EUROPEAN CENTRAL BANK

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**MONTHLY BULLETIN
JANUARY**

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In 2014 all ECB publications feature a motif taken from the €20 banknote.

MONTHLY BULLETIN

JANUARY 2014

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ABBREVIATIONS

COUNTRIES

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

OTHERS

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

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

EDITORIAL

Based on its regular economic and monetary analyses, the Governing Council decided at its meeting on 9 January 2014 to keep the key ECB interest rates unchanged. Incoming information and analysis have continued to confirm 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 credit dynamics remain subdued. At the same time, inflation expectations for the euro area over the medium to long term are firmly anchored in line with the Governing Council's aim of maintaining inflation rates below, but close to, 2%. Such a constellation continues to suggest that the euro area economy may experience a prolonged period of low inflation, to be followed by a gradual upward movement towards inflation rates below, but close to, 2% later on. Against this background, the Governing Council strongly emphasises that it will maintain an accommodative monetary policy stance for as long as necessary, which will assist the gradual economic recovery in the euro area. Accordingly, the Governing Council firmly reiterates the forward guidance that it continues to expect the key ECB interest rates to remain at present or lower levels for an extended period of time. As previously stated, this expectation is based on an overall subdued outlook for inflation extending into the medium term, given the broad-based weakness of the economy and subdued monetary dynamics. With regard to money market conditions and their potential impact on the monetary policy stance, the Governing Council is monitoring developments closely and is ready to consider all available instruments. Overall, the Governing Council remains determined to maintain the high degree of monetary accommodation and to take further decisive action if required.

Regarding the economic analysis, real GDP in the euro area rose by 0.1%, quarter on quarter, in the third quarter of 2013, following an increase of 0.3% in the second quarter. While developments in industrial production data for October point to a weak start to the fourth quarter, survey-based confidence indicators up to December have improved further from low levels, overall indicating a continuation of the gradual recovery in economic activity. Looking at 2014 and 2015, output is expected to recover at a slow pace, in particular owing to some improvement in domestic demand supported by the accommodative monetary policy stance. Euro area economic activity should, in addition, benefit from a gradual strengthening of demand for exports. Furthermore, the overall improvements in financial markets seen since the summer of 2012 appear to be working their way through to the real economy, as should the progress made on fiscal consolidation. In addition, real incomes have benefited recently from lower energy price inflation. At the same time, unemployment in the euro area remains high, and the necessary balance sheet adjustments in the public and the private sector 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, weaker than expected domestic demand and export growth, and slow or insufficient implementation of structural reforms in euro area countries.

According to Eurostat's flash estimate, euro area annual HICP inflation was 0.8% in December 2013, compared with 0.9% in November. This outcome was broadly as expected and reflected lower services price inflation. On the basis of prevailing futures prices for energy, annual inflation rates are expected to remain at around current levels in the coming months. Over the medium term underlying price pressures in the euro area are expected to remain subdued. At the same time, inflation expectations for the euro area over the medium to long term continue to be firmly anchored in line with the Governing Council's aim of maintaining inflation rates below, but close to, 2%.

The risks to the outlook for price developments continue to be seen as broadly balanced over the medium term, with upside risks relating to higher commodity prices, and 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 November support the assessment of continued subdued underlying growth in broad money (M3) and credit. Annual growth in M3 was broadly unchanged at 1.5% in November, after 1.4% in October, following two consecutive declines in September and August. Annual growth in M1 remained strong at 6.5%, reflecting a preference for liquidity, although it was below the peak of 8.7% observed in April 2013. As in previous months, the main factor supporting annual M3 growth was an increase in the MFI net external asset position, which continued to reflect the increased interest of international investors in euro area assets. 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 0.3% in November, broadly unchanged since the beginning of 2013. The annual rate of change of loans to non-financial corporations (adjusted for loan sales and securitisation) was -3.1% in November, following -3.0% in October. Overall, weak loan dynamics for non-financial corporations continue to reflect 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 on improving the funding situation of banks. 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. The ECB's comprehensive assessment will further support this confidence-building process. It will enhance the quality of information available on the condition of banks and result in the identification and implementation of necessary corrective actions. A timely implementation of further steps to establish a banking union will help to restore confidence in the financial system.

To sum up, the economic analysis indicates that the euro area economy may experience a prolonged period of low inflation, followed by a gradual upward movement towards inflation rates below, but close to, 2% later on. A cross-check with the signals from the monetary analysis confirms this picture.

As regards fiscal policies, it is important not to unravel past efforts, but to sustain fiscal consolidation over the medium term. Fiscal strategies should be in line with the fiscal compact and should ensure a growth-friendly composition of consolidation which combines improving the quality and efficiency of public services with minimising distortionary effects of taxation. When accompanied by the decisive implementation of structural reforms, this will further support the gradual economic recovery in the euro area and have a positive impact on public finances. Reforms in product and labour markets, and a rigorous enactment of Single Market policies warrant particular focus to improve the outlook for economic growth and to foster job creation in an environment of high unemployment.

This issue of the Monthly Bulletin contains three articles. The first article, entitled "Fifteen years of the ECB survey of professional forecasters", reviews some key elements regarding the usefulness of the survey as a source of information for the ECB's monetary policy assessment. The second article reviews the factors behind recent developments in excess liquidity and its impact on money market rates. The third article presents medium-term prospects for China's economy and discusses issues related to the internationalisation of the renminbi.

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The global economy remains on a gradual recovery path, albeit with regional differences. In major advanced economies, the recovery is gradually firming up, supported by accommodative policies. At the same time, growth in emerging market economies lost some of its former vigour, but remains strong overall. The latest survey indicators suggest robust global sentiment in the final quarter of 2013, with activity expected to gradually strengthen further in the course of 2014. Global inflation and inflationary pressures remain contained.

## 1.1 GLOBAL ECONOMIC ACTIVITY AND TRADE

The global economic recovery is progressing at a gradual pace, underpinned by strengthening growth momentum in most advanced economies. At the same time, following the Federal Open Market Committee's (FOMC) decision in December 2013 to "taper" its asset-purchasing programme, uncertainty in global financial markets declined. This may further support global economic activity. The latest survey indicators continue to point to robust business conditions in the fourth quarter of 2013, with all indices remaining solidly in expansionary territory. Specifically, the Purchasing Managers' Index (PMI) for global all-industry output remained almost unchanged at 53.4 in the final quarter of 2013 compared with the previous quarter. The resilience of the global all-industry output PMI in December – which, at 54.0, stood close to its historical average – was driven by a fairly strong reading in the manufacturing sector, while the index in the services sector eased somewhat. Excluding the euro area, the all-industry output PMI also remained almost unchanged at 53.8 in the fourth quarter of 2013 (see Chart 1).

Forward-looking global indicators continue to hint at a gradual expansion of the world economy. The new orders component of the global all-industry PMI (excluding the euro area) increased to 55.4 in December. Meanwhile, for October, the OECD's composite leading indicator, designed to anticipate turning points in economic activity relative to trend, signalled enhanced growth prospects in most major OECD countries and a tentative positive change in momentum in large emerging market economies, such as China, Russia and India (see Chart 2).

Global trade sustained momentum at the start of the fourth quarter of 2013, showing further signs of stabilisation after a prolonged period of muted growth. According to the CPB Netherlands Bureau of Economic Analysis, world imports of goods grew by 1.3% in October on a three-month-on-three-month basis, compared with 1.5% in September, reflecting considerably stronger growth in Asian emerging market economies and smaller increases in growth in the United States and Japan. Moreover, the global PMI for new manufacturing export orders remains in expansionary territory, despite a slight decrease in December, providing confirmation that the momentum of global trade is fairly positive. Yet the pace of recovery in global trade growth is likely to be modest in the near term and remain below the levels observed prior to the financial crisis.

Chart 1 Global PMI (excluding the euro area)

(seasonally adjusted monthly data)

— PMI output: overall
⋯⋯ PMI output: manufacturing
--- PMI output: services
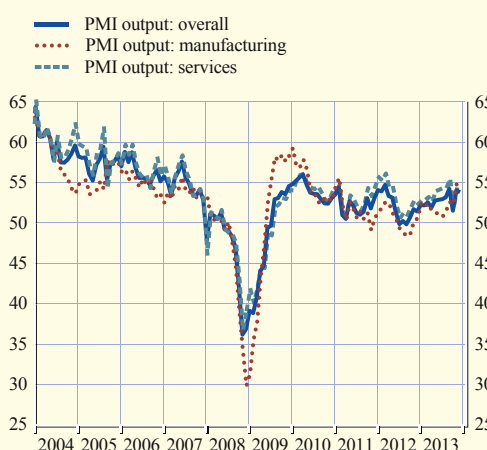
Source: Markit.

The balance of risks to the global outlook remains tilted to 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 and weaker than expected global demand.

1.2 GLOBAL PRICE DEVELOPMENTS

Global inflation and inflationary pressures remain contained. In the OECD area, annual headline consumer price inflation increased slightly to 1.5% in November from 1.3% in October, driven by gradually fading negative base effects from lower energy prices. Excluding food and energy, the OECD annual inflation rate remained broadly stable in November at 1.6%. Inflation picked up in the majority of the advanced economies, while price developments have been more mixed in emerging market economies, with inflation rising in India and Russia and falling in China (see Table 1).

Chart 2 Composite leading indicator and industrial production

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

— composite leading indicator (left-hand scale)
▬ industrial production (right-hand scale)
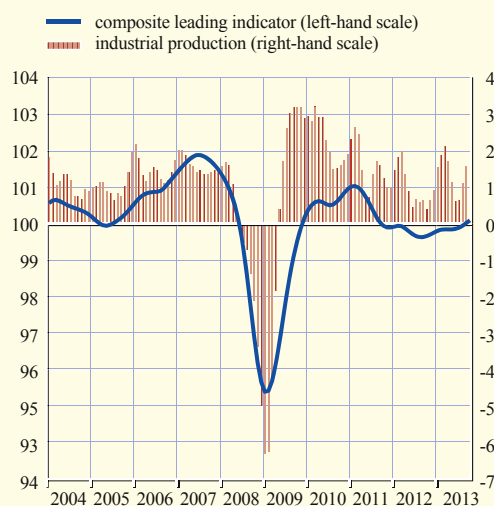
Sources: OECD and ECB calculations.
Notes: The composite leading indicator refers to the OECD countries plus Brazil, China, India, Indonesia, Russia and South Africa. The horizontal line at 100 represents the trend of economic activity. Industrial production refers to the same sample excluding Indonesia.

The containment of global inflation was supported by relatively stable commodity prices. Brent crude oil prices have decreased since early December and on 8 January 2014 stood at USD 107 per barrel, 3% lower than their level one year earlier. According to the International Energy Agency, global oil demand is forecast to decrease in the first quarter of 2014, while non-OPEC oil supply is expected to remain flat as the increase in US shale oil production offsets the fall in global biofuels. This might put downward pressure on prices. Futures markets price in lower oil prices over the medium term, with December 2015 futures prices trading at around USD 98 per barrel.

Table 1 Price developments in selected economies

(annual percentage changes)

	2011	2012	2013					
			June	July	Aug.	Sep.	Oct.	Nov.
OECD	2.9	2.3	1.8	2.0	1.7	1.5	1.3	1.5
United States	3.2	2.1	1.8	2.0	1.5	1.2	1.0	1.2
Japan	-0.3	0.0	0.2	0.7	0.9	1.0	1.1	1.5
United Kingdom	4.5	2.8	2.9	2.8	2.7	2.7	2.2	2.1
China	5.4	2.6	2.7	2.7	2.6	3.1	3.2	3.0
Memo item: OECD core inflation[1]	1.7	1.8	1.5	1.5	1.6	1.6	1.5	1.6

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

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Prices of non-energy commodities remained broadly flat on average during December. There was a decrease in cereal prices and an increase in metal prices. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was about 7% lower at the beginning of January than in the same period a year earlier.
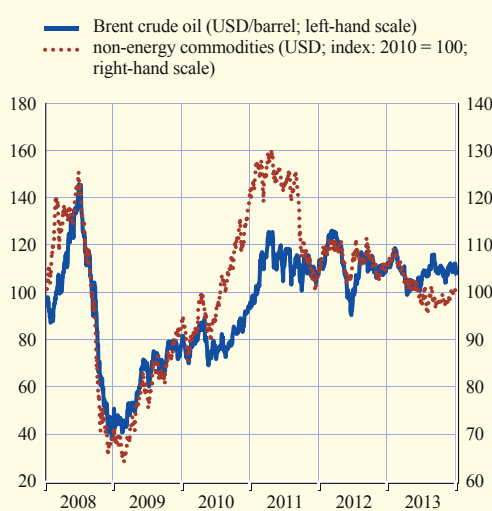
1.3 DEVELOPMENTS IN SELECTED ECONOMIES

UNITED STATES

In the United States, real GDP growth accelerated in the third quarter of 2013. According to the third and final estimate by the Bureau of Economic Analysis, US real GDP increased at an annualised rate of 4.1% (1.0% quarter on quarter), up from 2.5% (0.6% quarter on quarter) in the previous quarter. Real GDP growth was higher than the 3.6%

Chart 3 Main developments in commodity prices

Brent crude oil (USD/barrel; left-hand scale)
non-energy commodities (USD; index: 2010 = 100; right-hand scale)

Sources: Bloomberg and HWWI.

increase reported in the second estimate, with the upward revision mostly being a result of stronger than previously estimated gains in personal consumption expenditure and private fixed investment. These two components, together with a sizeable positive contribution from inventory investment of 1.7 percentage points, were the main drivers of growth in the third quarter. Public spending increased slightly as reduced expenditure at the federal level was more than offset by higher expenditure at the state and local levels. The contribution of net exports was slightly positive, reflecting a more pronounced slowdown in import growth than that in export growth.

In the final quarter of 2013 growth may have been somewhat weaker owing to the adverse effects of the temporary government shutdown and political brinkmanship surrounding the extension of the debt limit in October. Moreover, the substantial acceleration of inventory growth in the third quarter raises the prospect of a payback in the fourth quarter. Nevertheless, stronger than expected high-frequency data on consumption, industrial production and housing starts up to November point to an improvement in the underlying growth momentum of the economy. The labour market has shown resilience, with the pace of job creation accelerating in the

Table 2 Real GDP growth in selected economies

(percentage changes)

	Annual growth rates					Quarterly growth rates		
	2011	2012	2013 Q1	2013 Q2	2013 Q3	2013 Q1	2013 Q2	2013 Q3
United States	1.8	2.8	1.3	1.6	2.0	0.3	0.6	1.0
Japan	-0.4	1.4	-0.1	1.3	2.4	1.1	0.9	0.3
United Kingdom	1.1	0.3	0.7	2.0	1.9	0.5	0.8	0.8
China	9.3	7.7	7.7	7.5	7.8	1.5	1.9	2.2

Sources: National data, BIS, Eurostat and ECB calculations.
Note: Data in italics refer to preliminary estimates.

first two months of the fourth quarter relative to the average in the third quarter and the unemployment rate falling further to a five-year low of 7.0% in November. Moreover, consumer sentiment recovered in late 2013, suggesting that the negative confidence effects from the temporary government shutdown in October are likely to be short-lived. Finally, the bipartisan budget deal signed into law by President Obama on 26 December, which aims to reduce the across-the-board public spending cuts under the so-called sequester over the next two fiscal years, further diminishes the expected near-term fiscal restraint, thereby supporting expectations of an acceleration in economic activity in 2014. Although credit to the private sector has been relatively subdued in the recovery, there are signs of a recent pick-up. Box 1 looks at credit to the private sector and its relationship with the business cycle in the United States and the United Kingdom, with a view to assessing its impact on the current recovery.

Annual CPI inflation went up by 0.2 percentage point to 1.2% in November, mostly reflecting base effects related to energy price developments. Food price inflation remained subdued. Excluding food and energy, inflation stood at 1.7% for the third consecutive month, remaining within the tight range of between 1.6% and 1.8% that has prevailed since April. Looking ahead, considerable slack in the economy, as well as subdued wage and input cost dynamics, suggest that inflation will remain contained.

On 18 December the FOMC announced a modest reduction in the monthly pace of its asset purchases (commonly referred to as "tapering") of USD 10 billion to USD 75 billion, starting from January 2014. The reduction will be divided equally between purchases of mortgage-backed securities (from USD 40 billion to USD 35 billion) and longer-term Treasury securities (from USD 45 billion to USD 40 billion), while a further reduction in purchases will be conditional on the FOMC's assessment of economic developments. At the same time, the FOMC stated that "it likely will be appropriate to maintain the current target range for the federal funds rate well past the time that the unemployment rate declines below 6.5%, especially if projected inflation continues to run below the Committee's 2% longer-run goal", thereby reinforcing and strengthening its forward guidance regarding the future path of interest rates in relation to the formulations used since December 2012.

IS WEAK CREDIT HOLDING BACK THE ECONOMIC RECOVERY IN THE UNITED STATES AND THE UNITED KINGDOM?

The dynamics of credit to the non-financial private sector, defined as market and bank sources of credit, tend to be closely associated with the business cycle, as economic downturns and subsequent recoveries coincide with strong movements in the growth rate of credit to the private sector.[1] This box looks at regularities of credit and its relationship with the business cycle in two of the euro area's largest trading partners, the United States and the United Kingdom.

1 For evidence on the relationship between money/credit and the business cycle in the euro area, see the box entitled "Stylised facts of money and credit over the business cycle", *Monthly Bulletin*, ECB, October 2013.

Chart A Dynamics of real GDP and credit

(year-on-year percentage changes)

— real GDP
······ real credit to households
----- real credit to NFCs

a) United States

b) United Kingdom
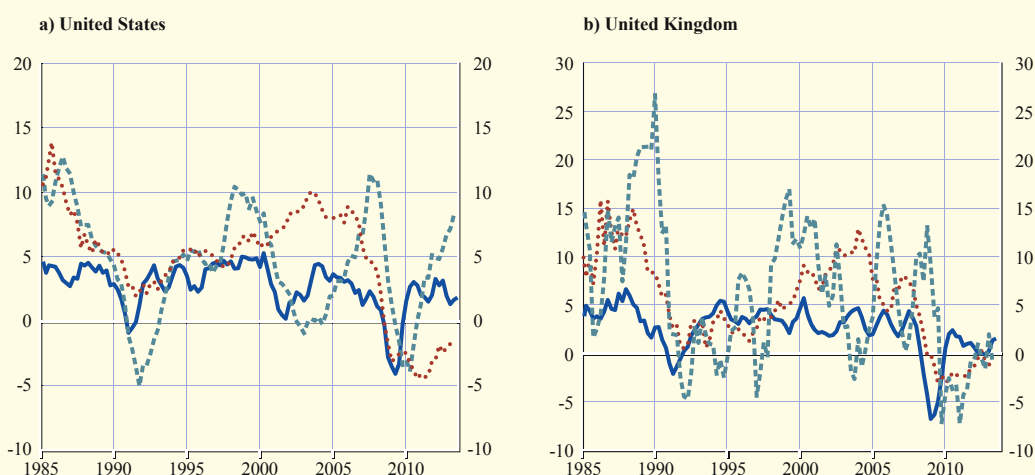
Sources: Federal Reserve System, Haver Analytics and Office for National Statistics.
Note: Real credit has been calculated using the GDP deflator and refers to market and bank sources of credit.

Credit to the non-financial private sector and the business cycle

Growth rates of real GDP and real credit to non-financial corporations (NFCs) and households have historically been positively correlated in both the United States and the United Kingdom (see Chart A). However, the correlation does not appear to be very tight, and in both countries credit dynamics have been more volatile for the non-financial business sector than for the household sector. During the current cycle, overall credit has been weak in both countries. As in previous cycles and in line with the stylised facts for the euro area, corporate credit growth slowed after household credit growth and economic activity. More recent dynamics suggest that in the United States the growth of credit to NFCs has picked up, while credit to households may be bottoming out. In the United Kingdom, credit growth in both sectors has stabilised in recent quarters at very weak levels.

Correlations between real GDP and real credit growth at different leads and lags confirm that credit growth is highly pro-cyclical in both countries. GDP growth appears to lead growth in credit to NFCs, with the highest correlation between the two series being for a three-quarter lead in the United States and a one-quarter lead in the United Kingdom. While GDP growth also appears to lead household credit in the United States (by around one quarter), the series are more coincidental in the United Kingdom. For the United Kingdom, the strongest correlation of GDP growth with corporate credit (at 0.29 over the period 1967 to 2013) is much lower than with household credit (at 0.54 over the same period), and also lower than the strongest correlations for the United States (0.57 for NFCs and 0.56 for households over the period 1953 to 2013).
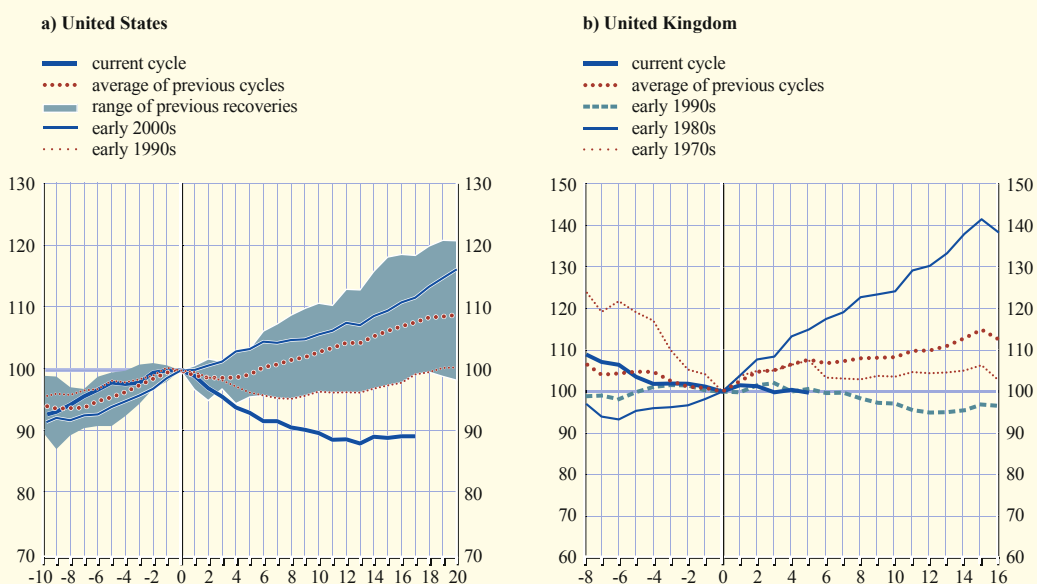
Comparison with previous cycles

A comparison of the ratio of market and bank sources of credit to GDP with previous cycles helps to assess whether credit has been exceptionally weak in the current recovery. Chart B points to slightly different situations in the two countries. In the United States, the ratio of credit to the non-financial private sector to GDP declined from the end of the latest recession, and has increased modestly since mid-2012. The ratio of household credit to GDP has been particularly weak and continued to decline until the third quarter of 2013 with the ongoing adjustment in US household balance sheets following the bursting of the housing bubble.[2] In the United Kingdom, by contrast, credit dynamics have been somewhat weaker than in previous recoveries but do not stand out as having been exceptionally weak. In particular, market-based funding for NFCs has developed relatively positively, suggesting that businesses have been more able than in previous episodes to replace bank borrowing with other forms of finance. Overall, however, the ongoing weakness of credit dynamics in the United Kingdom probably partly reflects the still fragile state of the banking sector.

For businesses, it appears that the weakness in credit growth may not be a major factor holding back the recovery in the two economies. Evidence from the composition of NFC financing indicates that firms with access to the capital markets have been able to offset some of the sharp drop in loans by issuing debt securities and – in the case of the United Kingdom – equities.

Chart B Ratio of real credit to GDP, comparison with previous recoveries

(index: end of recession = 100; x-axis: quarters)

a) United States

- current cycle
- average of previous cycles
- range of previous recoveries
- early 2000s
- early 1990s

b) United Kingdom

- current cycle
- average of previous cycles
- early 1990s
- early 1980s
- early 1970s

Sources: Federal Reserve System and ECB, Haver Analytics, Office for National Statistics and ECB.
Notes: Zero marks the end of each recession. According to the National Bureau of Economic Research, there have been ten recessions in the United States since 1950, with the latest starting in the fourth quarter of 2007 and ending in the second quarter of 2009. According to the Economic Cycle Research Institute, there have been four recessions in the United Kingdom since 1960, with the latest being a double-dip recession starting in the first quarter of 2008 and ending in the first quarter of 2012.

2 For more details, see the box entitled "How much progress has been achieved in household deleveraging in the United States?", *Monthly Bulletin*, ECB, November 2013.

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US corporations have even bought back shares for a number of years, indicating little need for external finance. This is also reflected in the financing gap of US businesses (i.e. capital expenditures less internal funds and inventory valuation adjustment), which has been negative since early 2009 and only recently started to close, indicating that the bulk of US NFCs have sufficient cash to cover investments. On average, UK companies also have large cash balances, although it cannot be ruled out that some firms face financing constraints.

Conclusion

Overall, although it is difficult to disentangle the causes and effects between credit and GDP growth without resorting to more structural frameworks, the stylised facts presented in this box show that credit dynamics have been relatively subdued during the recovery in the United States and to a lesser extent also in the United Kingdom. As regards the household sector, credit is still weak in both countries. However, recent balance sheet repair by households in the United States together with rising housing and financial wealth in both countries should lead to better fundamentals that will support private consumption. Turning to the business sector, non-financial corporations in both countries seem to have been able to use market-based funding when loan growth turned negative. More recently, business surveys have improved in the United Kingdom and the United States. This, together with the comfortable cash balances held by US and UK companies, suggests that the preconditions for an investment recovery are in place.

JAPAN

In Japan, the Cabinet Office's second preliminary estimate of third-quarter GDP growth provided further evidence of a slowdown in activity from the very buoyant rates of growth observed in the first half of the year. Third-quarter GDP growth was revised down to 0.3% quarter on quarter from 0.5%, largely owing to a smaller contribution from inventories. Latest survey data relating to the fourth quarter point to a pick-up in economic activity. The Bank of Japan's Tankan survey continued to increase in December for large manufacturing and non–manufacturing firms, indicating higher levels of business confidence. In addition, the manufacturing PMI remained broadly stable in December at 55.2. However, the positive picture provided by the latest survey data has to be tempered by the more modest increases recorded in hard data, such as those for industrial production, which increased by 0.1% month on month in November.

Consumer price inflation continued to increase, reaching 1.5% year on year in November, up from 1.1% in October. Against the background of rising energy prices, owing to limitations in domestic power supply and the past weakening of the Japanese yen, the gap between headline inflation and inflation excluding food, beverages and energy remains large, with the latter standing at just 0.6% in November (albeit up from 0.3%). Looking ahead, price dynamics will be affected by the contractual wage increases to be negotiated in the spring. The Bank of Japan kept its target for the monetary base unchanged at its December meeting.

UNITED KINGDOM

The United Kingdom has experienced robust economic growth in recent quarters. In the third quarter of 2013 real GDP increased by 0.8%, driven by domestic demand. Some of the main business and household survey indicators declined slightly in December, but the relatively high level of the indicators suggests that growth remained robust in the fourth quarter. In the medium term, however, the pace of growth is likely to slow somewhat. The relatively weak household real

income dynamics and the ongoing need for private and public sector balance sheet adjustment will continue to constrain domestic demand for some time, while prospects for export growth remain subdued. At the same time, the labour market situation has continued to improve, with full-time private sector employment growth in particular picking up in recent months. The unemployment rate fell by 0.2 percentage point to 7.4% in the three months to October. Buoyed by recent policy measures, both activity and price indicators for the housing market have improved further.

Annual CPI inflation slowed further in November 2013 after decelerating markedly in October. In November the headline inflation rate declined by 0.1 percentage point from October to 2.1%, owing mainly to lower energy price and education services inflation. Looking ahead, it is expected that inflationary pressures will remain moderate as inflation continues to be dampened by existing spare capacity in labour and capital utilisation.

At its meeting on 9 January 2014 the Bank of England's Monetary Policy Committee decided to keep the policy rate at 0.5% and the size of its asset purchase programme at GBP 375 billion.

CHINA

In China, the latest indicators continue to point to robust but slightly weaker economic momentum. Industrial production, fixed asset investment and import growth weakened slightly, but retail sales and exports rebounded somewhat. Overall, this suggests that growth momentum is slowing marginally as the effects of the mini-stimulus package implemented over the summer start to wane. Turning to the monetary side, credit and loan growth remained steady at high levels. Nonetheless, since the People's Bank of China announced in its third-quarter monetary policy report that the Chinese economy may have to go through an extended period of deleveraging, money and bond market interest rates have generally trended upwards.

Annual CPI inflation declined slightly owing to a lower contribution from food prices and remains well below the government's 3.5% target. Inflation excluding food and energy remained stable and continued to fluctuate between 1.3% and 1.9%, as it has done for two years. PPI inflation continued to be negative in year-on-year terms.

In early December the Central Economic Work Conference, which set policy priorities for 2014, emphasised the need to deal with imbalances that had built up in the economy, such as overcapacity in a number of industries and burgeoning local government debt, inter alia by presenting a plan to improve rural-urban labour mobility while supporting the ongoing urbanisation process (see also the article entitled "Medium-term prospects for China's economy and the internationalisation of the renminbi" in this issue of the Monthly Bulletin).

1.4 EXCHANGE RATES

Over the past month, the euro has appreciated against the currencies of most of the euro area's main trading partners. On 8 January 2014 the nominal effective exchange rate of the euro, as measured against the currencies of 20 of the euro area's most important trading partners, stood 0.4% above its level at the beginning of December and 4.5% above the level one year earlier (see Chart 4 and Table 3). During that period, movements in exchange rates were largely related to developments in interest rate expectations, as well as to adjustments in market expectations regarding the economic outlook for the euro area relative to other major economies.

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In bilateral terms, from 2 December 2013 to 8 January 2014 the euro strengthened against the US dollar (by 0.4%), the Japanese yen (by 2.3%) and the pound sterling (by 0.2%). Over the review period, the euro also appreciated vis-à-vis currencies of commodity-exporting countries, while its development against currencies of emerging economies in Asia was mixed. As far as currencies of other EU Member States are concerned, the exchange rate of the euro strengthened vis-à-vis the Romanian leu (by 1.3%) and, marginally, vis-à-vis the Czech koruna (by 0.1%) and the Swedish krona (by 0.1%). Meanwhile, it depreciated slightly against the Croatian kuna (by 0.1%), as well as against the Polish zloty (by 0.4%) and the Hungarian forint (by 0.6%). The currencies participating in ERM II remained broadly stable against the euro, trading at, or close to, their respective central rates. On 1 January 2014 Latvia adopted the euro and became the 18th member of the euro area. The irrevocable conversion rate of the Latvian lats was set at 0.702804 Latvian lats to the euro, which had also been the central rate throughout Latvia's participation in the ERM II (see also Box 2).

Chart 4 Nominal effective exchange rate of the euro

(daily data; index: Q1 1999 = 100)

Source: ECB.
Notes: The nominal effective exchange rate of the euro is calculated against the currencies of 20 of the most important trading partners of the euro area. This reference index has been adjusted to account for the accession of Latvia to the euro area on 1 January 2014. The adjustment applies retrospectively to the period before 2014.

Table 3 Euro exchange rate developments

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

	Weight in the effective exchange rate of the euro (EER-20)	Change in the exchange rate of the euro as at 8 January 2014 with respect to	
		2 December 2013	8 January 2013
EER-20		0.4	4.5
Chinese renminbi	18.7	-0.3	1.0
US dollar	16.8	0.4	3.9
Pound sterling	14.8	0.2	1.6
Japanese yen	7.2	2.3	24.2
Swiss franc	6.4	0.5	2.4
Polish zloty	6.2	-0.4	1.3
Czech koruna	5.0	0.1	7.3
Swedish krona	4.7	0.1	3.7
Korean won	3.9	1.2	4.3
Hungarian forint	3.2	-0.6	2.6
Danish krone	2.6	0.0	0.0
Romanian leu	2.0	1.3	1.8
Croatian kuna	0.6	-0.1	0.7

Source: ECB.
Note: The nominal effective exchange rate is calculated against the currencies of 20 of the most important trading partners of the euro area.

Box 2

LATVIA ADOPTS THE EURO

On 1 January 2014 Latvia adopted the euro and became the 18th member of the euro area. The conversion rate between the Latvian lats and the euro was irrevocably fixed at 0.702804 lats to the euro. This was the central rate of the Latvian lats throughout the country's membership of ERM II.

Latvia is a very small economy compared with the rest of the euro area. As such, the country's adoption of the euro will have no significant impact on the euro area's aggregate macroeconomic data (see the table).

Latvia's population is around 2 million and its GDP accounts for about 0.2% of euro area GDP. GDP per capita in purchasing power parity terms was slightly below 60% of the euro area average in 2012.

Key economic characteristics of Latvia and the euro area

	Reporting period	Unit	Euro area excluding Latvia	Euro area including Latvia	Latvia
Population and economic activity					
Total population	2012	millions	333.2	335.2	2.0
GDP	2012	EUR billions	9,483.5	9,505.8	22.3
GDP per capita	2012	EUR thousands	28.5	28.4	10.9
GDP per capita (PPP)	2012	EA17=100	100.0	99.7	57.6
GDP (share of world GDP) [1]	2012	percentage	13.5	13.5	0.04
Value added by economic activity [2]					
Agriculture, fishing, forestry	2012	percentage of total	1.7	1.7	5.0
Industry (including construction)	2012	percentage of total	25.0	25.0	25.7
Services (including non-market services)	2012	percentage of total	73.3	73.3	69.3
Monetary and financial indicators					
Credit to the private sector [3]	2012	percentage of GDP	139.4	139.2	67.6
Stock market capitalisation [4]	2012	percentage of GDP	47.5	47.3	3.8
External trade					
Exports of goods and services [5]	2012	percentage of GDP	45.8	45.9	61.6
Imports of goods and services [5]	2012	percentage of GDP	43.2	43.3	65.5
Current and capital account balance [6]	2012	percentage of GDP	1.4	1.4	0.5
Labour market [7]					
Labour force participation rate	Q2 2013	percentage	72.2	72.2	73.3
Unemployment rate	Q3 2013	percentage	12.1	12.1	12.0
Employment rate	Q2 2013	percentage	63.6	63.6	64.8
General government					
Surplus (+) or deficit (-)	2012	percentage of GDP	-3.7	-3.7	-1.3
Revenue	2012	percentage of GDP	46.3	46.2	35.1
Expenditure	2012	percentage of GDP	49.9	49.9	36.4
Gross debt outstanding	2012	percentage of GDP	92.7	92.6	40.6

Sources: Eurostat, IMF, European Commission, ECB and ECB calculations.
1) GDP shares are based on a purchasing power parity (PPP) valuation of countries' GDP.
2) Based on nominal gross value added at basic prices.
3) Comprises loans, holdings of securities other than shares and holdings of shares and other equities.
4) Defined as the total outstanding amount of quoted shares excluding investment funds and money market fund shares issued by euro area/Latvian residents at market value.
5) National accounts data for nominal trade in goods and services (includes intra-euro area trade).
6) Balance of payments data. Euro area data are compiled on the basis of transactions with residents of countries outside the euro area (i.e. excluding intra-euro area flows). Data for Latvia include transactions with residents from the rest of the world (i.e. including transactions with the euro area).
7) Refers to the working age population (aged between 15 and 64).

In the years up to 2007 Latvia was one the EU's fastest growing economies, but this growth was accompanied by a build-up of sizeable macroeconomic imbalances. Adjustment began in 2007 and intensified a year later, on account of the global financial crisis. International lenders provided support, and sizeable fiscal consolidation efforts followed in 2009 and 2010 under the supervision of the EU and the IMF. Despite a strong fall in output, the budget deficit was reduced from 9.8% in 2009 to 1.3% in 2012. A credible and frontloaded consolidation strategy, combined with structural reforms, helped Latvia to keep its fixed exchange rate. A recovery began in the last quarter of 2009, led by a strengthening in domestic demand and subsequently supported by a rebound in exports on account of regained competitiveness. Latvia concluded a financial assistance programme with the EU and the IMF in early 2012 and has already fully repaid the loan received from the IMF. The public debt-to-GDP ratio rose from a very low level during the economic crisis. Despite this increase, the public debt ratio stood at 41% in 2012, which was significantly below the euro area average of 93% in the same year.

More recently, activity has been dynamic and real GDP grew by 4.1% year on year in the third quarter of 2013. Developments in the labour market have also been positive, with the unemployment rate standing at 12.0% in the third quarter of 2013, compared with its peak of 20.9% in the first quarter of 2010. However, over the last five years Latvia's labour market has suffered from a significant decline in the labour force, resulting from a large number of people emigrating to search for work in other EU countries. In the third quarter of 2013 total employment in Latvia was still around 20% below the level it was before the crisis. At the same time, the labour force participation rate and the employment rate were slightly above the respective averages for the euro area.

Latvia's production structure is broadly similar to that of the euro area as a whole. In the Latvian economy, industry (including construction) contributes around 26% to total value added. The share of services is slightly lower, at around 70%, while the contribution of the agricultural sector, at 5%, is somewhat above that of the euro area as a whole. Furthermore, Latvia is a very open economy and the rest of the euro area is its key trading partner, accounting for around 30% of its total exports and 40% of its total imports. Other important trading partners include Lithuania and Russia.

The country's financial sector is heavily bank-based. Bank credit to the private sector amounted to 68% of GDP in 2012. The banking system is fairly concentrated compared with other euro area countries. Although it is dominated by Nordic banks, a number of mainly domestically owned banks actively engage in providing financial services to non-residents. Non-resident deposits comprised almost 50% of total deposits in the second half of 2013. Meanwhile, the country's non-banking financial sector is very small – its stock market capitalisation, at just below 4% of GDP in 2012, is the lowest among the euro area countries.

In order to fully reap the advantages of the euro and to allow adjustment mechanisms to operate efficiently within the enlarged currency area, Latvia needs to continue its reform efforts. Economic policies should be geared towards ensuring the sustainability of the convergence process and sustainable growth in the long term. Ensuring a low inflation environment is crucial in that respect. In addition, the functioning of the labour market should be improved to allow it to reach its full potential.

The Latvian authorities have publicly stated their goal to avoid pro-cyclical policies and strengthen the quality of institutions, the business environment and governance to ensure the stability and competitiveness of the economy. In addition, the authorities have announced a commitment to fully comply with the Stability and Growth Pact and the fiscal compact on a permanent basis, as well as to implement further structural reforms. The available toolkit of micro and macro-prudential policies should be effectively used and enhanced, if necessary, in order to limit risks stemming from, in particular, financial services provided to non-residents. In the context of the stability-oriented monetary policy of the ECB, the fulfilment of and long-term adherence to these commitments is essential to ensure that the economic environment in Latvia is conducive to sustainable output and job creation in the medium and long term.

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2 MONETARY AND FINANCIAL DEVELOPMENTS

2.1 MONEY AND MFI CREDIT

Annual M3 growth stabilised in November 2013, supported by further monthly inflows into its most liquid components, in particular overnight deposits. Annual growth of M1 thus stabilised and remained the main contributor to annual M3 growth. On the counterpart side, annual growth in broad money continued to be supported by strong monthly increases in MFIs' net external asset positions, in part reflecting the interest of international investors in euro area assets, and a reduction of longer-term financial liabilities. The annual rate of change in MFI lending to the private sector (adjusted for sales and securitisation) was broadly unchanged, although it remained in negative territory and thus a persistent drag on money creation. This stabilisation at negative levels is consistent with the state of the business cycle, amid weak demand and remaining supply constraints. MFI credit to general government declined, mirroring easing conditions in sovereign debt markets.

THE BROAD MONETARY AGGREGATE M3

The annual growth rate of M3 stabilised at 1.5% in November, after 1.4% in October (see Chart 5). M3 flows were again driven solely by inflows into M1. As in October, November flows into the narrow monetary aggregate M1 mirrored portfolio reallocations into overnight deposits, while other short-term deposits and marketable instruments saw outflows that were driven by a search for yield and reduced risk aversion.
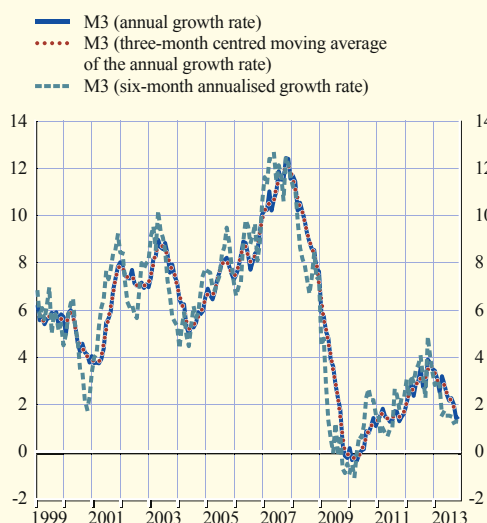
On the component side, M1 remained the main contributor to annual M3 growth, despite the stabilisation of its annual growth rate. The contribution of other short-term deposits (M2 minus M1) stabilised in negative territory, while that of marketable instruments (M3 minus M2) remained strongly negative. The net outflows from M3 instruments with a higher remuneration than those in M1 continue to signal a search for yield by the money-holding sector, resulting in shifts of funds from higher-yielding instruments within M3 towards less liquid, riskier assets outside M3.

On the counterpart side, money creation continued to be supported by further significant increases in MFIs' net external asset positions in November, resulting in part from the interest of international investors in euro area assets. Moreover, substantial negative flows from longer-term financial liabilities, in particular moderate outflows from longer-term deposits, were also supportive of M3 growth. By contrast, strong negative flows in credit to the private sector and, albeit to a lesser extent, in credit to general government, driven by net sales of domestic government bonds by MFIs in some stressed countries in November, reduced money growth.

The volume of euro area MFIs' main assets contracted further in November, continuing the deleveraging observed since spring 2012. The

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)

— M3 (annual growth rate)
····· M3 (three-month centred moving average
of the annual growth rate)
---- M3 (six-month annualised growth rate)

Source: ECB.

month-on-month decline reflects decreases in all main asset classes, with sizeable net redemptions of loans to the private sector in some stressed countries. Euro area MFIs' reliance on the provision of liquidity by the Eurosystem decreased further in November, thus continuing the declining trend observed since August 2012.

MAIN COMPONENTS OF M3

As regards the components of M3, the annual growth rate of M1 stabilised at 6.5% in November 2013, after 6.6% in October. Strong annual M1 growth continued to be driven by substantial inflows into overnight deposits, thus underlining the strong preference for liquidity displayed by the money-holding sector over past quarters, as well as the return of confidence in euro area assets among international investors.

By contrast, an increased interest of the money-holding sector in obtaining higher yields by investing in riskier assets has left its mark on developments observed in other M3 instruments. Accordingly, the annual growth rate of short-term deposits other than overnight deposits (M2 minus M1) declined to -1.5% in November, down from -1.2% in October. This reflected a further sharp decline in the annual growth rate of short-term time deposits (i.e. deposits with an agreed maturity of up to two years), to -6.8% in November, after -6.6% in October. By contrast, the annual growth of short-term savings deposits (i.e. deposits redeemable at notice of up to three months) remained in positive territory in November, although falling to 3.1%, from 3.5% in October.

The annual growth rate of marketable instruments (M3 minus M2) remained negative, standing at -16.2% in November, after -17.9% in October. This reflected negative rates of annual growth in the money-holding sector's holdings of money market fund shares/units and repurchase agreements, as well as in its holdings of short-term MFI debt securities. The continuous outflows from money market fund shares/units are a consequence of the relative unattractiveness of these instruments in a low interest rate environment, in particular after the further reduction of policy rates and declines in government bond yields in a number of euro area countries. The persistently negative growth rate of net issuance of short-term debt securities reflects the reduced funding needs of euro area MFIs in the context of balance sheet adjustments and a robust development of their deposit base.

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 to 2.7% in November, from 2.9% in October. The decline was driven mainly by a moderation of the annual growth of M3 deposits held by financial intermediaries other than insurance corporations and pension funds, as well as by households. In November, by contrast, M3 deposits held by non-financial corporations continued to increase at a robust annual growth rate (6.6%).

MAIN COUNTERPARTS OF M3

The annual growth rate of MFI credit to euro area residents decreased further in November, to -1.4%, from -1.0% in October. This mainly reflected a marked decline in the annual growth of credit to the general government sector, which decreased to -0.6%, from 0.8% in the previous month. The growth in credit to the private sector also slowed down in November, standing at -1.6%, after -1.4% in October.

The slower annual growth of credit to general government in November was due mainly to net sales of government securities, partly reflecting a continuation of the easing conditions in the euro area sovereign debt markets and an interest in this asset class by other investors.

Table 4 Summary table of monetary variables

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

	Outstanding amounts as a percentage of M3[1]	Annual growth rates					
		2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Oct.	2013 Nov.
M1	**54.8**	**6.2**	**6.8**	**8.1**	**7.0**	**6.6**	**6.5**
Currency in circulation	9.1	3.0	1.7	2.7	2.6	3.7	4.5
Overnight deposits	45.7	6.9	7.9	9.3	7.9	7.1	6.9
M2-M1 (=other short-term deposits)	38.5	1.6	1.2	0.2	0.2	-1.2	-1.5
Deposits with an agreed maturity of up to two years	17.0	-1.8	-3.8	-5.8	-5.0	-6.6	-6.8
Deposits redeemable at notice of up to three months	21.5	4.8	6.0	5.8	5.0	3.5	3.1
M2	**93.3**	**4.2**	**4.3**	**4.6**	**4.1**	**3.2**	**3.1**
M3-M2 (=marketable instruments)	6.7	-2.3	-8.5	-14.9	-17.1	-17.9	-16.2
M3	**100.0**	**3.6**	**3.2**	**2.9**	**2.2**	**1.4**	**1.5**
Credit to euro area residents		**0.5**	**0.0**	**-0.1**	**-0.5**	**-1.0**	**-1.4**
Credit to general government		8.3	4.3	3.3	2.0	0.8	-0.6
Loans to general government		1.9	-0.8	-2.6	-6.0	-6.5	-7.3
Credit to the private sector		-1.3	-1.0	-1.0	-1.2	-1.4	-1.6
Loans to the private sector		-0.8	-0.8	-1.1	-1.9	-2.2	-2.3
Loans to the private sector adjusted for sales and securitisation[2]		-0.4	-0.4	-0.6	-1.4	-1.7	-1.8
Longer-term financial liabilities (excluding capital and reserves)		**-5.1**	**-5.1**	**-4.6**	**-4.2**	**-3.5**	**-3.5**

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

Credit to the private sector suffered from strong negative flows in November, driven by sizeable net redemptions in loans and by net sales of securities other than shares on the part of MFIs. Shares and other equities also recorded outflows, albeit to a lesser extent.

The annual growth rate of MFI loans to the private sector (adjusted for sales and securitisation) was broadly stable in November, standing at -1.8%, after -1.7% in October. The annual growth rate of loans to non-financial corporations (adjusted for sales and securitisation) was -3.1% in November, compared with -3.0% in October (see Table 5). Loan developments continued to be characterised by net redemptions, with November data showing negative flows across all maturities, but particularly at shorter maturities. The annual growth of loans to households (adjusted for sales and securitisation) remained unchanged at 0.3% in November, broadly the level observed since early 2013.

Overall, the general profile of loan developments suggests that the downward trend observed within the euro area over the summer of 2013 may have come to a halt in a large number of euro area countries. Taking account of the generally lagging pattern of lending to non-financial corporations with respect to cyclical developments from a historical perspective, this could support the view that an incipient inventory cycle in the early phases of a recovery could promote credit demand and stimulate an improvement in credit flows in the months ahead. The delayed effects of the cycle on credit could be further explained by the solid level of corporate deposits across euro area countries, as firms tend to rely on internal sources of funding during the initial phase of a recovery. At the same time, a sustained recovery will depend crucially on a further reduction of financial fragmentation and on improvements in bank capital positions that still weigh on the supply of loans in stressed countries.

Table 5 MFI loans to the private sector

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

	Outstanding amount as a percentage of the total[1]	Annual growth rates					
		2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Oct.	2013 Nov.
Non-financial corporations	**41.3**	**-1.9**	**-2.5**	**-3.0**	**-3.7**	**-3.8**	**-3.9**
Adjusted for sales and securitisation[2]	*-*	*-1.4*	*-1.4*	*-2.0*	*-2.8*	*-3.0*	*-3.1*
Up to one year	24.4	-1.3	0.6	-0.8	-3.6	-4.2	-4.7
Over one and up to five years	17.4	-5.2	-5.9	-6.4	-5.7	-5.2	-4.9
Over five years	58.3	-1.0	-2.7	-2.9	-3.1	-3.1	-3.2
Households[3]	**49.4**	**0.4**	**0.5**	**0.2**	**0.1**	**0.2**	**0.1**
Adjusted for sales and securitisation[2]	*-*	*0.8*	*0.5*	*0.3*	*0.3*	*0.3*	*0.3*
Consumer credit[4]	10.9	-2.9	-3.2	-3.4	-2.7	-3.1	-3.4
Lending for house purchase[4]	73.7	1.1	1.4	1.1	0.8	0.9	0.9
Other lending	15.3	-0.6	-1.0	-1.0	-1.2	-1.1	-1.5
Insurance corporations and pension funds	**0.9**	**-4.2**	**6.1**	**12.4**	**12.8**	**8.4**	**14.0**
Other non-monetary financial intermediaries	**8.4**	**-1.3**	**-0.2**	**-0.2**	**-5.7**	**-8.0**	**-9.1**

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.
2) Adjusted for the derecognition of loans from the MFI statistical balance sheet owing to their sale or securitisation.
3) As defined in the ESA 95.
4) Definitions of consumer credit and lending for house purchase are not fully consistent across the euro area.

The annual growth rate of longer-term financial liabilities (excluding capital and reserves) was unchanged at -3.5% in November. The monthly flow in November remained negative, reflecting small outflows from longer-term deposits, although households in some countries have continued to place funds in longer-term deposits since the beginning of the year.

The net external asset position of euro area MFIs again expanded sharply, namely by €47 billion in November, following an increase of €45 billion in October. Such increases in MFIs' net external assets have been observed since July 2012 and represent the main factors that support positive M3 growth, counteracting the negative contributions of net redemptions of loans to the private sector. In the 12 months to November, the net external asset position of euro area MFIs increased by €316 billion (see Chart 6). Box 3 briefly reviews developments in the international investment position of the euro area since the start of the financial crisis.

Overall, the latest monetary data support the view that the underlying dynamics of money and credit growth remain subdued.

Chart 6 Counterparts of M3

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

- credit to the private sector (1)
- credit to general government (2)
- net external assets (3)
- longer-term financial liabilities (excluding capital and reserves) (4)
- other counterparts (including capital and reserves) (5)
- M3
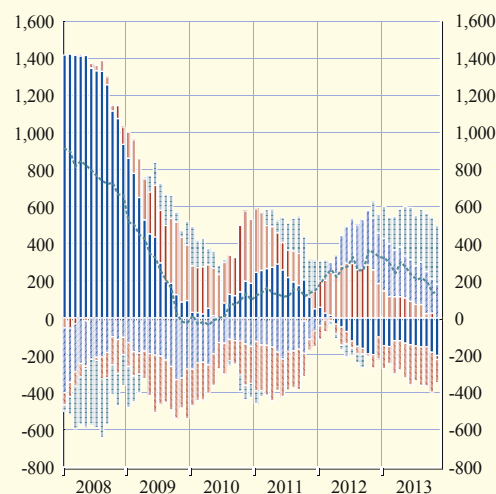
Source: ECB.
Notes: M3 is shown for reference only (M3 = 1+2+3−4+5). Longer-term financial liabilities (excluding capital and reserves) are shown with an inverted sign, since they are liabilities of the MFI sector.

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Broad money growth continues to be supported by increases in the net external assets of MFIs and by shifts away from longer-term financial liabilities. At the same time, the weakness of monetary dynamics also reflects a search for yield by the money-holding sector in an environment marked by a low remuneration of monetary assets and by returning confidence. The annual growth of MFI credit to the private sector remained negative in November 2013.

Box 3

DEVELOPMENTS IN THE INTERNATIONAL INVESTMENT POSITION OF THE EURO AREA SINCE THE OUTBREAK OF THE FINANCIAL CRISIS

The international investment position (i.i.p.) shows total holdings of foreign assets by domestic residents ("assets" in the i.i.p.) and total holdings of domestic assets by foreign residents ("liabilities" in the i.i.p.) at the end of the period in question. The net position (assets minus liabilities) measures the net creditor or debtor position of a country, or group of countries (e.g. the euro area), vis-à-vis the rest of the world. This box reviews developments in the euro area i.i.p. between 2007 and 2012 in order to shed light on how it has evolved since the beginning of the financial crisis.[1]

Between 2007 and 2012, assets and liabilities in the euro area i.i.p. both increased by around 20% of GDP (see Chart A). The breakdown presented in Chart A reveals that at the end of 2012 assets and liabilities across most instruments of the i.i.p. exceeded the levels recorded in 2007, with the exception of a slight decline in the asset position of portfolio investment equity securities and falling asset and liability positions for "other investment", which mainly consists of deposits and loans. The fall in the latter primarily reflected the deleveraging process taking place in the MFI sector from the onset of the financial crisis. Increases in outstanding amounts were most pronounced for foreign direct investment on the asset side (by 21% of GDP), and for portfolio investment debt securities on the liability side (by 16% of GDP), with the latter driven by a rise in the outstanding amount of holdings of government debt securities from 2009.

Chart A Euro area i.i.p. and its breakdown by instrument

(end-of-year positions as a percentage of GDP)

- foreign direct investment
- portfolio investment debt securities
- reserve assets and financial derivatives
- portfolio investment equity securities
- other investment
- net i.i.p. (right-hand scale)
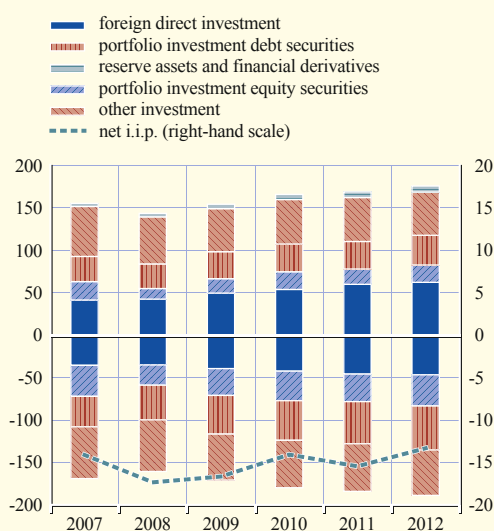
Source: ECB.
Note: Negative figures reflect euro area liabilities while positive figures reflect assets.

1 The full set of data on the euro area i.i.p., including the geographical breakdown, is only available up to the end of 2012. For an analysis of recent developments in net international investment positions in a number of euro area countries, see the box entitled "Net foreign liabilities in selected euro area countries", *Monthly Bulletin*, ECB, April 2013.
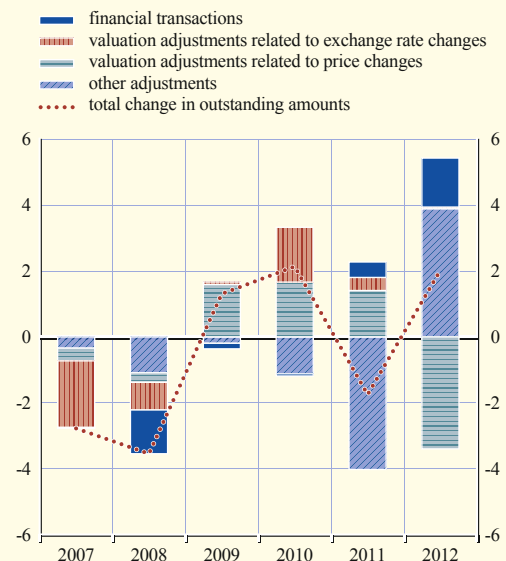
The net international investment position of the euro area remained negative and relatively stable from 2007 to 2012. Following a decline from -14% of GDP in 2007 to a low of -17% of GDP in 2008, it improved to -13% of GDP at the end of 2012. The improvement seen from 2008 onwards was mainly driven by an increase in the euro area's net asset position in terms of direct investment, from 7% of GDP in 2008 to 15% of GDP in 2012. In addition, reserve assets increased slightly to 7% of GDP and the net liability position in other investment contracted somewhat to 3% of GDP over the same period. These developments were partly counterbalanced by a growing net liability position for portfolio investment (equity and debt securities), which reached 33% of GDP in 2012, up from 23% of GDP in 2008.[2]

Changes in the net i.i.p. can be explained by three factors: (i) net financial transactions, (ii) valuation effects due to changes in exchange rates and asset prices, and (iii) "other" adjustments.[3] Before cross-border investment positions started to increase rapidly during the 1990s, net financial transactions (as the mirror image of current account balances) were the main determinants of changes in the net i.i.p. However, valuation effects and other adjustments gained in importance thereafter. Net financial transactions by euro area residents with the rest of the world closely followed developments in the euro area's current account balance from 2007 onwards (Chart B). In 2008, when the euro area recorded a current account deficit, net financial transactions exerted a negative effect on the net i.i.p. By contrast, in 2011 and 2012, the euro area's growing current account surpluses and the associated net capital outflows had a positive impact on the net i.i.p.

The euro area tends to record exchange rate-induced valuation gains when the exchange rate of the euro depreciates, as foreign assets are mainly denominated in foreign currency, whereas the largest share of the euro area's foreign liabilities is denominated in euro. The appreciation of the euro in nominal effective terms observed in 2007 and 2008 was associated with exchange rate-induced losses on euro area assets (Chart B), whereas, in years when the euro broadly depreciated, exchange rate-related gains arose – for instance in 2010. Valuation effects also arise from asset price movements. They depend on the performance of euro area investments abroad relative to the performance of domestic assets held by foreign investors. In 2007 and 2008, price-induced valuation effects were relatively small, as prices of the euro area's foreign assets and liabilities evolved in a similar manner. From 2009 to 2011, however, the euro area recorded positive

Chart B Breakdown of changes in the net i.i.p. of the euro area

(end-of-year positions as a percentage of GDP)

- financial transactions
- valuation adjustments related to exchange rate changes
- valuation adjustments related to price changes
- other adjustments
- total change in outstanding amounts

Source: ECB.

2 As the components of the i.i.p. are expressed as a percentage of GDP, a "growth" effect is present. However, these changes in GDP are common to all components.
3 "Other" adjustments include reclassifications, company write-downs, and changes in data sources or compilation practices (e.g. survey coverage).

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valuation gains from asset price developments as the foreign investments of euro area residents outperformed the investments of foreign residents in the euro area. Conversely, the euro area recorded substantial valuation losses in 2012 (3.4% of GDP), as the general improvement in euro area financial markets increased the value of foreign residents' investments in the euro area to a larger extent than the valuation gains euro area investors recorded on their foreign portfolios. Notably, in 2012 these price-induced valuation losses more than offset the positive contribution of net financial transactions, which mirrored the current account surplus. The largest contribution to changes in the euro area's net i.i.p. in 2011 and 2012 came, however, from "other" adjustments, which amounted to -4.0% of GDP in 2011 and 3.9% of GDP in 2012. These were mostly related to the introduction of new data sources and compilation practices, which are being developed by national compilers ahead of the changeover to the new international statistical standards in late 2014.[4]

The geographical breakdown of assets in portfolio investment equity securities showed a rather stable development from the beginning of the financial crisis onwards (Chart C).[5] The geographical distribution of equity liabilities changed considerably, however, with the surge

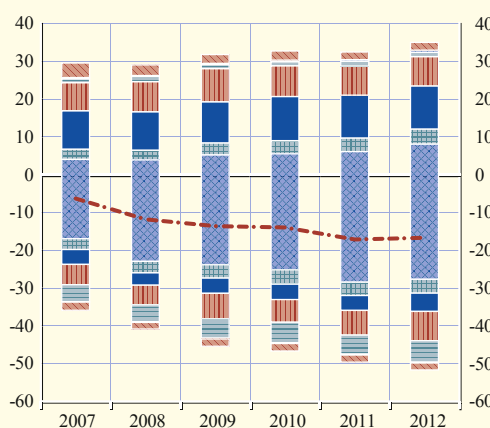**Chart C Country breakdown of euro area portfolio investment positions**

(end-of-year positions as a percentage of GDP)

- North America
- United Kingdom
- Japan
- Brazil, India and Russia
- offshore financial centres
- other EU countries and Switzerland
- other
- net total
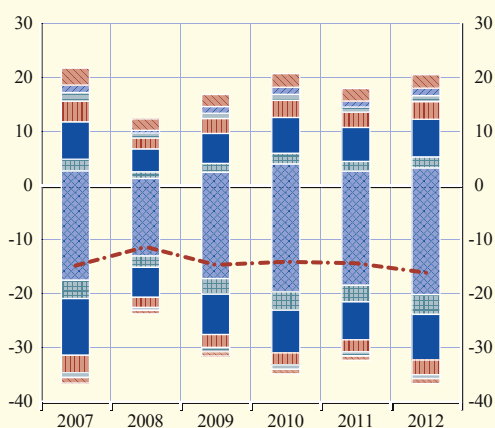
Sources: ECB and IMF Coordinated Portfolio Investment Survey (CPIS).
Notes: Negative figures reflect euro area liabilities, while positive figures reflect assets. As China does not report its portfolio investment assets in the IMF survey, it is included in "other", which is calculated as a residual.

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4 For more detail on the changeover to the new international statistical standards, consult the relevant ECB webpage: http://www.ecb. europa.eu/stats/external/bpm6/html/index.en.html
5 The country-specific data on liabilities of equity and debt investment are retrieved from the IMF Coordinated Portfolio Investment Survey (CPIS), while data on the total extra-euro area assets and liabilities and the country-specific data on assets are constructed by the ECB. The countries/country blocks that are included in the calculations are: the euro area 17, offshore financial centres, Denmark, Sweden, the United Kingdom, other EU countries, Switzerland, Canada, the United States, Japan, Brazil, India and Russia. More information on the geographical detail of the euro area international investment position is presented in Table 9 of Section 7.3 of the "Euro area statistics" section of the Monthly Bulletin and in the ECB's Statistical Data Warehouse.

of investments from the residual ("other") group of countries.[6] After a drop in 2008, the euro area's net liability position in portfolio investment equity securities increased by 5 percentage points, to reach around 16% of GDP in 2012.

As regards debt instruments, portfolio investment assets of euro area residents continued to be invested mostly in North America (predominantly the United States) from 2007, while the period from 2008 to 2012 also witnessed rising investments in the residual "other" region, promoting it to the second most important destination for euro area portfolio debt investment at the end of the period.[7] Developments on the liability side of euro area portfolio debt were also dominated by "other" countries, with the United Kingdom and North America playing a rather limited role. In fact, from 2008 investments by residents of "other" countries accounted for more than half of total debt security liabilities in the euro area.

6 The country group "other" includes China and all the main oil-producing countries – except for Russia – and is calculated as a residual from the total extra-euro area data.
7 The impact of offshore financial centres, already of minor importance, decreased further in the period under review.

2.2 SECURITIES ISSUANCE

In October 2013 debt securities issuance by euro area residents continued to contract on an annual basis. By contrast, year-on-year growth of debt securities issued by non-financial corporations remained at historically high levels. Issuance activity of quoted shares continued to be strong in the case of MFIs.

DEBT SECURITIES

In October 2013 the annual growth rate of debt securities issued by euro area residents remained negative at -0.9%, after -0.6% in the previous month (see Table 6). Developments across sectors were mixed. The annual growth rate of debt securities issuance increased from 9.8% in September to 10.0% in the case of non-financial corporations. It remained at -9.0% in the case of MFIs.

Table 6 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions) October 2013	Annual growth rates[1]					
		2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 September	2013 October
Debt securities	**16,482**	**2.8**	**0.7**	**-0.1**	**-0.7**	**-0.6**	**-0.9**
MFIs	4,974	0.9	-3.6	-6.5	-8.7	-9.0	-9.0
Non-monetary financial corporations	3,213	0.3	0.7	-0.4	1.2	2.2	1.3
Non-financial corporations	1,075	12.9	13.4	11.5	10.0	9.8	10.0
General government	7,221	4.1	2.6	3.6	3.4	3.3	3.0
of which:							
Central government	6,551	3.6	2.6	4.0	4.2	4.1	3.8
Other general government	670	9.1	2.4	-0.6	-3.8	-3.8	-4.1
Quoted shares	**5,407**	**1.0**	**0.8**	**0.6**	**1.1**	**1.0**	**1.1**
MFIs	557	5.2	3.0	2.5	7.8	7.8	7.7
Non-monetary financial corporations	445	2.6	2.6	2.6	1.6	0.7	0.9
Non-financial corporations	4,405	0.4	0.5	0.2	0.3	0.3	0.4

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

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Moreover, the annual growth rate of debt securities issued by the general government decreased to 3.0%, from 3.3% in September. Similarly, debt securities issuance by non-monetary financial institutions declined in October, with the annual growth rate standing at 1.3%, after 2.2% in the previous month.

Looking at developments across types of security, the contraction of issuance of short-term debt securities accelerated slightly in October (to -12.8%, from -12.2% in September), while the annual growth rate of long-term debt securities issuance decreased somewhat (to -0.3%, from -0.2% in September). Refinancing activity continued to be concentrated on issuance in the long-term segment of the market, notably at fixed rates. The annual growth rate of issuance of fixed rate long-term debt securities remained at 2.3% in October, whereas the annual rate of growth in issuance of floating rate long-term debt securities remained negative, as it has been over the past 14 months, declining by 0.2 percentage point to -8.1% in October.

Looking at short-term trends, the six-month annualised growth rate of debt securities issuance in October was 0.4 percentage point lower than in September and stood at -0.6% (see Chart 7). Over the same period the corresponding rate decreased from 3.0% to -0.3% in the case of non-monetary financial corporations, and from 3.6% to 3.2% in the case of the general government. The pronounced contraction of issuance by MFIs decelerated somewhat from -8.5% in September to -7.4% in October. Conversely, the six-month annualised growth rate of debt securities issued by non-financial corporations rose from 7.9% to 8.1%.

QUOTED SHARES
In October 2013 the annual growth rate of quoted shares issued by euro area residents increased by 0.1 percentage point to 1.1% (see Chart 8). The annual growth rate of equity issuance increased

**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
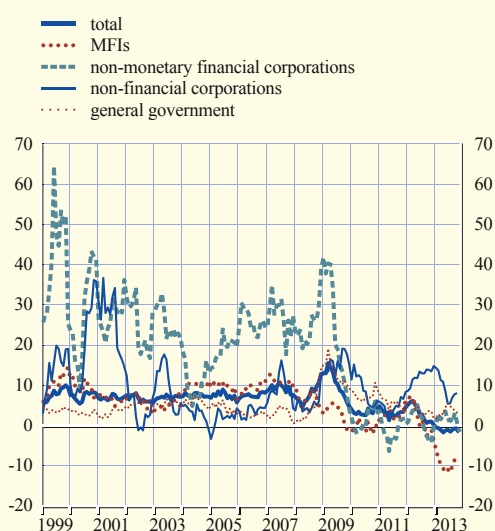
Source: ECB.

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

(annual growth rates)

- total
- MFIs
- non-monetary financial corporations
- non-financial corporations
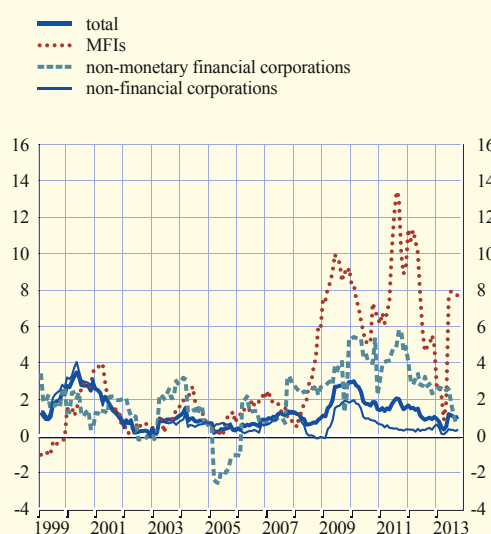
Source: ECB.
Note: Growth rates are calculated on the basis of financial transactions.

by 0.1 percentage point, to 0.4%, for non-financial corporations, and by 0.2 percentage point, to 0.9%, for non-monetary financial institutions. Similarly, the annual growth rate of equity issuance by MFIs remained high at 7.7%, 0.1 percentage point lower than in the previous month, reflecting further consolidation of their capital base.

2.3 MONEY MARKET INTEREST RATES

In December 2013 money market interest rates increased against the background of higher demand for precautionary liquidity buffers as the year-end approached. At the beginning of 2014, however, pressure on money market interest rates abated as demand for liquidity subsided. Since the start of the twelfth maintenance period, the volatility of both the EONIA and term-money market rates was elevated.

Unsecured money market interest rates rose in December 2013, and subsequently fell after the year-end, standing at higher levels than on 4 December 2013, however. On 8 January 2014 the one-month, three-month, six-month and twelve-month EURIBOR stood at 0.20%, 0.28%, 0.38% and 0.55% respectively, i.e 2, 4, 5 and 5 basis points higher than on 4 December 2013. Consequently, the spread between the twelve-month and one-month EURIBOR – an indicator of the slope of the money market yield curve – increased by 3 basis points to stand at 35 basis points on 8 January 2014 (see Chart 9).

The interest rates implied by the prices of three-month EURIBOR futures maturing in March, June, September and December 2014 increased by 6, 5, 5 and 7 basis points respectively in comparison with the levels seen on 4 December 2013, standing at 0.31%, 0.32%, 0.34% and 0.39% respectively

Chart 9 Money market interest rates

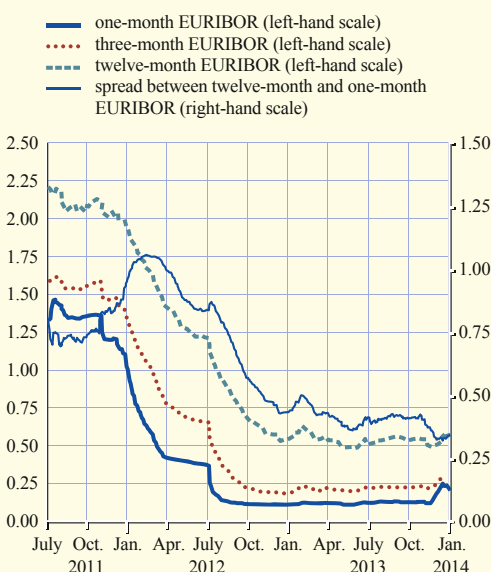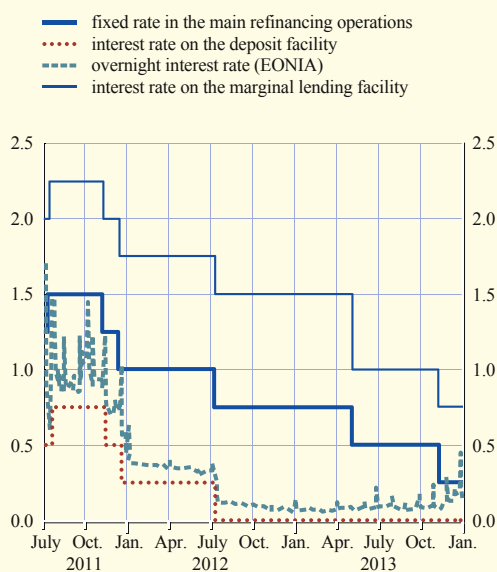(percentages per annum; spread in percentage points; daily data)

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

Sources: ECB and Thomson Reuters.

Chart 10 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)

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

Sources: ECB and Thomson Reuters.

on 8 January 2014. The three-month EONIA swap rate stood at 0.16% on the same date, 3 basis points higher than on 4 December 2013. Thus, the spread between the three-month EURIBOR and the three-month EONIA swap rate increased by 1 basis point.

Between 4 December and the end of the eleventh maintenance period of 2013 on 10 December, the EONIA continued to stand at around 0.13% against the background of lower levels of excess liquidity and an environment of receding market fragmentation. Since the start of the twelfth maintenance period, the EONIA has increased on account of precautionary demand for liquidity buffers towards the year-end, trading with higher volatility at levels between 0.14% and 0.22% (see Chart 10). On 31 December 2013, the EONIA spiked to reach 0.45% before dropping to levels between 0.10% and 0.15% at the beginning of January 2014.

Between 4 December 2013 and 8 January 2014, the Eurosystem conducted several refinancing operations. In the main refinancing operations of the twelfth maintenance period, conducted on 10, 17, 23 and 30 December 2013, and on 7 January 2014, the Eurosystem allotted €98.5 billion, €118.9 billion, €133.6 billion, €168.7 billion and €112.5 billion respectively. The Eurosystem also carried out two longer-term refinancing operations (LTROs) in December 2013, both as fixed rate tender procedures with full allotment, namely a special-term refinancing operation with a maturity of one maintenance period on 10 December (in which €10.1 billion was allotted) and a three-month LTRO on 18 December (in which €20.9 billion was allotted).

The Eurosystem also conducted five one-week liquidity-absorbing operations as variable rate tender procedures with a maximum bid rate of 0.25% on 10, 17, 23 and 30 December 2013, and on 7 January 2014. In the first and last of these operations, the ECB absorbed an amount equal to the outstanding value of purchases made under the Securities Markets Programme (which totalled €179 billion on 8 January 2014 on account of maturities of around €5 billion since 4 December 2013). Instead, in the context of precautionary demand for liquidity towards the year-end, the Eurosystem withdrew €152.3 billion, €139.8 billion and €104.8 billion in the operations that were carried out on 17, 23 and 30 December 2013 respectively.

Moreover, counterparties opted to repay, on a weekly basis, funds borrowed in the three-year LTROs allotted on 21 December 2011 and 29 February 2012 before maturity. On 8 January 2014, a total of €446.4 billion had been repaid since 30 January 2013. Out of the total repayments, €259.5 billion was related to the LTRO allotted on 21 December 2011, and the remaining €186.9 billion was related to that allotted on 29 February 2012. Thus, of the €523 billion of net liquidity originally injected through the two three-year LTROs, around 85% has been repaid thus far.

Excess liquidity declined further in the eleventh maintenance period of 2013, averaging €165.1 billion, compared with €193.1 billion, on average, in the previous maintenance period. The lower average level of excess liquidity in the eleventh maintenance period was due mainly to lower outstanding open market operations, which accounted for around 70% of the decrease of €28 billion in average excess liquidity (due, in particular, to LTRO repayments), with the remainder being attributed mainly to higher autonomous factors. While average daily recourse to the deposit facility decreased to €48.3 billion in the eleventh maintenance period, from €52.1 billion in the previous maintenance period, average current account holdings in excess of reserve requirements decreased from €141.1 billion to €116.9 billion. In the current twelfth maintenance period of the year, excess liquidity first increased to levels of up to around €280 billion, mainly on account of higher outstanding open market operations in the context of higher demand for precautionary liquidity buffers as the year-end approached. However, on 8 January 2014 excess liquidity dropped to

€156.7 billion on account of lower recourse to the main refinancing operation and full sterilisation of purchases under the Securities Markets Programme through the liquidity-absorbing operation, both of which were allotted on 7 January 2014.[1]

2.4 BOND MARKETS

Euro area and US government bond yields increased in December 2013 and early January 2014, driven mainly by some strong economic data releases for the US economy and the decision of the Federal Open Market Committee (FOMC) about the gradual tapering of asset purchases. Intra-euro area sovereign bond yield spreads declined somewhat in most countries. Uncertainty about future bond market developments declined on both sides of the Atlantic. Financial indicators of long-term inflation expectations in the euro area increased slightly, while remaining fully consistent with price stability.

Between the end of November 2013 and 8 January 2014 AAA-rated long-term euro area government bond yields increased by around 19 basis points to stand at about 2.1% (see Chart 11). In the same period long-term government bond yields in the United States increased by around 25 basis points and stood at about 3.0% on 8 January. In Japan, ten-year government bond yields increased by around 10 basis points and stood at around 0.7% at the end of the period under review.

In December AAA-rated long-term euro area government bond yields increased somewhat, mainly reflecting the reaction to strong economic data for the United States and the FOMC's decision of 18 December to reduce its asset purchases. Over the remainder of the review period AAA-rated long-term euro area government bond yields remained broadly unchanged.

In the United States, long-term bond yields increased slightly more than yields in the euro area and exhibited slightly greater fluctuations over the period under review. In addition to the factors mentioned above, this also reflected uncertainty surrounding the budget agreement. This uncertainty, however, faded when agreement on the budget accord was reached on 12 December.

Investor uncertainty about near-term bond market developments, as measured by the implied volatility extracted from options on bond prices, declined marginally on both sides of the Atlantic during the period under review (see Chart 12). It benefited from positive data releases, the budget agreement passed in the United States and the FOMC's decision of 18 December regarding asset purchases. By early January implied volatility stood at around 4.8% in the euro area and at around 5.0% in the United States.

Chart 11 Long-term government bond yields

(percentages per annum; daily data)

— euro area (left-hand scale)
···· United States (left-hand scale)
--- Japan (right-hand scale)
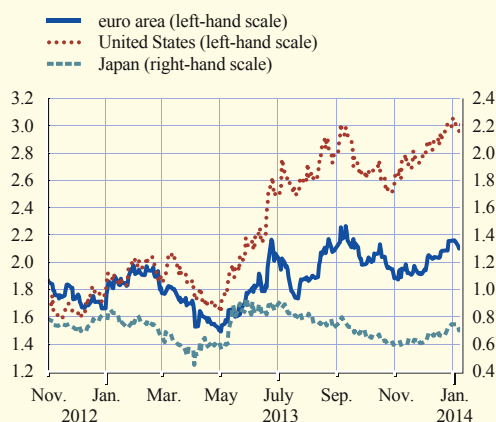
Sources: EuroMTS, ECB, Bloomberg and Thomson Reuters.
Notes: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity. The euro area bond yield is based on the ECB's data on AAA-rated bonds, which currently include bonds from Germany, the Netherlands, Austria and Finland.

1 See also the article entitled "Recent developments in excess liquidity and money market rates" in this issue of the Monthly Bulletin.

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Chart 12 Implied government bond market volatility

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

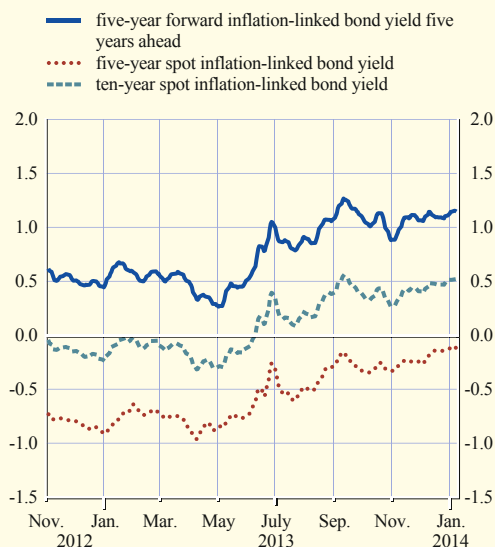- euro area
- United States
- Japan
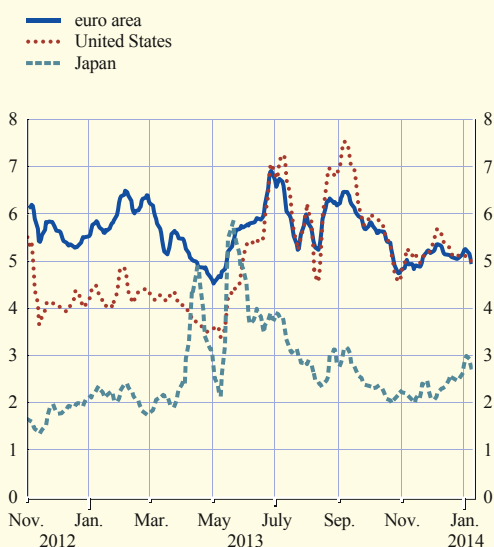
Source: Bloomberg.
Notes: Implied government bond market volatility is a measure of uncertainty surrounding short-term (up to three months) developments in German and US ten-year government bond prices. It is based on the market values of related traded options contracts. Bloomberg uses implied volatility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

Chart 13 Euro area zero coupon inflation-linked bond yields

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

- five-year forward inflation-linked bond yield five years ahead
- five-year spot inflation-linked bond yield
- ten-year spot inflation-linked bond yield

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

Intra-euro area sovereign bond spreads declined somewhat in most countries. In the period under review long-term bond yields increased in higher-rated euro area countries and declined in most countries under stress. Spreads vis-à-vis overnight indexed swap (OIS) rates declined or remained broadly unchanged in most euro area countries.

Developments in real bond yields, as measured by the yields on inflation-linked government bonds,[2] closely corresponded to the developments in nominal bond yields described above. Real ten-year bond yields increased by around 9 basis points to stand at around 0.5% on 8 January, while the real yields on five-year bonds increased by around 14 basis points to around -0.1% (see Chart 13). As a result, real long-term forward interest rates in the euro area (five-year forward rates five years ahead) increased by around 4 basis points, to stand at around 1.1% at the end of the review period.

Financial market indicators of long-term inflation expectations in the euro area slightly increased during the period under review. The five-year and ten-year break-even inflation rates implied by inflation-linked bonds increased to stand at around 1.2% and 1.8% respectively. Accordingly, the five-year forward break-even inflation rate five years ahead increased by 16 basis points to stand at 2.45% at the beginning of January (see Chart 14). The long-term forward inflation swap rate

2   The real yield on inflation-linked euro area government bonds is calculated as the GDP-weighted average yield on German and French 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", *Monthly Bulletin*, ECB, December 2011.

increased slightly over the period under review to stand at 2.2% on 8 January. Overall, giving due consideration to both the inflation risk premium and the liquidity premium, market-based indicators suggest that inflation expectations remain fully consistent with price stability.[3]

The term structure of implied forward overnight interest rates in the euro area shifted upwards slightly between the end of November and early January, mainly for bonds with medium to longer-term maturities (see Chart 15). This suggests that expectations regarding future short-term interest rates, and possibly the related risk premia, shifted upwards slightly over the review period.

In the period under review spreads of investment-grade corporate bonds issued by financial corporations in the euro area (relative to the Merrill Lynch EMU AAA-rated government bond index) remained broadly unchanged for higher-rated classes and declined somewhat for lower-rated classes. For non-financial corporations, the spreads increased marginally for higher-rated classes and declined for lower-rated classes. Overall, corporate bond spreads for most rating classes remain below the levels recorded at the beginning of 2013.

3 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", *Monthly Bulletin*, ECB, November 2012.

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2.5 INTEREST RATES ON LOANS AND DEPOSITS

In November 2013 MFI lending rates on loans to households increased for both short and long maturities, while the MFI lending rates on loans to non-financial corporations exhibited mixed movements. Lending rate spreads vis-à-vis market rates widened somewhat in November, except in the case of large long-term loans.

In November 2013 MFI interest rates on short-term deposits from both non-financial corporations and households decreased. Short-term rates on loans to households for house purchase increased by 1 basis point, to 2.8% in November, and those on consumer credit increased by 11 basis points, to 5.8%. With respect to non-financial corporations, short-term interest rates on large loans (defined as loans of more than €1 million) increased by 6 basis points, to 2.3%, while those on small loans (i.e. loans of up to €1 million) fell by 2 basis points, to 3.8% (see Chart 16). Accordingly, the spread between short-term interest rates on small loans to non-financial corporations and the corresponding interest rates on large loans decreased in November, to 156 basis points. The magnitude of the spread still suggests that financing conditions remain tighter for small and medium-sized enterprises than for large firms.
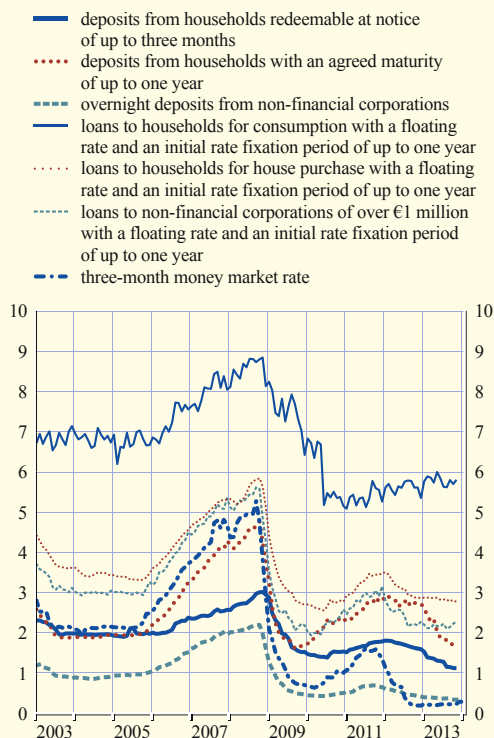
Overall, given that the three-month EURIBOR remained broadly unchanged in November, the spread between short-term MFI interest rates on loans to households and the three-month money market rate increased marginally, to 255 basis points, while the corresponding spread for short-term interest rates on large loans to non-financial corporations widened to 205 basis points (see Chart 17).

Since the beginning of 2013 short-term MFI interest rates on loans to households for house purchase and those on loans to non-financial corporations have remained broadly stable. The reductions in the key ECB interest rates, together with the effects of the non-standard monetary policy measures implemented or announced by the ECB, are gradually being passed through to bank lending rates. At the same time, financial fragmentation and weak economic conditions are still putting upward pressure on bank lending rates in some euro area countries.

Turning to longer maturities, MFI interest rates on long-term deposits from households and on deposits from non-financial corporations increased marginally in November overall. In particular, interest rates increased by 1 basis point,

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

(percentages per annum; rates on new business)

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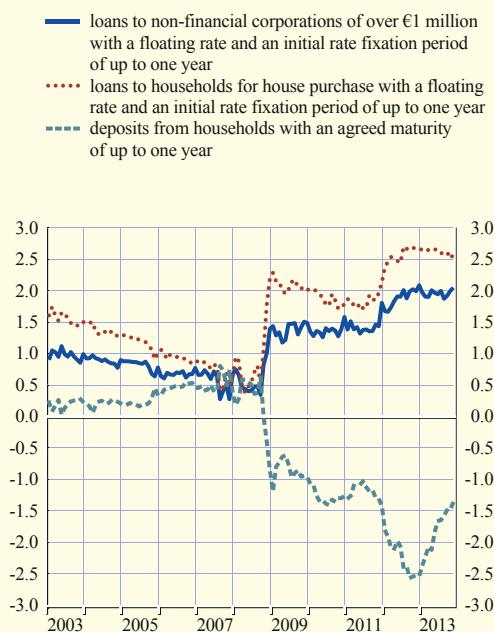–·– three-month money market rate

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

Chart 17 Spreads of short-term MFI interest rates vis-à-vis the three-month money market rate
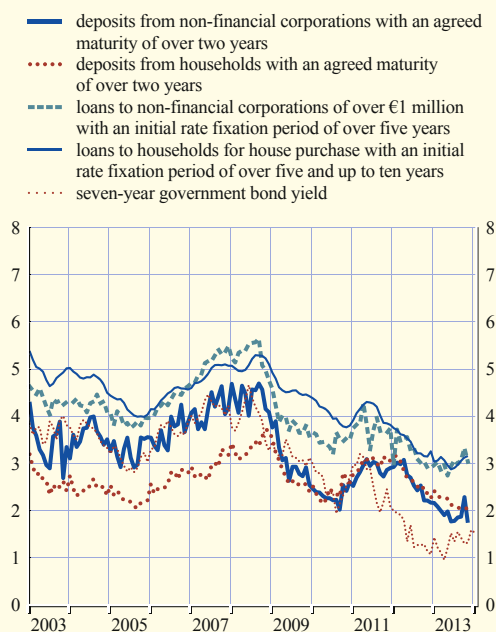
(percentage points; rates on new business)

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

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

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

(percentages per annum; rates on new business)

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

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

to 2.2%, in the case of households and fell by 46 basis points, to 1.8%, in that of non-financial corporations. Interest rates on long-term loans to households for house purchase increased by 3 basis points, to 3.2% in November. Similarly, long-term rates on small loans to non-financial corporations increased by 5 basis points, to 3.4%, while those on large loans to non-financial corporations declined by 30 basis points, to stand at 3.0% (see Chart 18). Hence, the spread between long-term rates on small loans and those on large loans that was virtually nil in October widened again to 34 basis points in November. As the yields on AAA-rated seven-year government bonds increased by 2 basis points in November, to 1.3%, the spreads between long-term lending rates and the yields on such bonds widened marginally in the case of both housing loans and small loans to non-financial corporations, while they narrowed in the case of large loans to non-financial corporations.

Since the beginning of 2013 the spread between long-term lending rates and the yields on AAA-rated seven-year government bonds has fluctuated 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. However, the spreads narrowed in comparison with the levels reached in 2012.

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2.6 EQUITY MARKETS

Between the end of November 2013 and 8 January 2014 stock prices increased by around 1% in the euro area and by around 2% in the United States. Stock market developments were affected by possible early profit-taking ahead of the end of the year, some strong economic data releases for the US economy, and the uncertainty regarding the budget agreement in the United States, as well as the timing and intensity of the reversal of the Federal Reserve System's monetary policy accommodation. Following the meeting of the FOMC on 18 December stock prices increased on both sides of the Atlantic. Stock market uncertainty, as measured by implied volatility, increased slightly in the euro area and remained broadly unchanged in the United States.

During the period under review stock prices in major markets increased slightly. Between the end of November 2013 and 8 January 2014 stock prices in the euro area, as measured by the broad-based Dow Jones EURO STOXX index, increased by around 1%. Over the same period stock prices in the United States, as measured by the Standard & Poor's 500 index, increased by around 2%, while stock prices in Japan, as measured by the Nikkei 225 index, increased by around 3% (see Chart 19).

During the first week of December euro area stock prices declined, possibly reflecting early profit-taking ahead of the end of the year. In the remainder of the review period euro area stock prices fluctuated only slightly and recorded a small increase after the FOMC's decision of 18 December to gradually taper its asset purchases. While economic data releases were somewhat mixed in the euro area, they were relatively strong in the United States. This was to some extent reflected in stock market developments in the United States. In addition, US stock prices were also driven by the uncertainty regarding the budget agreement and the timing of the reversal of the Federal Reserve System's monetary policy accommodation. Following the December meeting of the FOMC stock prices increased, with a decline in volatility in the latter part of the review period.

Euro area stock prices increased across most sectors and countries. Financial stock prices increased by 5%, while non-financial stock prices remained broadly unchanged, with the utility sector and the oil and gas sector lagging most in terms of performance. In the

Chart 19 Stock price indices

(index: 1 November 2012 = 100; daily data)

— euro area (left-hand scale)
······ United States (left-hand scale)
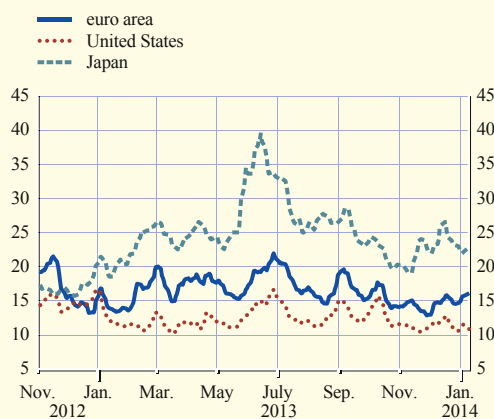----- Japan (right-hand scale)

Source: Thomson Reuters.
Note: The indices used are the Dow Jones EURO STOXX broad index for the euro area, the Standard & Poor's 500 index for the United States and the Nikkei 225 index for Japan.

United States, the changes in stock prices were broadly similar across sectors, with financial stock prices increasing somewhat more than non-financial stocks. In Japan, stock price increases were also broadly based across sectors, albeit somewhat higher in the financial sector than in the non-financial sector.

Stock market uncertainty in the euro area, as measured by implied volatility, increased slightly from around 13% at the end of November 2013 to around 16% on 8 January 2014 (see Chart 20). In the United States, it remained overall broadly unchanged at around 11% over the same period. These overall developments mask a decline in stock market uncertainty in both economic areas following the FOMC's decision on 18 December. Implied volatility in Japan was broadly unchanged, remaining somewhat elevated in comparison with previous years.

Chart 20 Implied stock market volatility

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

euro area
United States
Japan

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

3   PRICES AND COSTS

According to Eurostat's flash estimate, euro area annual HICP inflation was 0.8% in December 2013, compared with 0.9% in November. The outcome was broadly as expected and reflected lower services price inflation. On the basis of prevailing futures prices for energy, annual inflation rates are expected to remain at around current levels in the coming months. Over the medium term, underlying price pressures in the euro area are expected to remain subdued. At the same time, inflation expectations for the euro area over the medium to long term continue to be firmly anchored in line with the Governing Council's aim of maintaining inflation rates below, but close to, 2%. The risks to the outlook for price developments continue to be seen as broadly balanced over the medium term.

3.1 CONSUMER PRICES

Euro area annual HICP inflation decreased from 2.5%, on average, in 2012 to 1.3% in 2013 (on the basis of Eurostat's flash estimate for December 2013). This was primarily attributable to the sharp decrease in energy price inflation from the two-digit levels seen in 2011 and part of 2012 to 0.6%, on average, in 2013. In recent months, the rapid decline in annual food price inflation, from the elevated levels recorded earlier in the year, contributed towards further reducing overall inflation. Excluding the volatile components, food and energy, HICP inflation also eased, to reach an average of 1.1% in 2013, reflecting an environment of weak economic activity.

Looking at the latest data, according to Eurostat's flash estimate, headline HICP inflation decreased from 0.9% in November to 0.8% in December. This essentially reflects opposite developments in energy and services price inflation, where the increase in the former can be accounted for by an upward base effect, together with an increase in the monthly rate, and the decline in the latter by the drop-out of the impact related to changes in HICP price collection practices in Germany last November (see Table 7).

Looking at the main components of the HICP in more detail, Eurostat's flash estimate points to a further increase in energy price inflation to 0.0% in December 2013, after negative annual rates of change of -1.1% and -1.7% in November and October, respectively. This increase largely reflects
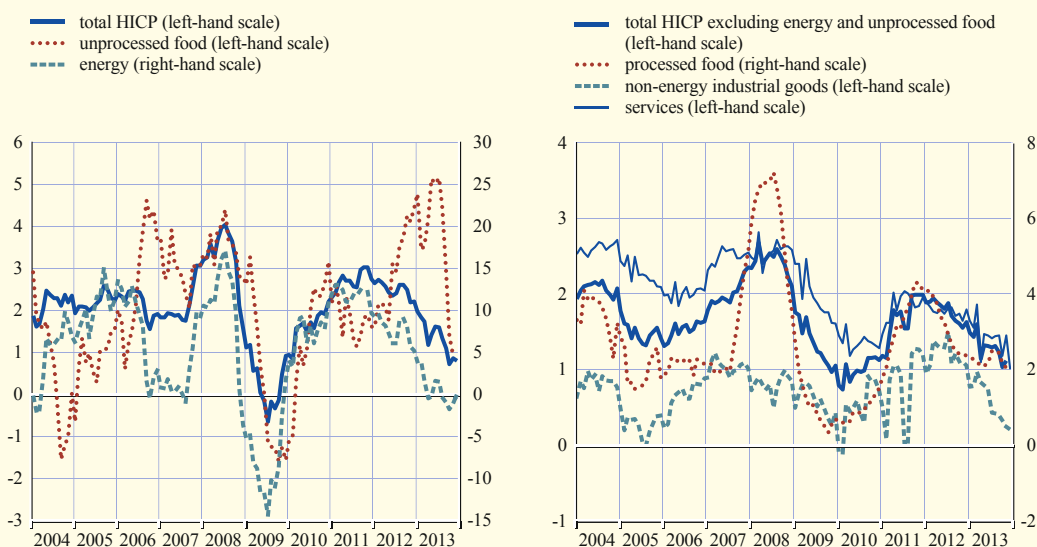
Table 7 Price developments

(annual percentage changes, unless otherwise indicated)

	2012	2013	2013 July	2013 Aug.	2013 Sep.	2013 Oct.	2013 Nov.	2013 Dec.
HICP and its components[1]								
Overall index	2.5	1.3	1.6	1.3	1.1	0.7	0.9	*0.8*
Energy	7.6	0.6	1.6	-0.3	-0.9	-1.7	-1.1	*0.0*
Food	3.1	2.7	3.5	3.2	2.6	1.9	1.6	*1.8*
Unprocessed food	3.0	.	5.1	4.4	2.9	1.4	0.9	.
Processed food	3.1	.	2.5	2.5	2.4	2.2	2.0	.
Non-energy industrial goods	1.2	0.6	0.4	0.4	0.4	0.3	0.2	*0.2*
Services	1.8	1.4	1.4	1.4	1.4	1.2	1.4	*1.0*
Other price indicators								
Industrial producer prices	2.8	.	0.0	-0.9	-0.9	-1.3	-1.2	.
Oil prices (EUR per barrel)	86.6	81.7	81.9	82.6	83.0	80.0	80.0	80.8
Non-energy commodity prices	0.5	-8.2	-12.2	-12.9	-12.9	-12.2	-11.7	-11.4

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

Chart 21 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)

— total HICP (left-hand scale)
····· unprocessed food (left-hand scale)
---- energy (right-hand scale)

— total HICP excluding energy and unprocessed food (left-hand scale)
····· processed food (right-hand scale)
---- non-energy industrial goods (left-hand scale)
— services (left-hand scale)

Source: Eurostat.

base effects. In November, the last month for which a detailed breakdown is available, the increase in the annual rate of change of the energy component reflected, in particular, a smaller decline, on an annual basis, of prices for car fuels and other liquid fuels, whereas the annual rate of increase in electricity and gas prices declined marginally.

Eurostat's flash estimate of inflation for the total food component, which refers to inflation in the processed and unprocessed components taken together, increased somewhat to 1.8% in December 2013, from 1.6% in November. No official information is yet available with regard to the breakdown of the food component for December. In November, unprocessed food price inflation dropped to 0.9%, from 1.4% in October, reflecting declines in the annual rates of change in meat and fruit prices. Given that unprocessed food price inflation stood at rates above 5% from May to July, the decline over the past few months indicates that the recent spike in food inflation is quickly unwinding. In particular, the annual rates of change in fruit and vegetable prices stood at 0.9% and -0.7%, respectively, in November, from peaks of 11.3% in July for fruit and 9% in June for vegetables. Processed food price inflation also declined further to 2.0% in November, reflecting, in particular, a decline in the annual rate of increase in the price of bread and cereals. The annual rate of increase in the price of tobacco products remained unchanged.

Excluding the volatile components, food and energy, HICP inflation has also moderated over 2013, albeit to a lesser extent than headline inflation. While HICP inflation excluding these items stood at 1.5%, on average, in 2012, it has fallen to rates below 1.0% over recent months, standing at 0.7% in December according to Eurostat's flash estimate. Excluding these two volatile groups, HICP inflation consists of two main components, namely non-energy industrial goods and services, both of which have recorded lower annual rates of change in recent months. The limited initial impact of a VAT increase in Italy on 1 October 2013 contributed to keeping non-energy industrial goods and services price inflation lower than expected. According to Eurostat's flash estimate, non-energy

industrial goods price inflation remained unchanged at 0.2% in December. In November, the annual rate of change in non-energy industrial goods prices had already been unusually weak, primarily reflecting lower annual rates of increase in semi-durable goods, and garments in particular, driven by the price drop in Greece following the mid-season sales.

According to Eurostat's flash estimate, services price inflation decreased to 1.0% in December, from 1.4% and 1.2% in November and October, respectively. The high volatility in the services component in the last two months is mainly related to the aforementioned changes in the HICP price collection practices in Germany.

3.2 INDUSTRIAL PRODUCER PRICES

Industrial producer prices inflation excluding construction stood at -1.2% in November 2013, after -1.3% in October (see Table 7 and Chart 22). Excluding construction and energy, the annual rate of change in industrial producer prices remained unchanged at -0.3% in November.

Pipeline pressures for HICP non-energy industrial goods price inflation remained at subdued levels. Annual PPI non-food consumer goods inflation decreased to 0.0% in November, from 0.2% in October, driven by declines in industries producing pharmaceuticals and books, and partly due to a downward base effect. This fall continues a downward trend observed over the last two years. Looking ahead, the PMI retail survey index of input prices for non-food stores in December picked up (on a three-month moving average basis), thereby exceeding its historical

average at 58.1 and continuing an upward trend over the last six months. Similarly, PMI survey indices of the input costs of consumer goods manufacturers have also increased over recent months. At the earlier price stages, the annual rate of change of PPI intermediate goods prices stood at -1.7% in November, unchanged from the previous month. In December the monthly rates of change for raw material commodity prices and crude oil prices in euro were slightly positive, whilst the annual rates of change remained in negative territory.

Pipeline pressures for HICP food price inflation continue to fall at both the earlier and later stages of the price chain, although from somewhat higher levels than in the case of non-energy industrial goods. Annual producer price inflation for food declined in November to 1.0%, following 1.2% in October and rates close to 4% at the start of 2013. The PMI survey shows a small decrease in the input price index for food retailers in December, whilst the index for margins increased. Earlier in the price chain, the annual rate of increase in EU farm

Chart 22 Breakdown of industrial producer prices

(annual percentage changes; monthly data)

— total industry excluding construction (left-hand scale)
····· intermediate goods (left-hand scale)
--- capital goods (left-hand scale)
— consumer goods (left-hand scale)
····· energy (right-hand scale)
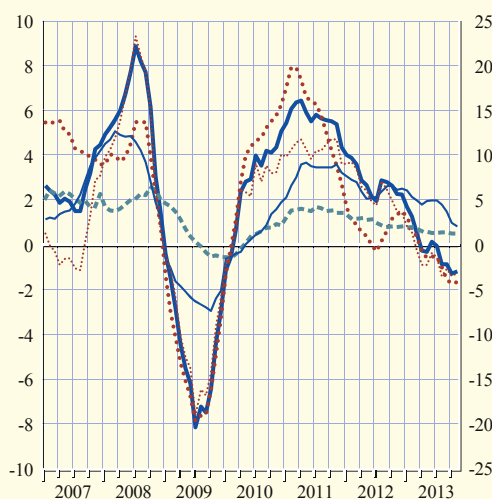
Sources: Eurostat and ECB calculations.

gate prices dropped to -3.2% in November, from rates above 11% in the second quarter of the year. International food commodity prices in euro terms remained broadly unchanged in December compared to the previous month, whilst remaining strongly negative in annual terms (-15.3%).

The latest information from both the PMI and the European Commission surveys confirms that pipeline pressures on consumer prices for non-energy industrial goods remain subdued and that those on consumer prices for processed food are moderating. With regard to the headline PMI (see Chart 23), the input price index for the manufacturing sector increased from 53.4 in November to 54.5 in December, while the output price index rose from 51.1 to 51.3 over the same period. Both indices remained below their long-term averages. According to the European Commission survey, selling price expectations for total industry remained broadly unchanged in November 2013.

Chart 23 Producer input and output price surveys

(diffusion indices; monthly data)

— manufacturing; input prices
····· manufacturing; prices charged
- - - services; input prices
— services; prices charged
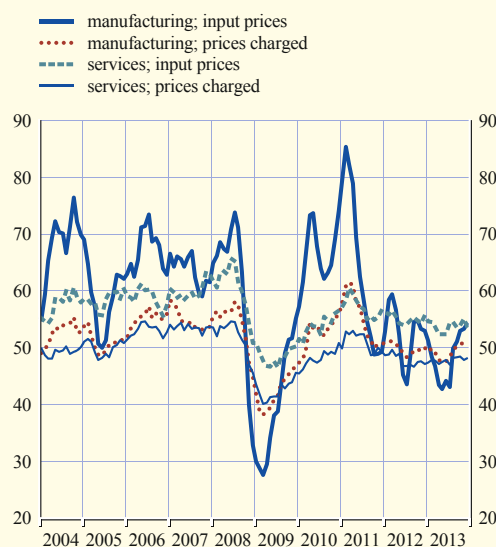
Source: Markit.
Note: An index value above 50 indicates an increase in prices, whereas a value below 50 indicates a decrease.

3.3 LABOUR COST INDICATORS

Domestic pressures on prices stemming from labour cost data remained subdued in the first three quarters of 2013 (see Table 8 and Chart 24), in line with the continued weak labour market situation. The relatively smooth pattern of wage growth at the euro area level conceals substantial divergences in wage developments across countries. While nominal wages grew at robust rates in countries with relatively resilient labour markets, nominal wages and unit labour costs grew only slightly or even declined in countries undergoing the most significant public sector wage cuts (related to fiscal consolidation) and experiencing persistently high levels of unemployment.

At the aggregate euro area level, compensation per employee grew at 1.5%, year on year, in the third quarter of 2013, after increasing by 1.6% in the previous quarter. Annual unit labour cost growth

Table 8 Labour cost indicators

(annual percentage changes, unless otherwise indicated)

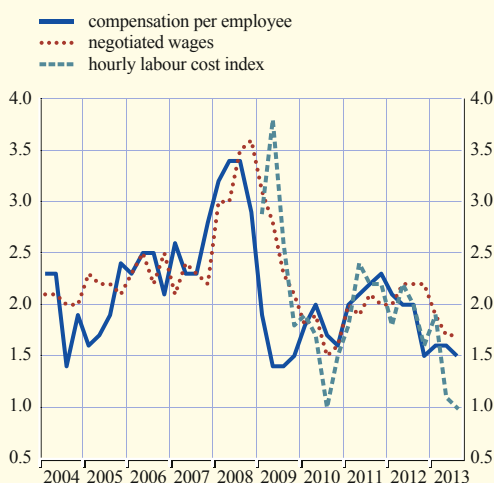|	2011	2012	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3
Negotiated wages	2.0	2.2	2.2	2.2	1.9	1.7	1.7
Hourly labour cost index	2.2	1.9	2.0	1.6	1.9	1.1	1.0
Compensation per employee	2.1	1.7	2.0	1.5	1.6	1.6	1.5
Memo items:							
Labour productivity	1.3	0.0	-0.1	-0.3	-0.1	0.4	0.5
Unit labour costs	0.8	1.7	2.1	1.8	1.8	1.2	1.0

Sources: Eurostat, national data and ECB calculations.

declined further, from 1.2% in the second quarter of 2013 to 1.0% in the third quarter.

The annual growth rate of total hourly labour costs declined further to 1.0% in the third quarter, from 1.1% in the second quarter, after having already slowed considerably by 0.8 percentage point from the first to the second quarter. The decrease is attributable to the marked increase in hours worked. The overall slowdown reflects a decline in hourly wage growth in the business economy, while hourly labour cost growth in the non-business economy, which mainly reflects changes in the government sector, increased. Within the business economy, annual hourly labour cost growth fell in the industrial sector, somewhat less so in the services sector but more so in the construction sector. At the country level, hourly labour costs decelerated in most of the 16 countries for which data are published. Some

Chart 24 Selected labour cost indicators

(annual percentage changes; quarterly data)

— compensation per employee
···· negotiated wages
---- hourly labour cost index

Sources: Eurostat, national data and ECB calculations.

of the remaining countries that witnessed an acceleration did so at still negative rates. Euro area negotiated wages grew by 1.7%, year on year, unchanged from the second quarter. Preliminary data for the fourth quarter point to a stabilisation in negotiated wage growth. Overall, the latest data releases suggest moderate labour cost growth in the near future.

Chart 25 Sectoral labour cost developments

(annual percentage changes; quarterly data)

— industry excluding construction, CPE
···· construction, CPE
---- market services, CPE
— services, CPE

— industry excluding construction, hourly LCI
···· construction, hourly LCI
---- market services, hourly LCI
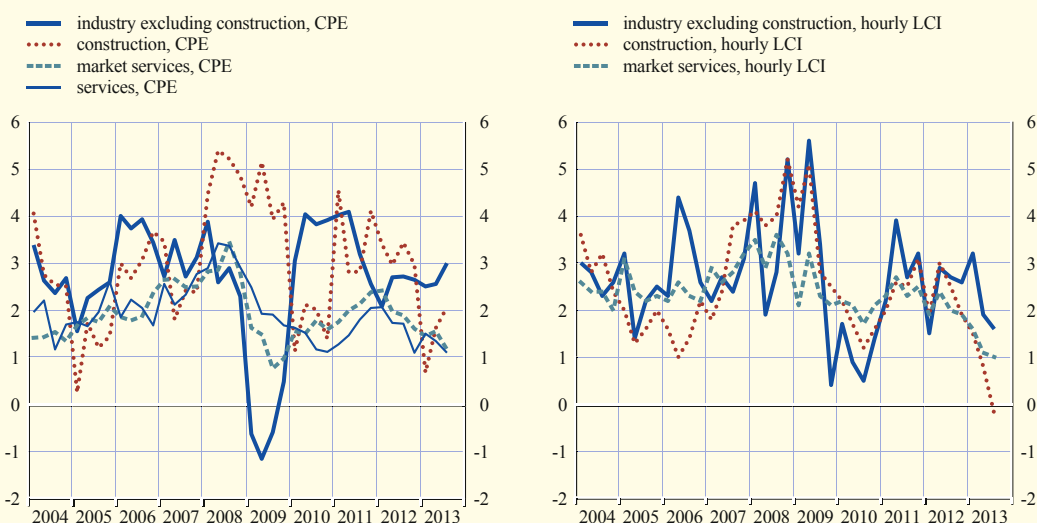
Sources: Eurostat and ECB calculations.
Note: CPE stands for compensation per employee and LCI stands for labour cost index.

3.4 THE OUTLOOK FOR INFLATION

On the basis of prevailing futures prices for energy, annual inflation rates are expected to remain at around current levels in the coming months. Over the medium term, underlying price pressures in the euro area are expected to remain modest. At the same time, inflation expectations for the euro area over the medium to long term continue to be firmly anchored in line with the aim of maintaining inflation rates below, but close to, 2%.

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

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4 OUTPUT, DEMAND AND THE LABOUR MARKET

Real GDP in the euro area rose by 0.1%, quarter on quarter, in the third quarter of 2013, following an increase of 0.3% in the second quarter. While developments in industrial production data for October point to a weak start to the fourth quarter, survey-based confidence indicators up to December have improved further from low levels, overall indicating a continuation of the gradual recovery in economic activity. Looking at 2014 and 2015, output is expected to recover at a slow pace, in particular owing to some improvement in domestic demand supported by the accommodative monetary policy stance. Euro area economic activity should, in addition, benefit from a gradual strengthening of demand for exports. Furthermore, the overall improvements in financial markets seen since the summer of 2012 appear to be working their way through to the real economy, as should the progress made in fiscal consolidation. In addition, real incomes have benefited recently from lower energy price inflation. At the same time, unemployment in the euro area remains high, and the necessary balance sheet adjustments in the public and the private sector 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 0.1% in the third quarter of 2013, after having increased by 0.3% in the second quarter (see Chart 26). Both domestic demand and changes in inventories contributed to growth in the third quarter. At the same time, net trade made a negative contribution to growth. This was the first time since early 2010 that net trade provided a negative contribution to quarter-on-quarter GDP growth. In the third quarter of 2013 output still stood 3% below its pre-recession peak in the first quarter of 2008 and around 1% below its post-recession peak in the third quarter of 2011.

Private consumption in the euro area rose by 0.1%, quarter on quarter, in the third quarter of 2013, following a similar growth rate in the previous quarter. The latest outcome most likely reflects rising consumption of retail goods, which was partly offset by lower spending on services. At the same time, car purchases made a neutral contribution to consumption growth in the third quarter.

With regard to the fourth quarter, available information tends, on balance, to suggest broadly stable developments in private consumption. In November the volume of retail sales rose by 1.4%, month on month, to stand at the same level as the average reading recorded for the third quarter of 2013, when they increased by 0.4% quarter on quarter. New car registrations in the euro area stood in October and November on average slightly more than 3% above their average level in the third quarter, when they declined, quarter on quarter, by 0.4%.

Chart 26 Real GDP growth and contributions

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

- domestic demand (excluding inventories)
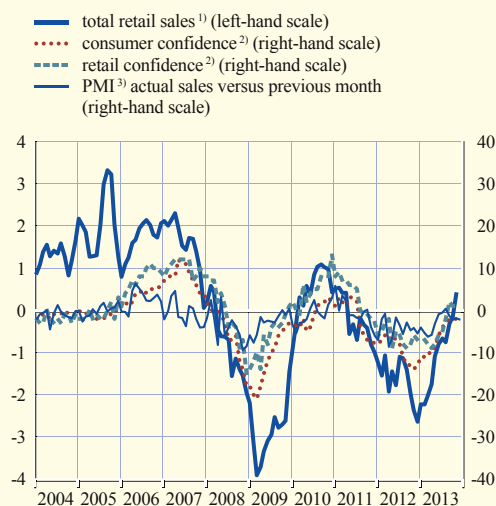- changes in inventories
- net exports
- total GDP growth
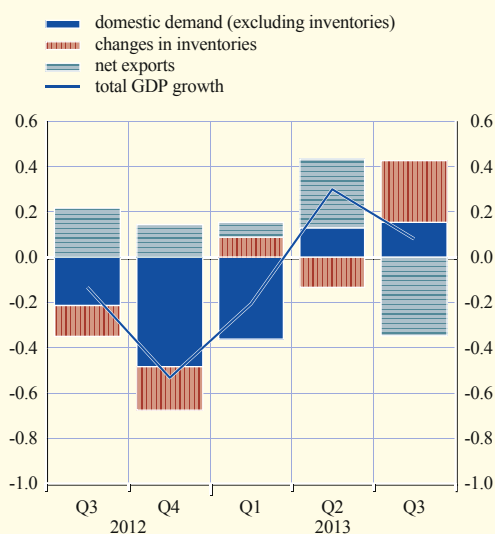
Sources: Eurostat and ECB calculations.

Survey data on the retail sector for the fourth quarter of 2013 suggest that the consumption of retail goods continued to display moderate growth (see Chart 27). The European Commission's indicator on confidence in the retail sector, which rose strongly in the third quarter, improved somewhat further in October and November, to stand slightly above its long-term average. In addition, consumer confidence improved between November and December, thereby resuming the upward movement which was temporarily interrupted by the previous month's decline. Confidence is now close to its long-term average and is thus consistent with ongoing soft dynamics in consumer spending. The Purchasing Managers' Index (PMI) for the retail sector declined from 49.5 in the third quarter to 47.8 in the fourth quarter. By remaining below 50, it points to muted sales in the final quarter of 2013. Finally, the indicator on expected major purchases remained at depressed levels, suggesting that consumers continue to be cautious in deciding whether or not to purchase durable goods.

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

(monthly data)

- total retail sales [1] (left-hand scale)
- ····· consumer confidence [2] (right-hand scale)
- ----- retail confidence [2] (right-hand scale)
- PMI [3] actual sales versus previous month (right-hand scale)

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

Gross fixed capital formation, which rebounded in the second quarter of 2013, rose further by 0.4% quarter on quarter in the third quarter. With regard to the components of investment in the third quarter, both construction and, albeit to a lesser extent, non-construction investment – each accounting for around half of total investment – displayed positive growth rates on a quarterly basis. Following the weak recovery over the past two quarters, business investment is expected to continue to increase moderately, as demand gradually picks up, confidence and financing conditions improve and uncertainty diminishes (see Box 4).

Incoming data on fixed investment provide somewhat mixed signals. Industrial production of capital goods – an indicator of future non-construction investment – declined further in October 2013, by 1.3% month on month. In the same month capital goods production stood around 1% below its average level in the third quarter of 2013, when it displayed flat growth on a quarterly basis. While this represents a depressed start to the fourth quarter, strong monthly volatility of production data calls for a cautious assessment. More timely survey results paint a somewhat more optimistic picture. For instance, the manufacturing PMI, which in the third quarter stood on average above the no-growth threshold of 50 for the first time since the second quarter of 2011, improved further in the final quarter of the year. Meanwhile, the European Commission's industrial confidence indicator, which has steadily risen over the last year, rose further in October and November, reaching the same level as in the summer of 2011.

In October 2013 construction production contracted further, by 1.2% month on month, following a decline of 0.5% in the previous month. As a result, in October, production in construction stood 1.5% below the average level for the third quarter, which represents a significant worsening compared with

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the third quarter when construction production rose by 1.9% on a quarterly basis. In addition, the construction confidence indicator, published by the European Commission, was still well below its historical average in October and November, while the PMI for construction in the euro area stood below 50 during the same months, pointing to muted developments in the construction sector.
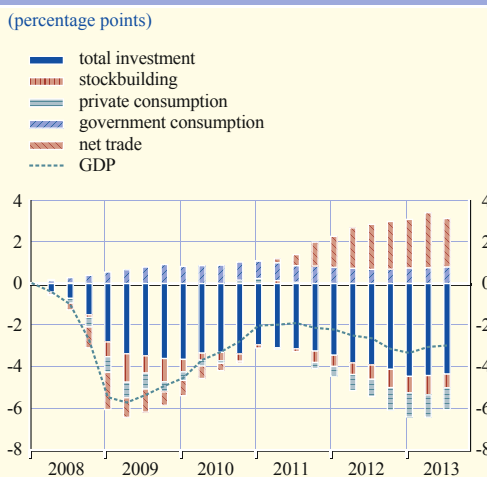
BUSINESS INVESTMENT – SIGNS OF A MODEST RECOVERY AHEAD

This box presents developments in investment, particularly business investment, since 2008, and gives an indication of the outlook for 2014. Total investment in the euro area has shrunk steadily and substantially during the financial crisis. Thus far total investment has contracted by more than 15% since the simultaneous peak in GDP and investment in 2008. This fall explains most of the sharp decline in euro area GDP that has been registered since 2008. This is because, in accounting terms, total investment (including housing) has subtracted more than 4 percentage points from real GDP in cumulative terms over this period (see Chart A). While total investment is usually among the most volatile components in GDP over the business cycle, the contraction over the past six years has been deeper and more extensive than during any recession in the past 30 years in the euro area. A weak recovery has been observed recently, with total investment growing by 0.2% in the second quarter of 2013 and by 0.4% in the third quarter of 2013 respectively. However, its level remains far below that of 2008.

Total investment refers to activities by businesses, households and the public sector. The fall in business investment (non-financial corporations) accounts for about half of the decline in total investment since 2008 (see Chart B). The household sector has contributed almost as much to this reduction, largely reflecting the drop in housing investment.[1] Public sector investment has

Chart A Euro area real GDP and contributions to cumulative change in real GDP since the first quarter of 2008

(percentage points)

- total investment
- stockbuilding
- private consumption
- government consumption
- net trade
- GDP

Source: Eurostat.
Notes: The last observation is for the third quarter of 2013. For Spain, inventories are reported within investment.

Chart B Euro area sectoral contributions to cumulative change in nominal investment since the first quarter of 2008

(percentage points)

- non-financial corporations
- public sector
- financial corporations
- households
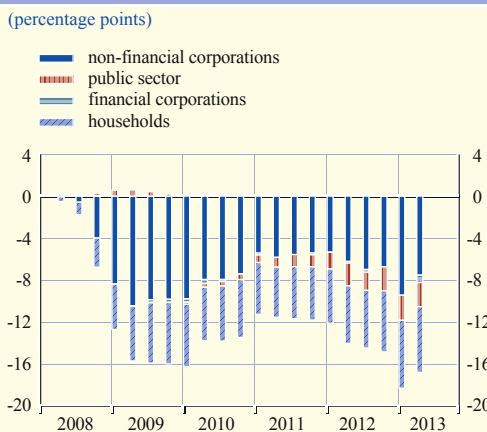
Source: Eurostat.
Note: The last observation is for the second quarter of 2013.

1 See the box entitled "Uncovering the dynamics of residential investment", *Monthly Bulletin*, ECB, Frankfurt am Main, May 2013.

also contracted sharply. However, given the relatively small share of public sector investment in total investment, its contribution is much more limited.

Looking closer at business investment, fundamental factors, such as weak demand and profits[2], as well as abundant spare capacity, help to explain the contracting dynamics over recent years. Particularly during the financial crisis, high levels of uncertainty[3], tight financing conditions and deleveraging needs among firms and banks also contributed to dampening firms' investment activity.

According to the European Commission's November 2013 investment survey, real euro area investment in the manufacturing industry is estimated to have decreased by a further 3% in 2013 and is expected to increase by 3% in 2014.

The survey also shows that, on balance, demand factors are expected to be more supportive of investment growth in the euro area in 2014 than they were a year earlier. Currently demand factors are broadly as supportive of investment growth as they have been on average since the start of EMU. The Commission survey distinguishes between small firms with less than 50

Chart C European Commission investment survey – factors influencing industrial investment in the euro area

(balances)

- demand
- financial
- technical
- other

a) small firms
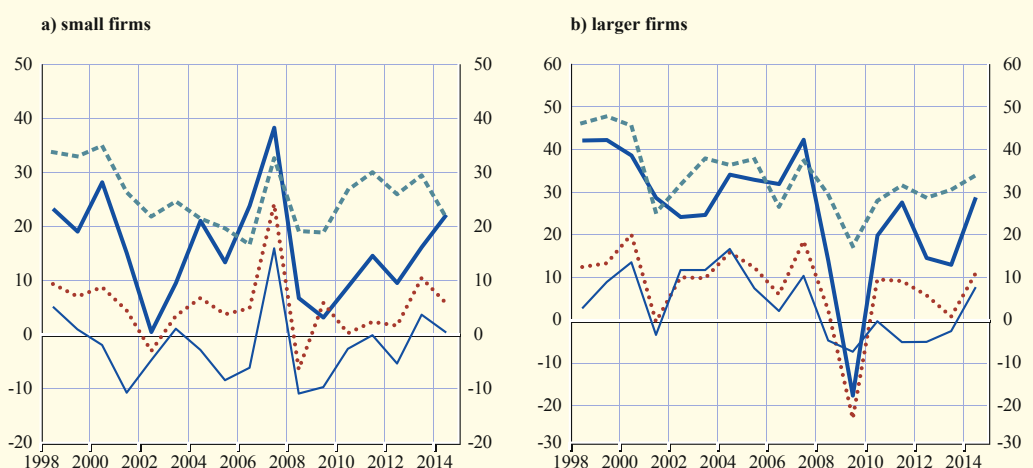
b) larger firms

Sources: European Commission investment survey and Eurostat.
Notes: Larger firms have more than 250 employees; small firms have less than 50 employees. Plotted are the levels of the balances of responses: the higher the balance, the more supportive the factor is perceived to be (and the lower the balance, the more restrictive). "Demand factors" cover the capacity utilisation rate and sales prospects; "financial factors" include the availability of resources for investment and their cost together with the return on investment and the lack of opportunities for the company to use its resources more profitably than by investment (notably by purely financial operations); "technical factors" comprise technological developments, the availability of labour and workers' attitudes towards the new technologies, and the technical conditions set by the public authorities before they grant the investment permit; "other factors" may include the policy of the public authorities, notably with regard to taxation, and whether or not production can be transferred abroad.

2 See the box entitled "Sectoral contributions to rebalancing within the euro area", *Monthly Bulletin*, ECB, Frankfurt am Main, December 2013.
3 See the box entitled "How has macroeconomic uncertainty in the euro area evolved recently?", *Monthly Bulletin*, ECB, Frankfurt am Main, October 2013.

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employees and larger firms with more than 250 employees. An encouraging result is that in 2014 smaller firms expect demand factors to be more supportive than they have been on average since 2009 (see Chart C). Unlike for larger firms, overall, the demand factors have provided limited support for investment since 2009 for small firms. The survey also shows that financing considerations remain heavily dependent on firm size: while larger companies expect financial factors in 2014 to become substantially more supportive of investment decisions compared with a year ago, small companies expect some deterioration.

All in all, following the weak recovery in recent quarters, moderate growth in business investment is expected to continue, as demand gradually picks up, confidence and financing conditions improve and uncertainty diminishes. The euro area bank lending survey also shows that lending for investment purposes is expected to become less subdued. However, the recovery is expected to take place at a modest pace, from low levels, as it remains dampened by *inter alia* the continued deleveraging by both banks and firms and to some extent by difficulties encountered by firms with bank-financing constraints to find alternative financing via market securities issuance, foreign direct investment flows or trade credits.

The contribution of euro area trade to GDP growth turned negative in the third quarter of 2013. Both export and import growth moderated in the third quarter: on a quarterly basis, exports grew by only 0.2%, while imports increased by 1%. This moderation follows an extended period of positive net trade. In this context, Box 5 assesses to what extent the current account adjustment for countries under stress has been cyclical or structural.

Data on euro area trade for the fourth quarter based only on October data suggest that trade growth was weak, but the net trade contribution to GDP growth is likely to become positive again. In October the value of exports fell marginally on a monthly basis, whereas the value of imports declined more strongly. The level of exports stood higher than the average for the third quarter, while imports were lower. According to short-term indicators, trade prices fell in October, indicating that in volume terms trade was better, with real export growth stronger than real import growth. Survey data for the fourth quarter show an improving trade scenario. The PMI new export orders index for the fourth 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 improved compared with the third quarter.

Box 5

TO WHAT EXTENT HAS THE CURRENT ACCOUNT ADJUSTMENT IN THE STRESSED EURO AREA COUNTRIES BEEN CYCLICAL OR STRUCTURAL?

Prior to the global financial crisis, a number of euro area countries recorded large current account deficits. However, since 2008 the current account deficits of the four countries which in 2012 were subject to an economic and/or financial adjustment programme have decreased or even turned into surpluses (see Chart A).[1] In parallel, domestic demand has declined substantially in

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1 This box focuses on the four countries subject to an economic and/or financial adjustment programme in 2012 (Ireland, Greece, Spain and Portugal). Cyprus is excluded from the analysis as its programme and adjustment process started only later.
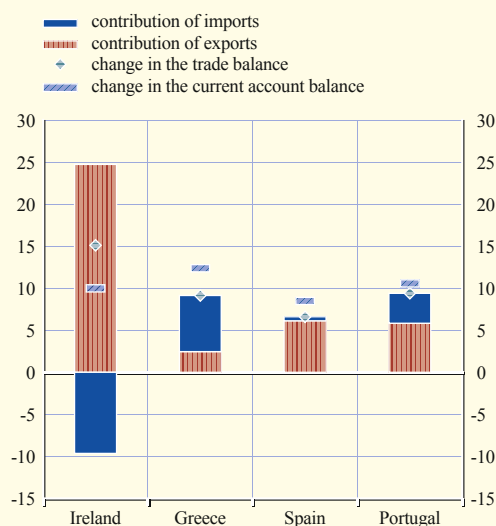
Chart A Current account balances

(as a percentage of GDP)
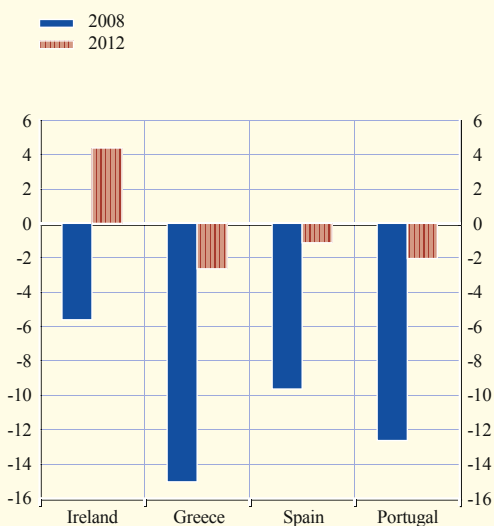
- 2008
- 2012

Sources: Eurostat and national statistical institutes.

Chart B Contributions to the change in trade balances between 2008 and 2012

(percentage points of GDP)

- contribution of imports
- contribution of exports
- change in the trade balance
- change in the current account balance

Sources: Eurostat and national statistical institutes.

these countries. This raises the question of the extent to which the external adjustment has been driven by a cyclical compression of domestic demand, which might be reversed at some point, and the extent to which the adjustment is more structural in nature.

A current account deficit can be reduced through a reduction in imports and/or an expansion of exports. During the ongoing adjustment of external imbalances in the stressed euro area countries both channels have played a role, albeit to varying degrees (see Chart B). In Spain and Portugal, the larger part of the improvement in current account balances is attributable to an increase in exports relative to GDP, while in Greece the improvement is mostly attributable to a compression of imports. In Ireland, exports have increased strongly since 2008, with imports contracting only in the initial stages of the adjustment phase and exceeding their pre-crisis level in 2012.

The adjustment in exports and imports, in turn, typically reflects a decline in domestic demand relative to foreign demand or a depreciation of the real effective exchange rate of the country concerned. In the four stressed euro area countries under review, a combination of both mechanisms has been at work (see Chart C). While most of the contraction in relative demand occurred in the initial stages of the adjustment, the adjustment of relative prices, i.e. a real depreciation as measured by the harmonised competitiveness indicators deflated by unit labour costs, occurred only later and was most pronounced in 2012 (with the exception of Ireland). However, the adjustment in unit labour costs partly reflects productivity increases due to labour shedding rather than nominal wage adjustment. Moreover, the pass-through from unit labour costs to product prices has been incomplete.

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The decline in domestic demand relative to foreign demand appears to have been both cyclical and structural in nature. Between 2008 and 2012 the stressed countries recorded declines in real GDP of around 5% in the cases of Ireland, Spain and Portugal and 20% in the case of Greece. According to estimates by the IMF, the European Commission and the OECD, this only partly reflected a substantial widening of the output gap. For instance, for Greece the output gap is estimated to have widened by between 14 and 19 percentage points. However, potential output in Greece is estimated to have declined by up to 6% between 2008 and 2012. Also in the other stressed countries potential growth was either negative or fell short of world potential output growth of about 15%. This implies that a significant part of the decline in domestic demand of the stressed euro area countries relative to foreign demand is due to a decline in their potential output relative to that of the rest of the world.

Chart C Relative demand and harmonised competitiveness indicators

(index: 2009 = 100)

x-axis: relative demand [1]
y-axis: harmonised competitiveness indicator [2]

——— Ireland
· · · · · Greece
– – – Spain
——— Portugal

Source: ECB staff calculations.
1) Ratio of domestic demand to foreign demand.
2) Deflated by unit labour costs. A decrease corresponds to a real depreciation.

The observed change in relative potential output suggests that part of the external rebalancing in the stressed euro area countries must have been of a non-cyclical nature. In order to quantify the cyclical and non-cyclical components of the current account adjustment more distinctly, one can draw on the empirical relationship between the current account balance and its determinants, as captured by a standard current account model. Such a reduced-form model relates the current account balance to a set of variables including, on the one hand, cyclical factors, in particular the output gap of a country expressed relative to the world output gap, and, on the other hand, non-cyclical factors, such as demographics, the medium-term growth potential and the cyclically-adjusted fiscal position.[2] It was found that non-cyclical factors have played a significant role in the current account adjustment in the stressed euro area countries. In fact, according to most estimates, cyclical factors explain less than half of the current account adjustment between 2008 and 2012, with the notable exception of Greece (see Chart D). This finding is robust to the use of different measures of the output gap, which are known to be subject to a considerable degree of measurement uncertainty.[3]

While continued adjustment is needed going forward, available evidence suggests that a significant part of the current account adjustment achieved so far is likely to be maintained in the near future,

2 For a discussion of such current account models, see *External Balance Assessment (EBA) Methodology: Technical Background,* Research Department, IMF, June 2013.
3 For a discussion of the measurement of the output gap and the uncertainty surrounding such estimates, see the article entitled "Trends in potential output", *Monthly Bulletin,* ECB, January 2011.
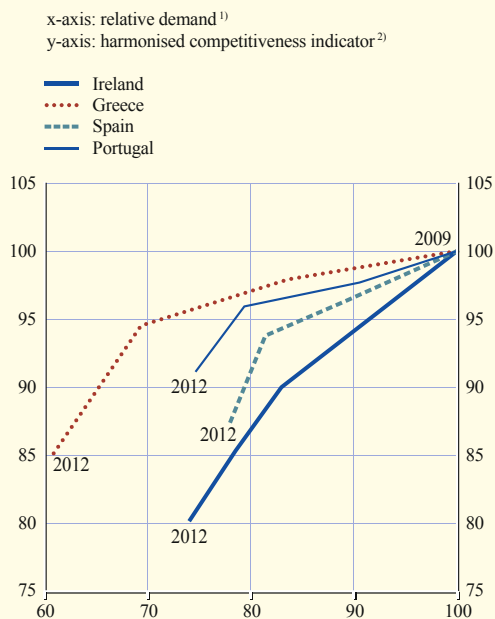
broadly consistent with projections by the IMF and the European Commission. This reflects both the structural adjustment observed so far but also the expectation that the negative output gaps in the stressed euro area countries will close only slowly. However, some deterioration is to be expected in the current account balances of the stressed euro area countries once output returns to potential. In addition, it is likely that potential growth will increase again in the future. However, these factors are unlikely to reverse fully the current account correction seen to date.

Nevertheless, several countries have not adjusted their structural current account balances to a level that would significantly reduce their large negative net international investment positions in the near future. Further structural reforms, as well as further improvements in price and non-price competitiveness, are therefore needed in the stressed euro area countries with a view to strengthening export performance over the longer term.

Chart D Contribution of cyclical factors to the change in current account balances between 2008 and 2012

(percentage points)

■ change in the current account balance
▮▮ cyclical contribution based on output gaps from the IMF
▬ cyclical contribution based on output gaps from the European Commission
▨ cyclical contribution based on output gaps from the OECD
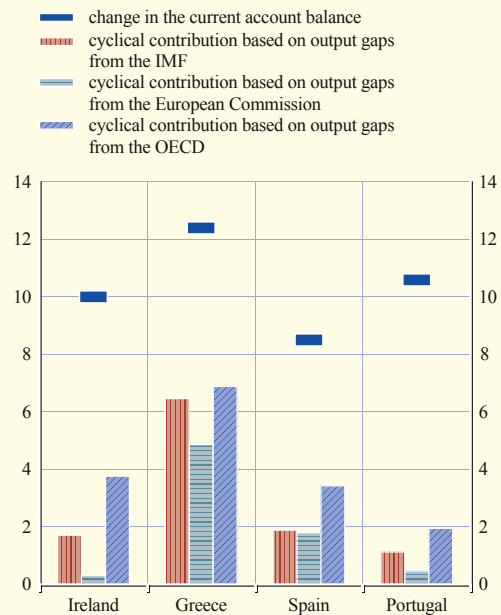
Sources: European Commission, IMF, OECD, national statistical institutes and ECB staff estimates.

4.2 SECTORAL OUTPUT

In the third quarter of 2013 real value added increased further by 0.1% quarter on quarter, owing to developments in services. Value added in industry displayed flat growth in the third quarter.

With regard to developments in the final quarter of 2013, production in the industrial sector (excluding construction) declined by 1.1%, month on month, in October. As a result, production stood almost 1% below its average level in the third quarter. This is a weak start to the fourth quarter and a worsening compared with the quarterly decline of 0.2% in the third quarter of 2013 (see Chart 28). Meanwhile, the ECB indicator on euro area industrial new orders (excluding heavy transport equipment) declined by 1.9%, month on month, in October, following a smaller decline in the previous month. The level of orders therefore stood 1.5% below the level in the third quarter, when it rose by 1.3% on a quarterly basis. Survey data, which are available up to December, point towards a small expansion of industrial sector output in the fourth quarter (see Chart 29). For example, the PMI manufacturing output index, which already indicated growth in the third quarter, rose further in the fourth quarter of 2013.

Production in construction declined by 1.2% in October, to a level 1.5% below that reached in the third quarter of the year. Moreover, survey data point to a feeble underlying growth momentum, consistent with ongoing weakness in the construction sector.

Although the PMI index of activity in business services has declined during the last three months, it still rose somewhat between the third and fourth quarters of 2013. The index, which averaged

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Chart 28 Industrial production growth and contributions

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

- capital goods
- consumer goods
- intermediate goods
- energy
- total (excluding construction)
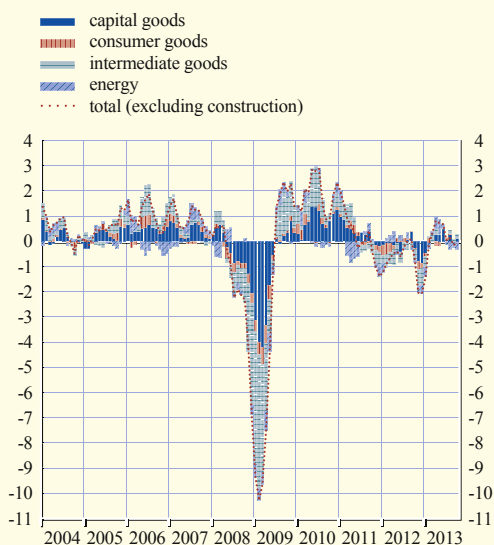
Sources: Eurostat and ECB calculations.
Note: Data shown are calculated as three-month moving averages against the corresponding average three months earlier.

Chart 29 Industrial production, industrial confidence and PMI manufacturing output

(monthly data; seasonally adjusted)
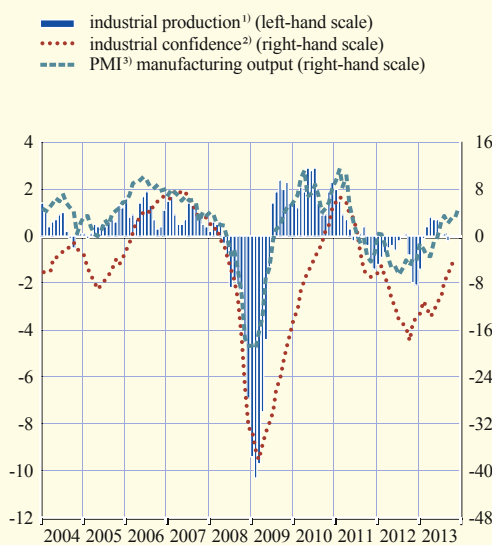
- industrial production[1] (left-hand scale)
- industrial confidence[2] (right-hand scale)
- PMI[3] manufacturing output (right-hand scale)

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

51.2 in the final quarter of 2013, is thus in line with another small increase in output in the services sector in that quarter. Other business surveys, such as those of the European Commission, paint a similar picture.

4.3 LABOUR MARKET

Labour markets are showing signs of stabilisation, which is consistent with their typically delayed response to improvements in economic activity. Employment was stable in the third 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 subdued developments in the period ahead.

In the third quarter of 2013 the level of employment remained stable compared with the second quarter (see Table 9). At the same time, the reading for the second quarter has been revised up, now displaying zero growth. The latest developments thus clearly indicate that a stabilisation is taking place following the prolonged period of decline. At the sectoral level, the latest outcome reflects declines in the industrial sector, which were offset by increases in the services sector. Hours worked rose further by 0.1% quarter on quarter in the third quarter, a development which is consistent with a normalisation of labour market conditions. Although survey results have recently improved, they still point to continued weak labour market developments in the fourth quarter of 2013 (see Chart 30).

Table 9 Employment growth

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

| | Persons | | | | | Hours | | | | |
| | Annual rates | | Quarterly rates | | | Annual rates | | Quarterly rates | | |
	2011	2012	2013 Q1	2013 Q2	2013 Q3	2011	2012	2013 Q1	2013 Q2	2013 Q3
Whole economy	0.3	-0.7	-0.4	0.0	0.0	0.3	-1.4	-1.0	0.7	0.1
of which:										
Agriculture and fishing	-2.0	-1.9	-1.5	1.8	-0.3	-3.1	-2.8	-0.4	0.8	-0.5
Industry	-1.1	-2.1	-0.8	-0.5	-0.3	-0.8	-3.4	-1.6	1.1	-0.2
Excluding construction	0.1	-1.0	-0.4	-0.4	-0.3	0.8	-2.1	-1.2	1.4	-0.1
Construction	-3.8	-4.7	-1.6	-1.0	-0.3	-3.9	-6.1	-2.4	0.6	-0.6
Services	0.8	-0.2	-0.3	0.0	0.1	0.8	-0.7	-0.8	0.6	0.2
Trade and transport	0.7	-0.8	-0.4	0.0	0.0	0.5	-1.6	-0.8	0.8	0.3
Information and communication	1.2	1.2	-0.2	0.1	-0.1	1.4	0.5	-0.1	0.3	-0.4
Finance and insurance	-0.4	-0.4	-0.1	-0.1	-0.1	-0.3	-0.8	-0.2	0.4	0.1
Real estate activities	0.6	-0.4	-0.7	0.5	0.4	1.4	-1.2	-0.2	1.0	-0.3
Professional services	2.5	0.7	-0.6	0.5	0.4	2.7	0.4	-1.0	0.8	0.4
Public administration	0.3	-0.3	-0.2	-0.2	0.1	0.5	-0.5	-0.9	0.4	0.1
Other services[1]	0.1	0.7	0.0	-0.1	0.1	0.1	-0.1	-0.5	-0.1	0.4

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

Productivity per person employed rose by 0.5% in annual terms in the third quarter of 2013, which is slightly more than in the previous quarter (see Chart 31). The latest increase was broadly based across sectors. At the same time, the annual growth rate of hourly labour productivity rose by 0.2 percentage point to 0.5% between the second and third quarters. Looking ahead, the PMI productivity index points to continued positive, albeit moderate, productivity growth in the final quarter of 2013.

Chart 30 Employment growth and employment expectations

(annual percentage changes; percentage balances; seasonally adjusted)

— employment growth in industry (excluding construction; left-hand scale)
····· employment expectations in manufacturing (right-hand scale)

— employment expectations in construction
····· employment expectations in the retail trade
---- employment expectations in the services sector
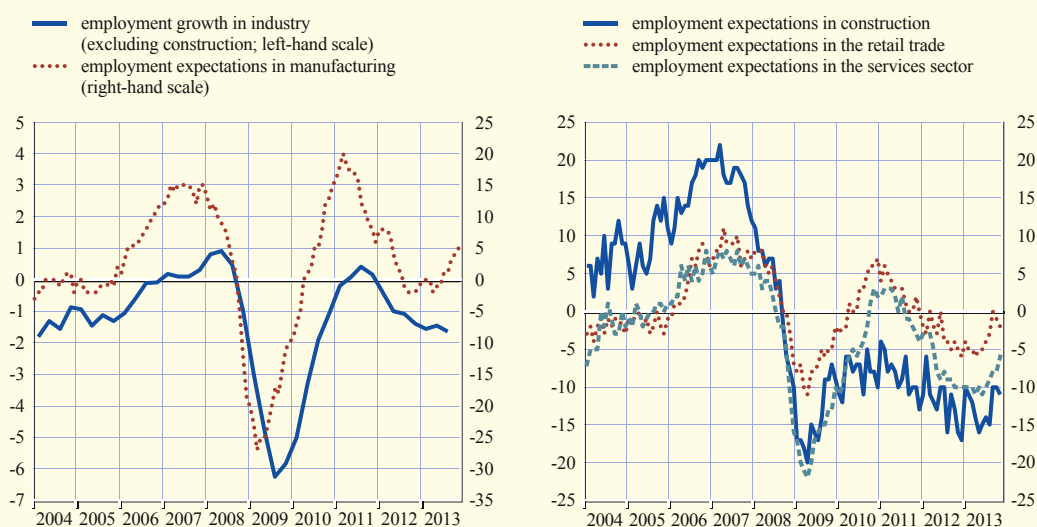
Sources: Eurostat and European Commission Business and Consumer Surveys.
Note: Percentage balances are mean-adjusted.

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Chart 31 Labour productivity per person employed

(annual percentage changes)

— whole economy (left-hand scale)
····· industry (excluding construction; right-hand scale)
--- services (left-hand scale)
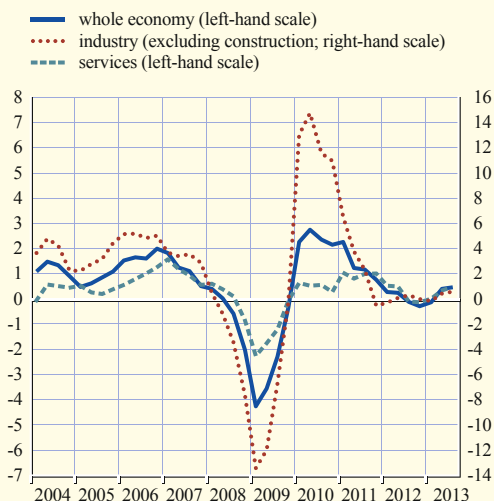
Sources: Eurostat and ECB calculations.

Chart 32 Unemployment

(monthly data; seasonally adjusted)

— monthly change in thousands (left-hand scale)
····· percentage of the labour force (right-hand scale)
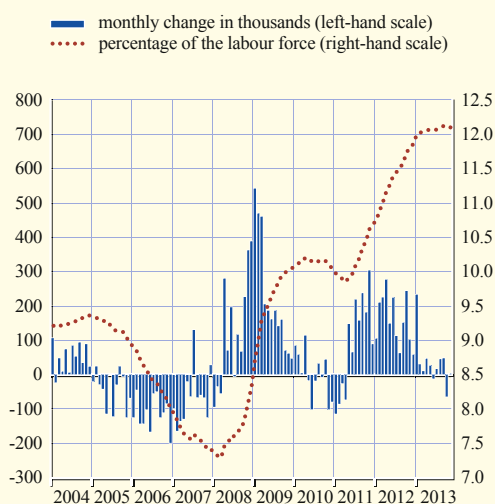
Source: Eurostat.

The unemployment rate stood at 12.1% in November, having thereby remained stable for eight consecutive months. However, when considering the annual change in the unemployment rate, there has been a steady improvement since the summer of 2012. Nevertheless, the latest reading is 4.8 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

While developments in industrial production data for October point to a weak start to the fourth quarter, survey-based confidence indicators up to December have improved further from low levels, overall indicating a continuation of the gradual recovery in economic activity. Looking at 2014 and 2015, output is expected to recover at a slow pace, in particular owing to some improvement in domestic demand supported by the accommodative monetary policy stance. Euro area economic activity should, in addition, benefit from a gradual strengthening of demand for exports. Furthermore, the overall improvements in financial markets seen since the summer of 2012 appear to be working their way through to the real economy, as should the progress made in fiscal consolidation. In addition, real incomes have benefited recently from lower energy price inflation. At the same time, unemployment in the euro area remains high, and the necessary balance sheet adjustments in the public and the private sector 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, weaker than expected domestic demand and export growth, and slow or insufficient implementation of structural reforms in euro area countries.

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FIFTEEN YEARS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS
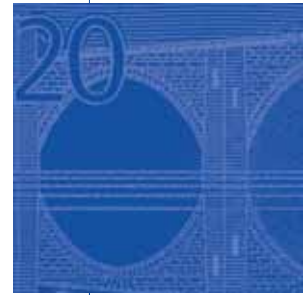
Fifteen years have passed since the launch of the ECB Survey of Professional Forecasters (SPF). Over this period, the SPF has made a significant contribution to the ECB's macroeconomic analysis and monetary policy deliberations and has drawn interest from practitioners and academics alike, both from within and outside the world of central banking. This article reviews some key elements regarding the usefulness of the SPF as a source of information for the ECB's monetary policy assessment. First, the short to medium-term expectations in the SPF offer a useful benchmark against which to assess the Eurosystem staff macroeconomic projections. Second, longer-term inflation forecasts help to assess whether private agents' expectations are in line with the ECB's quantitative definition of price stability, while longer-term expectations for GDP growth and unemployment offer useful insights into the broad forces underlying the euro area's growth potential. Third, the financial crisis has highlighted the usefulness of uncertainty measures for macroeconomic analysis, including those that can be extracted from the SPF.

I INTRODUCTION

Fifteen years have passed since the launch of the ECB Survey of Professional Forecasters (SPF). Around the time of its inception in June 1998, the ECB began preparations, in collaboration with the national central banks (NCBs) of the EU, to establish a survey of the private sector's expectations regarding key euro area macroeconomic developments.[1] The first SPF was conducted in the first quarter of 1999 and, since then, 60 surveys have been carried out on a quarterly basis – in January, April, July and October – asking respondents to provide expectations for euro area HICP inflation, GDP growth and the unemployment rate. Respondents provide point forecasts for rolling horizons (one and two years ahead), fixed calendar year horizons (current year, next year and year after next) and longer-term expectations (five years ahead). SPF participants are also asked to assign a probability distribution to their forecasts. The individual responses are aggregated in the form of mean point forecasts and as aggregate probability distributions. Other central banks from major economies around the world also use surveys of professional forecasters as an independent source of information for expectations of macroeconomic developments (see Box 1 for a comparison between the euro area SPF and that of the United States and of the United Kingdom).

The results of the euro area SPF have drawn considerable interest from both practitioners and academics alike. The latter have used them for a wide range of issues, including testing for rational and efficient expectations both at the individual and aggregate levels, optimal forecast combination methods and the measurement and behaviour of uncertainty. For the ECB, the SPF has been an important source of information in its general economic and monetary analyses. This article assesses three main ways in which the SPF has been used by policy-makers in its 15 years of existence. Section 2 looks at the role of the SPF as a comparator for the Eurosystem staff macroeconomic projections for the current year and the next year, reviewing relative performance and discussing the role of forecasting assumptions.[2] Section 3 examines the longer-term forecasts in the SPF for GDP growth, unemployment rates and inflation in the context of the information these variables provide on key concepts such as potential output and inflation objectives. Section 4 examines professional forecasters' assessments of the uncertainty surrounding their forecasts and compares these assessments with other indicators of macroeconomic uncertainty. Section 5 concludes.

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1 For more details regarding the motivation for launching the SPF, see García, J.A., "An introduction to the ECB's Survey of Professional Forecasters", *Occasional Paper Series*, No 8, ECB, September 2003.
2 For an early assessment of the data collected in the SPF between 1999 and 2006, see Bowles, C., Friz, R., Genre, V., Kenny, G., Meyler, A. and Rautanen, T., "The ECB Survey of Professional Forecasters (SPF) – A review after eight years' experience", *Occasional Paper Series*, No 59, ECB, April 2007.

COMPARING SURVEYS OF PROFESSIONAL FORECASTERS ACROSS COUNTRIES

Central banks conducting surveys of professional forecasters include the Federal Reserve Bank of Philadelphia (FRBP) for the United States, the Bank of England (BoE) for the United Kingdom and the ECB for the euro area.[1] The history of these surveys goes back to 1968 in the case of the FRBP, to 1993 in the case of the BoE and to 1999 in the case of the ECB. The experiences of central banks and other users over the years are important for any future adaptations of such surveys. Against this background, this box examines some key similarities and differences across the three surveys and summarises some of the changes introduced over time.

Key similarities and differences across surveys

The surveys of professional forecasters by the ECB, the FRBP and the BoE are comparable in several respects. In particular, all three surveys cover inflation, real GDP growth and unemployment as *core variables*. This selection of core variables allows the inflation outlook to be assessed in terms of fundamental determinants such as economic activity and unemployment. The FRBP SPF covers by far the broadest set of indicators, as it also requests data on components of GDP, productivity and house prices, for example. All three surveys ask for forward-looking information on variables that often function as *assumptions* or otherwise conditioning variables in forecasts and projections. For instance, the ECB and BoE surveys ask for central bank interest rate and exchange rate assumptions, while the ECB survey also asks for data on oil prices and labour costs. The FRBP survey, in addition to requesting information on the three-month Treasury bill rate, also asks for information on corporate bond yields as a variable that captures financing conditions.

All three surveys are conducted in the first month of each quarter, with the actual deadline depending on the release of relevant national data. The results are then published in the second month of the quarter. The surveys thus form part of the information set available which central banks use as a basis for preparing their own forecasts and projections. In the case of the ECB SPF, the results are based on an *average number of respondents* somewhat greater than 50, compared with fewer than 40 in the case of the FRBP SPF and between 20 and 30 in the case of the BoE SPF.

In the ECB and FRBP surveys, forecasts are surveyed for specific *calendar year horizons*. This allows the nature of the forecast revision process, such as its relationship to macroeconomic news, to be examined. Both surveys ask for expectations related to the current calendar year, the next year and the year after next. Additionally, longer-term expectations, relating to a horizon of five calendar years ahead in the case of the ECB and covering the periods one to five years and one to ten years ahead in the case of the FRBP, are surveyed. All three surveys also request information on *rolling horizons*, referring to expectations one year ahead, for instance, of the latest data released for a given variable. Such rolling horizons allow for a consistent comparison of disagreement and uncertainty surrounding the forecasts of different survey rounds, given that, in the case of fixed horizons, these two measures normally decrease as more information becomes available.

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1 Additional examples of the many other countries which carry out surveys of professional forecasters include Japan (Survey of Japanese Economic Forecasts (ESPF) established in May 2009) and Canada (Private Sector Survey (PSS) established in 1975).

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All three surveys ask for *probability distributions* around the core variables. For this purpose the questionnaires provide so-called "bins" (with the lowest and highest bins being open-ended) that can be used as a basis for approximating the underlying distribution. Such distributions allow the risks that forecasters see around their point estimates to be assessed.

Key adaptations made across time and surveys

Notable changes have been made to various features of the designs of the surveys. All surveys have, over time, requested *additional variables*, including core variables such as real GDP in the case of the BoE survey and assumption variables such as labour costs in the case of the ECB survey. Other extensions include requesting expectations for corporate bond yields in the case of the FRBP and for the stock of assets purchased by the central bank in the case of the BoE.

Adaptations of horizons have been introduced in the FRBP and BoE surveys. In the case of the former, this relates in particular to the introduction of the calendar year after next as an additional fixed horizon, as well as the long-term and rolling horizons for inflation and GDP. In the case of the BoE, there has been a switch from a mix of fixed and rolling horizons to just rolling horizons (one, two and three years ahead).

All surveys have seen *adjustments to the number and size of bins* in response to the macroeconomic developments over the last 15 years. These adjustments have occurred at different points in time, but were most prominent in response to developments seen during the 2008 financial crisis and recession. As point forecasts assumed historically unprecedented values, the probability mass moved closer to the open-ended bins, with the consequence that it was no longer possible to reasonably approximate the underlying distribution. The extension of the range covered by closed bins restored this possibility of approximation.

Overall, the current design of the three SPF surveys by the ECB, the FRBP and the BoE and the adaptations seen over time suggest a broad convergence of the key features of the surveys. In particular, the adjustments suggest that an informed assessment of the survey information requires additional information beyond that provided by the core variables, and that probabilities are a highly useful element in the assessment of baseline forecasts. Similarly, the request for expectations at longer horizons reflects the usefulness of assessing the anchoring of expectations in the context of the medium-term orientation of monetary policy.

2 USING THE SPF AS A COMPARATOR FOR PROJECTIONS

The ECB aims to achieve price stability at a medium-term horizon. In its assessment of risks to price stability, the Eurosystem staff macroeconomic projections play an important role in condensing the information provided by economic indicators in a coherent and structured manner. In this respect, the SPF has provided an alternative source of information against which to assess Eurosystem staff projections. Although the focus of this section will be on comparing SPF and staff projections in terms of the magnitude of the projected variables for the individual years of the forecast horizon, policy-makers also obtain highly valuable information from the time profile that the SPF expects for the projected variables (e.g. acceleration or deceleration) over the horizon.

More specifically, this section compares the Eurosystem's own projections for the current and next calendar years with the corresponding mean forecasts from the SPF, with some focus on the reasons for the observed forecast errors, such as different assumptions.[3] In order to interpret differences between forecasts and projections, it is useful to bear in mind the way SPF respondents form their expectations. The results of a special questionnaire for SPF participants provide information on the prevailing forecast practices and some changes that have been observed since 2008 (see Box 2).

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3 A more detailed assessment of the forecast performance of the Eurosystem staff macroeconomic projections for the euro area, including a comparison with those of other international institutions, can be found in the article entitled "An assessment of Eurosystem staff macroeconomic projections", *Monthly Bulletin*, ECB, May 2013.

HOW ARE FORECASTS IN THE ECB SURVEY OF PROFESSIONAL FORECASTERS MADE? RESULTS OF A SPECIAL QUESTIONNAIRE

Understanding how participants in the ECB SPF make their forecasts and form their expectations is important for interpreting both the average outcomes and the heterogeneity across individual forecasts. This box summarises the results of a special questionnaire sent to SPF participants in the summer of 2013, aimed at taking stock of current forecasting practices and gauging potential changes since the start of the financial crisis.[1]

Responses were received from 45 SPF participants, which represents around three-quarters of the average number of responses received in the regular survey rounds. As in the first special questionnaire conducted in 2008, there were questions on timeliness and methods of forecasting, on the use of economic models and judgement, and on the way probability distributions and assumptions are computed.[2] These questions have been partly rephrased and extended to find out whether and in what way the forecasting processes have changed since the start of the financial crisis. It should be noted that on some occasions, the percentages reported may add up to more than 100%, as respondents could indicate more than one category.

Frequency of forecast updates reported in the SPF

The majority of respondents (84%) reported that their forecasts are updated on a regular calendar basis. Around one-third (31%) do so following important data releases that make them change their view of the economy. A number of respondents (16%) update their forecasts both on a calendar basis and in between scheduled updates in case of important data releases. These percentages are broadly the same as those reported in the 2008 special questionnaire.

Of those respondents who update their forecasts regularly according to a calendar, two-thirds reported that they do so on a quarterly basis, while a smaller share (28%) updates them each month. Compared with the 2008 special questionnaire, a higher share of participants now reports that they update their forecasts at least once each quarter.

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1 A copy of the questionnaire and a more detailed summary of the results can be found on the ECB's website at http://www.ecb.europa.eu/stats/prices/indic/forecast/html/index.en.html.
2 For a summary of the 2008 SPF special questionnaire, see http://www.ecb.europa.eu/stats/prices/indic/forecast/shared/files/quest_summary.pdf.

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Most respondents indicated that they provide their latest available forecast for each SPF round, with only a small proportion preparing a new forecast specifically for the SPF. Of the forecasts that are sent in a given SPF round, less than half are new forecasts, while around one-third are mechanical updates of previous forecasts on the basis of the latest data or assumptions. Overall, given the high frequency and nature of the updates, the replies suggest that the SPF expectations are quite timely.

Forecasting techniques and models

The responses indicate that the type of model preferred to generate forecasts varies according to the forecast horizon and to the variable being forecast. Reduced form models, such as single equation, vector autoregressive (VAR) or vector error correction models (VECM), seem to be commonly used for all horizons and variables, although somewhat more prominently to forecast inflation rather than real GDP or unemployment. Structural models, such as supply and demand-based macro models or dynamic stochastic general equilibrium (DSGE) models, are increasingly used for the longer forecast horizons.

Most respondents (84%) reported that they use at least one type of reduced form model, with a substantial share of respondents reporting that they use two or more types of these models for a given variable and horizon. With regard to structural models, the responses suggest an increased use of DSGE models in comparison with the 2008 questionnaire, putting them now on a more or less equal footing with more traditional supply and demand-based macro models. More generally, the use of different models for the same horizons and variables is motivated by cross-checking results or by forecasting components of the core variables with different models and later combining them in a bottom-up approach. Moreover, the comparative advantage of using different models at different forecast horizons also plays a role.

SPF participants were asked to what extent their forecasts are model or judgement-based. Most respondents (81% on average, across all variables and horizons) consider their forecasts to be, at least in part, judgement-based – in the sense that model-based outcomes are complemented by judgemental adjustments – with one-third of respondents reporting that their forecasts are essentially, i.e. to a very high degree, judgement-based. Across horizons, a slightly higher share of respondents reports essentially judgement-based forecasts for unemployment than for HICP and GDP. When looking at the combined shares of essentially judgemental forecasts and model-based forecasts including judgement, they are roughly the same for all three variables. Looking at the impact of judgement on forecasts for different forecast horizons, the share of respondents providing essentially judgement-based forecasts is higher for longer-term horizons than for short and medium-term horizons. These results correspond to those in the 2008 special questionnaire.

When forming their longer-term (five years ahead) inflation expectations, most respondents make use of a wide range of information: the ECB's inflation objective is mentioned most often (81%), followed by trends in actual inflation (54%), long-term inflation expectations from financial markets (43%) and trends in wages and monetary aggregates (both 38%).

Almost all respondents stated that they changed their models following the financial crisis in 2008 and that, since then, the importance of judgement in forming their expectations had increased. Some of the changes relate to the treatment of model parameters, with some respondents placing

more emphasis on the post-crisis parameters (50%) and others freezing parameters to values derived before the pre-crisis period (22%). Around one-third of respondents introduced more real financial linkages to their models. Most forecasters (72%) reported that they use linear models, while others explicitly allow for non-linearities such as those captured in structural breaks, the zero lower bound for nominal interest rates or time-varying parameters.

The euro area forecasts are formed on the basis of data and models for the euro area as a whole, but also on the basis of aggregating from bottom up the forecasts for individual countries (mostly the largest euro area economies). The use of both practices is mentioned by some respondents to be due to different practices for different variables, while others mention using bottom-up approaches as a means of cross-checking results.

SPF participants were also asked how they generate their reported probability distributions for HICP inflation, GDP growth and the unemployment rate. A large majority of respondents (72% on average over all variables and horizons) said that these probability distributions are estimated on the basis of judgement, while 14% generate them from models and 13% from models with judgmental adjustments.[3]

Other variables and conditioning assumptions

With regard to other variables and conditioning assumptions, most respondents produce in-house forecasts for oil prices, exchange rates, interest rates and wage growth. In-house forecasts of oil prices are often complemented by market data, for example futures prices or averages of recent spot prices. A few respondents reported that they use external forecasts to complement and cross-check in-house forecasts for oil prices. In terms of other sources, a small number of respondents use automatic rules (e.g. a random walk or they assume a constant rate of change in oil prices).

In summary, these replies suggest that SPF responses can reflect a relatively diverse set of views and assumptions but also indicate that the SPF responses are quite timely. In addition, although both structural and time series models are widely used, judgement also plays a key role, in particular for the reported probability distributions and, to an increasing extent, following the financial crisis in 2008.

3 The high share of probabilities based at least partly on judgement might also be explained by the fact that, for the vast majority of respondents (around 80%), they are computed exclusively for the purposes of the SPF.

2.1 COMPARING THE FORECASTING PERFORMANCE OF THE SPF AND THE EUROSYSTEM STAFF MACROECONOMIC PROJECTIONS

Since December 2000, the ECB has been publishing the Eurosystem staff macroeconomic projections twice a year (in June and December) for the current year and the next year.[4] Below, these projections are compared with the mean forecasts of the SPF for inflation and real

4 These projections have been complemented by ECB staff macroeconomic projections, published in March and September since September 2004. In order to facilitate a comparison with the SPF, the mid-point of the projection ranges in the Eurosystem staff macroeconomic projections is considered for those periods where point estimates have not been published.

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Forecasting errors in the Eurosystem staff macroeconomic projections and in the SPF forecasts

(percentage points)

	Inflation		Real GDP growth	
	Current year	Next year	Current year	Next year
Forecasts and projections made in the second quarter[1)]				
Eurosystem staff projections				
Mean error	0.0	0.4	-0.1	-0.9
Mean absolute error	0.1	0.8	0.5	1.7
SPF forecasts				
Mean error	0.2	0.3	-0.2	-1.0
Mean absolute error	0.2	0.7	0.5	1.6
Forecasts and projections made in the fourth quarter[2)]				
Eurosystem staff projections				
Mean error	0.0	0.3	0.0	-0.6
Mean absolute error	0.0	0.5	0.1	1.0
SPF forecasts				
Mean error	0.0	0.3	0.0	-0.7
Mean absolute error	0.1	0.7	0.1	1.2

Sources: ECB, Eurostat and ECB calculations.
Notes: The mean error is the average difference between the realised and the forecast value and the mean absolute error is the average of the absolute errors. Forecast errors are computed for the first release of inflation data and for the third release of GDP growth data.
1) Based on forecasts made from 2001 to 2012 for the current year, and from 2001 to 2011 for the next year.
2) Based on forecasts made from 2000 to 2012 for the current year, and from 2000 to 2011 for the next year.

GDP growth collected in the second and fourth quarters of each year.[5] Performance is assessed in terms of bias (as measured by the mean projection error) and the size of the projection errors (as measured by the absolute mean squared error). The size of the forecasting errors could be influenced by the particular vintage of data used to calculate the actual outcomes. Since macroeconomic data can be revised after initial releases, real time data are used in the analysis.[6]

The table reports the mean error and the mean absolute error for HICP inflation and GDP growth for the forecasts made in the period 2000-12. In order to avoid mixing projections with different forecast horizons, the table distinguishes the forecasts made in the second quarter from those made in the fourth quarter of each year. Considering first the results for inflation, both SPF respondents and Eurosystem staff have tended to underestimate next year inflation in particular (by an average of between 0.3 and 0.4 percentage point in each forecasting round). The mean error statistics conceal large errors at individual points in time, both positive and negative, as evidenced by the higher value of the mean absolute error statistics. As it is typically more difficult to make accurate forecasts over longer periods, the mean absolute errors increase with the forecast horizon and are higher for the forecast made in the second quarter than that in the fourth quarter. Looking across projections, for the current year and for both forecasting rounds the mean absolute errors are, on average, somewhat smaller in the projections by Eurosystem staff than in the SPF forecasts. This slightly better performance might be due to, inter alia, the fact that the Eurosystem projections benefit from one additional month of data, which is particularly advantageous when

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5 The data collected in the SPF have normally been summarised by means of a simple average of point forecasts. The question arises as to whether a different combination of SPF forecasts (principal components, trimmed means, performance-based weighting, etc.) could deliver gains in terms of forecast accuracy. Evidence suggests that there is only a modest case for deviating from the simple average as a means of better summarising the information collected in the SPF. For more details, see Genre, V., Kenny, G., Meyler, A. and Timmermann, A., "Combining expert forecasts: Can anything beat the simple average?", *International Journal of Forecasting*, Vol. 29(1), 2013, pp. 108-121.

6 The vintage data used for inflation are for January of the following year, while for GDP the vintage data used are the third release of real GDP growth. Revisions to historical data have been sizeable for real GDP growth and unemployment, but less so for HICP inflation. For more details on revisions to GDP, see the article entitled "Revisions to GDP estimates in the euro area", *Monthly Bulletin*, ECB, April 2009.

forecasting inflation at a short-term horizon.[7] For the next year, the SPF performs slightly better in the first forecast round (0.7 versus 0.8 percentage point), while the Eurosystem performs better in the second round (0.5 versus 0.7 percentage point).

By contrast with the inflation forecasts, real GDP growth rates have tended to be overestimated by both Eurosystem staff and SPF participants. For the next year, when overestimation is larger, the mean forecast error ranges between -0.6 and -0.7 percentage point for the second forecasting round and between -0.9 and -1.0 percentage point for the first forecasting round. As in the case of inflation, the mean absolute errors increase with the forecast horizon. Looking across error measures, the degree of overestimation by SPF respondents for the year ahead tends to be slightly larger than that by the Eurosystem (by about 0.1 percentage point).

2.2 DIFFERENCES IN METHODS BETWEEN SPF FORECASTS AND EUROSYSTEM STAFF MACROECONOMIC PROJECTIONS

Various factors are likely to explain the differences between the Eurosystem staff macroeconomic projections and those of the SPF vis-à-vis actual outcomes. These factors include the timing, the type of model used, the degree and role of judgment and the assumptions made. This section focuses on the role of assumptions upon which the forecasts/projections are conditioned. The Eurosystem bases its forecast on a number of technical assumptions about commodity prices, interest and exchange rates and fiscal policies.[8] For instance, the Eurosystem uses futures prices as assumptions for commodity prices in US dollars, while for the exchange rate it applies a "no change" assumption based on the most recent data points. Assumptions for fiscal policy measures can have a large bearing on projections; in the case of the Eurosystem only those measures that have been approved by national parliaments, or have already been defined in detail and are likely to pass the legislative process, are taken into account. In the case of the SPF, less is known about how respondents make their assumptions, although responses to the special questionnaire indicate that they are based mainly on in-house forecasts.

Among the different conditioning assumptions, those for oil price developments have traditionally accounted for a large proportion of forecasting errors for inflation.[9] Chart 1 reports, for different projection and forecast rounds, the actual oil price together with futures prices for Brent crude, and the corresponding forecast by SPF respondents. For most of the time period, the broad contour of the oil price assumptions is rather similar for the SPF and the Eurosystem. By contrast, over the last three years, SPF respondents have been posting a broadly stable or a slightly increasing oil price profile, while the futures prices used by the Eurosystem have been sloping downwards. All other things being equal, this difference in the assumption of oil prices would, to a large extent, explain why SPF inflation forecasts have been higher than those by Eurosystem staff over the last few years. In particular, elasticities implied by Eurosystem macroeconometric models suggest that these differences accounted for about three-quarters of the difference in inflation projected over a two-year horizon by the Broad Macroeconomic Projection Exercise and the SPF participants.[10]

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7 The Eurosystem staff macroeconomic projections use data until the end of the third week of May and until the end of the third week of November for the June and December forecasting rounds, respectively. The cut-off date for the data used in the SPF projections is less clear-cut. While the second and fourth quarter survey rounds are carried out in the middle of April and October, respectively, the exact cut-off date for the data is unknown to the ECB. According to a special questionnaire, 84% of SPF respondents report their latest available forecast, which in 82% of cases is quarterly or monthly.

8 For more details regarding the assumptions in the Eurosystem staff projections, see the article entitled "An assessment of Eurosystem staff macroeconomic projections", *Monthly Bulletin*, ECB, May 2013.

9 See the article entitled "Commodity prices and their role in assessing euro area growth and inflation", *Monthly Bulletin*, ECB, October 2013.

10 For these elasticities, see "Energy markets and the euro area macroeconomy", *Occasional Paper Series*, ECB, No 113, June 2010.

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Chart 1 Assumptions of Brent crude oil prices in the SPF and in the Eurosystem staff macroeconomic projections and actual oil price developments

(USD per barrel; quarterly data)

- oil futures price
- SPF
- oil price
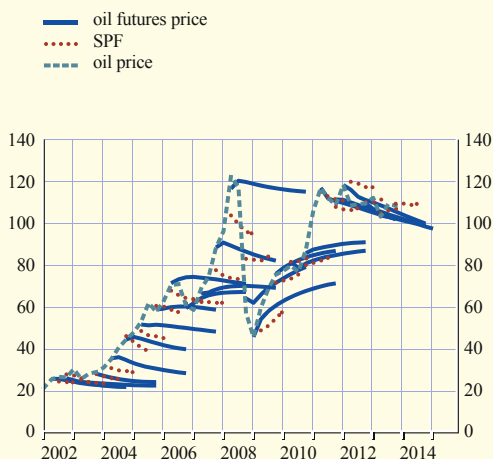
Sources: ECB and SPF.

Chart 2 Decomposition of forecast errors for HICP inflation in the SPF based on forecast errors for both real GDP growth and the oil price

(percentage points)

- lagged inflation
- oil price
- real GDP growth
- residual
- inflation
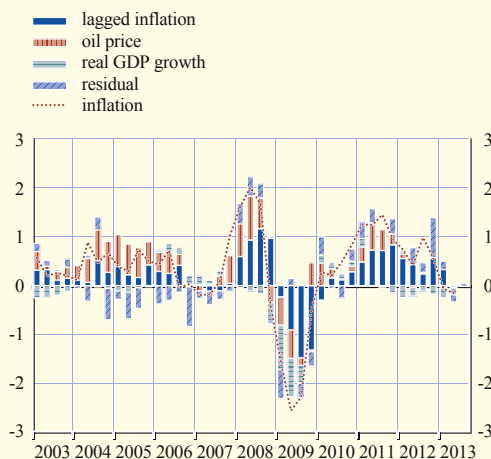
Sources: ECB and SPF.
Note: Based on rolling horizon forecasts. For more details, see footnote 12.

Taking a long-term perspective, however, since 1999 the absolute error made in respect of the level of oil prices assumed in the projections and forecasts is broadly similar across the Eurosystem and the SPF. For the period since 2000, excluding the error in the first quarter of 2009 (the largest in both cases), it has stood at around 22%.[11] This error has contributed significantly to the overall error in the respective projections and forecasts for HICP inflation.

In the case of the SPF a simple regression analysis illustrates the impact of forecast errors in oil prices on errors in predicting HICP inflation one year ahead (Chart 2).[12] Controlling for the errors in real GDP growth expectations, the evidence shows that the underestimation of oil prices by SPF participants in the period from 2004 until before the financial crisis was strongly associated with the underestimation of inflation during the same period. By contrast, the overestimation of both oil prices and GDP growth at the peak of the financial crisis (between late 2008 and until 2009) was associated with a corresponding overestimation of inflation. More recently, the underestimation of oil prices in 2010 and 2011 also contributed to the underestimation of inflation during that period, while errors in predicting real GDP growth are assessed to have played only a minor role.

3 THE INFORMATION CONTENT OF THE SPF LONGER-TERM EXPECTATIONS

Panellists in the SPF also provide longer-term expectations (i.e. five year ahead) for euro area real GDP growth, unemployment and inflation. Responses to the special questionnaire suggest that the

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11 The mean absolute error is computed based on a rolling forecast horizon (using the longest available forecast in the SPF) rather than for the current or next year's projections. This is because oil price assumptions for the current year and next year in the SPF started to be made only in the second quarter of 2010.

12 The analysis is based on an instrumental variable (IV) regression of forecast errors in inflation on the lagged dependent variable and forecast errors in real GDP growth and in the oil price. The estimated effect of the exchange rate proved to be insignificant. Real GDP growth is treated as an endogenous variable in the regression because most SPF respondents to a special questionnaire indicate that inflation and real GDP growth forecasts are dependent on one another in the short and medium term. Instruments used in the regression are the lagged forecast errors in real GDP growth and the remaining explanatory variables.

longer-term expectations for real GDP growth can be interpreted as the rate of growth of potential output (68% of respondents) and those for unemployment as the Non-Accelerating Inflation Rate of Unemployment – NAIRU (53%). At the same time, longer-term inflation expectations may help to assess the ECB's credibility in terms of maintaining its objective of price stability. Respondents stress that these expectations are determined mainly by the ECB's price stability objective of below but close to 2% (81% of respondents) and past inflation trends (54% of respondents).

Longer-term GDP growth expectations in the SPF declined steadily from 2.6% at the beginning of the sample to 1.7% in the fourth quarter of 2013. The real-time forecasts by international organisations of potential output growth five years ahead display a similarly broad downward trend over the past decade, but have been consistently below SPF expectations over this period. If anything, the gap between the two sets of series appears to have widened over the last few years (Chart 3).

In the case of long-term unemployment, SPF expectations increased slightly between 2002 and the first half of 2005, then declined and reached a minimum of 6.5% in 2007. Subsequently, expectations increased gradually to stand at around 9½% in the fourth quarter of 2013 (Chart 4). Compared with the real-time forecasts by international organisations for the NAIRU five years ahead, the SPF expectations have tended to stand at the lower end, and for the period since 2008 in particular the long-term forecasts for the NAIRU estimates have increased more strongly than the SPF expectations, especially in the case of the European Commission.[13] The recently lower long-term

Chart 3 Long-term real GDP growth expectations by the SPF and long-term estimates of potential output growth by international organisations
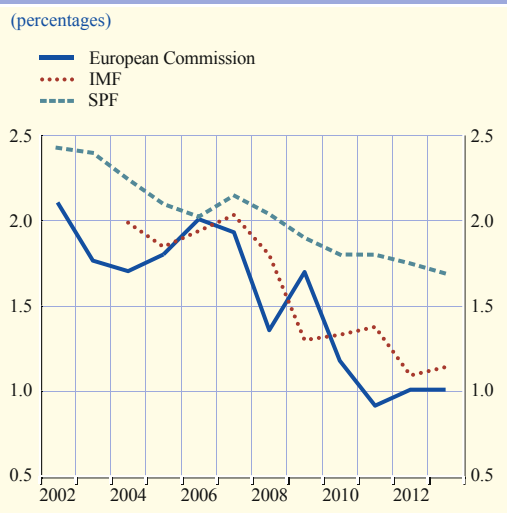
(percentages)

— European Commission
···· IMF
- - - SPF

Sources: European Commission, IMF and SPF.
Notes: For the European Commission and the IMF, data refer to the autumn forecast. For the SPF, data refer to the fourth quarter round. The EC figure for 2006 has been constructed using national figures (12 countries) weighted by the GDP shares of 2005.

Chart 4 Long-term unemployment expectations by the SPF and long-term NAIRU estimates by international organisations

(percentages)

— European Commission
···· IMF
- - - SPF

Sources: European Commission, IMF and SPF.
Notes: For the European Commission and the IMF, data refer to the autumn forecast. For the SPF, data refer to the fourth quarter round. The EC figure for 2006 has been constructed using national figures (12 countries) weighted by the GDP shares of 2005.

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13 In the case of the ECB SPF, it has been found that revisions to longer-term unemployment expectations are driven largely by revisions in the short-term unemployment outlook, suggesting that respondents perceive a high degree of hysteresis in unemployment data. See Bowles, C., Friz, R., Genre, V., Kenny, G., Meyler, A. and Rautanen, T., "The ECB survey of professional forecasters (SPF) – A review after eight years' experience", *Occasional Paper Series*, No 59, ECB, April 2007.

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unemployment expectations in the SPF compared with forecasts by international organisations are qualitatively consistent with the higher long-term real GDP growth expectations in the SPF.

Long-term inflation expectations in the SPF have remained quite stable over recent years. The average five-year ahead expectation has remained between around 1.9% and 2.0%, with the median remaining even more stable. At the same time, headline HICP inflation has been subject to fairly large fluctuations. SPF data available since the start of EMU point to a relatively weak link between long-term inflation expectations surveyed in a particular quarter and the latest actual inflation rate known at the time of the survey. However, the link is stronger between long-term inflation expectations and longer-term moving averages of past inflation. It is particularly high for the cumulative average of annual inflation rates calculated for each quarter in the period from the first quarter of 1999. The cumulative average inflation rate can be seen as a proxy for the track record, and the resulting credibility, of the ECB's monetary policy in terms of the inflation outcome.[14]

Overall, the analysis of long-term expectations suggests that they provide important information on how firmly anchored expectations are around the ECB's objective of price stability and how forecasters perceive the evolution of the euro area's longer-term growth potential.

4 REVIEWING PROFESSIONAL FORECASTERS' ASSESSMENT OF UNCERTAINTY SURROUNDING THEIR FORECASTS

Since the start of the financial crisis in 2008, the macroeconomic outlook has been characterised by greater than normal uncertainty. Whilst it is generally accepted that uncertainty has increased, there is no agreed metric to indicate by how much. An assessment of the degree of uncertainty is important, as it is likely to have an impact on corporate investment and household saving decisions.[15]

An important feature of the ECB SPF is that it provides an insight into respondents' assessments of the degree of uncertainty surrounding their forecasts. More specifically, SPF participants are asked to assign a probability distribution to their forecasts.[16] Although the ECB SPF provides several dimensions for measuring forecast uncertainty, this section extracts information on uncertainty from (i) disagreement and (ii) probabilities, with the focus on aggregate uncertainty and more specifically on the standard deviation of the probability distribution aggregated across all respondents.[17] In the absence of a direct measure of uncertainty, disagreement has often been used as a proxy variable. However, it does not appear to be a good proxy for overall macroeconomic uncertainty. In the case of the ECB SPF, across all macroeconomic variables and horizons, the spread of individual point

14 See the box entitled "The anchoring of long-term inflation expectations", *Monthly Bulletin*, ECB, October 2013.
15 For a discussion on the evolution of various measures of uncertainty and their potential implications for the macroeconomic outlook, see the box entitled "Measuring perceptions of macroeconomic uncertainty", *Monthly Bulletin*, ECB, January 2010, and the box entitled "How has macroeconomic uncertainty in the euro area evolved recently?", *Monthly Bulletin*, ECB, Oct. 2013.
16 This distribution provides information about the probability, expressed as a percentage, of the future outcome being within a specific range. The probability distribution resulting from the aggregation of responses also helps to assess how, on average, survey participants gauge the risk of the actual outcome being above or below the most likely range.
17 Calculating the standard deviation of the SPF distributions is somewhat problematic in practice as respondents attach probabilities to specific ranges. We present the approach that assumes that all the probability for a given range relates to the mid-point of that range. Although this may shift the estimated standard deviation upwards, as it is more likely that more of the probability within a range is located closer to the centre of the distribution than further away, other methods, which include fitting functional forms such as normal, skew-normal or beta distributions, are not without their drawbacks either, particularly at the individual level.

forecasts has rarely been wide enough to encompass the actual outcome.[18] Aggregate uncertainty combines information on disagreement between (standard deviation of) individual point forecasts and forecasters' individual assessments of uncertainty (average individual uncertainty) measured by the average of standard deviations of the probability distributions reported by each forecaster.[19]

Uncertainty can normally be expected to increase over the different forecast horizons requested from SPF participants (i.e. next calendar year, one year ahead, calendar year after next, two years ahead and five calendar years ahead). Chart 5 shows values for this term structure for two sub-periods: pre-crisis (1999-2008) and post-crisis (2009-2013). There are a couple of noteworthy features. First, although uncertainty generally increases as the forecast horizon increases, the upward slope is relatively flat for HICP inflation and particularly for GDP growth, while it is steeper for unemployment. Whereas longer-term expectations of inflation and GDP growth may be anchored by monetary policy and potential growth respectively, longer-term unemployment expectations tend to be linked to the NAIRU, which may vary substantially over time, as seen in the previous section. Second, there has been a clear upward shift in the perceived degree of uncertainty surrounding macroeconomic forecasts since the economic crisis began. For each variable and forecast horizon, aggregate uncertainty has shifted upwards for the post-crisis period.

The increase in perceived uncertainty is broadly consistent with other indicators of macroeconomic uncertainty. There has been a significant degree of co-movement with other macroeconomic indicators of uncertainty, such as stock and bond market volatility and sentiment surveys. Chart 6 reports the uncertainty measure for two-year ahead outcomes (unweighted average of the uncertainty measure for HICP inflation, real GDP growth and unemployment rate forecasts), as this is probably the forecast horizon closest to the horizons implied by the medium-term orientation of monetary policy. This co-movement indicates that measures of uncertainty derived from the SPF may be useful complements to financial indicators measuring the direction of movement of uncertainty. Overall, since early 2008, all measures of forecast uncertainty from the ECB SPF have risen for all variables across all horizons. Although some of this increase has since unwound, uncertainty remains fairly elevated when compared with financial market indicators. This suggests that, while perceptions of market-specific risks may have eased, perceptions of overall macroeconomic risks have remained elevated according to forecasters.

However, in this regard, unlike for point forecasts, there is no directly observable benchmark for forecast probabilities that could facilitate a test of how closely they correspond to the true density of the variable under consideration. Nonetheless, there is indirect evidence that ECB SPF forecasters, in common with many macroeconomic forecasters, appear generally to have underestimated uncertainty over the last decade.[20] Evidence from the US SPF suggests that these forecasters also tend to be over-confident regarding the uncertainty surrounding their forecasts.[21] In this regard, it may also be that the ongoing elevated perceptions of risk depicted in Chart 6 merely reflect the adoption of a more realistic assessment of macroeconomic uncertainty compared with before, rather than an actual increase in the underlying degree of uncertainty.

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18 D'Amico and Orphanides also suggest that disagreement may be a weak proxy for forecast uncertainty. See D'Amico, S. and Orphanides, A., "Uncertainty and Disagreement in Economic Forecasting", *Finance and Economics Discussion Series*, No 2008-56, Board of Governors of the US Federal Reserve System, 2008.
19 Other higher moments of the aggregate distribution that might provide information on the balance of risks or tail risk events, in particular the skew and kurtosis, are not considered here. See Kenny, G., Kostka, T and Masera, F., "How informative are the subjective density forecasts of macroeconomists?", *Working Paper Series*, No 1446, ECB, July 2012.
20 See Bowles et al. (2010) "An Evaluation of the Growth and Unemployment Forecasts in the ECB Survey of Professional Forecasters", OECD Journal: Journal of Business Cycle Measurement and Analysis, Vol. 2010/2.
21   See Clements, M.P., "Subjective and Ex Post Forecast Uncertainty: US Inflation and Output Growth", The Warwick Economics Research Paper Series (TWERPS), No 995, September 2012.

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Chart 5 Term structure of macroeconomic uncertainty according to SPF respondents

— average (1999-2008)
····· average (2009-2013)

a) HICP inflation
(annual percentage change)

b) GDP growth
(annual percentage change)

c) Unemployment rate
(percentages)
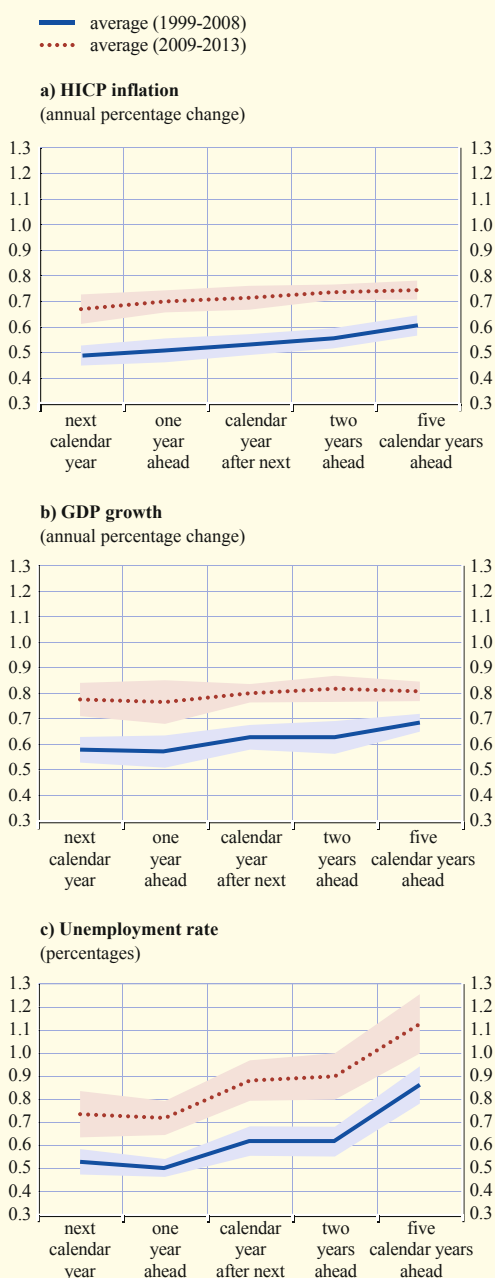
Sources: SPF and ECB calculations.
Notes: The charts show the average dispersion (as measured by the standard) of aggregated SPF probability distributions. The shaded areas illustrate the variation about the average and represent plus and minus one standard deviation from the average observed over each period. The x-axis denotes the horizon. Note that the current calendar year horizon is not reported as it is strongly impacted by seasonality in terms of how many months remain when the round is conducted.

Chart 6 Cross-checking against other selected indicators of macroeconomic uncertainty

— implied stock market volatility
····· implied bond volatility
- - - economic sentiment indicator
— SPF two-year ahead uncertainty (right-hand scale)
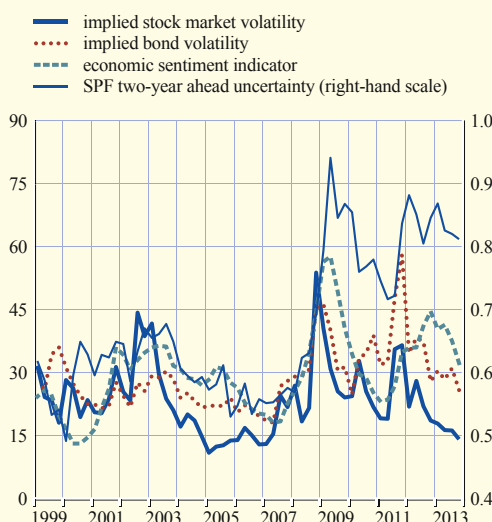
Sources: Bloomberg, European Commission, SPF and ECB calculations.
Note: Economic sentiment indicator is inverted and rescaled.

5 CONCLUSION

In line with the importance of expectations for the economy, the ECB Survey of Professional Forecasters gathers information on the private sector's short to medium-term outlook. The survey has provided very useful services to policy-makers in their assessment of risks to price stability, providing a rich source of information on the outlook for euro area macroeconomic developments and the uncertainty surrounding these developments. In this respect, the SPF has offered a useful comparator to the Eurosystem staff macroeconomic projections in terms of point forecasts. In addition, the longer-term GDP growth, unemployment and inflation expectations in the SPF have provided a useful insight into the broad forces underlying the long-term dynamics of the euro area and the credibility of the ECB's monetary policy with regard to its price stability objective. Finally, the SPF has provided information on professional forecasters' assessments of the uncertainty surrounding their forecasts, which can be considered a key value added of the SPF.

RECENT DEVELOPMENTS IN EXCESS LIQUIDITY AND MONEY MARKET RATES

Since the introduction of tender operations with fixed rate full allotments in October 2008, euro area banks have been operating in an environment of excess liquidity, which reached a peak in March 2012, following the allotment of the two three-year long-term refinancing operations (LTROs). As of early 2013, banks have had the option of repaying the three-year LTROs funds on a weekly basis, which, in turn, has led to a substantial decline in the level of excess liquidity. The purpose of this article is to explore the reasons behind the trend in excess liquidity and assess its impact on money market rates. Several conclusions can be drawn from this analysis. First, the progressive decline in excess liquidity stemming from the voluntary repayment of the three-year LTROs was mainly the result of improved market access for euro area banks. The fall in demand for excess liquidity is expected to continue throughout 2014, ceteris paribus, as the residual maturity of the three-year refinancing operations shrinks to below one year and autonomous liquidity factors continue to increase banks' liquidity needs. Second, at the current level of excess liquidity, money market rates have largely remained stable, although autonomous liquidity factors and calendar effects have caused short-term volatility. Third, the anticipation of future money market rates becomes more challenging in an environment in which the stock of excess liquidity may become too low to anchor overnight market rates to the deposit facility rate but not low enough for the rates to draw closer to the Eurosystem's main refinancing rate.

1   INTRODUCTION

The liquidity management framework of the Eurosystem was developed around the concept of neutral liquidity allotments, which endeavoured to create balanced liquidity conditions in the money market and allowed the ECB to steer very short-term interest rates close to the minimum bid rate of its main refinancing operations. However, after introducing tender operations with fixed rate full allotments in October 2008 and, in particular, following the two three-year operations in December 2011 and February 2012, the euro area banking system experienced very ample liquidity conditions. On 5 March 2012, excess liquidity (defined as deposits at the deposit facility net of the recourse to the marginal lending facility, plus current account holdings in excess of those contributing to the minimum reserve requirements) reached a peak of €812 billion. Since January 2013, however, the banking system has experienced a progressive decline in excess liquidity, as banks have been increasingly exercising the early repayment option embedded in these operations.

This article examines money market rates and expectations about future short-term rates in the context of declining excess liquidity and changing market conditions. As a result, it provides important insight into the challenges that could arise were there to be a further decline in excess liquidity. This article reviews liquidity and market developments up to 10 December 2013, which is the last day of the 11th maintenance period in 2013. More specifically, Section 2 of this article describes recent liquidity trends, analysing the main changes to the Eurosystem's liquidity provision framework that were introduced during the financial crisis. Further, it elaborates on the factors associated with the overall decline in the outstanding amount of the Eurosystem's refinancing operations. Section 3 explores a number of factors determining banks' potential demand for excess liquidity in the future, explaining the behaviour of autonomous factors based on both historical trends and seasonal patterns. Section 4 analyses the impact of developments in excess liquidity on money market rates. It reviews the transmission mechanism of excess liquidity to money markets based on the historical relationship between overnight interest rates and excess liquidity. Following this, it investigates the impact of excess liquidity and volatility in short-term rates on expectations about future money market rates. Section 5 concludes by discussing some of the anticipated challenges associated with a gradual normalisation of money markets and the resulting decline in excess liquidity.

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2 TRENDS IN EXCESS LIQUIDITY

Excess liquidity has been on a declining trend since the record high reached in March 2012. Most of this decline can be attributed to improving market conditions and abating risk aversion, which have allowed banks to reduce their precautionary liquidity buffers. Nevertheless, excess liquidity may still persist owing to market segmentation and prudential regulatory constraints. In that respect, a significant drop in banks' demand for excess reserves is expected to take place later in 2014, mainly as a result of an acceleration in the pace of repayments of the two three-year LTROs as the residual maturity on outstanding loans declines to below one year.

2.1 CHANGES TO THE EUROSYSTEM'S LIQUIDITY PROVISION FRAMEWORK

In the pre-crisis monetary policy implementation framework,[1] the Eurosystem's overall supply of liquidity was determined on the basis of an estimate of the banking sector's aggregate liquidity needs, which primarily depended on the minimum reserve requirements imposed by the Eurosystem as well as on developments in autonomous liquidity factors[2] (i.e. the neutral liquidity allotments). The Eurosystem targeted the aggregated market liquidity needs rather than individual banks' needs. The targeted amount was allotted on a weekly basis via a variable rate tender – known as the main refinancing operation (MRO) – with a minimum bid rate determined by the Governing Council of the ECB. This was sufficient to steer short-term money market rates, as long as the money market was able to redistribute liquidity from banks with a liquidity surplus to banks with a liquidity deficit. Excess liquidity was very low, as it was remunerated below market rates, and banks had no incentive to hold substantial amounts of excess reserves as insurance against liquidity risk since the private liquidity supply was readily available.

The financial crisis, however, had a profound impact on the functioning of euro area money markets which, in turn, brought significant changes in the way liquidity management was traditionally implemented by the Eurosystem. During the crisis, credit was rationed in the interbank market, as banks with a liquidity surplus became reluctant to lend to banks with a liquidity deficit, particularly on a cross-border basis, thus impairing efficient liquidity provision by money markets. Under these conditions, the demand for the Eurosystem's refinancing operations became volatile and difficult to forecast. As a result, in October 2008, the Governing Council decided to fully satisfy (at a fixed rate) individual banks' demand in its refinancing operations, including the main refinancing operations and refinancing operations with more than a seven-day maturity, typically known as longer-term refinancing operations (LTROs). In November 2013, the fixed rate full allotment procedure was prolonged for as long as necessary and, at least, until July 2015.

The fixed rate full allotment procedure triggered a shift in liquidity provision by the Eurosystem. In fact, liquidity provision using the fixed rate full allotment procedure is determined by individual banks' overall demand, while previously, it was determined by the Eurosystem based on its estimation of the banking system's aggregate liquidity needs. The new operating regime generated excess liquidity, as banks' demand for refinancing (and the Eurosystem's allotments) exceeded aggregate liquidity needs arising from autonomous liquidity factors and minimum

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1 The standard Eurosystem operational framework is described in greater detail in the ECB publication entitled "The implementation of monetary policy in the euro area – General documentation on Eurosystem monetary policy instruments and procedures."

2 Autonomous liquidity factors are defined as the items in the consolidated balance sheet of the Eurosystem, apart from monetary policy operations, that provide or withdraw liquidity and thus affect the current accounts which credit institutions hold with the Eurosystem (see Box 2, *Monthly Bulletin*, ECB, July 2001). Typical autonomous factors are banknotes in circulation, government deposits with the Eurosystem and net foreign assets.

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Chart I Liquidity needs and excess liquidity since 2008

(EUR billions)

- excess liquidity
- net autonomous factors
- reserve requirements
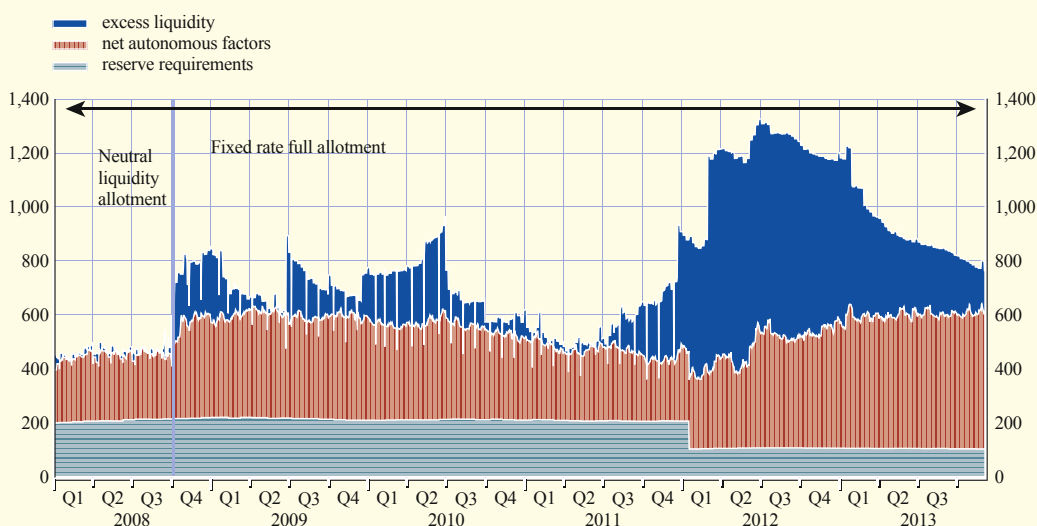
Source: ECB.

reserve requirements. Banks voluntarily requested more liquidity than necessary as insurance against possible difficulties in accessing the money market at a reasonable cost. Chart 1 shows the liquidity needs arising from autonomous factors and minimum reserve requirements as well as excess liquidity. Excess liquidity was low under the neutral liquidity allotment procedure and increased once the fixed rate full allotment procedure was introduced. The largest increase in the amount of excess liquidity, however, took place after the allotment of the two three-year LTROs in December 2011 and February 2012. The high demand in the two three-year operations was driven, on the one hand, by genuine funding needs (see Box 1) and, on the other, by the intention to accumulate precautionary liquidity buffers, which resulted in a surge in the amount of excess liquidity to exceptionally high levels.

2.2 RECENT TRENDS IN EXCESS LIQUIDITY

Banks' demands for refinancing declined soon after excess liquidity reached its historical peak in March 2012 in several ways. First, the demand for regular refinancing operations declined, while the liquidity needs, on account of autonomous liquidity factors, continued to increase. Second, since January 2013, banks have actively used the opportunity offered in the terms of the three-year LTROs to repay the funds allotted early. From December 2012 to November 2013, excess liquidity, on a maintenance-period average, declined by €452 billion to €168 billion. Approximately 89% of this reduction, or €400 billion, is due to a decline in the recourse to the Eurosystem's refinancing operations, including €384 billion for three-year LTRO repayments. The remaining decline is due to an increase in autonomous liquidity factors by €52.3 billion (see Chart 2). The excess liquidity provided by other Eurosystem operations and facilities has also dropped by €16.3 billion since December 2012.

By November 2013, banks had repaid about 40% of their initial borrowing. Based on ECB staff analyses of financial statements from participating banks, funding conditions and refinancing considerations, primarily over the short and medium term, were important determinants of participation in the three-year LTROs (see Box 1). In line with this, the largest repayments were made by those three-year LTRO participants that had increased their deposit base and market access to the greatest degree. This, in turn, translated into a notable improvement in the cash position of the aforementioned banks in late 2012, as they prepared for their first repayments in January and February 2013. Based also on a survey conducted among repaying banks, two of the most important factors explaining initial repayments were the ability to obtain market financing at competitive rates and a willingness to reduce liquidity buffers as capital market conditions gradually improved and market fragmentation began to recede. Some banks kept on their accounts with the Eurosystem an amount of excess reserves equivalent to their initial borrowing, which reflected a precautionary stance. These banks repaid 82% of their three-year loans at the first opportunity, while other banks repaid 28% as of November 2013.

Chart 2 Breakdown of excess liquidity absorption

(cumulative changes since December 2012; EUR billions)

- total reduction in excess liquidity
- net autonomous factors
- other liquidity-providing operations
- LTRO repayments

Excess liquidity in December 2012: EUR 619.7 billion

Excess liquidity in November 2013: EUR 167.8 billion
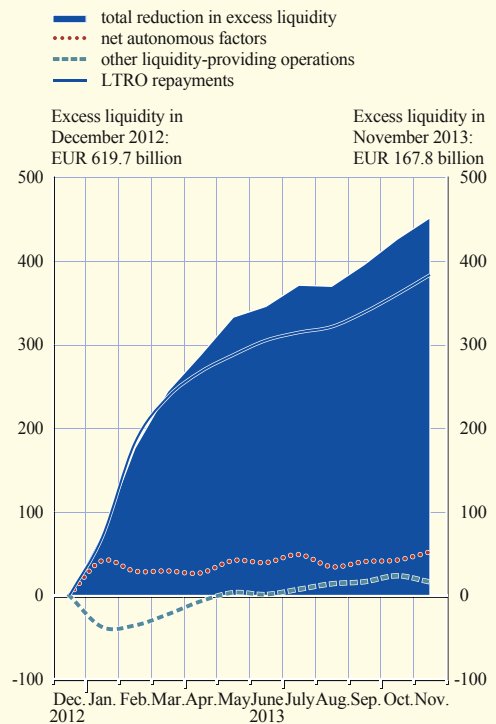
Source: ECB.
Note: This is based on maintenance period averages.

FACTORS DRIVING THE REPAYMENTS OF THE TWO THREE-YEAR LTROs: EMPIRICAL EVIDENCE BASED ON BANKS' BALANCE SHEETS

This box provides information on the main determinants of banks' participation in the two three-year long-term refinancing operations (LTROs) conducted in December 2011 and February 2012 and the possible reasons for the early repayment of those funds. The information used is based on publicly available annual financial statements for 393 banks and on non-public monthly balance sheet information for 238 banks. The two datasets cover 220 and 131 of the banks that participated in at least one of the two three-year refinancing operations, accounting for 78% and 80% of the total allotted amount of €1018.7 billion, respectively.[1]

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

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Chart A Cumulative flows of deposits by the non-financial private sector between January 2011 and March 2012

(mean of cumulative flows; as a percentage of main assets in January 2011)
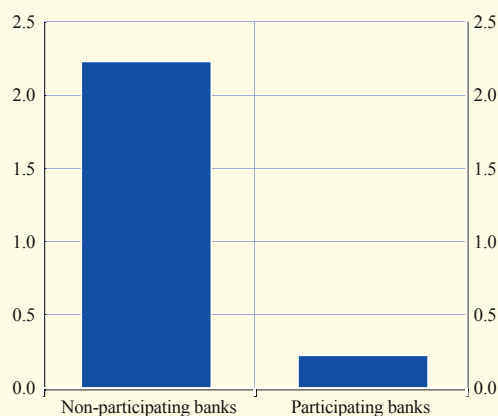
Sources: ECB and ECB calculations.

Chart B Change in the ratio of senior debt maturing after one year-to-total liabilities between December 2011 and December 2012

(percentage points)
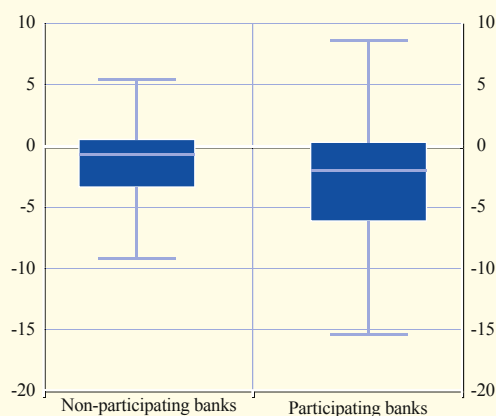
Sources: Fitch and ECB calculations.
Note: The lower blue band represents the 25th percentile of the distribution. The upper blue band represents the 75th percentile. The blue line in the middle is the median. The highest and lowest values represent the maximum and minimum of distribution.

Factors driving participation in the two three-year LTROs

A comparison of relevant balance sheet characteristics between banks that participated in the two three-year LTROs and those that did not take recourse suggests that funding considerations played a major role in the decision to participate in the aforementioned operations. This is consistent with existing data on the factors driving participation in these operations, which are based on information regarding the refinancing needs of banks and the spreads of bank bonds.[2]

Chart A shows that in the 15 months prior to March 2012, which is when the second three-year LTRO was settled, banks that had participated in at least one of the two three-year LTROs recorded, on average, much lower deposit inflows from the non-financial private sector than banks that did not bid for any funds in these operations. This indicates that participation in these operations was partially driven by the funding situation of the particular bank. Moreover, Chart B shows that the ratio of senior unsecured debt (maturing after one year) to total liabilities decreased more for participating banks than for non-participating banks between December 2011 and December 2012. This shows that demand for the three-year operations was, to some extent, driven by looming short to medium-term refinancing needs. Evidently, banks participating in at least one of these operations were buffering some of the anticipated decline both in the maturity and, potentially, in the outstanding amount of senior unsecured debt, which allowed these banks to wait for an improvement in issuance conditions.

Characteristics of banks that have started to repay their three-year LTRO funds

Evidence based on banks' balance sheets identifies better financing conditions and the need for lower liquidity buffers as important factors driving the repayment decisions of banks.

2   See the article entitled "The impact of the first three-year longer-term refinancing operation", *Monthly Bulletin*, ECB, January 2012; and the article entitled "The impact of the two three-year longer-term refinancing operations", *Monthly Bulletin*, ECB, March 2012.

Chart C Cumulative flows of deposits by the non-financial private sector between March 2012 and June 2013

(mean of cumulative flows; as a percentage of main assets in March 2012)
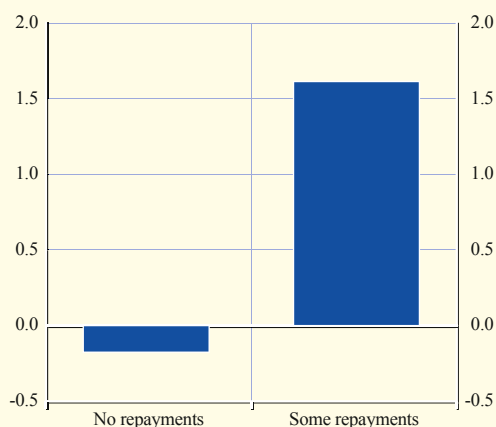
Sources: ECB and ECB calculations.

Chart D Cumulative flows of issued debt securities between March 2012 and June 2013

(mean of cumulative flows; as a percentage of main assets in March 2012)
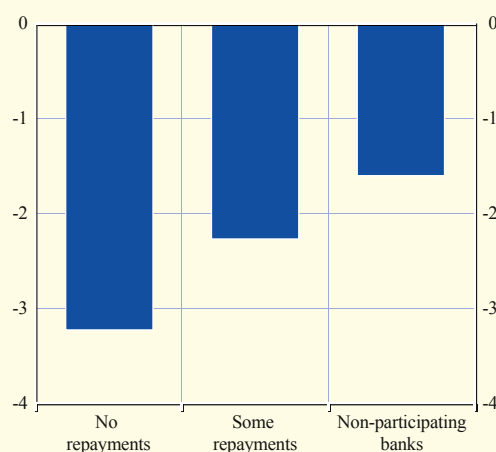
Sources: ECB and ECB calculations.

Chart C shows that, on average, repaying banks have witnessed much higher deposit inflows since the conduct of the second three-year LTRO in February 2012 compared to banks that did not repay any funds, which instead experienced, on average, some outflows of deposits by the non-financial private sector. Improved deposit funding, therefore, appears to be an important factor behind repayment decisions. Repaying banks have recorded around €150 billion of deposit inflows since March 2012, which is a significant amount in relation to the aggregate repayments of around €380 billion. In addition, repaying banks have seen, on average, only a small decline in the stock of debt securities since the conduct of the second LTRO. This decline was similar in magnitude to that of banks that chose not to participate in the three-year LTRO operations. By contrast, non-repaying banks experienced a larger decline in issued debt securities, on average, as can be seen in Chart D. These developments in the stock of issued securities indicate that market-based funding conditions are an important factor driving repayment decisions for three-year LTRO funds.

The median repaying bank also held a larger share of cash over total assets at the end of 2012 compared to non-repaying banks and banks that did not participate in any of the operations (see Chart E). Some banks strategically accumulated cash buffers by end-2012 to prepare for repayments by January 2013. Moreover, the median repaying bank saw a larger improvement in the core Tier 1 capital ratio between 2011 and 2012 compared to non-repaying banks and banks that did not take any funds in the two three-year LTROs (See Chart F). This implies that improvements in the balance sheet of banks are of high importance in relation to repayment decisions.

Improvements in aggregate funding conditions and repayment patterns

Aggregate information on deposit and unsecured market-based funding conditions for banks largely corroborate the findings based on banks' balance sheet data. Since the conduct of the first three-year LTRO in December 2011, the bank cost of debt financing has decreased significantly. The improvement in aggregate bank funding conditions was particularly strong up

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Chart E Ratio of cash-to-total assets in December 2011 and December 2012
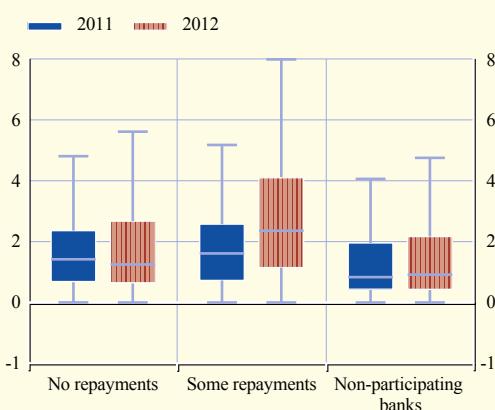
(percentages)

◼ 2011 ▦ 2012

Sources: Fitch and ECB calculations.
Note: The lower blue band represents the 25th percentile of the distribution. The upper blue band represents the 75th percentile. The blue line in the middle is the median. The highest and lowest values represent the maximum and minimum of distribution.

Chart F Changes in the regulatory Tier 1 capital ratios between December 2011 and December 2012
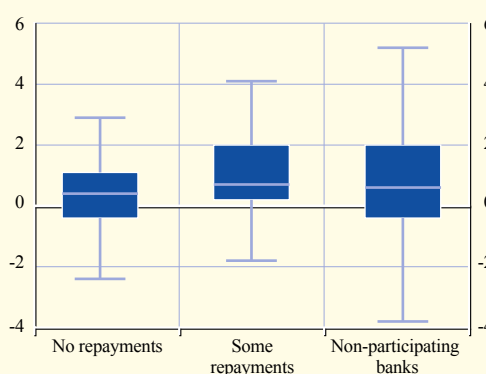
(percentages)

Sources: Fitch and ECB calculations.
Note: The lower blue band represents the 25th percentile of the distribution. The upper blue band represents the 75th percentile. The blue line in the middle is the median. The highest and lowest values represent the maximum and minimum of distribution.

until the beginning of 2013 and was most likely a major driver of the large repayments that took place in the initial period when the option of repayments was first made possible. Bank funding conditions have continued to improve since the start of 2013, albeit at a slower pace, which is fully consistent with the tailing-off of repayment flows.

The aforementioned findings complement existing evidence showing that improved deposit funding and bond market access are important determinants of early repayment decisions by banks. Repayments, therefore, reflect, to a large extent, an improvement in the financial market environment in the euro area with receding fragmentation since the summer of 2012. At the same time, banks' access to unlimited liquidity provision is being guaranteed by the extension of the fixed rate full allotment procedure for as long as necessary and at least until July 2015, a decision taken on 7 November 2013.

3 POTENTIAL FACTORS INFLUENCING THE PATH OF EXCESS LIQUIDITY

Some sources of demand for excess liquidity are likely to wane in the future, while others are expected to persist. Among these sources, some are under the direct control of banks as a result of the liquidity allocation framework adopted since the introduction of the fixed rate full allotment procedure in 2008 and since repayments became possible in 2013. Others, however, relate to autonomous liquidity factors which typically lie outside banks' direct control.

Prudential liquidity regulations could lead to an increase in demand for central bank refinancing. This relates to the fact that collateral eligibility under the Eurosystem's operations is broader compared to the high-quality collateral requirements under the liquidity coverage ratio. At the same time, repayments in the three-year LTROs may increase once the remaining maturity decreases to below one year (i.e. starting from early 2014), because central bank funding of less than one year does not improve banks' maturity profile from a regulatory point of view.

The demand for Eurosystem funding and, therefore, excess liquidity crucially depends on developments in market sentiment. While increasing levels of market turmoil could lead to a higher demand for Eurosystem refinancing, excess liquidity could wane once market confidence improves and market segmentation recedes. Eventually, the decline in the demand for the Eurosystem's refinancing operations could continue if credit conditions and country risks continue to decline and hence banks with a liquidity surplus become more confident about lending to banks with a liquidity deficit. Moreover, the level of money market rates relative to the interest rate of the LTRO can influence the path of repayments and thereby the level of excess liquidity: a higher cost of private funding would, ceteris paribus, lead to lower repayments, and vice versa. At the same time, the level of money market rates is endogenous, as the extent of repayments influences the stock of excess liquidity and may, therefore, have an impact on the level of money market rates.

Under the fixed rate and full allotment procedures, temporary increases in the MRO allotment were noted in June, July and November 2013 when banks turned to the Eurosystem to compensate for a temporary deterioration in national money market funding conditions. Since this additional demand was not fully met by the intra-Eurosystem money market transactions owing to market segmentation, recourse to the Eurosystem's operations was necessary to absorb the temporary liquidity shocks. As long as the fixed rate tender procedure with full allotment is in place, excess liquidity conditions might be further prolonged, assuming that banks continue to take recourse to the Eurosystem's refinancing operations to offset temporary liquidity shocks.

In the short term, variations in autonomous factors are the main source of volatility in excess liquidity. Government deposits, in particular, tend to extract large amounts of liquidity from the market (i.e. from banks' current accounts in the Eurosystem) during the tax collection periods. This liquidity is then only released to the market when the national treasuries make payments, such as

Chart 3 Seasonal patterns of selected autonomous liquidity factors (2008-12)

(EUR billions)
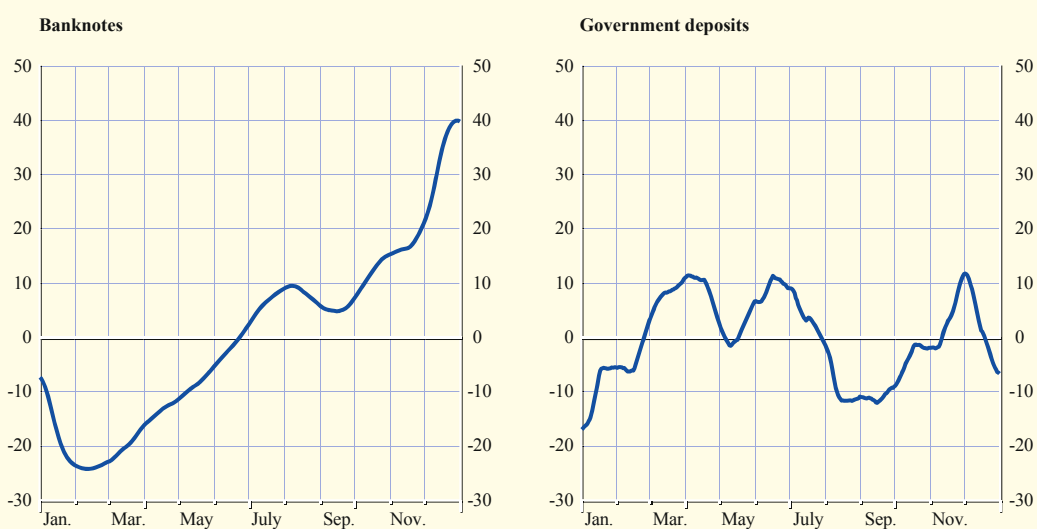
Source ECB.
Note: The chart shows the deviations from the average outstanding banknotes and government deposits throughout the year.

salary payments or debt redemption.[3] As a result, changes in government deposits do not alter the overall excess liquidity, on average, but can introduce volatility in the short term (see Chart 3). In that respect, banknotes follow a regular seasonal pattern related to the holiday periods during which the demand for physical cash is typically high.

Volatility in excess liquidity triggered by autonomous liquidity factors is not a new phenomenon. However, given the downward trend in excess liquidity, volatility relative to the amount of excess liquidity has risen over recent months, thus increasing the potential to influence money market activity. Moreover, with market segmentation prevailing, intra-euro area flows do not smooth out these domestic shocks as effectively as they did in the past.

4 IMPACT OF EXCESS LIQUIDITY ON EURO AREA MONEY MARKET RATES

Excess liquidity remained high enough to keep very short-term money market rates stable, on average, until about June 2013. Around that time, less abundant liquidity conditions resulted in somewhat more volatile short-term interest rates, especially towards the end of each month. Increased volatility in short-term rates, in turn, complicates the signal extraction process and makes it more complex for market participants to form their expectations about the course of future money market rates.

4.1 MECHANISM OF EXCESS LIQUIDITY TRANSMISSION TO THE MONEY MARKET

The Eurosystem's monetary policy implementation framework aims to steer very short-term interest rates in line with the policy rate decision of the Governing Council. In the years before the onset of the financial crisis, the achievement of this objective was underpinned by three main elements. First, the level of very short-term rates was steered to a level close to its minimum bid rate through the weekly provision of liquidity in the MRO.[4] Second, the ECB's marginal lending and deposit facilities ensured that short-term money market rates – typically overnight interbank rates – remained in a certain corridor (see Chart 4). Finally, the averaging provision in the fulfilment of the minimum reserve requirements served as a tool to limit fluctuations in short-term rates.

Market participants usually try to anticipate changes in the policy rate in order to determine the rates of other money market maturities. In the euro area, overnight indexed swaps (OIS) are the main instruments used by market participants in order to take a stance on expected central bank decisions. EONIA[5] interest rate swaps indicate the average level at which market participants expect the EONIA to be during one maintenance period – which lasts approximately one month – in the future. For instance, a one-maintenance period EONIA swap for a sixth-month horizon priced in at end-November 2013 indicates the expected average of prevailing EONIA rates six months later. Funding rates, such as the euro interbank offered rate (EURIBOR), typically follow the OIS rates, with a spread reflecting term premia and counterparty risk, as they provide an indication of the short-term cost of funding in the future.

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3   Some national treasuries actively managed their cash flows by temporarily reinvesting some of their liquidity surplus in the market, which reduces the impact of their operations on excess liquidity. However, this strategy has not yet succeeded in smoothing out the impact of their operations to the full extent.

4   The MRO weekly liquidity provision was based on a variable rate tender until October 2008, with a minimum bid rate. The latter is the interest rate below which the Eurosystem would not accept any bids. Thereafter, a fixed rate tender procedure was introduced and the minimum bid rate became the rate at which all bids were allotted.

5   The euro overnight index average (EONIA) is the effective overnight reference rate for the euro. It is computed as a weighted average of all of the overnight unsecured lending transactions in the interbank market undertaken in the European Union and the European Free Trade Association countries by a panel of banks.

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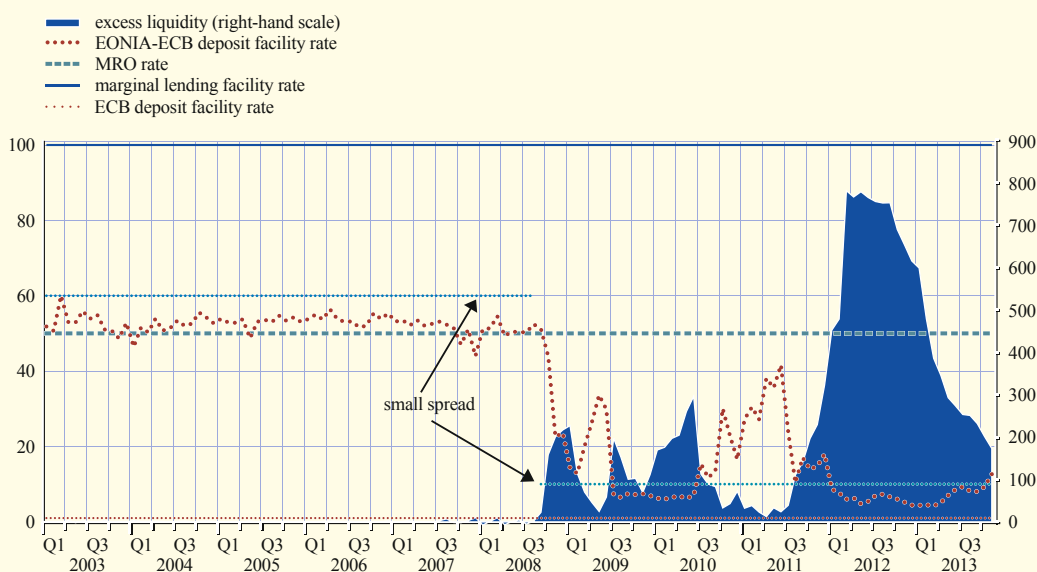
In the pre-crisis period, up to October 2008, the Eurosystem's monetary policy implementation framework was able to steer overnight rates to levels close to the MRO minimum bid rate. Previous estimates have shown that a small spread tends to persist between the EONIA and the MRO rate during that time (see Chart 4), because the EONIA is an unsecured transaction, while the Eurosystem's refinancing operations are collateralised. This spread has been attributed to the credit risk of dealing in the market on an overnight basis and to a degree of uncertainty regarding the distribution of the allotment.

The financial crisis changed the overnight interest rate position in the interest rate corridor when the Eurosystem departed from neutral liquidity conditions (see Chart 4). As a result of excess liquidity, the EONIA was no longer tied to the MRO rate and it decreased to its lowest possible level, a few basis points above the ECB deposit facility rate. This rate provides a lower bound for interest rates in the interbank money market, as banks with access to the deposit facility are unlikely to lend on the money market at a less favourable rate than the deposit facility rate at which they could invest an infinite amount of their excess liquidity. Given the high level of excess liquidity prevailing in 2012, the spread between the EONIA and the ECB deposit facility rate remained in a narrow range between three to ten basis points. This spread could be attributed to the credit risk of dealing with the market compared to depositing liquidity with the Eurosystem.

4.2 HISTORICAL RELATIONSHIP BETWEEN THE EONIA AND EXCESS LIQUIDITY

The EONIA rate increased, on a maintenance-period average basis, to 11.8 basis points as excess liquidity declined to around €168.4 billion on 20 November 2013 in the 11th maintenance period.

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To put the aforementioned changes into perspective but also in order to obtain some guidance on the potential trajectory of the EONIA in an environment of receding excess liquidity, it is useful to resort to empirical evidence on the historical relationship of the two. Chart 5 provides an in-sample fit of a logistic function of the EONIA rate on excess liquidity. The relationship is estimated for the period starting from January 2009 until November 2013. This period was characterised by the fixed rate and full liquidity allotment procedures and a high level of excess liquidity. It also covers a period of pronounced stress in the interbank market and substantial financial turmoil.

Under the assumption of well-functioning money markets, the relationship between very short-term interest rates and excess liquidity should be characterised by a very high degree of sensitivity. In such an environment, relatively low levels of excess liquidity are sufficient to anchor short-term interest rates close to the deposit facility rate. This is because banks with a liquidity surplus have little incentive to hoard liquidity beyond a relatively small cushion, typically held for precautionary reasons, and thus, prefer to lend the remaining part to banks with a liquidity deficit.

However, the responsiveness of money market rates to excess liquidity is also determined by prevailing market conditions and, most importantly, by the extent of fragmentation in the interbank market. An increase in the degree of market fragmentation is typically associated with an increase in the demand for liquidity buffers. Banks accumulate additional liquidity buffers, because they are less confident in the market's ability to absorb liquidity shocks. Hence, during periods of market turmoil and economic distress, banks' insurance demands will rise disproportionately which, in turn, is expected to reduce the share of tradable excess liquidity readily available in the interbank market. Under these circumstances, the sensitivity of very short-term interest rates to excess liquidity declines, rendering the slope of the respective curve less steep compared to normal market conditions.

Chart 5 Historical relationship between the EONIA rate and excess liquidity (2009-13)

(percentage points; EUR billions)

- no fragmentation
- daily observations since January 2009
- fitted values
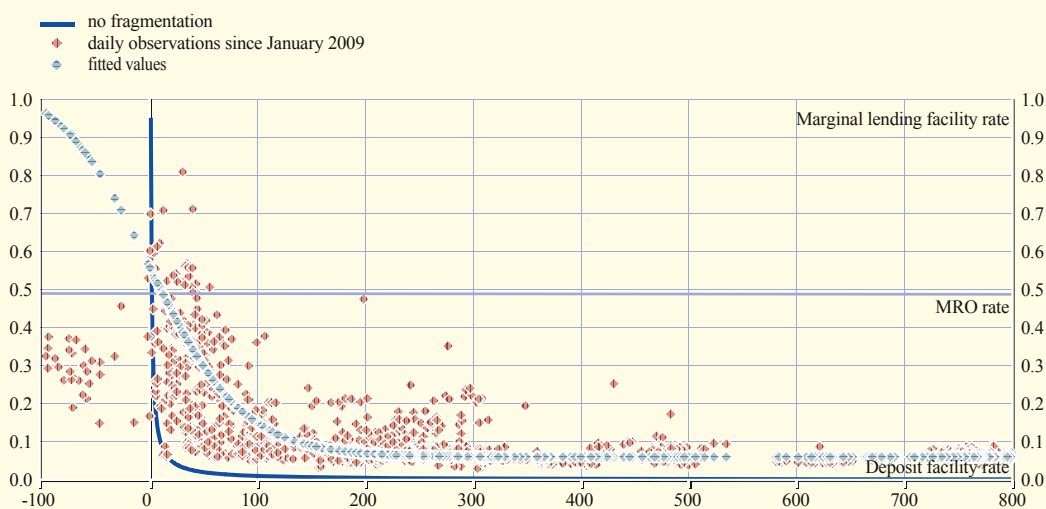
Source: ECB.
Note: The EONIA rate is nomalised for a constant 100-basis point corridor.

4.3 THE ANCHORING OF SHORT-TERM INTEREST RATES AND VOLATILITY IN RATES

As described above, the anchoring of money market rates works well in environments of neutral liquidity conditions (anchoring to the MRO minimum bid rate) and also in situations with ample excess liquidity (anchoring to the ECB deposit facility rate). Nevertheless, during periods when the stock of excess liquidity is too high to keep overnight market rates close to the MRO rate, but not high enough to keep them close to the deposit facility rate, the formation of expectations about future short-term interest rates becomes more complex.

Chart 6 shows the cumulative distribution of the spread between the EONIA rate and the ECB deposit facility rate for different levels of excess liquidity. Each curve represents the same number of observations in terms of EONIA spreads for declining excess liquidity brackets. The blue curve represents the cumulative distribution of the spread during the entire period during which the neutral liquidity allotment was in place, i.e. until the introduction of the fixed rate full allotment procedure in October 2008. The spread between the EONIA rate and the ECB deposit facility rate is larger than seven basis points more frequently as excess liquidity declines, thereby weakening the link between the ECB deposit facility rate and very short-term money market rates. When excess liquidity reached low levels but liquidity conditions were not yet neutral, this spread tended to be widely – even randomly – distributed within the corridor.

Several factors can make the EONIA deviate from the ECB deposit facility rate in the context of lower excess liquidity. For example, banks prefer not to deal on the market at month-ends and at quarter-ends. In particular, retaining cash around those dates helps banks to present a stronger liquidity position in their financial statements. This leads to a spike in EONIA and repo rates.

Chart 6 Cumulative distribution of the spread between the EONIA and the ECB deposit facility rate for different levels of excess liquidity (2003-13)

(basis points; percentages)

- spread for high excess liquidity
- spread for moderate excess liquidity
- spread for low excess liquidity
- spread for neutral liquidity
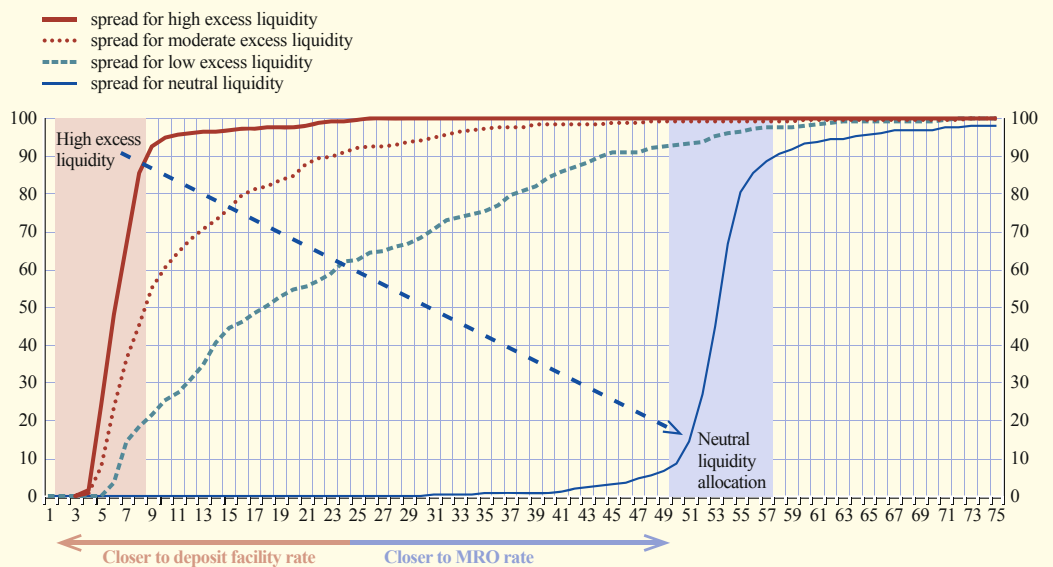
Source: ECB.
Note: The EONIA rate is normalised for a constant 100-basis point interest rate corridor.

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money market rates

An aggravating factor is that the size of the end-of-the month spikes depends on the liquidity needs on the market, thus on the stock of excess liquidity, which is difficult to forecast accurately.

Government deposits can have an impact on money markets, because they create a liquidity cycle that is not fully smoothed out by intra-Eurosystem flows. This tax-induced liquidity cycle is well-known by market participants, but its impact on rates in a segmented market, as well as the exact size of the corresponding liquidity swings, are difficult to forecast. The liquidity impact of tax collections in May, June and July 2013 was particularly pronounced, representing more than 30% of excess liquidity in June 2013. During these months, some of the national treasuries experienced relatively large tax cycles, which resulted in noticeable increases in overnight unsecured and repo rates across local markets. The local impact had spillover effects on the rest of the euro area money market.

4.4 TRANSMISSION OF EXCESS LIQUIDITY DEVELOPMENTS TO MONEY MARKET EXPECTATIONS

If short-term rates were less closely related to the ECB deposit facility rate, market participants would have more difficulties predicting these rates. As a result, expected money market rates are likely to reflect a degree of uncertainty. Day-to-day excess liquidity fluctuations are difficult to forecast accurately, because they remain largely under the banks' direct control and may reflect idiosyncratic liquidity conditions. As a result of the non-linearity in the relationship between excess liquidity and short-term rates, a decline in excess liquidity can lead to a relatively large increase in market rates, while an increase in excess liquidity can have a smaller, dampening effect on rates. This uncertainty should lead to expected rates that are somewhat higher, on average, than the actual or spot rate, as market participants need to be compensated for the risks associated with less predictable overnight rates. For each maintenance period since 2012, Chart 7 presents the curve of average one-maintenance period EONIA swaps up to the ninth maintenance period. The history of this curve illustrates this shift in market focus.

Chart 7 EONIA forward curves and excess liquidity

(percentages; EUR billions)
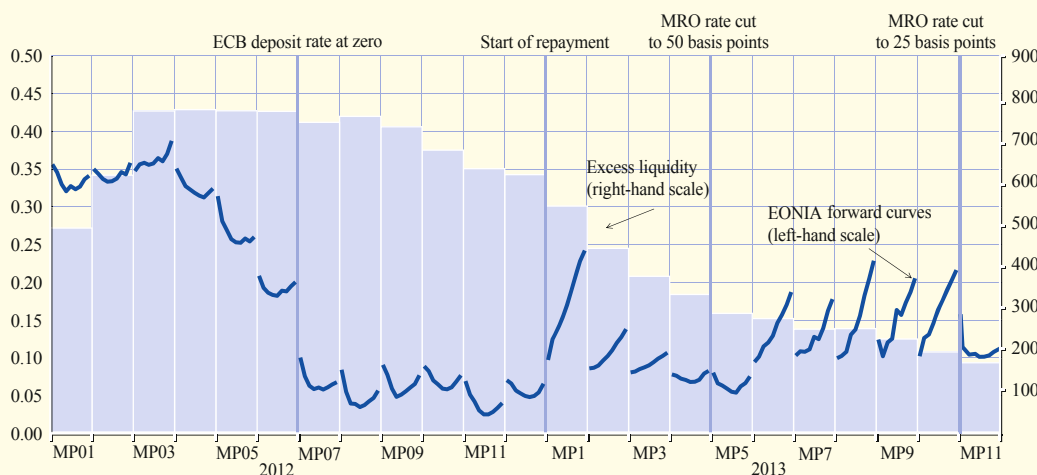
Sources: ECB and Bloomberg.
Note: MP stands for maintenance period.

From the ECB deposit facility rate cut in July 2012 to the start of the repayment period in January 2013, the EONIA forward curve was flat, with a slight downward slope for short-dated maturities, which reflected the tendency of the EONIA rate to decline slowly in the context of very high excess liquidity. The December 2012 maintenance-period curve retained the same shape, despite imminent repayments, in part, because of negative rate discussions among policy-makers.

From January to May 2013, higher than expected repayments significantly switched the market focus towards liquidity developments compared to December 2012, as illustrated by the sharp steepening of the curve. However, despite large repayments, the liquidity stock remained large enough to keep overnight rates close to the ECB deposit facility rate, triggering a rapid repricing of the curve in line with stable spot rates in the following two maintenance periods. The flattening process culminated in May 2013 against the backdrop of renewed discussions about negative rates. Since June 2013, improved economic data led the market to price out further rate cuts or liquidity enhancing measures. As a result, the balance of factors that could influence market expectations tilted in favour of higher rates, resulting in a steeper EONIA forward curve. The steepening may also reflect market uncertainty about the path of excess liquidity – although it is still expected to continue to decline over time — and the volatility of excess liquidity. Moreover, contrary to the period from January to May 2013, volatility in rates actually began increasing in June and July and overnight rates could be seen to be less dependent on the ECB deposit facility than previously. Finally, the curve flattened in November 2013 as a consequence of the cut in the ECB's MRO rate to 25 basis points and to the narrowing of the interest rate corridor.

In summary, expectations about future liquidity conditions are an important factor in influencing expectations about money market rates, but they are not the only deciding factor.

5 CONCLUSION

Excess liquidity provision by the Eurosystem reached its peak in March 2012. More recently, the improving market conditions have reduced the demand for precautionary liquidity buffers, while reopening access to the wholesale funding market to counterparties that had experienced impairments in market access during 2011. This is reflected in a lower demand for excess liquidity in the Eurosystem's refinancing operations and in the substitution of Eurosystem funding with market funding. As a consequence, euro area banks have been actively using the opportunity for early repayments of the amount borrowed in the three-year LTROs. Demand for liquidity in the other Eurosystem refinancing operations also declined.

Should excess liquidity remain abundant, money market rates would continue to be anchored at levels close to the ECB deposit facility rates. If, however, excess liquidity were to decline towards more neutral conditions, money market rates would tend to be anchored to the MRO rate. Any transition period, as the liquidity provision normalises, would lead to greater volatility, which could imply that short-term rates could become less closely anchored to the ECB deposit facility rate. This would make expectations about future money market rates more complex to interpret, as several factors, such as future liquidity developments and uncertainty, would be priced in overnight index swaps, in addition to expectations about the future path of policy rates.

MEDIUM-TERM PROSPECTS FOR CHINA'S ECONOMY AND THE INTERNATIONALISATION OF THE RENMINBI

The impressive growth of China's economy over the past decade has strengthened its global influence. However, although there have been substantial improvements in China's external imbalances since 2008, internal imbalances have become accentuated. Tackling these imbalances will require the implementation of ambitious structural reforms aimed at reducing incentives that have long favoured investment and saving over consumption. Recently announced reform intentions are promising in this respect. The pursuit of the internationalisation of the renminbi by the authorities may also help to overcome these challenges. Reforms aimed at liberalising domestic financial markets, the movement of capital across China's borders and the exchange rate of the renminbi are essential before the currency can be used widely in international trade and finance. As some of the reforms that are vital for the internationalisation of the renminbi coincide with those needed to rebalance China's growth, this may result in a virtuous circle.

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I INTRODUCTION

As China's emergence on the international scene becomes more established, a question mark hangs over whether its economic performance of the past few decades can continue at the same pace. The persistence of internal imbalances suggests that reforms to the growth model are needed. At the same time, for some years now the authorities have been taking steps to encourage greater international use of the renminbi.

Issuing an international reserve currency brings benefits that facilitate growth, such as reduced financing costs for domestic firms and the sovereign. To achieve international currency status, however, economies must typically be rather large and stable, and feature highly developed domestic financial markets, an open capital account and a floating exchange rate. These features may all stimulate growth independently from their effect on the international use of a currency, and are often conditional on one another. For example, capital account liberalisation enables domestic agents to diversify their portfolio, which helps to improve the allocation of capital, thereby fostering growth. However, in order to ensure orderly capital account liberalisation, domestic financial markets must have achieved a minimum level of development – including sufficiently deep and broad markets, as well as adequate risk management capabilities among financial institutions and supervision by authorities – in order to deal with capital flows that can, at times, be volatile. Similarly, a flexible exchange rate helps to reduce the risk that surges in capital flows may foment currency and banking crises.

Therefore, structural and financial reforms, whether they are geared towards domestic or international goals, are clearly linked. Some even view the policies recently adopted by the authorities which are aimed at supporting the international role of the renminbi as catalysts to accomplishing necessary domestic reforms. From this perspective, there seems to be a mutually reinforcing relationship between the reforms needed in order to sustain China's growth in the medium term and those necessary for fostering the internationalisation of the renminbi.

By analysing the changing nature of the imbalances in the economy and of the pattern of growth in China, this article aims to shed light on which structural reforms are crucial. Moreover, by reviewing recent developments in the international use of the renminbi and its determinants, this article also discusses the role that the internationalisation of the renminbi might play in the implementation of the structural reforms that may ensure a more sustainable growth path.

2 MEDIUM-TERM PROSPECTS FOR THE ECONOMY

China's growth performance over the past few decades has propelled it onto the global stage as a major player. However, high levels of growth have been associated with imbalances, such as persistent current account surpluses, high investment ratios and rapid credit growth. Although progress has been made on reducing external imbalances, internal imbalances have continued to grow, despite the slowdown in growth since 2008. The Chinese government has repeatedly expressed its desire to move the economy onto a slower, but more sustainable growth path that is based primarily on private consumption. The authorities have announced guidelines for economic reforms over the next decade to facilitate this transition (see Box 1), but their effects will depend on the way in which and the speed with which they are implemented.

2.1 RECENT DEVELOPMENTS IN THE PATTERN OF GROWTH

Growth of the Chinese economy is on a downward path. Since reaching a peak of 14.2% in 2007, real GDP growth has virtually halved, standing at 7.8% in the third quarter of 2013. This decline was temporarily mitigated by a large stimulus package, estimated at CNY 4 trillion (€482 billion, or 12% of GDP in 2009), which was implemented during 2008-09 in reaction to the financial crisis. As the effects of the stimulus have worn off, there has been a decline in the contributions to growth by all major components of GDP (see Chart 1).

The reasons for this slowdown are diverse and are still being debated. Some research[1] suggests that growth is bound to slow down as the economy gradually depletes its extensive sources of growth and transits to a phase of intensive growth. Other research points to the diminishing effects of positive productivity and demand shocks[2] that have given rise to large income windfalls and boosted the savings rate, investment and, ultimately, growth in GDP. More controversially, it has been suggested that countries with high levels of growth experience a significant slowdown in growth of at least 2 percentage points when their per capita income reaches about USD 17,000 (in 2005 constant international prices). Since China is expected to achieve this level in around 2015, it is claimed that the country is poised to experience a slowdown in the decade to 2020.[3]

Chart 1 Decomposition of GDP growth

(year-on-year percentage changes; percentage points)
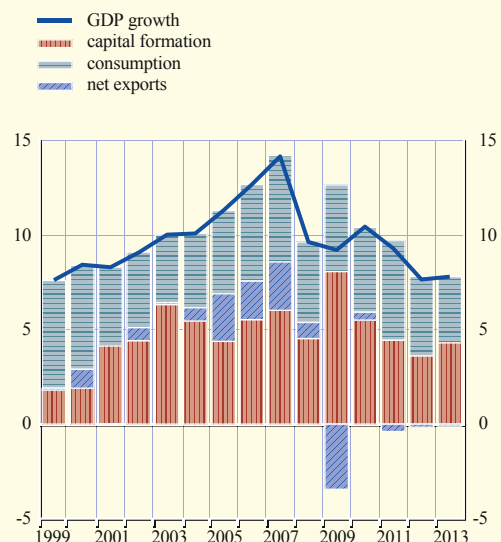
Sources: CEIC Data and National Bureau of Statistics.
Note: The data for 2013 are until the third quarter.

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1   See Dorrucci, E., Gabor, P. and Santabárbara, D., "China's economic growth and rebalancing", *Occasional Paper Series*, No 142, ECB, Frankfurt am Main, February 2013.

2   Favourable demographics, robust restructuring of state-owned enterprises in the 1990s and market liberalisation prior to accession to the World Trade Organization in 2001. See Ma, G., McCauley, R.N. and Lam, L., "The Roles of Saving, Investment and the Renminbi in Rebalancing the Chinese economy", *Review of International Economics*, Vol. 21(1), February 2012, pp. 72-84.

3   See Eichengreen, B., Park, D. and Shin, K., "When Fast-Growing Economies Slow Down: International Evidence and Implications for China", *NBER Working Paper*, No 16919, 2011 and Eichengreen, B., Park, D. and Shin, K., "Growth Slowdowns Redux: New Evidence on the Middle-Income Trap", *NBER Working Paper*, No 18673, 2013.

The recent slowdown of growth in China seems to follow historical patterns in a number of Asian countries and other large emerging and advanced economies since 1950, which saw their growth rates drop as their GDP per capita reached USD 6,500-8,000 in purchasing power parity (PPP) terms (see Chart 2), although there is a large degree of variation within that pattern. China's GDP per capita reached USD 8,000 in 2007. Whatever the precise reasons behind the slowdown, the reduction in growth has only gone partially hand in hand with a reduction in the imbalances that have characterised China's economic development, namely its reliance on investment and exports.

REDUCED EXTERNAL IMBALANCES
China's current account surplus shrank from 10.2% in 2007 to 2.0% in the first three quarters of 2013.

The extent to which the decrease in the current account balance is structural is debatable. Weaker global trade dynamics and slower growth in the euro area and the United States since the international financial crisis are partly at play, suggesting that the external surplus could rise again. However, the real effective exchange rate has risen by 29.6% since 2007, while wages have also risen quickly. Accordingly, the IMF's October 2013 World Economic Outlook foresees a rise in the current account surplus to about 4% by 2018, which is well below previous highs.

The decline in the current account surplus has greatly reduced the accumulation of foreign exchange reserves. Reserves, which more than tripled from 14% of GDP in 2000 to 48% of GDP in 2009, are hovering around USD 3.7 trillion and have even fallen in terms of GDP, to 41% in September 2013 (see Chart 3).

REMAINING DOMESTIC CHALLENGES
Despite the reduction in the external imbalance, the composition of domestic demand has become even more skewed towards investment since 2008. In 2012 the investment ratio

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Chart 2 An international comparison of growth rates versus GDP per capita (1951-2011)

(x-axis: GDP per capita in PPP; y-axis: annual real GDP growth)

- China
- other economies
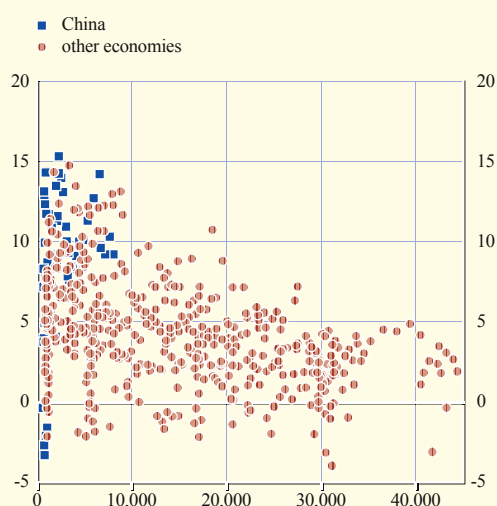
Source: Penn World Tables 8.0.
Note: Other economies include Brazil, France, Germany, India, Japan, Korea, South Africa, the United Kingdom and the United States.

Chart 3 Current account and foreign exchange reserves

(percentage of GDP)

— current account
···· foreign exchange reserves (right-hand side)
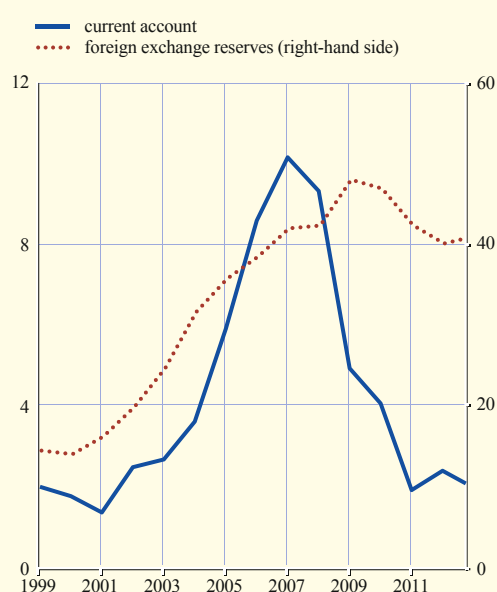
Sources: CEIC Data, National Bureau of Statistics.
Notes: Current account data are until the third quarter of 2013; foreign exchange reserves data are until September 2013.

reached 46.1% of real GDP, standing at an all-time high. At the same time, growth has become increasingly reliant on credit. Total financing to the economy[4] increased from 113% of GDP at the end of 2007 to 182% of GDP in September 2013. Such financial leverage is much higher than that in other countries with a similar level of development, and is only found in high-income economies such as the United States and United Kingdom. Strong growth has been accompanied by a shift in the composition of financing away from bank lending (see Chart 4).

Local governments have contributed to the above developments. They were instrumental in implementing a large part of the infrastructure investments under the 2008-09 fiscal stimulus package, borrowing heavily by means of so-called local government financing vehicles (LGFVs) to do so. According to the Chinese national audit office, the 2008-09 stimulus package led to a doubling of local government and LGFV debt between 2008 and 2010, to CNY 10.7 trillion (equivalent to 27% of GDP in 2010).[5]

Chart 4 Credit and investment ratio

(percentage of GDP)

Sources: CEIC Data, People's Bank of China, National Bureau of Statistics, World Bank.
Note: The last observation refers to September 2013.

China's investment profile is also deviating increasingly from the historical experience of other economies since 1960, including within Asia. The investment-to-GDP ratio has risen rapidly and substantially beyond that of other major advanced and emerging economies. This could be taken as a sign that the current investment rate might be excessive (see Chart 5). It is debatable whether China's capital stock is too high. Despite the very high investment rate, infrastructure needs are still large, in part because of ongoing urbanisation. Indeed, when comparing the (urban) infrastructure, such as (rail) road density, with that of other economies, there is still scope for expanding public infrastructure investment. Nevertheless, the ratio of China's productive capital stock to GDP as estimated by the OECD, at 2.6 in 2012, is relatively high given its level of development: it has already reached a level that is only matched by economies with a much higher GDP per capita (such as France and Germany) and which is only surpassed by Japan. However, the OECD also estimates that, between 1992 and 2009, profitability outside agriculture and housing remained high by international standards, suggesting that – on an economy-wide basis – investment was still efficient until then.[6] Other measures, such as capital stock per capita, which is only a fraction of that of high-income countries, suggest that capital stock is in line with that of other countries given its level of development. Nonetheless, the rate of growth in capital stock per capita has accelerated since 2000, and since 2008 it has consistently outperformed GDP growth.

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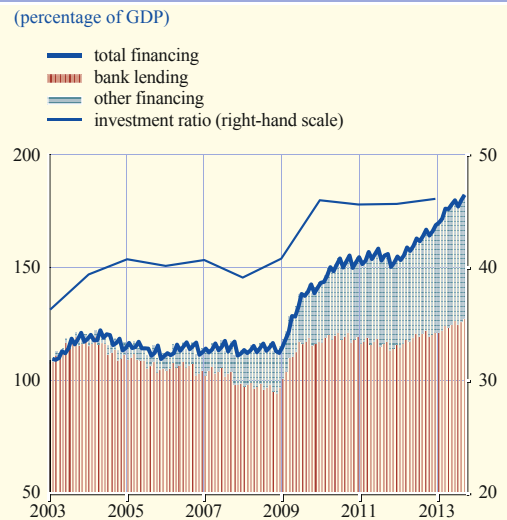
4   This includes financing to the private sector through bank and non-bank lending, as well as corporate bond and equity financing. It does not include outstanding government bonds.

5   The IMF estimates that China's general government debt might be 45% under an augmented definition of government debt that includes local government infrastructure spending (see "*People's Republic of China: Staff Report for the 2013 Article IV Consultation*", IMF, July 2013).

6   See "*Economic Surveys: China*", OECD, March 2013.

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Signs of overcapacity in a number of manufacturing industries have been apparent for some time and have been recognised explicitly by the Chinese authorities. The five-year plan covering the period 2011-15 has already called for the elimination of backward and excess capacity in manufacturing industries, such as steel, shipbuilding and construction, and for greater focus instead on research and development, as well as rationalising energy and resource utilisation as a source of growth. According to its quarterly monetary policy reports, the People's Bank of China (PBoC) has been using its "credit policy guidance" to banks since at least 2007 to reduce credit flows to industries with excess capacity (see also Section 2.2).

According to the Ministry of Industry and Information Technology, capacity utilisation in manufacturing reached 78.6% in the second quarter of 2013, down from 81.5% at the end of 2009. In 21 of the 39 industries surveyed, including the steel, aluminium and cement industries, capacity utilisation was below 75%.

Chart 5 An international comparison of investment relative to GDP (1960-2011)

(x-axis: GDP per capita in PPP; y-axis: investment as a percentage of GDP in real terms)

■ China
● other economies

Sources: Penn World Tables 8.0, World Bank.
Note: Other economies include Brazil, France, Germany, India, Japan, Korea, South Africa, the United Kingdom and the United States.

According to IMF estimates, the downward trend in capacity utilisation since the 1990s has intensified since 2008.[7] Moreover, since 2012 producer price inflation has been negative in year-on-year terms, confirming anecdotal evidence of price drops in response to overproduction, such as of solar panels.

Reacting to the latest signs of overcapacity, the Ministry of Industry and Information Technology published plans in July and August 2013 to reduce capacity by means of closing old production facilities and promoting mergers between firms across a wide range of industries. However, calculations by some industry analysts suggest that the proposed reductions in capacity are relatively modest and may not have a major effect.

2.2 TOWARDS CONSUMPTION-LED GROWTH

The apparent persistence of domestic imbalances suggests that administrative measures to control investment and credit growth have only been partially effective. Structural reforms aimed at tackling incentives that have long favoured investment can also play a role in rebalancing growth. Such reforms are likely to have dislocational effects, as economic agents, authorities and regulators will need to assume new roles. This may have a negative effect on growth in the short term. However, the increased allocational efficiency resulting from structural reforms is expected to lift total factor productivity, thereby limiting the expected slowdown in growth as the catching-up process progresses.

A substantial rebalancing of the economy is likely to require a much slower rate of investment growth, particularly as the overall growth rate moderates. The World Bank has estimated that

7   See "*People's Republic of china: Staff Report for the 2012 Artcle IV consultation*", IMF, July 2012.

GDP growth will decline to 7% by 2020 and to 5% by 2030. If China's GDP per capita were to grow at a rate of 7% per year, it would reach a level of about USD 30,000 (in PPP terms) by 2030. At that level of development, investment ratios in Japan and Korea stood at about 30%. If China wanted to achieve a similar investment ratio at that level of development, this would imply annual investment growth of about 4-5% (and 3% if growth in GDP per capita were only 5%). Such growth rates stand in stark contrast to the growth rates of around 10% observed until recently. It might, therefore, take longer than expected to significantly rebalance China's demand composition.

The following sections review some of the incentives that favour investment over consumption, before examining the possible elements of a structural reform programme.

INCENTIVES FAVOURING INVESTMENT

China's growth model contains a number of incentives that favour investment over consumption. Investment has been a central part of its development model since the start of reforms in 1978. Investment in infrastructure is also believed to promote regional growth potential and raise tax revenues for local governments. Although such investments have proved useful, particularly in fast-growing areas of the country that attract migrants looking for employment opportunities, there have been exceptions, notably in more far-flung areas.

Quotas restricting cross-border investment flows and hence the scope of investments available to savers also have a bearing on domestic investment rates. The restricted ability to invest internationally combined with the limited development of the domestic financial markets (see Section 3.2) inevitably leads to a bias in the structure of the economy towards remaining alternatives such as housing. The domestic housing market has seen rapid growth, with new residential floor space doubling from 400 million square metres in 2005 to slightly less than 800 million square metres in the last 12 months to October 2013. Increased housing activity is supported by the ongoing process of urbanisation, which is expected to continue for another few decades.[8] Moreover, it also reflects an upgrading of the existing housing stock and a desire for more modern and larger housing. Nonetheless, authorities have taken measures to avoid speculative investment behaviour, such as imposing high deposit requirements. According to IMF research,[9] full capital account liberalisation may be followed by an increase in Chinese assets abroad in the order of 15-25% of GDP and a (smaller) increase in foreign assets in China in the order of 2-10% of GDP, resulting in an increase of net international assets of 11-18% of GDP. According to these results, the rise in available international investment opportunities would crowd out some domestic investment in net terms, thereby reducing the investment intensity of growth.

The underpricing of the cost of capital has also promoted investment. Benchmark lending and deposit rates have for a long time been set by the PBoC, guaranteeing banks a positive interest rate margin, while keeping real rates low. Since 2000 the benchmark one-year deposit rate has fluctuated at around 0% in real terms and has even been negative for prolonged periods of time. The one-year lending rate has been on average 3.6%. By keeping the return on household savings low, regulated interest rates amounted to a sizeable, forced transfer of households to firms, which was estimated at 4% of GDP in 2008, depressing income and hence consumption.[10] Furthermore, the PBoC influences the lending policies of banks to ensure that these remain in

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8   The United Nations expects the percentage of people in China living in cities to rise from 49.2% in 2010 to 68.7% in 2030 and to 77.3% in 2050 (See "*World Urbanization Prospects: the 2011 Revision*", United Nations, April 2012).

9   See Bayoumi, T. and Ohnsorge, F., "Do Inflows or Outflows Dominate? Global Implications of Capital Account Liberalization in China", *Working Paper Series*, IMF, No 189, 2013.

10 See Lardy, N., "Financial Repression in China", *Peterson Institute for International Economics Working Paper*, No PB08-8, September 2008.

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line with national priorities. This system, called "window guidance", uses moral pressure to steer lending decisions. In addition to the window guidance system, there are other channels of political influence over credit flows in China, including government ownership of the largest banks. As a result, China's state-owned enterprises seem to enjoy easier access to credit than private firms.[11]

ELEMENTS OF A STRUCTURAL REFORM PROGRAMME

Reducing the incentives that favour investment will require the implementation of an ambitious programme of structural reforms. In order to correctly reflect the cost of capital, market-based interest rates will have to play a larger role, while available capital must be increasingly allowed to flow across borders in search of higher and more diversified returns. It is likely that any steps taken to reduce the level of (precautionary) savings in the economy will further facilitate the transition towards more consumption-based growth. To reduce the high degree of self-financing by enterprises, the financial system will need to become more efficient and competitive, and equally capable of providing financing to small and medium-sized private enterprises as to large state-owned enterprises. Opening up the banking sector for private capital, both domestic and foreign, could provide the necessary competitive pressure. In order to reduce precautionary saving by households, social security coverage will have to become more comprehensive. Increasing the supply of affordable, subsidised housing will also help, while also diminishing speculative pressures.

Such a reform programme is more than ambitious, as it amounts to redefining the relationship between the state and the market, increasingly allowing private enterprises and individuals to take economic decisions. The obstacles to implementing such a reform programme are significant in view of their inherent complexity. Moreover, in the past such reforms have proven to have their pitfalls. For example, in many emerging market economies, these kinds of liberalisation initiatives have entailed banking and currency crises.[12]

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11 See Herrala, R. and Yandong, J., "Has the Chinese Growth Model Changed? A View from the Credit Market", *BOFIT Discussion Paper*, No 5, March 2012.
12 See Ishii, S. and Habermeier, K.,"Capital Account Liberalization and Financial Sector Stability", *Occasional Paper Series*, IMF, No 211, 2002; and Schmukler, S., "Financial Globalisation: Gain and Pain for Developing Countries", *Economic Review*, Federal Reserve Bank of Atlanta, 2004, pp. 39-66.

Box 1

ECONOMIC POLICY PRIORITIES UP TO 2020

From 9 to 12 November 2013, the central committee of the Communist Party of China decided on a comprehensive set of policy and reform priorities, the bulk of which should be implemented by 2020 and will be overseen by a high-level "leading group". This box briefly describes these priorities and assesses their likely impact on China's economic development and on the internationalisation of the renminbi.

The following principles underlie the proposed economic reforms: (1) although public ownership will continue to play a dominant role in the economy, markets will play a decisive role in allocating resources; (2) regardless of private or public ownership, all enterprises will be able to

compete in most markets under equal and fair conditions; and (3) the Chinese government will focus on preserving macroeconomic stability and effective regulation, rather than micromanaging decisions by economic actors.

A wide range of reforms is proposed to achieve these aims. To increase the role of market forces, price regulations on water, energy products, transport and telecommunication services will be reduced. Labour mobility will be improved by increasing the possibilities for rural citizens to move to cities and by giving them greater access to urban public services. At the same time, the transfer of property rights will be facilitated. Furthermore, market access restrictions will be abolished for all but a limited number of sensitive industries. Approval procedures and other administrative requirements will be reduced and relegated to the lowest possible level of government. To ensure a level playing field for all market participants, existing preferential treatment and hidden barriers will be eliminated, while the legal system will be strengthened to guarantee equality before the law. To ensure that the financing capacity of local governments remains in line with its responsibilities, the sharing of revenue between the levels of government will be adjusted, and the powers of local governments to raise taxes will be increased, among other things, speeding up the introduction of real estate taxes. It is also proposed to increase the contribution to the budget of state-owned enterprise profits to 30%. With regard to the banking sector, competition will be increased by allowing private small and medium-sized banks to be established. The introduction of a deposit guarantee system as well as a resolution mechanism for financial institutions is also foreseen. The development of domestic financial markets will be promoted by strengthening supervision. Finally, market forces will also be allowed to play a greater role in setting the renminbi exchange rate, while opportunities for cross-border capital transactions will be increased. Further increasing market access for foreign investment is also foreseen. The recently established free trade zone in Shanghai is an important test area in that respect.

Given that the decisions taken are broad policy intentions, rather than fully developed plans, it is difficult to assess their economic impact. Nonetheless, some tentative conclusions can be drawn. The greater role for market forces should increase the efficiency of labour and capital allocation, while uniform market conditions and greater competitive pressures should reduce the opportunities for rent-seeking and increase the scope for productivity gains. A correct pricing of capital should reduce the investment intensity of growth, while broader access to social security services could reduce precautionary savings and boost consumption. The further opening-up of the capital account and development of domestic financial markets should in turn increase the efficiency of credit allocation and promote the greater international use of the renminbi.

The proposed reforms represent a continuation and intensification of the reform and opening-up process initiated in 1978. The systemic nature of the proposed reforms signals a desire to tackle the underlying causes of economic imbalances that have emerged while at the same time strengthening the economy's capacity for growth.

3 THE INTERNATIONALISATION OF THE RENMINBI

The growing economic influence of China in the global economy has led to discussions about whether the renminbi might become an important international currency in the years to come. These discussions have also been fuelled by the announcement of reforms that would ultimately lead to the

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liberalisation of its capital account, its exchange rate regime and domestic financial markets.[13] It has also been argued that the internationalisation of the renminbi has the potential to act as a catalyst for the reforms that would address China's imbalances (see Section 2.1), and thereby shift the economy onto a more sustainable growth path. This section reviews recent developments in the international use of the renminbi and the economic determinants governing this. It also looks at the prospects going forward and discusses different views on the gradual progress of the internationalisation process.

3.1 RECENT DEVELOPMENTS IN THE INTERNATIONAL USE OF THE RENMINBI IN TRADE AND FINANCE

Over the past few years the renminbi has been used increasingly in the settlement of China's international trade and financial transactions. For example, between 2010 and mid-2013 the share of China's trade in goods settled in renminbi increased from essentially 0% to more than 10% (see Chart 6). The growing use of the renminbi as a trade settlement currency has given rise to sizeable renminbi deposits in Hong Kong, reaching more than USD 100 billion in mid-2013, which is equivalent to about 10% of total local deposits (see Chart 7).[14] Moreover, the issuance of renminbi-denominated ("dim-sum") bonds in Hong Kong has risen sharply since 2007 (see Chart 7). While the bulk of renminbi-denominated bonds issued globally have been issued in Hong Kong, international issuance has grown in other financial centres after London, Singapore and Taiwan took steps to become renminbi financial hubs as well. According to data from the BIS, the international issuance of renminbi-denominated bonds rose sharply from almost none in 2007 to USD 60 billion in the first quarter of 2013.

The international use of the renminbi as an official reserve currency has remained limited so far, owing mainly to the fact that it is still largely inconvertible for investment purposes. Only a few central banks (Austria, Hong Kong, Indonesia, Japan, South Africa, South Korea and Thailand) have been given approval to participate in China's Interbank Bond Market Program, which provides investors with access to China's onshore interbank bond market,[15] although the amounts invested under this program are believed to be marginal to date.[16] Nevertheless, there appears to be large potential for an expansion of the investor base, as a recent survey of reserve managers found that 37% of respondents would consider investing in the renminbi within the next five to ten years.[17]

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13 See "The timing, path and strategies of renminbi internationalisation", PBoC, 2006; the 12th Five-year Plan of the Chinese State Council in 2011; and "The conditions for accelerating the opening of China's capital account are basically mature", PBoC, 2013.

14 Renminbi deposits in Hong Kong have stabilised since late 2011 owing to greater use of the renminbi to pay for imports from China, thereby creating a more, although not fully, balanced receipt-to-payment ratio. It has been argued that a major reason for the decline in the receipt-to-payment ratio has been the weakening of expectations since 2012 that the renminbi will appreciate vis-à-vis the US dollar, see Yu, Y., "Revisiting the Internationalization of the Yuan", *ADBI Working Paper*, No 366, July 2012. Another reason for the slowdown in the growth of renminbi-denominated deposits in Hong Kong may have been the introduction of the Renminbi Qualified Institutional Investor Scheme, which allows renminbi funds held offshore to be invested in mainland China (see Section 3.2); moreover, the growth in offshore renminbi deposits may also have slowed down as a result of the increase in the issuance of renminbi-denominated certificates of deposits in Hong Kong, which has grown from CNY 6.8 billion in 2010 to CNY 117.3 billion in 2012 according to data from the Hong Kong Monetary Authority (see http://www.hkma.gov.hk/eng/key-information/insight/20130221.shtml).

15 See Ballantyne, A. Garner, M. and Wright, M., "Developments in Renminbi Internationalisation", *Bulletin*, Reserve Bank of Australia, June Quarter, 2013.

16 Some evidence suggests that only about 0.17% of global reserves are accounted for by renminbi-denominated securities, see McDowell, D., "Taking on the Dollar: Japanese and Chinese Currency Internationalization in Comparative Perspective", paper prepared for the Workshop on Crisis and Change in the Global Monetary System, Ghent Institute of International Studies, Belgium, 20 March 2013. Recently, Australia announced it would invest 5% of its foreign reserves in Chinese government bonds (see http://www.ft.com/intl/cms/s/0/f679dad8-aca0-11e2-9454-00144feabdc0.html?siteedition=intl#axzz2iLF76J9s).

17 See "*RBS Reserve Management Trends 2013*", Royal Bank of Scotland, 2013.

Chart 6 Share of renminbi-denominated settlements in China's trade in goods

(percentages)

Chart 7 Renminbi-denominated deposits in Hong Kong and dim-sum bond issuance

(USD billions)

- dim-sum bond insurance
- renminbi deposits in Hong Kong (right-hand scale)

Sources: CEIC and PBoC.
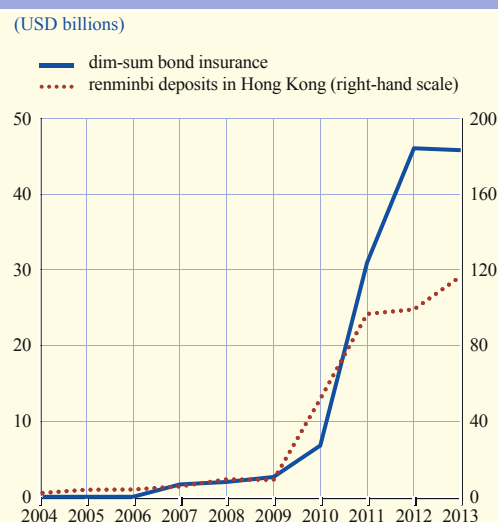
Sources: CEIC and HKM for deposits and Bloomberg for dim-sum bond issuance.
Note: Data for 2013 refer to August 31 for deposits and 6 October for dim-sum bonds issuance.

Despite the impressive growth in the use of the renminbi in trade and financial transactions, its use remains limited. For example, trade settlement in renminbi is focused mainly on China's trade with neighbouring Asian economies: in 2012 almost 60% of trade settled in renminbi was with Hong Kong, while together Japan, Macau, Singapore and Taiwan accounted for another 15%, according to data from the PBoC.[18] Similarly, while the amount of renminbi-denominated international bonds and notes outstanding has grown significantly, they only account for about 0.3% of the global amount of bonds and notes outstanding as at the second quarter of 2013.

3.2 DETERMINANTS OF THE GROWING INTERNATIONAL USE OF THE RENMINBI

Economies issuing currencies that are used widely in international trade and financial transactions typically account for a large share of global output and trade, feature macroeconomic stability, as well as deep, liquid and broad domestic financial markets. Beyond these classic determinants of an international currency, it has often been argued that an economy needs to have an open capital account and a flexible exchange rate in order for its currency to play an important role in the international monetary system, in particular as a reserve currency.[19, 20] The following sections discuss the extent to which China and the renminbi meet these criteria.

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18 See Jin, Z., "The use of RMB in international transactions: Background, development and prospect", keynote speech held at the conference on the "Internationalization of the Renminbi", University of California, San Diego, 7 June 2012.

19 See Ito, T., "The internationalisation of the RMB: Opportunities and pitfalls", Council on Foreign Relations, Washington D.C., 2011; and Prasad, E. and Ye, L., *"The Renminbi's Role in the Global Monetary System"*, Brookings, Washington DC, February 2012.

20 For discussions on whether these are necessary conditions or whether they merely help in the process of currency internationalisation, see Prasad, E., Rumbaugh, T. and Wang, Q., "Putting the Cart Before the Horse? Capital Account Liberalization and Exchange Rate Flexibility in China", *Policy Discussion Paper*, IMF, No 05/1, 2005; and Vallée, S., "The internationalisation path of the renminbi", *Bruegel Working Paper*, 2012/05, Brussels, 2012. It has also been argued that currency convertibility is a necessary condition for a currency to gain international reserve status, see Prasad, E. and Ye, L., ibid, 2012.

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ECONOMIC WEIGHT AND MACROECONOMIC STABILITY

In terms of nominal GDP, China is currently the third largest economy in the world, having overtaken Japan in 2010. Moreover, the IMF projects that China will soon overtake the euro area to become the world's second largest economy. Similarly, according to IMF data, while China accounted for 4% of trade in global goods in 2000, this share grew to 11% in 2012, which is comparable to the figure for the United States. However, despite the growing size of China's economy and its increasing share in global trade, the switch from local or vehicle currency pricing to producer currency pricing in export settlement will depend, among other factors, on the strength of incumbency effects (which favour the use of the US dollar or the euro in many of China's export markets) and on the market and bargaining power of China's exporters, which some believe to be limited.[21] As regards macroeconomic stability, over the past decade China's inflation and output growth records have been remarkable. Since 2000 average inflation, at 2.3%, has been low and average output growth has amounted to 10%. However, it is not clear whether China will manage to maintain this performance in terms of output growth and inflation (see Section 2.1).

DOMESTIC FINANCIAL MARKET DEVELOPMENT

China's domestic financial markets remain less developed compared with those in the United States, for example. In 2011 China set out a programme of reforms up to 2015 to develop its domestic financial markets in the 12th Five-year Plan for the Development and Reform of the Financial Industry. These include more market-based determination of interest rates, financial innovation and coverage, more sophisticated risk management and surveillance. Some of these goals have already been achieved, such as the liberalisation of lending rates.[22] However, despite these efforts, China's financial markets remain insufficiently deep, liquid and broad to generate substantive international demand for renminbi-denominated financial instruments.[23]

CAPITAL ACCOUNT LIBERALISATION

Except for foreign direct investment, compared with advanced economies, China's capital account remains largely closed and subject to tight regulation. In particular, portfolio investment is significantly more restricted than foreign direct investment and is allowed to enter mainland China's financial market only through special schemes. For example, foreign-currency inward portfolio investment is channelled through the Qualified Foreign Institutional Investor (QFII) scheme. Under the QFII scheme, investments are subject to a lock-in period of up to one year and an aggregate ceiling of USD 150 billion (as of July 2013), the pool of eligible applicants for participation in the scheme is limited and excludes private individuals, and repatriation of invested capital is subject to SAFE approval, which also applies to profits under certain circumstances. The Renminbi Qualified Foreign Institutional Investor scheme (RQFII) is similar to the QFII, but applies to inward portfolio investment undertaken with renminbi held offshore.[24] Outward portfolio investment, in turn, is channelled through the Qualified Domestic Institutional Investor (QDII) scheme. While absolute amounts of cross-border portfolio investment under these schemes have

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21 See Jin, Z., op. cit.

22 In another attempt to introduce gradual reform, since early 2013 China's authorities have allowed borrowers and lenders to negotiate interest rates freely for cross-border loans in renminbi in the "Special Qianhai Financial Zone", see Sekine, E., "Start of Chinese experimentation in financial deregulation", *Nomura Journal of Capital Markets*, Vol. 5(1), 2013.

23 See also Eichengreen, B., "Renminbi Internationalization: Tempest in a teapot?", Asian Development Bank Distinguished Lecture, Manila, 11 January 2013, and Yu, Y., op. cit.

24 Recently, the RQFII scheme has been expanded to include London and Singapore (see http://www.ft.com/intl/cms/s/0/9579f608-356e-11e3-b539-00144feab7de.html?siteedition=intl#axzz2iLF76J9s and http://www.ft.com/intl/cms/s/0/f3fe0f00-3ae8-11e3-87fa-00144feab7de.html?siteedition=intl#axzz2iLF76J9s).

increased continuously since their introduction, reaching around USD 270 billion in September 2013 (see Chart 8), these amount to only about 2% of China's GDP. Beyond these schemes, portfolio investment for the purpose of repatriating renminbi held offshore is also allowed for a small number of financial institutions (namely renminbi clearing banks in Hong Kong and Macau, and overseas banks authorised to settle trade in renminbi) and foreign central banks under China's Interbank Bond Market Program. However, the amount of investment arising through this channel is also small. The limited significance of portfolio investment flowing through the above channels is also reflected in China's international investment position: portfolio investment only accounts for a small share relative to foreign direct investment and other investment (see Chart 9).[25]

Overall, despite some progress, China's capital account still remains largely closed, in particular for capital flows beyond direct investment. As foreign investors are unlikely to issue large amounts of financial instruments in renminbi as long as they cannot easily enter China's financial markets, the limited degree of capital account convertibility constitutes a major obstacle to a growing international use of the currency.

Chart 8 Approved investment funds under QFII, QDII and RQFII

(USD billions)

— QFII
···· QDII
- - - RQFII (right-hand scale)
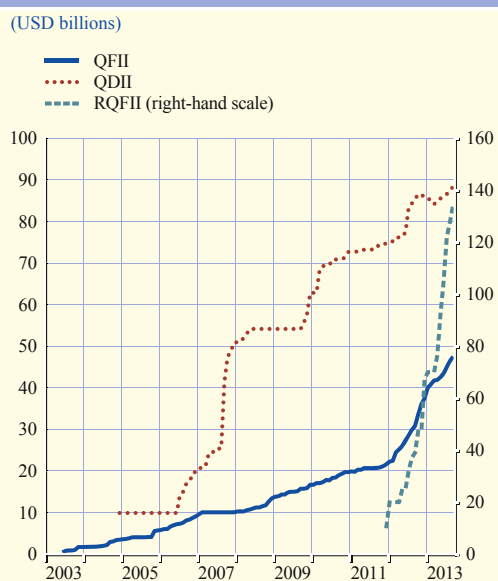
Source: CEIC Data.

Chart 9 Composition of China's international investment position in 2012

(percentage of GDP)

■ liabilities
▥ assets
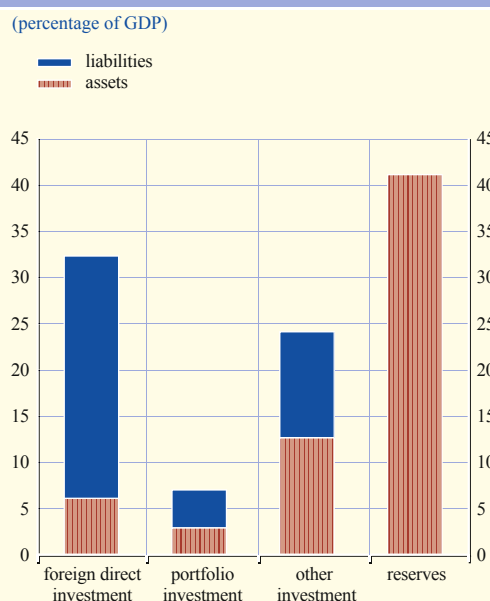
Sources: IMF Balance of Payments Statistics database and World Economic Outlook.

25 A noteworthy step taken recently by China's authorities towards gradually liberalising the capital account was the introduction of the "Special Qianhai Financial Zone". In particular, since the beginning of 2013 China's authorities have allowed – subject to regulations – the repatriation of offshore renminbi to Qianhai via cross-border loans in renminbi from Hong Kong; moreover, China's authorities also encourage the issuance by residents of renminbi-denominated bonds in Hong Kong, the creation of funds of funds in Qianhai and foreign equity investment in Qianhai. Similar to the schemes governing cross-border portfolio investment described above, the amount of cross-border loans channelled to Qianhai from Hong Kong have, however, been small so far, amounting to approximately CNY 8 billion by January 2013, Sekine, E., op. cit.

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EXCHANGE RATE FLEXIBILITY

The experience of a number of emerging market economies has shown that limited exchange rate flexibility after opening the capital account may increase an economy's vulnerability to volatile capital flows, for example through currency mismatches between short-term assets and liabilities. By appreciating in times of surges in capital inflows, allowing an independent monetary policy and generating incentives for domestic financial markets to develop, a flexible exchange rate is an important precondition for successful capital account liberalisation.[26] As a consequence, despite the recent widening of the trading band, the limited flexibility of China's exchange rate continues to be viewed as an additional obstacle to the internationalisation of the renminbi.[27, 28]

3.3 POLICIES SUPPORTING THE INTERNATIONAL USE OF THE RENMINBI

Another determinant of the international use of a currency beyond economic weight, macroeconomic stability, domestic financial market development, capital account openness and exchange rate flexibility, is the role played by supporting policies. In China, such policies have, for example, aimed at liberalising its current account. For example, in 2009 a pilot project for settling trade in renminbi was launched. It was initially limited to a small number of Chinese cities, firms and trading partners, but was extended in 2012 so that (almost) all of China's trade can now be settled in renminbi. In order to foster the international use of the renminbi in trade, the authorities have also developed a network of bilateral swap agreements between the PBoC and 25 foreign central banks in a total amount of more than USD 400 billion (as of October 2013). So far, however, only marginal amounts have been drawn from these swap lines. [29]

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26 See Rajan, R. and Subramanian, A., "Exchange rate flexibility is in Asia's interest", *Financial Times*, 26 September 2004; Prasad, E., Rumbaugh, T. and Wang, Q., op. cit. and Yu, Y., op. cit.
27 See He, D., Cheung, L., Zhang, W.L. and Wu, T., "How would capital account liberalization affect China's capital flows and the renminbi real exchange rate?", *China and the World Economy*, Vol. 20, 2012, pp. 29-54.
28 The renminbi exchange rate has been allowed to float within a narrow band around a central parity determined with reference to a basket of world currencies since 2005. Since April 2012 the band has been expanded to 1% around the central parity.
29 See "*The PBoC Annual Report*", PBoC, 2012.

Box 2

ESTABLISHMENT OF A BILATERAL CURRENCY SWAP AGREEMENT BETWEEN THE ECB AND THE PBOC

On 8 October 2013 the ECB and the People's Bank of China (PBoC) established a bilateral currency swap arrangement to purchase and subsequently repurchase Chinese renminbi and euro from each other. The swap agreement, which will be valid for three years, has a maximum size of CNY 350 billion when renminbi are provided to the ECB, and of €45 billion when euro are provided to the PBoC. From the ECB's perspective, the swap line serves as a backstop facility to address sudden and temporary disruptions in the renminbi market owing to liquidity shortages. The calibration of the operational parameters with which renminbi will be offered to euro area banks will be consistent with this purpose. The euro/renminbi swap facility is not intended to address any current malfunctioning, but to reassure market participants that a safety net is in place to address possible future market malfunctioning and to reassure euro area banks regarding the continuous provision of renminbi. The latter has become increasingly important given rapidly growing bilateral trade and investment flows between China and the euro area, which have

increased demand for renminbi-denominated financial services within the euro area. The swap arrangement is only intended to be used as a backstop facility to address sudden and temporary disruptions in the renminbi market owing to liquidity shortages. It is not intended for use over an extended period of time, and could therefore not function as an effective policy tool to affect the exchange rate or alleviate pressures related to cross-border transfer restrictions. The establishment of the swap line with the PBoC is consistent with the network of swap lines that the ECB has established with other central banks in systemically important economies, the growing global systemic importance of China, the closer ties between Europe and China, the growing offshore renminbi market in Europe, where many euro area banks are actively engaged, and the actions of the ECB to ensure and preserve the stability of the financial markets. Therefore, the conclusion of the swap agreement with the PBoC reflects the uniqueness of China and its rapidly growing systemic relevance. In this respect, the conclusion of the swap agreement with China is not a precedent and does not pave the way for the conclusion of additional swap lines with other countries.

3.4 OUTLOOK FOR INTERNATIONALISATION OF THE RENMINBI

The role of the renminbi in the future international monetary system is difficult to predict. First, it has been argued that the adoption of a gradual approach towards the internationalisation of the renminbi stems from the intention of China's authorities to benefit from capital account and exchange rate liberalisation while limiting possible risks.[30] For example, it is thought that capital account liberalisation is being pursued slowly so as not to expose underdeveloped domestic financial markets to volatile capital flows too quickly. At the same time, it is suggested that China has liberalised selected capital account transactions to allow limited foreign participation in domestic financial markets in order to import technology and know-how, thereby benefiting from so-called collateral benefits.[31] The sequencing of the liberalisation of China's capital account – according to the principle of "inflows before outflows, long-term investment before short-term investment, and institutional investment before private investment" – has also been ascribed to this spirit.[32] Under this view, it is expected that China's capital account and exchange rate will eventually be liberalised to a large extent. As a result of strong fundamentals and helped by supporting policies, it is believed that the renminbi will become an important international currency. It has also been claimed that the policies adopted to support the internationalisation of the renminbi have acted as catalysts for pressing forward with domestic reforms.[33]

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30 See Yu, Y., op. cit.; and Prasad, E. and Ye, L., op. cit.
31 See Dell'Ariccia, G., Di Giovanni, J., Faria, A., Kose, A., Mauro, P. Ostry, J., Schindler, M. and Terrones, M., "Reaping the Benefits of Financial Globalization", *Occasional Paper Series,* IMF, No 264, 2008; and Kose, M.A., Prasad, E.S., Rogoff, K. and Wei, S.J., "Financial Globalization: A Reappraisal", *IMF Staff Papers,* IMF, Vol. 56, No 1, 2009, pp. 8-62.
32 See "*Financial Statistics Report*", PBoC, 2011. China's gradual approach to capital account liberalisation and domestic financial market reforms is broadly in line with recent recommendations by the IMF (see "*The Liberalization and Management of Capital Flows: An Institutional View*", IMF, November 2012). China's gradual approach is also in line with the implications of several empirical studies, which find that the benefits of capital account liberalisation can only be reaped if a minimum level of domestic financial and institutional development has been reached, see Dell'Ariccia, G., Di Giovanni, J., Faria, A., Kose, A., Mauro, P., Ostry, J., Schindler, M. and Terrones, M., op. cit.; Kose, M.A., Prasad, E.S., Rogoff, K. and Wei, S.J., op. cit.; and Kose, A. and Taylor, A., "Thresholds in the process of international financial integration", *Journal of International Money and Finance,* 30(1), 2011, pp. 147-179; some observers have argued that the necessary preconditions for successful capital account liberalisation have not yet been met in China, see Lardy, N., "Financial Repression in China", *Peterson Institute for International Economics Working Paper,* No PB08-8, September 2008.
33 See Frankel, J., "*Historical precedents for internationalisation of the RMB*", Council on Foreign Relations, Washington DC, 2011; Subramanian, A., "Renminbi rules: the conditional imminence of the reserve currency transition", *Peterson Institute for International Economics Working Paper,* Vol. 11-14, 2012; Thornton, A., *"Anaemic ascent: Why China's currency is far from going global"*, Lowy Institute for International Policy Analysis, 2012; Yu, Y., op. cit.; and Ma, J. and Hui, M., "The impact of financial liberalization on China's financial sector" in Udaibir S.D., Fiechter, J. and Sun, T. (eds.), "*China's Road to Greater Financial Stability: Some Policy Perspectives*", IMF, Washington, D.C., July 2013, pp. 191-199.

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Second, others have argued that the gradual nature of the progress made on the liberalisation of the capital account and the renminbi exchange rate has resulted from diverging views within China's leadership about the desirable extent of reforms.[34] From this perspective, whether the renminbi will become an important international currency will depend on the extent to which market forces rather than state intervention eventually determine China's economic development.

4 CONCLUSION

Although China has made progress on reducing its external imbalances, internal imbalances – in particular a high investment ratio and high leverage – have continued to grow. Tackling these imbalances will require the implementation of ambitious structural reforms aimed at reducing incentives that favour investment and saving over consumption. Such reforms will have an impact on the real and financial sectors, and will redefine the role of the State in economic decision-making. In this context, reforms that promote the internationalisation of the renminbi could act as a catalyst for domestic reforms. In turn, reforms aimed at reducing imbalances also promote domestic stability and the attractiveness of the renminbi as an investment currency.

34 See Cohen, B., "The Yuan tomorrow? Evaluating China's currency internationalization strategy", *New Political Economy,* Vol. 17(3), July 2012; Heep, S., *"China in Global Finance: Domestic Financial Repression and International Financial Power"*, Springer, Berlin, forthcoming; and Hess, P., "China's Financial System: Past Reforms, Future Ambitions and Current State" in Rövekamp, F. and Hilpert, H.G. (eds.), *"Currency Cooperation in East Asia"*, Springer, Heidelberg, forthcoming.

EURO AREA STATISTICS

CONTENTS[1]

1 For further information, please contact us at: statistics@ecb.europa.eu. See the ECB's Statistical Data Warehouse in the "Statistics" section of the ECB's website (http://sdw.ecb.europa.eu) for longer runs and more detailed data.

ENLARGEMENT OF THE EURO AREA ON 1 JANUARY 2014 TO INCLUDE LATVIA

In January 2014 Latvia joined the euro area, bringing the number of euro area countries to 18.

Unless otherwise indicated, all data series including observations for 2014 relate to the "Euro 18" (i.e. the euro area including Latvia) 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.

Detailed information on the current and past compositions of the euro area can be found in the General Notes.

Conventions used in the tables

"-"   data do not exist/data are not applicable

"."   data are not yet available

"…"   nil or negligible

"billion" 10^9

(p)   provisional

s.a.   seasonally adjusted

n.s.a.   non-seasonally adjusted

EURO AREA OVERVIEW

1. Monetary developments and interest rates [1]

	M1 [2]	M2 [2]	M3 [2],[3]	M3 [2],[3] 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government [2]	Securities other than shares issued in euro by non-MFI corporations [2]	3-month interest rate (EURIBOR; % per annum; period averages)	10-year spot rate (% per annum; end of period) [4]
	1	2	3	4	5	6	7	8
2012	4.0	3.1	2.9	-	-0.2	1.2	0.58	1.72
2013	.	.	.	-	.	.	0.22	2.24
2013 Q1	6.8	4.3	3.2	-	-0.8	1.5	0.21	1.76
Q2	8.1	4.6	2.9	-	-1.1	0.2	0.21	2.14
Q3	7.0	4.1	2.2	-	-1.9	1.9	0.22	2.05
Q4	.	.	.	-	.	.	0.24	2.24
2013 July	7.1	4.1	2.2	2.3	-1.9	1.8	0.22	1.95
Aug.	6.8	4.0	2.3	2.2	-2.1	2.4	0.23	2.17
Sep.	6.7	3.8	2.0	1.9	-2.1	2.7	0.22	2.05
Oct.	6.6	3.2	1.4	1.7	-2.2	2.1	0.23	1.95
Nov.	6.5	3.1	1.5	.	-2.3	.	0.22	1.99
Dec.	.	.	.	.	.	.	0.27	2.24

2. Prices, output, demand and labour markets [5]

	HICP [1]	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
2012	2.5	2.8	1.9	-0.7	-2.5	78.6	-0.7	11.4
2013	1.3	.	.	.	.	.	.	.
2013 Q2	1.4	-0.1	1.1	-0.6	-1.0	77.9	-1.0	12.1
Q3	1.3	-0.6	1.0	-0.4	-1.1	78.4	-0.8	12.1
Q4	0.8	.	.	.	.	.	.	.
2013 July	1.6	0.0	-	-	-2.0	78.3	-	12.1
Aug.	1.3	-0.9	-	-	-1.5	-	-	12.1
Sep.	1.1	-0.9	-	-	0.2	-	-	12.1
Oct.	0.7	-1.3	-	-	0.2	78.4	-	12.1
Nov.	0.9	-1.2	-	-	.	-	-	12.1
Dec.	0.8	.	-	-	.	-	-	.

3. External statistics
(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)			Reserve assets (end-of-period positions)	Net international investment position (as a % of GDP)	Gross external debt (as a % of GDP)	Effective exchange rate of the euro: EER-21 [6] (index: 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Combined direct and portfolio investment				Nominal	Real (CPI)	
	1	2	3	4	5	6	7	8	9
2012	131.2	94.9	68.8	689.4	-13.3	127.5	97.9	95.5	1.2848
2013	.	.	.	.	.	.	101.7	98.9	1.3281
2013 Q1	26.4	30.7	-7.5	687.8	-12.4	129.1	100.8	98.2	1.3206
Q2	58.1	52.1	18.4	564.3	-13.8	126.8	100.9	98.2	1.3062
Q3	58.0	41.7	-35.6	586.8	.	.	101.9	99.1	1.3242
Q4	.	.	.	.	.	.	103.1	99.9	1.3610
2013 July	28.4	19.7	-44.4	588.7	-	-	101.5	98.9	1.3080
Aug.	13.8	8.3	17.4	613.0	-	-	102.2	99.5	1.3310
Sep.	15.8	13.7	-8.6	586.8	-	-	102.0	99.1	1.3348
Oct.	28.5	19.6	-6.7	579.6	-	-	102.9	99.7	1.3635
Nov.	.	.	.	561.5	-	-	102.7	99.5	1.3493
Dec.	.	.	.	.	-	-	103.9	100.6	1.3704

Sources: ECB, European Commission (Eurostat and Economic and Financial Affairs DG) and Thomson Reuters.
Note: For more information on the data, see the relevant tables later in this section.
1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
2) Annual percentage changes for monthly data refer to the end of the month, whereas those for quarterly and yearly data refer to the annual change in the period average. See the Technical Notes for details.
3) M3 and its components exclude holdings by non-euro area residents of money market fund shares/units and debt securities with a maturity of up to two years.
4) Based on AAA-rated euro area central government bond yield curves. For further information, see Section 4.7.
5) Data refer to the Euro 17, unless otherwise indicated.
6) For a definition of the trading partner groups and other information, please refer to the General Notes.
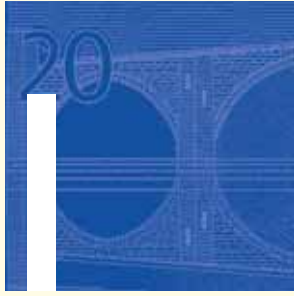
MONETARY POLICY STATISTICS

1.1 Consolidated financial statement of the Eurosystem
(EUR millions)

1. Assets

	6 December 2013	13 December 2013	20 December 2013	27 December 2013	3 January 2014
Gold and gold receivables	343,920	343,920	343,920	343,920	303,156
Claims on non-euro area residents in foreign currency	244,585	243,659	243,969	245,654	241,563
Claims on euro area residents in foreign currency	23,602	23,849	23,283	22,964	23,237
Claims on non-euro area residents in euro	20,374	20,187	19,515	19,517	20,194
Lending to euro area credit institutions in euro	709,297	713,016	723,303	717,142	752,259
Main refinancing operations	94,625	98,495	118,911	133,585	168,662
Longer-term refinancing operations	614,514	614,393	604,050	583,325	583,325
Fine-tuning reverse operations	0	0	0	0	0
Structural reverse operations	0	0	0	0	0
Marginal lending facility	158	128	341	232	270
Credits related to margin calls	1	1	1	0	2
Other claims on euro area credit institutions in euro	75,888	73,234	74,194	74,985	73,545
Securities of euro area residents in euro	591,441	591,937	585,284	586,050	591,184
Securities held for monetary policy purposes	241,421	241,251	235,412	235,412	235,929
Other securities	350,020	350,686	349,872	350,638	355,255
General government debt in euro	28,328	28,326	28,326	28,326	28,287
Other assets	243,359	244,893	245,739	246,842	245,133
Total assets	2,280,794	2,283,020	2,287,531	2,285,399	2,278,560

2. Liabilities

	6 December 2013	13 December 2013	20 December 2013	27 December 2013	3 January 2014
Banknotes in circulation	935,063	938,657	950,471	958,265	952,900
Liabilities to euro area credit institutions in euro	442,136	446,054	462,481	443,733	492,037
Current accounts (covering the minimum reserve system)	203,674	223,637	256,078	244,083	298,943
Deposit facility	54,069	38,341	53,345	59,628	88,213
Fixed-term deposits	184,000	184,000	152,251	139,920	104,842
Fine-tuning reverse operations	0	0	0	0	0
Deposits related to margin calls	394	76	808	102	39
Other liabilities to euro area credit institutions in euro	5,226	4,980	4,208	4,204	3,239
Debt certificates issued	0	0	0	0	0
Liabilities to other euro area residents in euro	103,771	104,310	81,371	82,342	81,007
Liabilities to non-euro area residents in euro	114,323	110,181	109,631	115,209	114,211
Liabilities to euro area residents in foreign currency	1,976	2,049	2,372	4,434	4,791
Liabilities to non-euro area residents in foreign currency	5,590	5,042	4,024	3,193	3,170
Counterpart of special drawing rights allocated by the IMF	53,565	53,565	53,565	53,565	52,717
Other liabilities	224,190	223,226	224,454	225,500	220,911
Revaluation accounts	304,534	304,534	304,534	304,534	262,876
Capital and reserves	90,420	90,420	90,420	90,420	90,701
Total liabilities	2,280,794	2,283,020	2,287,531	2,285,399	2,278,560

Source: ECB.

1.2 Key ECB interest rates
(levels in percentages per annum; changes in percentage points)

With effect from: [1]	Deposit facility		Main refinancing operations			Marginal lending 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	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 [3]	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003 7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50
2005 6 Dec.	1.25	0.25	-	2.25	0.25	3.25	0.25
2006 8 Mar.	1.50	0.25	-	2.50	0.25	3.50	0.25
15 June	1.75	0.25	-	2.75	0.25	3.75	0.25
9 Aug.	2.00	0.25	-	3.00	0.25	4.00	0.25
11 Oct.	2.25	0.25	-	3.25	0.25	4.25	0.25
13 Dec.	2.50	0.25	-	3.50	0.25	4.50	0.25
2007 14 Mar.	2.75	0.25	-	3.75	0.25	4.75	0.25
13 June	3.00	0.25	-	4.00	0.25	5.00	0.25
2008 9 July	3.25	0.25	-	4.25	0.25	5.25	0.25
8 Oct.	2.75	-0.50	-	-	-	4.75	-0.50
9 [4]	3.25	0.50	-	-	-	4.25	-0.50
15 [5]	3.25	...	3.75	-	-0.50	4.25	...
12 Nov.	2.75	-0.50	3.25	-	-0.50	3.75	-0.50
10 Dec.	2.00	-0.75	2.50	-	-0.75	3.00	-0.75
2009 21 Jan.	1.00	-1.00	2.00	-	-0.50	3.00	...
11 Mar.	0.50	-0.50	1.50	-	-0.50	2.50	-0.50
8 Apr.	0.25	-0.25	1.25	-	-0.25	2.25	-0.25
13 May	0.25	...	1.00	-	-0.25	1.75	-0.50
2011 13 Apr.	0.50	0.25	1.25	-	0.25	2.00	0.25
13 July	0.75	0.25	1.50	-	0.25	2.25	0.25
9 Nov.	0.50	-0.25	1.25	-	-0.25	2.00	-0.25
14 Dec.	0.25	-0.25	1.00	-	-0.25	1.75	-0.25
2012 11 July	0.00	-0.25	0.75	-	-0.25	1.50	-0.25
2013 8 May	0.00	...	0.50	-	-0.25	1.00	-0.50
13 Nov.	0.00	...	0.25	-	-0.25	0.75	-0.25

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

1.3 Eurosystem monetary policy operations allotted through tender procedures [1], [2]
(EUR millions; interest rates in percentages per annum)

1. Main and longer-term refinancing operations [3]

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures	Variable rate tender procedures			Running for (...) days
				Fixed rate	Minimum bid rate	Marginal rate [4]	Weighted average rate	
	1	2	3	4	5	6	7	8
Main refinancing operations								
2013 2 Oct.	94,466	73	94,466	0.50	-	-	-	7
9	93,366	68	93,366	0.50	-	-	-	7
16	91,234	70	91,234	0.50	-	-	-	7
23	90,605	67	90,605	0.50	-	-	-	7
30	89,319	66	89,319	0.50	-	-	-	7
6 Nov.	89,524	64	89,524	0.50	-	-	-	7
13	87,744	67	87,744	0.25	-	-	-	7
20	86,881	71	86,881	0.25	-	-	-	7
27	97,210	78	97,210	0.25	-	-	-	7
4 Dec.	94,625	78	94,625	0.25	-	-	-	7
11	98,495	80	98,495	0.25	-	-	-	7
18	118,911	102	118,911	0.25	-	-	-	5
23	133,585	117	133,585	0.25	-	-	-	7
30	168,662	181	168,662	0.25	-	-	-	9
2014 8 Jan.	112,458	92	112,458	0.25	-	-	-	7
Longer-term refinancing operations [5]								
2013 10 July	3,536	21	3,536	0.50	-	-	-	28
1 Aug.	2,683	43	2,683	0.50	-	-	-	91
7	3,910	24	3,910	0.50	-	-	-	35
29	6,823	38	6,823	0.46	-	-	-	91
11 Sep.	3,430	23	3,430	0.50	-	-	-	28
26	8,607	51	8,607	0.39	-	-	-	84
9 Oct.	3,447	21	3,447	0.50	-	-	-	35
31 [6]	1,930	43	1,930	.	-	-	-	91
13 Nov.	3,194	21	3,194	0.25	-	-	-	28
28 [6]	5,926	47	5,926	.	-	-	-	91
11 Dec.	10,143	31	10,143	0.25	-	-	-	35
19 [6]	20,914	76	20,914	.	-	-	-	98

2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures	Variable rate tender procedures				Running for (...) days
					Fixed rate	Minimum bid rate	Maximum bid rate	Marginal rate [4]	Weighted average rate	
	1	2	3	4	5	6	7	8	9	10
2013 2 Oct.	Collection of fixed-term deposits	265,066	117	187,500	-	-	0.50	0.09	0.08	7
9	Collection of fixed-term deposits	251,347	117	188,000	-	-	0.50	0.09	0.08	7
16	Collection of fixed-term deposits	219,440	117	188,000	-	-	0.50	0.15	0.09	7
23	Collection of fixed-term deposits	240,212	132	188,000	-	-	0.50	0.12	0.09	7
30	Collection of fixed-term deposits	215,802	119	188,000	-	-	0.50	0.18	0.12	7
6 Nov.	Collection of fixed-term deposits	257,518	131	184,000	-	-	0.50	0.13	0.10	7
13	Collection of fixed-term deposits	254,702	126	184,000	-	-	0.25	0.10	0.09	7
20	Collection of fixed-term deposits	218,118	122	184,000	-	-	0.25	0.11	0.09	7
27	Collection of fixed-term deposits	157,764	108	157,764	-	-	0.25	0.25	0.16	7
4 Dec.	Collection of fixed-term deposits	190,189	130	184,000	-	-	0.25	0.25	0.14	7
11	Collection of fixed-term deposits	186,728	126	184,000	-	-	0.25	0.25	0.19	7
18	Collection of fixed-term deposits	152,251	109	152,251	-	-	0.25	0.25	0.23	5
23	Collection of fixed-term deposits	139,920	103	139,920	-	-	0.25	0.25	0.24	7
30	Collection of fixed-term deposits	104,842	89	104,842	-	-	0.25	0.25	0.24	9
2014 8 Jan.	Collection of fixed-term deposits	185,795	132	179,000	-	-	0.25	0.25	0.17	7

Source: ECB.
1) The amounts shown may differ slightly from those in Section 1.1 owing to operations that have been allotted but not settled.
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.
3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tender procedures. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids. On 8 October 2008 the ECB announced that, starting from the operation to be settled on 15 October 2008, the weekly main refinancing operations would be carried out through a fixed rate tender procedure with full allotment at the interest rate on the main refinancing operations. On 4 March 2010 the ECB decided to return to variable rate tender procedures in the regular three-month longer-term refinancing operations, starting with the operation to be allotted on 28 April 2010 and settled on 29 April 2010.
4) In liquidity-providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted.
5) For the operations settled on 22 December 2011 and 1 March 2012, after one year counterparties have the option to repay any part of the liquidity that they have been allotted in these operations, on any day that coincides with the settlement day of a main refinancing operation.
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.

1.4 Minimum reserve and liquidity statistics
(EUR billions; period averages of daily positions, unless otherwise indicated; interest rates as percentages per annum)

1. Reserve base of credit institutions subject to reserve requirements

Reserve base as at (end of period):	Total	Liabilities to which a positive reserve coefficient is applied [1]		Liabilities to which a 0% reserve coefficient is applied		
		Overnight deposits and deposits with an agreed maturity or notice period of up to 2 years	Debt securities issued with a maturity of up to 2 years	Deposits with an agreed maturity or notice period of over 2 years	Repos	Debt securities issued with a maturity of over 2 years
	1	2	3	4	5	6
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	18,148.7	9,823.0	562.9	2,481.1	1,323.0	3,958.8
2013 June	18,577.4	9,948.3	593.5	2,531.5	1,426.0	4,078.1
July	18,343.3	9,826.4	596.3	2,515.3	1,422.1	3,983.3
Aug.	18,252.7	9,835.6	587.7	2,494.7	1,353.8	3,981.0
Sep.	18,133.7	9,806.2	572.8	2,483.8	1,301.4	3,969.5
Oct. [2]	18,148.7	9,823.0	562.9	2,481.1	1,323.0	3,958.8

2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2010	211.8	212.5	0.7	0.5	1.00
2011	207.7	212.2	4.5	0.0	1.25
2012	106.4	509.9	403.5	0.0	0.75
2013	103.3	220.2	116.9	0.0	0.25
2013 6 Aug.	104.5	269.6	165.1	0.0	0.50
10 Sep.	104.9	274.5	169.6	0.0	0.50
8 Oct.	103.8	268.4	164.7	0.0	0.50
12 Nov.	103.8	244.9	141.1	0.0	0.50
10 Dec.	103.3	220.2	116.9	0.0	0.25
2014 14 Jan. [3]	103.3	.	.	.	.

3. Liquidity

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts	Base money
	Monetary policy operations of the Eurosystem											
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations [4]	Deposit facility	Other liquidity-absorbing operations [5]	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
	1	2	3	4	5	6	7	8	9	10	11	12
2010	511.1	179.5	336.3	1.9	130.4	44.7	70.8	815.9	94.4	-79.1	212.5	1,073.1
2011	622.1	238.0	389.0	4.4	260.3	253.7	200.5	869.4	63.8	-85.9	212.2	1,335.3
2012	708.0	74.0	1,044.1	1.6	277.3	231.8	208.5	889.3	121.1	144.5	509.9	1,631.0
2013	550.8	91.6	625.3	0.1	241.5	48.3	177.4	925.9	80.2	57.2	220.2	1,194.4
2013 9 July	615.9	108.8	708.0	1.3	256.4	92.1	195.0	909.3	92.5	115.1	286.5	1,287.9
6 Aug.	532.3	104.5	698.6	0.2	255.0	82.6	195.5	917.6	97.1	28.2	269.6	1,269.8
10 Sep.	531.8	97.5	692.3	0.4	251.1	79.2	191.7	920.4	72.6	34.7	274.5	1,274.2
8 Oct.	538.2	96.2	674.6	0.2	248.2	58.9	189.8	918.3	80.1	41.9	268.4	1,245.6
12 Nov.	550.9	90.8	652.4	0.1	244.6	52.1	187.2	920.4	70.9	63.4	244.9	1,217.4
10 Dec.	550.8	91.6	625.3	0.1	241.5	48.3	177.4	925.9	80.2	57.2	220.2	1,194.4

Source: ECB.

1) A coefficient of 1% is applied as of the maintenance period beginning on 18 January 2012. A coefficient of 2% is applied to all previous maintenance periods.
2) The end-October 2013 reserve base is used for the calculation of the reserve requirements of euro area credit institutions for the maintenance period ending in January 2014 and therefore includes the reserve bases of credit institutions in Latvia. On a transitional basis, credit institutions located in the euro area may decide to deduct from their own reserve bases any liabilities vis-à-vis credit institutions located in Latvia. Starting from the reserve base as at end-January 2014, the standard treatment applies (see Decision ECB/2013/41 of the ECB of 22 October 2013 on transitional provisions for the application of minimum reserves by the ECB following the introduction of the euro in Latvia).
3) Owing to the adoption of the euro by Latvia on 1 January 2014, the reserve requirement is an average - weighted by the number of calendar days - of the reserve requirements for the then 17 countries of the euro area for the period 11-31 December 2013 and the reserve requirements for the 18 countries now in the euro area for the period 1-14 January 2014.
4) Includes liquidity provided under the Eurosystem's covered bond purchase programmes and the Eurosystem's Securities Markets Programme.
5) 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
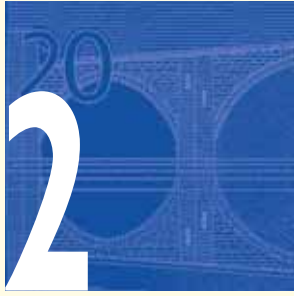
MONEY, BANKING AND OTHER FINANCIAL CORPORATIONS

2.1 Aggregated balance sheet of euro area MFIs [1]
(EUR billions; outstanding amounts at end of period)

1. Assets

	Total	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Money market fund shares/ units [2]	Holdings of shares/ other equity issued by euro area residents	External assets	Fixed assets	Remaining assets [3]
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
						Eurosystem								
2011	4,700.4	2,780.5	18.0	1.0	2,761.5	717.2	557.0	10.1	150.1	-	20.3	779.2	8.1	395.0
2012	5,287.6	3,351.2	16.9	1.0	3,333.3	723.1	568.4	10.5	144.2	-	23.4	799.9	8.3	381.8
2013 Q2	4,399.4	2,572.6	15.1	1.2	2,556.3	741.7	588.9	25.3	127.4	-	23.6	665.0	8.3	388.4
Q3	4,303.2	2,455.0	15.1	1.2	2,438.7	727.9	576.7	26.5	124.7	-	24.6	690.7	8.3	396.8
2013 Aug.	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
Sep.	4,303.2	2,455.0	15.1	1.2	2,438.7	727.9	576.7	26.5	124.7	-	24.6	690.7	8.3	396.8
Oct.	4,228.5	2,399.5	15.1	1.2	2,383.3	724.6	575.7	25.7	123.3	-	25.2	671.7	8.4	399.0
Nov. (p)	4,147.9	2,338.7	15.1	1.2	2,322.4	723.2	573.8	25.8	123.5	-	25.0	649.9	8.4	402.7
						MFIs excluding the Eurosystem								
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	17,990.5	1,153.4	11,041.7	5,795.4	4,901.6	1,627.0	1,423.3	1,851.3	66.8	1,227.8	4,046.3	214.6	4,249.9
2013 Q2	32,009.2	17,528.2	1,101.8	10,978.0	5,448.4	4,959.6	1,785.2	1,407.3	1,767.1	50.9	1,246.4	4,004.8	209.5	4,009.8
Q3	31,386.0	17,300.6	1,090.4	10,779.4	5,430.8	4,842.3	1,744.7	1,393.8	1,703.8	58.9	1,232.9	3,896.6	210.4	3,844.3
2013 Aug.	31,536.8	17,383.1	1,090.2	10,767.7	5,525.2	4,893.2	1,755.3	1,401.8	1,736.1	58.1	1,223.4	3,951.3	210.1	3,817.6
Sep.	31,386.0	17,300.6	1,090.4	10,779.4	5,430.8	4,842.3	1,744.7	1,393.8	1,703.8	58.9	1,232.9	3,896.6	210.4	3,844.3
Oct.	31,356.2	17,188.1	1,103.0	10,730.0	5,355.2	4,825.9	1,764.6	1,374.4	1,686.9	55.8	1,234.6	3,954.6	209.0	3,888.2
Nov. (p)	31,344.3	17,179.7	1,085.1	10,725.3	5,369.2	4,814.3	1,761.0	1,371.7	1,681.6	56.9	1,239.5	3,969.0	209.7	3,875.5

2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents				Money market fund shares/ units [4]	Debt securities issued [5]	Capital and reserves	External liabilities	Remaining liabilities [3]
			Total	Central government	Other general government/ other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11
					Eurosystem						
2011	4,700.4	913.6	2,609.0	63.8	12.1	2,533.1	-	0.0	481.3	284.3	412.2
2012	5,287.6	938.2	3,062.2	81.4	64.5	2,916.4	-	0.0	536.1	298.7	452.4
2013 Q2	4,399.4	936.8	2,350.7	107.9	45.7	2,197.1	-	0.0	421.4	241.3	449.3
Q3	4,303.2	944.6	2,225.0	82.0	49.2	2,093.8	-	0.0	444.8	225.4	463.5
2013 Aug.	4,353.7	945.3	2,250.3	81.3	46.3	2,122.7	-	0.0	469.1	229.4	459.5
Sep.	4,303.2	944.6	2,225.0	82.0	49.2	2,093.8	-	0.0	444.8	225.4	463.5
Oct.	4,228.5	950.4	2,153.1	79.7	69.2	2,004.2	-	0.0	444.4	213.5	467.1
Nov. (p)	4,147.9	953.5	2,093.0	88.2	58.9	1,945.9	-	0.0	426.9	203.6	470.9
					MFIs excluding the Eurosystem						
2011	33,533.5	-	17,312.0	195.5	10,752.1	6,364.4	570.6	5,008.2	2,229.1	3,805.2	4,608.3
2012	32,697.6	-	17,197.8	169.7	10,869.1	6,159.1	534.7	4,848.9	2,343.9	3,495.0	4,277.3
2013 Q2	32,009.2	-	17,071.2	235.6	11,085.0	5,750.6	486.9	4,590.6	2,391.8	3,411.0	4,057.8
Q3	31,386.0	-	16,851.9	190.9	10,929.5	5,731.6	476.8	4,470.5	2,392.7	3,274.9	3,919.2
2013 Aug.	31,536.8	-	16,945.5	180.4	10,950.3	5,814.8	502.5	4,506.4	2,388.8	3,343.0	3,850.6
Sep.	31,386.0	-	16,851.9	190.9	10,929.5	5,731.6	476.8	4,470.5	2,392.7	3,274.9	3,919.2
Oct.	31,356.2	-	16,766.9	165.5	10,907.5	5,693.9	474.9	4,447.5	2,400.5	3,297.6	3,968.8
Nov. (p)	31,344.3	-	16,806.9	175.4	10,940.5	5,691.0	475.0	4,435.6	2,400.8	3,270.9	3,955.1

Source: ECB.
1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
2) Amounts issued by euro area residents. Amounts issued by non-euro area residents are included in external assets.
3) In December 2010 a change was made to the recording practice for derivatives in one Member State, leading to an increase in this position.
4) Amounts held by euro area residents.
5) Amounts issued with a maturity of up to two years and held by non-euro area residents are included in external liabilities.

2.2 Consolidated balance sheet of euro area MFIs [1]
(EUR billions; outstanding amounts at end of period; transactions during period)

1. Assets

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents	External assets	Fixed assets	Remaining assets [2]
		Total	General government	Other euro area residents	Total	General government	Other euro area residents				
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
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	26,248.6	12,213.0	1,170.3	11,042.7	3,629.2	2,195.4	1,433.8	767.0	4,846.2	222.9	4,570.3
2013 Q2	25,930.2	12,096.1	1,116.9	10,979.2	3,806.8	2,374.1	1,432.6	792.5	4,669.8	217.7	4,347.3
Q3	25,416.9	11,886.1	1,105.5	10,780.6	3,741.7	2,321.4	1,420.3	792.6	4,587.2	218.7	4,190.6
2013 Aug.	25,459.9	11,874.1	1,105.2	10,768.9	3,762.5	2,334.8	1,427.7	781.6	4,662.6	218.4	4,160.7
Sep.	25,416.9	11,886.1	1,105.5	10,780.6	3,741.7	2,321.4	1,420.3	792.6	4,587.2	218.7	4,190.6
Oct.	25,461.3	11,849.2	1,118.1	10,731.1	3,740.3	2,340.2	1,400.1	793.3	4,626.3	217.4	4,234.8
Nov. (p)	25,419.0	11,826.7	1,100.2	10,726.5	3,732.3	2,334.8	1,397.5	795.1	4,618.9	218.1	4,228.1
Transactions											
2011	992.9	60.3	-55.6	115.9	127.8	151.9	-24.1	-29.9	-37.5	7.8	864.3
2012	87.1	-38.0	-4.7	-33.4	113.1	183.6	-70.5	38.6	-151.1	-14.1	138.6
2013 Q2	-441.0	-69.9	-23.6	-46.3	79.7	79.7	0.0	9.1	2.6	-0.3	-462.3
Q3	-431.9	-98.3	-12.5	-85.8	-70.6	-58.6	-12.0	-8.4	-75.7	1.1	-180.0
2013 Aug.	-160.0	-47.0	-15.0	-32.0	-6.3	-2.8	-3.5	-2.5	-15.9	0.1	-88.5
Sep.	-21.4	19.0	0.2	18.9	-24.3	-16.3	-8.1	6.1	-31.9	0.4	9.3
Oct.	65.1	-22.6	12.5	-35.0	-15.4	5.3	-20.7	-5.6	66.6	-1.2	43.3
Nov. (p)	-27.7	-15.7	-17.9	2.2	-12.3	-9.1	-3.1	1.4	6.8	0.8	-8.4

2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units [3]	Debt securities issued [4]	Capital and reserves	External liabilities	Remaining liabilities [2]	Excess of inter-MFI liabilities over inter-MFI assets
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2011	26,718.7	857.5	259.3	10,764.3	520.4	3,006.2	2,219.1	4,089.5	5,020.5	-17.9
2012	26,248.6	876.8	251.0	10,933.5	467.9	2,853.4	2,395.9	3,793.7	4,729.7	-53.3
2013 Q2	25,930.2	885.9	343.5	11,130.7	435.9	2,696.1	2,335.8	3,652.2	4,507.1	-57.0
Q3	25,416.9	894.0	272.9	10,978.6	417.9	2,642.0	2,372.6	3,500.3	4,382.7	-44.2
2013 Aug.	25,459.9	894.2	261.7	10,996.6	444.4	2,645.5	2,392.2	3,572.5	4,310.1	-57.3
Sep.	25,416.9	894.0	272.9	10,978.6	417.9	2,642.0	2,372.6	3,500.3	4,382.7	-44.2
Oct.	25,461.3	897.9	245.2	10,976.8	419.1	2,637.3	2,378.3	3,511.1	4,435.9	-40.3
Nov. (p)	25,419.0	903.4	263.6	10,999.4	418.1	2,630.4	2,358.3	3,474.5	4,426.0	-54.7
Transactions										
2011	992.9	49.1	-0.8	168.1	-29.0	50.0	141.4	-199.9	860.3	-46.1
2012	87.1	19.5	-5.1	186.9	-18.2	-124.8	155.4	-251.2	148.2	-23.6
2013 Q2	-441.0	18.4	42.2	85.5	-23.4	-66.7	49.4	-105.0	-437.5	-3.8
Q3	-431.9	8.1	-70.6	-63.3	-18.1	-41.6	7.0	-130.7	-152.0	29.2
2013 Aug.	-160.0	1.4	-55.7	21.2	9.5	-12.5	10.6	-49.9	-99.0	14.4
Sep.	-21.4	-0.2	11.2	-14.6	-26.4	4.4	-1.9	-54.8	50.7	10.2
Oct.	65.1	3.9	-28.0	13.2	1.3	2.8	-6.6	30.5	48.4	-0.4
Nov. (p)	-27.7	5.4	18.4	27.9	-1.0	-6.1	-3.1	-44.3	-8.4	-16.5

Source: ECB.
1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
2) In December 2010 a change was made to the recording practice for derivatives in one Member State, leading to an increase in this position.
3) Amounts held by euro area residents.
4) Amounts issued with a maturity of up to two years and held by non-euro area residents are included in external liabilities.

1. Monetary aggregates [2] and counterparts

	M3					M3 3-month moving average (centred)	Longer-term financial liabilities	Credit to general government	Credit to other euro area residents [3]			Net external assets [4]
	M2			M3-M2						Loans	Loans adjusted for sales and securitisation [5]	
M1	M2-M1											
1	2	3	4	5	6	7	8	9	10	11	12
					Outstanding amounts						
2011 4,807.0	3,800.6	8,607.6	891.7	9,499.2	-	7,678.0	3,164.7	13,286.3	11,018.1	-	927.7
2012 5,109.9	3,882.3	8,992.2	790.1	9,782.3	-	7,568.4	3,406.0	13,058.6	10,857.4	-	1,035.8
2013 Q2 5,264.3	3,873.7	9,138.0	686.5	9,824.5	-	7,385.8	3,451.5	12,935.2	10,706.7	-	1,004.1
Q3 5,345.8	3,852.4	9,198.2	664.8	9,863.0	-	7,365.9	3,437.3	12,865.1	10,629.0	-	1,079.6
2013 Aug. 5,338.8	3,855.8	9,194.6	685.7	9,880.4	-	7,393.7	3,452.4	12,878.2	10,649.2	-	1,077.9
Sep. 5,345.8	3,852.4	9,198.2	664.8	9,863.0	-	7,365.9	3,437.3	12,865.1	10,629.0	-	1,079.6
Oct. 5,397.6	3,820.6	9,218.2	663.1	9,881.4	-	7,395.1	3,464.0	12,827.7	10,607.1	-	1,116.8
Nov. (p) 5,425.5	3,816.4	9,241.9	659.1	9,901.0	-	7,358.2	3,428.9	12,767.1	10,577.4	-	1,142.1
					Transactions						
2011 91.4	69.5	161.0	-8.1	152.8	-	211.9	95.8	49.6	104.0	130.7	162.2
2012 310.2	78.1	388.3	-55.4	332.8	-	-116.9	184.9	-102.5	-70.8	-16.8	98.8
2013 Q2 66.3	-7.5	58.8	-33.9	24.9	-	-32.9	23.2	-75.7	-94.2	-86.3	78.3
Q3 84.8	-20.4	64.4	-28.8	35.7	-	-36.3	-21.2	-72.5	-71.9	-64.9	61.1
2013 Aug. 37.1	-16.3	20.8	-5.2	15.6	-	-3.8	4.7	-16.8	-18.9	-16.4	22.5
Sep. 9.7	-2.3	7.5	-19.3	-11.9	-	-4.2	-18.1	-11.5	-13.0	-16.4	27.8
Oct. 53.6	-30.6	23.0	-1.6	21.4	-	24.9	13.0	-36.3	-14.0	-14.3	45.1
Nov. (p) 26.9	-4.7	22.2	-2.7	19.5	-	-20.1	-38.9	-59.1	-27.2	-24.2	47.2
					Growth rates						
2011 1.9	1.9	1.9	-0.9	1.6	1.7	2.9	3.2	0.4	1.0	1.2	162.2
2012 6.5	2.1	4.5	-6.5	3.5	3.6	-1.5	5.9	-0.8	-0.6	-0.2	98.8
2013 Q2 7.6	0.1	4.3	-17.0	2.4	2.5	-1.0	2.7	-1.1	-1.6	-1.0	282.0
Q3 6.7	0.1	3.8	-17.6	2.0	1.9	-1.3	0.7	-1.2	-2.1	-1.5	313.3
2013 Aug. 6.8	0.4	4.0	-16.4	2.3	2.2	-1.2	2.2	-1.2	-2.1	-1.5	282.9
Sep. 6.7	0.1	3.8	-17.6	2.0	1.9	-1.3	0.7	-1.2	-2.1	-1.5	313.3
Oct. 6.6	-1.2	3.2	-17.9	1.4	1.7	-0.8	0.8	-1.4	-2.2	-1.7	329.9
Nov. (p) 6.5	-1.5	3.1	-16.2	1.5	.	-0.9	-0.6	-1.6	-2.3	-1.8	315.8

C1 Monetary aggregates [1]
(annual growth rates; seasonally adjusted)

M1
M3
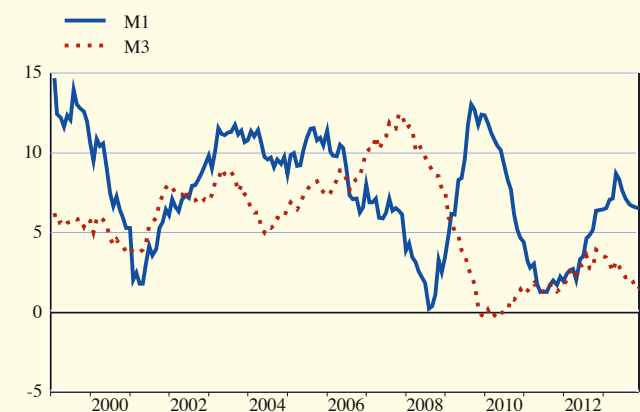
C2 Counterparts [1]
(annual growth rates; seasonally adjusted)
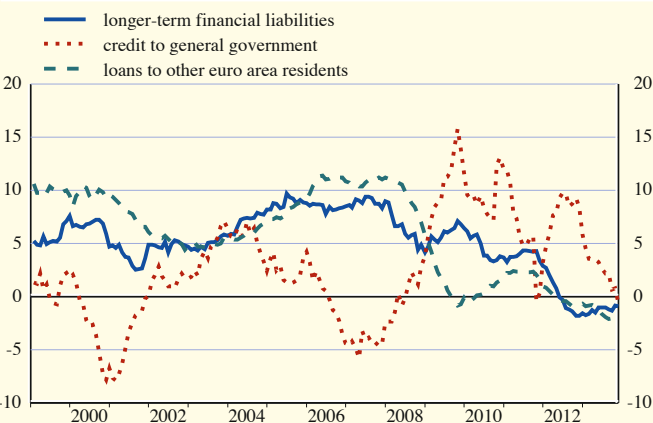
longer-term financial liabilities
credit to general government
loans to other euro area residents

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

2.3 Monetary statistics [1]
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

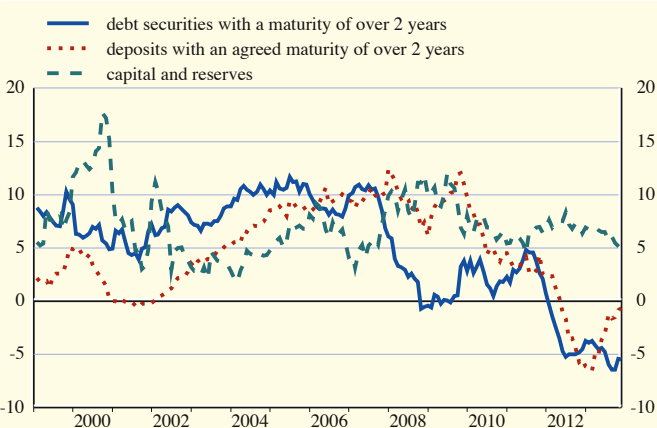### 2. Components of monetary aggregates and longer-term financial liabilities

	Currency in circulation	Overnight deposits	Deposits with an agreed maturity of up to 2 years	Deposits redeemable at notice of up to 3 months	Repos [2]	Money market fund shares/units	Debt securities with a maturity of up to 2 years	Debt securities with a maturity of over 2 years	Deposits redeemable at notice of over 3 months	Deposits with an agreed maturity of over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
						Outstanding amounts					
2011	843.9	3,963.1	1,838.6	1,961.9	146.2	537.8	207.7	2,812.9	115.3	2,544.2	2,205.7
2012	863.9	4,246.0	1,801.8	2,080.6	123.7	483.3	183.2	2,685.0	106.1	2,395.2	2,382.1
2013 Q2	880.8	4,383.5	1,751.3	2,122.4	117.7	438.6	130.2	2,562.8	96.6	2,401.5	2,324.9
Q3	893.7	4,452.1	1,719.5	2,132.9	110.4	421.7	132.7	2,505.5	93.6	2,393.1	2,373.7
2013 Aug.	890.8	4,448.0	1,727.4	2,128.4	123.0	434.5	128.3	2,515.1	95.4	2,393.8	2,389.3
Sep.	893.7	4,452.1	1,719.5	2,132.9	110.4	421.7	132.7	2,505.5	93.6	2,393.1	2,373.7
Oct.	898.1	4,499.6	1,691.8	2,128.8	117.9	423.1	122.1	2,516.5	92.7	2,401.6	2,384.3
Nov. (p)	902.9	4,522.5	1,684.1	2,132.4	118.7	417.6	122.8	2,513.6	92.1	2,394.2	2,358.3
						Transactions					
2011	48.9	42.6	35.8	33.8	-16.8	-29.6	38.2	17.5	-2.5	56.0	140.8
2012	20.2	290.0	-36.5	114.6	-17.0	-20.0	-18.4	-105.8	-10.2	-156.1	155.1
2013 Q2	11.6	54.7	-27.8	20.3	-4.4	-18.7	-10.8	-54.2	-4.3	-8.0	33.7
Q3	12.9	71.9	-32.1	11.7	-15.4	-16.8	3.4	-45.8	-3.0	-6.5	19.0
2013 Aug.	5.6	31.5	-16.8	0.5	-5.9	-1.4	2.1	-13.5	-0.1	-3.0	12.8
Sep.	2.9	6.8	-7.0	4.7	-12.5	-12.7	5.8	-3.2	-1.8	-1.3	2.1
Oct.	4.3	49.3	-26.6	-4.0	7.6	1.5	-10.7	18.6	-0.9	9.0	-1.8
Nov. (p)	4.9	22.0	-8.9	4.2	1.3	-5.5	1.4	-2.8	-0.6	-7.6	-9.1
						Growth rates					
2011	6.1	1.1	2.0	1.8	-9.8	-5.1	29.2	0.7	-2.1	2.3	6.9
2012	2.4	7.3	-2.0	5.8	-11.8	-3.9	-9.6	-3.8	-8.8	-6.1	6.9
2013 Q2	2.1	8.8	-5.6	5.4	-9.3	-11.2	-35.6	-4.8	-14.8	-3.2	6.5
Q3	3.1	7.4	-4.9	4.5	-17.9	-11.9	-30.9	-6.5	-14.9	-1.5	5.5
2013 Aug.	2.7	7.6	-4.5	4.8	-9.8	-10.1	-35.4	-6.5	-14.2	-1.6	6.1
Sep.	3.1	7.4	-4.9	4.5	-17.9	-11.9	-30.9	-6.5	-14.9	-1.5	5.5
Oct.	3.7	7.1	-6.6	3.5	-10.0	-12.5	-36.0	-5.4	-14.8	-0.9	5.1
Nov. (p)	4.5	6.9	-6.8	3.1	-9.6	-12.6	-30.2	-5.5	-14.4	-0.7	4.8

C3 Components of monetary aggregates [1]
(annual growth rates; seasonally adjusted)

currency in circulation
overnight deposits
deposits with an agreed maturity of up to 2 years
deposits redeemable at notice of up to 3 months
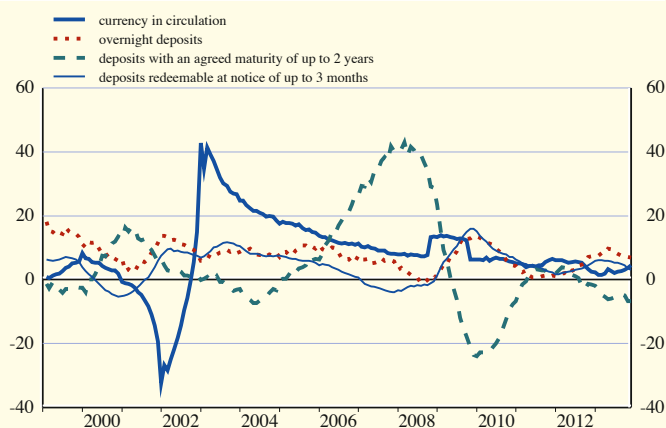
C4 Components of longer-term financial liabilities [1]
(annual growth rates; seasonally adjusted)

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

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

	Insurance corporations and pension funds	Other financial inter-mediaries [2]	Non-financial corporations					Households [3]				
	Total	Total	Total		Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total		Consumer credit	Loans for house purchase	Other loans
				Loans adjusted for sales and securitisation [4]					Loans adjusted for sales and securitisation [4]			
	1	2	3	4	5	6	7	8	9	10	11	12
Outstanding amounts												
2011	91.1	965.3	4,729.6	-	1,147.7	860.6	2,721.2	5,232.1	-	625.9	3,777.2	828.9
2012	89.0	977.0	4,548.8	-	1,132.1	795.7	2,621.0	5,242.5	-	601.8	3,824.3	816.5
2013 Q2	94.3	932.1	4,442.8	-	1,107.5	770.0	2,565.3	5,237.6	-	587.2	3,842.0	808.4
Q3	95.4	902.7	4,395.1	-	1,082.9	762.5	2,549.7	5,235.9	-	582.1	3,845.4	808.3
2013 Aug.	96.4	910.6	4,410.6	-	1,086.3	770.4	2,554.0	5,231.6	-	586.4	3,839.4	805.8
Sep.	95.4	902.7	4,395.1	-	1,082.9	762.5	2,549.7	5,235.9	-	582.1	3,845.4	808.3
Oct.	97.2	897.1	4,379.8	-	1,072.0	760.9	2,546.9	5,233.0	-	575.3	3,853.3	804.4
Nov. (p)	100.2	883.5	4,364.4	-	1,063.0	759.1	2,542.3	5,229.4	-	572.4	3,856.2	800.7
Transactions												
2011	1.3	-37.5	58.6	64.5	24.0	-22.9	57.4	81.6	102.3	-11.6	85.8	7.4
2012	-2.0	12.9	-107.3	-61.8	6.5	-51.4	-62.4	25.6	34.3	-17.8	48.3	-4.9
2013 Q2	1.2	-36.8	-50.1	-50.5	-24.1	-6.6	-19.4	-8.4	0.0	-5.0	0.4	-3.8
Q3	1.4	-40.4	-35.7	-37.9	-17.0	-8.2	-10.4	2.7	10.9	-0.6	3.5	-0.1
2013 Aug.	0.7	-9.3	-13.0	-12.5	-7.8	-1.4	-3.8	2.7	4.0	-1.5	3.9	0.3
Sep.	-1.1	-8.5	-9.3	-10.0	-0.3	-6.9	-2.1	5.8	3.0	-0.7	6.0	0.5
Oct.	1.9	-3.9	-14.8	-16.6	-9.3	1.0	-6.4	2.8	4.5	-6.1	8.3	0.5
Nov. (p)	2.9	-14.2	-13.1	-13.6	-8.0	-1.6	-3.5	-2.8	0.6	-2.4	3.0	-3.4
Growth rates												
2011	1.6	-3.8	1.3	1.4	2.1	-2.6	2.2	1.6	2.0	-1.8	2.3	0.9
2012	-2.2	1.3	-2.3	-1.3	0.6	-6.0	-2.3	0.5	0.7	-2.9	1.3	-0.6
2013 Q2	11.8	-3.1	-3.3	-2.4	-1.9	-6.2	-3.0	0.0	0.3	-3.6	0.9	-1.2
Q3	9.9	-7.5	-3.6	-2.8	-3.2	-5.6	-3.2	0.1	0.4	-2.3	0.8	-1.0
2013 Aug.	12.7	-6.3	-3.8	-3.0	-4.4	-5.3	-3.1	0.1	0.4	-2.5	0.7	-1.2
Sep.	9.9	-7.5	-3.6	-2.8	-3.2	-5.6	-3.2	0.1	0.4	-2.3	0.8	-1.0
Oct.	8.4	-8.0	-3.8	-3.0	-4.2	-5.2	-3.1	0.2	0.3	-3.1	0.9	-1.1
Nov. (p)	14.0	-9.1	-3.9	-3.1	-4.7	-4.9	-3.2	0.1	0.3	-3.4	0.9	-1.5

C5 Loans to other financial intermediaries and non-financial corporations [1] (annual growth rates; seasonally adjusted)

- other financial intermediaries [2]
- non-financial corporations

C6 Loans to households [1] (annual growth rates; seasonally adjusted)
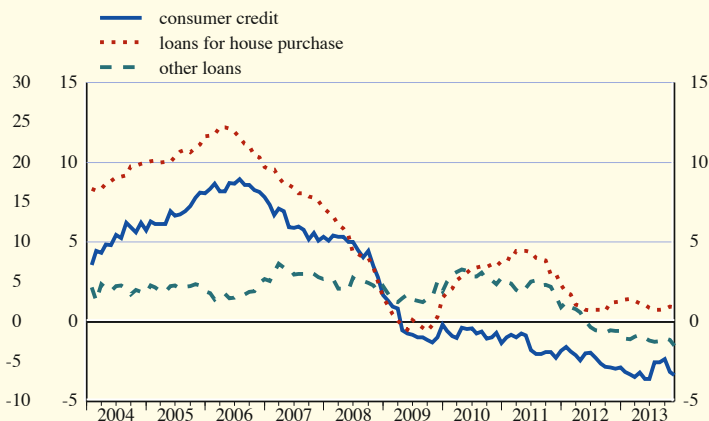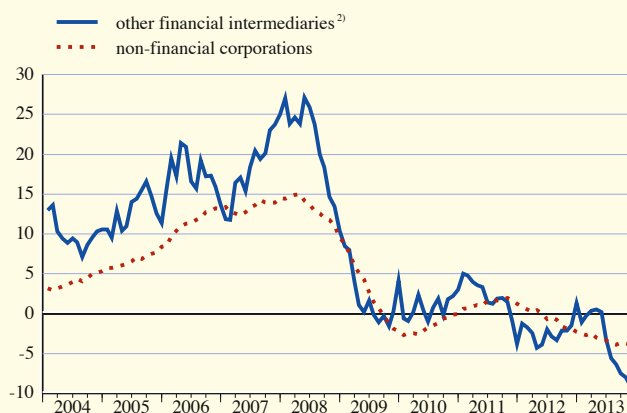
- consumer credit
- loans for house purchase
- other loans

Source: ECB.
1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
2) Excludes reverse repos to central counterparties as of June 2010; transactions and growth rates are adjusted for this effect.
3) Including non-profit institutions serving households.
4) Adjusted for the derecognition of loans on the MFI balance sheet on account of their sale or securitisation.
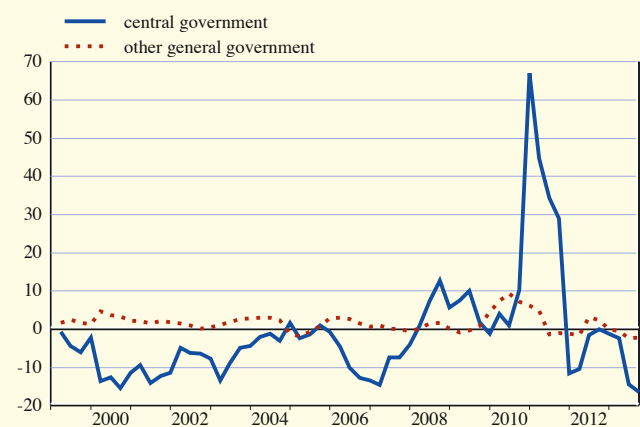
2.4 MFI loans: breakdown [1), 2)]
(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

1. Loans to financial intermediaries and non-financial corporations

	Insurance corporations and pension funds				Other financial intermediaries					Non-financial corporations			
	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	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 amounts												
2012	81.6	64.2	4.5	12.9	1,169.5	196.2	599.6	229.4	340.5	4,538.2	1,123.7	794.6	2,619.9
2013 Q2	95.2	79.2	3.8	12.2	1,188.3	252.6	628.3	218.8	341.2	4,451.1	1,117.8	770.7	2,562.6
Q3	98.5	82.1	3.5	12.9	1,048.5	137.7	504.3	215.2	329.1	4,394.6	1,080.2	764.0	2,550.4
2013 Sep.	98.5	82.1	3.5	12.9	1,048.5	137.7	504.3	215.2	329.1	4,394.6	1,080.2	764.0	2,550.4
Oct.	100.4	83.3	3.7	13.5	1,018.2	123.3	473.2	215.7	329.3	4,377.7	1,066.5	762.8	2,548.5
Nov. (p)	101.0	83.4	3.8	13.8	1,016.4	133.2	471.8	216.7	327.9	4,371.9	1,062.9	759.6	2,549.4
	Transactions												
2012	-1.7	0.6	-1.8	-0.5	51.8	38.7	21.1	13.1	17.6	-108.5	5.8	-51.5	-62.8
2013 Q2	3.6	3.6	-0.1	0.1	-16.0	17.8	-1.1	-2.9	-12.0	-40.5	-16.2	-5.0	-19.2
Q3	3.7	3.2	-0.3	0.7	-43.7	-8.0	-32.2	2.4	-13.9	-44.5	-30.1	-7.4	-7.0
2013 Sep.	-1.6	-2.0	0.0	0.4	11.3	5.7	13.9	0.1	-2.7	-0.7	9.8	-6.1	-4.4
Oct.	1.9	1.2	0.2	0.6	-22.1	-7.9	-23.8	1.3	0.4	-16.4	-12.2	1.3	-5.5
Nov. (p)	0.5	0.1	0.1	0.3	1.8	14.2	2.4	0.9	-1.5	-3.6	-2.5	-3.1	2.0
	Growth rates												
2012	-2.0	0.9	-28.6	-3.5	4.6	24.7	3.6	6.0	5.5	-2.3	0.5	-6.0	-2.3
2013 Q2	11.4	17.3	-29.6	-2.2	3.9	42.7	8.8	-0.8	-1.5	-3.3	-1.9	-6.2	-3.0
Q3	10.0	14.6	-37.6	5.2	-4.2	12.4	-4.1	-0.8	-5.9	-3.6	-3.2	-5.6	-3.2
2013 Sep.	10.0	14.6	-37.6	5.2	-4.2	12.4	-4.1	-0.8	-5.9	-3.6	-3.2	-5.6	-3.2
Oct.	8.4	11.3	-31.6	7.8	-5.6	4.0	-7.9	0.1	-5.4	-3.7	-4.2	-5.1	-3.1
Nov. (p)	14.2	17.2	-19.7	9.6	-4.7	20.8	-4.7	0.0	-7.8	-3.8	-4.7	-4.9	-3.1

2. Loans to households [3)]

	Total	Consumer credit				Loans for house purchase				Other loans				
		Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	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 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 Q2	5,243.4	589.5	130.9	171.3	287.3	3,840.4	13.7	55.7	3,771.1	813.5	414.1	144.7	78.4	590.3
Q3	5,237.7	583.0	130.4	170.4	282.3	3,847.0	12.6	55.8	3,778.6	807.7	413.6	138.4	77.6	591.7
2013 Sep.	5,237.7	583.0	130.4	170.4	282.3	3,847.0	12.6	55.8	3,778.6	807.7	413.6	138.4	77.6	591.7
Oct.	5,233.6	576.4	126.9	168.6	280.9	3,854.4	12.8	55.9	3,785.7	802.8	410.2	136.3	77.3	589.1
Nov. (p)	5,236.1	572.9	125.3	168.4	279.1	3,857.5	12.7	56.0	3,788.9	805.8	408.9	140.3	77.2	588.3
	Transactions													
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 Q2	6.6	-0.1	1.5	-1.0	-0.6	3.3	0.2	-0.3	3.4	3.4	-2.1	3.7	0.1	-0.3
Q3	-1.2	-2.1	0.0	-1.0	-1.1	6.7	-1.1	0.1	7.7	-5.9	-1.5	-6.0	-0.7	0.9
2013 Sep.	9.8	0.4	1.8	-0.5	-1.0	8.1	0.0	-0.2	8.4	1.4	2.0	1.8	-0.9	0.4
Oct.	1.5	-5.8	-3.0	-1.9	-1.0	7.8	0.2	0.1	7.5	-0.5	-0.1	-1.1	0.1	0.6
Nov. (p)	3.4	-3.0	-0.9	-0.7	-1.4	3.2	-0.1	0.1	3.2	3.2	-1.7	4.0	-0.2	-0.6
	Growth rates													
2012	0.5	-2.8	-2.2	-3.4	-2.8	1.3	1.3	0.3	1.3	-0.6	-1.4	-0.3	-7.8	0.4
2013 Q2	0.0	-3.6	-2.4	-5.0	-3.3	0.9	-0.1	-2.1	0.9	-1.2	-1.6	-1.1	-7.3	-0.3
Q3	0.1	-2.3	-0.8	-3.9	-2.1	0.8	-10.1	-2.4	0.9	-1.0	-1.2	-1.1	-5.6	-0.4
2013 Sep.	0.1	-2.3	-0.8	-3.9	-2.1	0.8	-10.1	-2.4	0.9	-1.0	-1.2	-1.1	-5.6	-0.4
Oct.	0.2	-3.2	-2.6	-5.0	-2.3	0.9	-8.4	-2.5	1.0	-1.1	-1.3	-1.8	-5.3	-0.4
Nov. (p)	0.1	-3.3	-2.8	-4.9	-2.7	0.9	-8.8	-2.5	1.0	-1.5	-1.4	-3.4	-5.1	-0.5

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

2.4 MFI loans: breakdown [1), 2)]
(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

3. Loans to government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks [3)]	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2011	1,159.6	348.9	221.7	567.4	21.7	3,021.6	2,022.7	998.9	62.4	936.4
2012	1,153.4	341.8	221.6	565.9	24.1	2,868.8	1,906.7	962.1	60.7	901.4
2012 Q4	1,153.4	341.8	221.6	565.9	24.1	2,868.8	1,906.7	962.1	60.7	901.4
2013 Q1	1,124.3	312.4	217.0	568.8	26.0	2,891.7	1,889.5	1,002.2	60.0	942.2
Q2	1,101.8	290.3	218.1	565.3	28.0	2,878.5	1,893.7	984.9	58.0	926.8
Q3 (p)	1,090.4	285.1	213.8	560.0	31.6	2,767.2	1,807.7	959.4	59.3	900.1
	Transactions									
2011	-54.9	-45.9	-0.3	14.6	-23.3	15.6	-26.2	41.6	12.9	28.7
2012	-3.6	-4.1	-4.9	2.9	2.4	-128.3	-100.8	-27.5	-1.0	-26.5
2012 Q4	-9.5	0.6	-9.9	1.9	-2.1	-101.4	-56.0	-45.4	1.9	-47.3
2013 Q1	-29.5	-29.5	-4.5	2.5	1.9	10.8	-26.8	37.7	-1.0	38.7
Q2	-22.1	-21.8	1.1	-3.5	2.0	18.7	25.2	-6.5	-1.3	-5.2
Q3 (p)	-12.5	-5.1	-4.5	-6.4	3.5	-91.6	-77.2	-14.4	2.4	-16.8
	Growth rates									
2011	-4.5	-11.6	-0.2	2.7	-51.6	0.6	-1.1	4.4	26.7	3.2
2012	-0.3	-1.2	-2.2	0.5	11.2	-4.2	-4.9	-2.8	-1.8	-2.8
2012 Q4	-0.3	-1.2	-2.2	0.5	11.2	-4.2	-4.9	-2.8	-1.8	-2.8
2013 Q1	-1.1	-2.4	-3.5	0.2	8.3	-5.2	-7.1	-1.3	0.1	-1.4
Q2	-5.9	-14.4	-9.5	-0.1	11.6	-4.1	-5.7	-0.9	3.2	-1.1
Q3 (p)	-6.3	-16.3	-7.7	-1.0	20.1	-5.5	-6.9	-2.8	3.4	-3.2

C7 Loans to government [2)]
(annual growth rates; not seasonally adjusted)

— central government
...... other general government

C8 Loans to non-euro area residents [2)]
(annual growth rates; not seasonally adjusted)
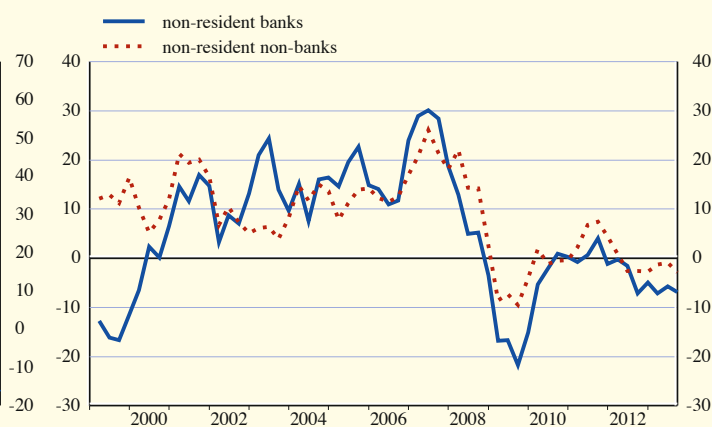
— non-resident banks
...... non-resident non-banks

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

1. Deposits by financial intermediaries

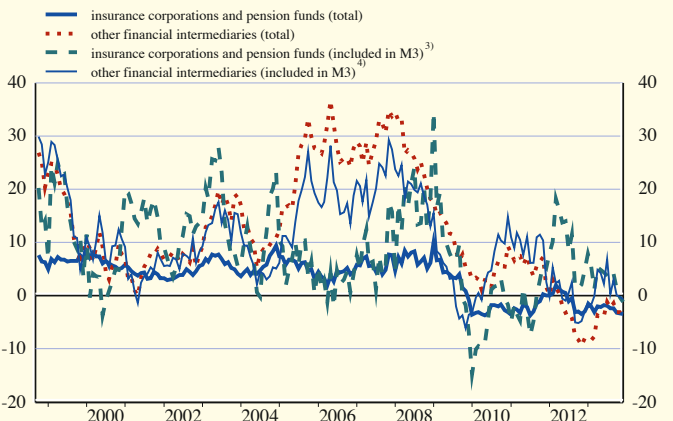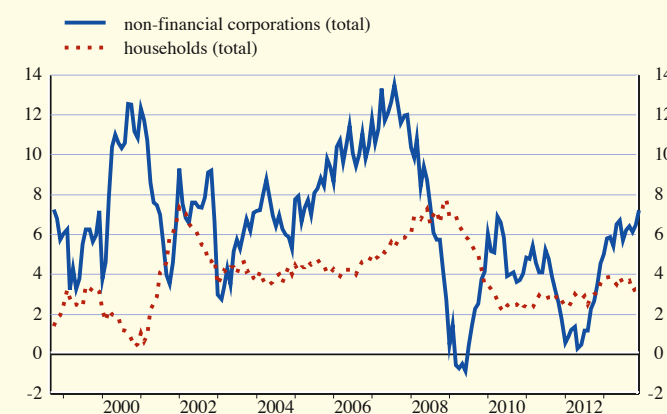|	Insurance corporations and pension funds							Other financial intermediaries							
	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos	
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		With central counter-parties
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Outstanding amounts															
2011	703.8	91.9	79.9	512.4	4.0	0.2	15.5	2,221.0	390.0	284.9	1,190.7	14.7	0.5	340.2	260.0
2012	691.4	106.5	81.4	484.4	6.4	0.2	12.5	2,016.5	410.7	236.6	1,021.0	13.6	0.3	334.4	256.7
2013 Q2	678.8	104.2	78.0	479.4	7.9	0.3	9.0	2,123.8	455.5	230.5	994.3	16.9	0.2	426.3	343.4
Q3	669.6	106.5	74.6	470.7	8.2	0.1	9.5	1,960.3	443.2	235.2	969.7	17.2	0.3	294.7	212.3
2013 Aug.	675.2	104.0	80.6	472.9	8.4	0.4	8.9	1,966.6	436.1	235.5	978.3	16.8	0.3	299.5	206.9
Sep.	669.6	106.5	74.6	470.7	8.2	0.1	9.5	1,960.3	443.2	235.2	969.7	17.2	0.3	294.7	212.3
Oct.	668.8	105.6	77.2	467.9	7.9	0.1	9.9	1,917.1	436.9	225.6	964.9	17.3	0.4	272.1	187.8
Nov. (p)	660.6	104.8	72.6	465.4	7.1	0.1	10.6	1,901.9	433.8	216.7	961.9	23.3	0.5	265.6	183.6
Transactions															
2011	0.0	11.5	4.2	-14.2	1.1	-0.1	-2.6	2.4	28.8	-29.1	5.7	-2.6	0.1	-0.4	5.5
2012	-12.5	15.2	2.6	-27.6	2.0	0.0	-4.7	-176.7	23.9	-49.5	-166.0	-2.0	-0.3	17.2	13.3
2013 Q2	-17.9	-9.3	-5.4	-0.7	0.0	0.0	-2.5	15.0	14.3	-7.0	-21.3	1.8	0.0	27.2	29.4
Q3	-9.1	2.4	-3.7	-9.2	0.9	-0.2	0.6	-80.4	-11.8	4.8	-24.7	0.2	0.1	-49.1	-40.2
2013 Aug.	-8.9	-5.0	-0.2	-2.6	0.5	0.1	-1.7	-1.8	0.2	2.9	-9.1	-0.7	0.1	4.7	10.2
Sep.	-5.2	2.6	-5.9	-2.3	0.0	-0.2	0.7	-6.6	7.2	0.0	-9.2	0.2	0.0	-4.7	5.4
Oct.	-0.6	-0.8	2.6	-2.6	-0.2	0.0	0.4	-30.2	-5.7	-9.1	-4.5	0.1	0.1	-11.1	-13.0
Nov. (p)	-8.2	-0.8	-4.7	-2.5	-0.8	0.0	0.6	-9.1	-3.5	-9.2	-3.2	6.2	0.1	0.5	2.2
Growth rates															
2011	0.0	14.1	5.6	-2.7	43.3	-	-13.1	0.2	8.1	-9.3	0.4	-10.0	-	-0.2	2.1
2012	-1.8	16.5	3.4	-5.4	50.8	-	-32.1	-8.0	6.1	-17.4	-14.0	-14.0	-	4.3	4.2
2013 Q2	-1.9	6.6	-0.2	-4.2	27.9	-	-8.2	-1.2	12.1	-9.0	-9.0	12.4	-	11.5	16.3
Q3	-3.2	5.6	-5.2	-5.0	31.7	-	-13.3	-3.1	2.5	-1.1	-6.4	27.1	-	-3.3	2.7
2013 Aug.	-2.3	5.3	2.9	-4.9	32.2	-	-15.5	-1.4	5.3	-1.5	-5.9	24.6	-	2.4	5.2
Sep.	-3.2	5.6	-5.2	-5.0	31.7	-	-13.3	-3.1	2.5	-1.1	-6.4	27.1	-	-3.3	2.7
Oct.	-3.3	-0.2	-2.4	-4.6	26.2	-	-3.0	-3.1	4.5	-8.1	-6.1	30.2	-	-2.0	1.1
Nov. (p)	-3.4	2.4	-5.2	-4.3	17.2	-	-16.0	-3.6	3.0	-8.0	-6.7	74.3	-	-3.4	-0.9

C9 Total deposits by sector [2)]
(annual growth rates)
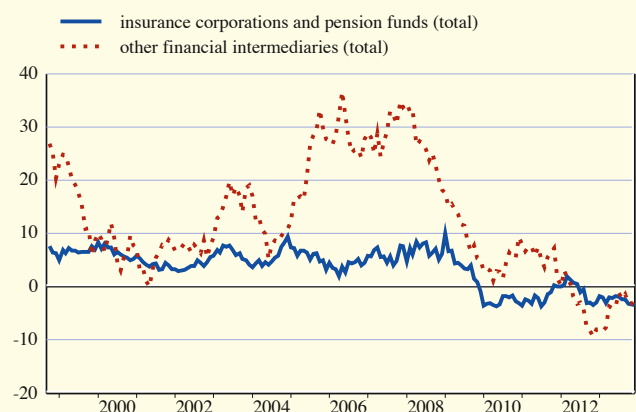
- insurance corporations and pension funds (total)
- other financial intermediaries (total)

C10 Total deposits and deposits included in M3 by sector [2)] (annual growth rates)

- insurance corporations and pension funds (total)
- other financial intermediaries (total)
- insurance corporations and pension funds (included in M3) [3)]
- other financial intermediaries (included in M3) [4)]

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

2.5 Deposits held with MFIs: breakdown [1], [2]

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

2. Deposits by non-financial corporations and households

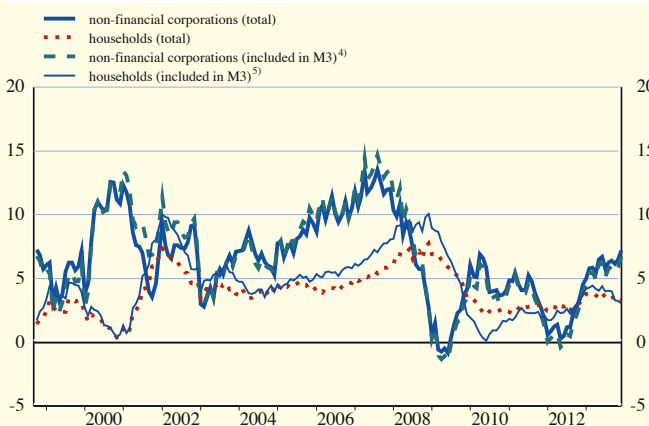|	Non-financial corporations							Households [3]						
	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts														
2011	1,686.9	1,054.3	444.3	97.7	72.3	2.0	16.3	5,894.0	2,255.7	948.1	723.7	1,837.1	106.7	22.7
2012	1,763.8	1,150.8	408.3	106.5	85.4	2.0	10.9	6,119.1	2,346.4	979.1	747.8	1,937.3	98.0	10.4
2013 Q2	1,762.0	1,151.8	389.6	115.9	92.4	1.7	10.6	6,210.0	2,446.4	928.9	770.4	1,970.0	88.2	6.1
Q3	1,792.1	1,174.6	392.2	118.9	95.0	1.8	9.7	6,202.8	2,460.2	902.5	783.6	1,965.2	84.9	6.3
2013 Aug.	1,786.8	1,165.8	395.6	116.9	94.7	1.8	12.1	6,221.0	2,463.3	914.6	778.3	1,971.4	86.7	6.6
Sep.	1,792.1	1,174.6	392.2	118.9	95.0	1.8	9.7	6,202.8	2,460.2	902.5	783.6	1,965.2	84.9	6.3
Oct.	1,814.0	1,181.9	402.1	120.8	94.8	1.8	12.6	6,209.7	2,478.6	891.0	791.1	1,958.7	84.5	5.7
Nov. (p)	1,840.2	1,210.1	400.8	121.1	95.0	1.9	11.5	6,229.2	2,502.5	886.1	796.2	1,954.6	84.2	5.6
Transactions														
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 Q2	15.8	29.7	-19.9	5.7	0.8	0.0	-0.5	46.0	69.9	-35.6	12.3	6.6	-4.9	-2.2
Q3	34.0	25.1	2.4	4.1	3.2	0.1	-0.8	-6.0	14.1	-26.5	14.0	-4.6	-3.3	0.2
2013 Aug.	23.2	16.9	2.3	1.0	1.4	-0.1	1.8	9.8	12.7	-6.7	4.1	0.3	-0.3	-0.3
Sep.	7.9	10.9	-3.0	2.0	0.4	0.0	-2.3	-17.6	-2.8	-11.9	5.4	-6.2	-1.8	-0.3
Oct.	23.6	8.3	10.7	1.8	-0.2	0.1	2.9	6.9	18.7	-11.8	7.5	-6.4	-0.5	-0.6
Nov. (p)	25.6	27.9	-2.0	0.3	0.6	0.0	-1.2	19.3	23.7	-5.0	5.1	-4.1	-0.3	-0.1
Growth 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 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
Q3	6.1	8.0	-2.0	15.2	11.0	2.0	-12.2	3.2	7.2	-6.4	4.9	3.9	-15.8	-50.3
2013 Aug.	6.4	8.4	-2.1	13.4	13.2	10.3	4.6	3.7	8.0	-5.1	4.0	4.2	-15.2	-50.3
Sep.	6.1	8.0	-2.0	15.2	11.0	2.0	-12.2	3.2	7.2	-6.4	4.9	3.9	-15.8	-50.3
Oct.	6.5	8.2	-1.4	15.3	11.5	4.8	5.5	3.3	8.5	-8.1	6.2	2.9	-15.7	-52.0
Nov. (p)	7.2	9.3	-1.2	15.4	10.5	-6.7	2.3	3.3	8.9	-8.8	7.4	2.4	-15.3	-52.2

C11 Total deposits by sector [2]
(annual growth rates)

- non-financial corporations (total)
- households (total)

C12 Total deposits and deposits included in M3 by sector [2]
(annual growth rates)

- non-financial corporations (total)
- households (total)
- non-financial corporations (included in M3) [4]
- households (included in M3) [5]

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

## 2.5 Deposits held with MFIs: breakdown [1], [2]
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

3. Deposits by government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks [3]	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2011	442.0	195.5	48.6	112.6	85.4	3,153.6	2,175.0	978.6	44.3	934.3
2012	448.0	169.7	62.8	111.7	103.8	2,895.9	2,016.6	879.3	39.8	839.4
2012 Q4	448.0	169.7	62.8	111.7	103.8	2,895.9	2,016.6	879.3	39.8	839.4
2013 Q1	499.4	207.8	67.2	111.8	112.5	2,905.4	1,989.5	915.9	37.6	878.3
Q2	546.0	235.6	70.9	115.4	124.2	2,807.0	1,873.3	933.7	35.4	898.3
Q3 (p)	495.5	190.9	70.7	113.7	120.1	2,665.9	1,738.4	927.5	43.0	884.5
Transactions										
2011	17.1	3.3	0.6	2.3	10.8	-334.9	-314.6	-20.3	-2.1	-18.2
2012	-7.9	-22.6	-0.3	-0.4	15.5	-239.7	-135.8	-103.9	-5.1	-98.8
2012 Q4	-61.5	-32.3	-30.2	0.4	0.6	-206.4	-138.9	-67.5	-3.3	-64.1
2013 Q1	50.3	38.2	4.1	0.1	7.9	-2.3	-33.0	30.7	-2.0	32.7
Q2	46.7	27.7	3.8	3.6	11.7	-68.7	-98.6	29.9	-1.8	31.7
Q3 (p)	-49.8	-44.7	-0.1	-1.6	-3.4	-128.9	-126.6	-2.3	7.9	-10.2
Growth rates										
2011	3.9	1.3	1.3	2.1	14.6	-9.8	-12.8	-1.9	-4.4	-1.8
2012	-1.4	-11.7	10.3	-0.4	18.2	-7.5	-6.3	-10.6	-11.9	-10.5
2012 Q4	-1.4	-11.7	10.3	-0.4	18.2	-7.5	-6.3	-10.6	-11.9	-10.5
2013 Q1	3.6	9.8	-12.3	-1.5	12.8	-12.9	-14.9	-8.7	-33.0	-7.2
Q2	7.6	23.9	-28.2	2.9	16.5	-11.5	-16.3	0.2	-14.4	0.8
Q3 (p)	-2.8	-5.4	-24.1	2.2	16.2	-13.1	-18.4	-0.9	2.0	-1.1

C13 Deposits by government and non-euro area residents [2]
(annual growth rates)
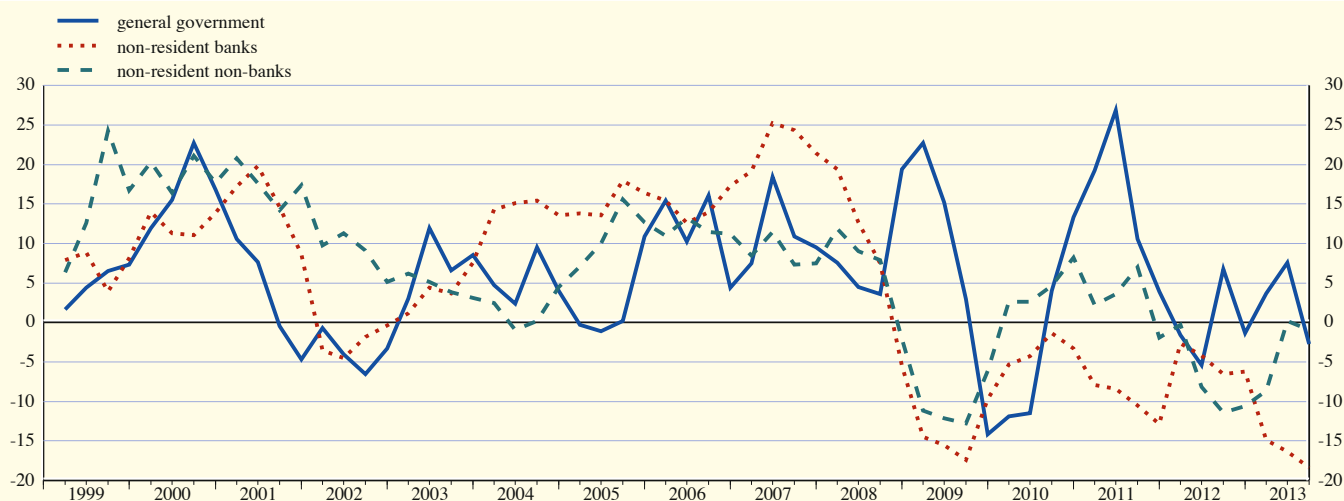
general government
non-resident banks
non-resident non-banks

Source: ECB.
1) MFI sector excluding the Eurosystem; sectoral classification is based on the ESA 95.
2) Data refer to the changing composition of the euro area. For further information, see the General Notes.
3) The term "banks" is used in this table to indicate institutions similar to MFIs which are resident outside the euro area.

2.6 MFI holdings of securities: breakdown [1], [2]

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

	Securities other than shares								Shares and other equity			
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts											
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 Q2	5,774.5	1,650.0	117.1	1,755.9	29.3	1,380.6	26.7	814.9	1,554.7	468.9	777.5	308.4
Q3	5,649.4	1,601.6	102.2	1,714.9	29.8	1,365.0	28.8	807.1	1,552.7	456.3	776.6	319.8
2013 Aug.	5,698.3	1,625.6	110.5	1,723.9	31.4	1,374.3	27.5	805.1	1,533.3	457.2	766.1	310.0
Sep.	5,649.4	1,601.6	102.2	1,714.9	29.8	1,365.0	28.8	807.1	1,552.7	456.3	776.6	319.8
Oct.	5,626.6	1,586.3	100.7	1,735.6	29.0	1,346.3	28.2	800.7	1,556.3	458.0	776.6	321.7
Nov. (p)	5,616.0	1,578.7	103.0	1,735.0	26.0	1,344.3	27.4	801.7	1,567.3	460.9	778.6	327.8
	Transactions											
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	-46.3	49.9	6.6	38.0	5.3
2013 Q2	7.8	-48.6	-5.2	83.4	-1.7	-0.8	0.0	-19.3	19.7	9.9	9.2	0.6
Q3	-123.7	-50.2	-14.5	-45.9	0.8	-15.4	2.3	-0.8	-13.4	-14.1	-8.7	9.4
2013 Aug.	-23.5	-14.0	-8.1	1.6	2.5	-3.3	-0.2	-1.9	-25.6	-22.3	-2.6	-0.7
Sep.	-51.2	-25.0	-8.8	-11.7	-1.4	-9.9	1.3	4.4	13.0	-1.0	5.9	8.1
Oct.	-29.2	-16.8	-0.4	10.6	-0.5	-19.5	-0.3	-2.3	-3.7	2.2	-5.8	-0.1
Nov. (p)	-17.8	-8.3	1.3	-3.2	-3.1	-2.1	-1.1	-1.2	8.9	2.7	1.7	4.5
	Growth rates											
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 Q2	-1.2	-7.6	19.7	10.4	-8.8	-3.5	7.7	-7.2	5.4	-1.3	8.1	9.7
Q3	-2.3	-11.0	-2.2	6.5	-2.2	0.9	15.2	-5.7	3.0	-4.7	4.5	12.3
2013 Aug.	-1.4	-10.8	6.8	9.6	2.5	0.5	13.6	-6.2	2.7	-4.2	5.3	8.0
Sep.	-2.3	-11.0	-2.2	6.5	-2.2	0.9	15.2	-5.7	3.0	-4.7	4.5	12.3
Oct.	-2.2	-11.0	-1.9	6.4	-2.7	0.0	0.1	-4.0	2.8	-4.4	4.3	11.0
Nov. (p)	-2.9	-11.2	-5.4	4.5	-18.2	0.5	17.7	-4.4	3.3	-2.0	2.6	14.1

C14 MFI holdings of securities [2]
(annual growth rates)
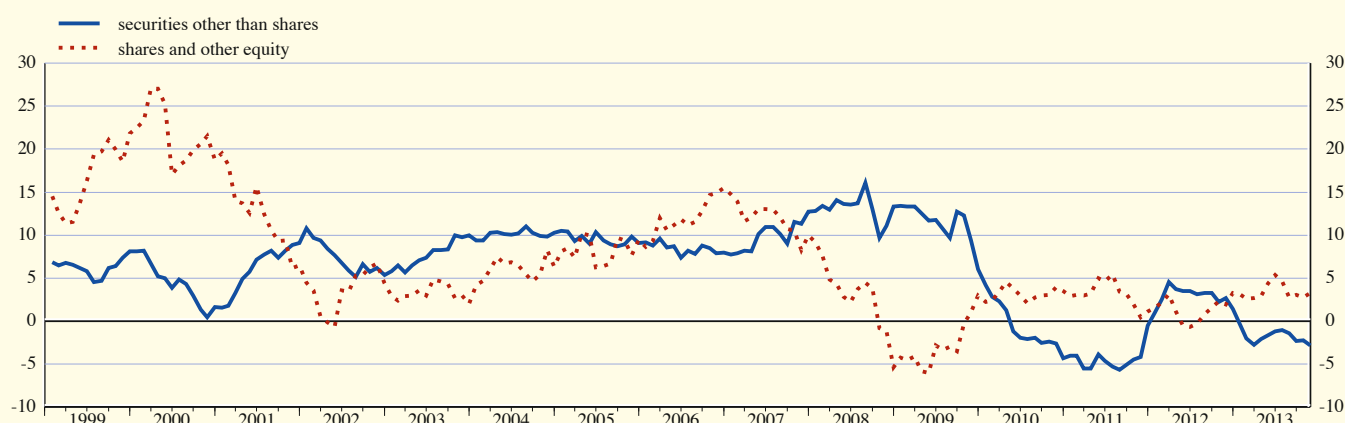
— securities other than shares
··· shares and other equity

Source: ECB.
1) MFI sector excluding the Eurosystem; sectoral classification is based on the ESA 95.
2) Data refer to the changing composition of the euro area. For further information, see the General Notes.

2.7 Currency breakdown of selected MFI balance sheet items [1], [2]
(percentages of total; outstanding amounts in EUR billions; end of period)

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

	MFIs [3]							Non-MFIs						
	All currencies (outstanding amount)	Euro [4]	Non-euro currencies Total					All currencies (outstanding amount)	Euro [4]	Non-euro currencies Total				
				USD	JPY	CHF	GBP				USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Loans														
To euro area residents														
2011	6,153.8	-	-	-	-	-	-	12,322.7	96.2	3.8	1.9	0.3	1.1	0.4
2012	5,795.4	-	-	-	-	-	-	12,195.1	96.4	3.6	1.7	0.2	0.9	0.5
2013 Q2	5,448.4	-	-	-	-	-	-	12,079.8	96.5	3.5	1.8	0.2	0.9	0.4
Q3 (p)	5,430.8	-	-	-	-	-	-	11,869.8	96.6	3.4	1.7	0.1	0.9	0.4
To non-euro area residents														
2011	2,022.7	44.5	55.5	35.6	2.5	2.7	9.3	998.9	38.2	61.8	41.2	2.6	3.3	7.8
2012	1,906.7	47.3	52.7	31.9	1.9	3.5	10.1	962.1	40.1	59.9	38.2	2.0	2.9	9.9
2013 Q2	1,893.7	44.2	55.8	35.8	2.1	2.8	9.4	984.9	39.6	60.4	39.4	2.7	2.6	9.1
Q3 (p)	1,807.7	41.8	58.2	36.6	2.4	3.6	9.9	959.4	40.3	59.7	38.6	2.6	2.6	9.1
Holdings of securities other than shares														
Issued by euro area residents														
2011	1,852.0	95.3	4.7	2.5	0.1	0.3	1.5	2,913.1	98.2	1.8	1.0	0.2	0.1	0.4
2012	1,851.3	94.4	5.6	2.7	0.1	0.4	2.0	3,050.3	98.1	1.9	1.2	0.1	0.1	0.4
2013 Q2	1,767.1	93.4	6.6	2.9	0.1	0.3	2.9	3,192.5	98.2	1.8	1.0	0.1	0.1	0.5
Q3 (p)	1,703.8	94.0	6.0	2.8	0.1	0.3	2.4	3,138.5	98.1	1.9	1.0	0.1	0.1	0.6
Issued by non-euro area residents														
2011	457.0	56.4	43.6	21.1	0.3	0.3	16.0	475.5	32.2	67.8	39.4	5.8	0.7	13.7
2012	434.0	54.9	45.1	19.8	0.3	0.3	19.1	438.8	34.1	65.9	39.1	5.4	0.9	11.8
2013 Q2	407.8	55.1	44.9	20.9	0.2	0.2	17.1	407.2	34.7	65.3	40.5	4.8	0.9	10.4
Q3 (p)	419.8	52.6	47.4	21.3	0.2	0.2	19.2	387.3	36.6	63.4	37.6	4.3	0.9	11.0
Deposits														
By euro area residents														
2011	6,364.4	92.1	7.9	5.1	0.2	1.2	0.7	10,947.6	97.0	3.0	2.0	0.1	0.1	0.4
2012	6,159.1	93.8	6.2	3.9	0.2	1.1	0.6	11,038.7	97.0	3.0	2.0	0.1	0.1	0.4
2013 Q2	5,750.6	93.1	6.9	4.4	0.2	1.0	0.6	11,320.6	97.0	3.0	2.1	0.1	0.1	0.4
Q3 (p)	5,731.6	93.1	6.9	4.4	0.2	1.1	0.7	11,120.4	96.8	3.2	2.1	0.1	0.1	0.4
By non-euro area residents														
2011	2,175.0	59.2	40.8	25.6	2.1	1.8	7.2	978.6	56.1	43.9	30.0	2.0	1.5	5.1
2012	2,016.6	58.3	41.7	27.7	1.6	1.0	7.3	879.3	52.4	47.6	31.3	1.9	1.2	6.3
2013 Q2	1,873.3	56.7	43.3	29.1	1.3	0.9	7.1	933.7	50.4	49.6	33.3	2.5	1.0	6.4
Q3 (p)	1,738.4	54.4	45.6	31.1	1.6	1.3	7.7	927.5	51.1	48.9	32.1	2.2	1.3	6.3

2. Debt securities issued by euro area MFIs

| | All currencies (outstanding amount) | Euro [4] | Non-euro currencies Total | | | | |
| | | | | USD | JPY | CHF | GBP |
	1	2	3	4	5	6	7
2011	5,236.8	82.0	18.0	9.4	1.7	2.0	2.6
2012	5,068.0	81.8	18.2	9.6	1.6	1.9	2.5
2013 Q2	4,825.2	81.0	19.0	10.9	1.2	1.8	2.6
Q3 (p)	4,710.1	80.7	19.3	11.0	1.2	1.8	2.7

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

1. Assets

	Total	Deposits and loan claims	Securities other than shares	Shares and other equity (excl. investment fund/ money market fund shares)	Investment fund/ money market fund shares	Non-financial assets	Other assets (incl. financial derivatives)
	1	2	3	4	5	6	7
				Outstanding amounts			
2013 Apr.	7,764.7	520.4	3,134.7	2,159.9	1,042.3	248.7	658.8
May	7,825.2	519.2	3,130.8	2,191.9	1,049.8	248.2	685.4
June	7,592.6	524.1	3,045.5	2,095.2	1,018.5	249.0	660.4
July	7,707.0	527.2	3,066.8	2,168.7	1,042.8	250.6	650.8
Aug.	7,656.0	525.1	3,057.4	2,139.6	1,040.4	251.0	642.6
Sep.	7,768.3	507.5	3,099.3	2,224.3	1,064.7	251.1	621.4
Oct. (p)	7,946.7	532.5	3,114.8	2,296.9	1,094.5	251.3	656.8
				Transactions			
2013 Q1	228.2	25.2	82.1	34.2	32.3	1.6	52.9
Q2	152.6	31.8	55.7	19.1	2.3	1.2	42.6
Q3	53.3	-11.0	56.4	22.8	32.8	2.0	-49.7

2. Liabilities

	Total	Loans and deposits received	Investment fund shares issued				Other liabilities (incl. financial derivatives)
			Total	Held by euro area residents		Held by non-euro area residents	
					Investment funds		
	1	2	3	4	5	6	7
			Outstanding amounts				
2013 Apr.	7,764.7	166.2	7,005.2	5,088.5	828.2	1,916.8	593.3
May	7,825.2	169.2	7,035.7	5,101.5	831.6	1,934.2	620.4
June	7,592.6	164.2	6,819.1	4,996.2	793.4	1,822.9	609.2
July	7,707.0	163.4	6,946.1	5,100.7	818.3	1,845.4	597.5
Aug.	7,656.0	169.6	6,890.5	5,076.6	814.7	1,813.9	595.9
Sep.	7,768.3	167.0	7,037.1	5,179.2	839.0	1,857.8	564.2
Oct. (p)	7,946.7	174.9	7,192.5	5,300.0	867.7	1,892.5	579.4
			Transactions				
2013 Q1	228.2	9.4	160.6	96.4	31.2	64.2	58.2
Q2	152.6	9.3	97.3	98.0	-7.6	-0.7	46.0
Q3	53.3	3.4	97.0	97.9	32.5	-1.0	-47.1

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

	Total	Funds by investment policy						Funds by type		Memo item: Money market funds
		Bond funds	Equity funds	Mixed funds	Real estate funds	Hedge funds	Other funds	Open-end funds	Closed-end funds	
	1	2	3	4	5	6	7	8	9	10
					Outstanding amounts					
2013 Mar.	6,890.0	2,447.1	1,840.7	1,685.5	327.6	150.3	438.9	6,804.0	86.1	912.1
Apr.	7,005.2	2,505.7	1,855.4	1,717.8	330.1	151.7	444.6	6,918.8	86.5	901.7
May	7,035.7	2,499.0	1,875.2	1,724.4	331.1	154.0	452.0	6,947.2	88.5	895.0
June	6,819.1	2,416.6	1,783.0	1,683.8	331.3	153.6	450.9	6,731.6	87.6	856.2
July	6,946.1	2,431.0	1,847.3	1,721.9	333.7	151.9	460.3	6,858.3	87.8	851.1
Aug.	6,890.5	2,407.2	1,819.9	1,715.4	332.8	154.2	461.0	6,802.7	87.8	869.6
Sep.	7,037.1	2,425.2	1,906.9	1,743.1	334.6	157.1	470.1	6,947.4	89.6	846.2
Oct. (p)	7,192.5	2,443.2	1,976.6	1,795.1	335.3	159.6	482.6	7,102.2	90.3	835.1
					Transactions					
2013 Apr.	70.1	41.3	7.5	16.7	1.0	-0.7	4.2	70.0	0.2	-0.8
May	45.5	24.7	6.0	7.0	2.9	0.9	3.9	43.6	1.8	-5.8
June	-18.3	-24.5	-11.5	8.2	2.4	1.3	5.9	-18.6	0.3	-37.0
July	57.4	18.3	16.5	18.0	2.5	-0.2	2.2	57.0	0.4	0.7
Aug.	2.8	-5.0	-0.5	6.0	0.4	1.2	0.5	2.8	0.0	14.5
Sep.	36.9	-5.1	19.9	14.4	0.8	3.6	3.4	35.4	1.4	-22.2
Oct. (p)	39.1	2.7	18.4	12.1	-0.1	2.0	3.9	39.0	0.1	-7.0

Source: ECB.
1) Other than money market funds (which are shown as a memo item in column 10 in Table 3 of this section). For further details, see the General Notes.

2.9 Securities held by investment funds [1] broken down by issuer of securities
(EUR billions; outstanding amounts at end of period; transactions during period)

1. Securities other than shares

	Total	Euro area							Rest of the world		
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds	Non-financial corporations		EU Member States outside the euro area	United States	Japan
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2012 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	3,045.5	1,649.4	404.2	770.9	247.9	8.4	218.0	1,396.1	324.9	551.1	15.2
Q3 (p)	3,099.3	1,686.0	393.6	798.4	257.7	9.1	227.3	1,413.3	343.8	549.7	14.9
Transactions											
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	55.7	28.8	-0.4	24.5	4.0	0.1	0.7	26.9	2.4	12.7	0.2
Q3 (p)	56.4	27.7	-11.9	22.1	8.7	0.5	8.3	28.7	20.8	2.5	-0.3

2. Shares and other equity (other than investment fund and money market fund shares)

	Total	Euro area							Rest of the world		
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds	Non-financial corporations		EU Member States outside the euro area	United States	Japan
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2012 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	2,095.2	738.6	58.9	-	52.4	28.1	599.1	1,356.6	181.7	482.2	109.5
Q3 (p)	2,224.3	813.5	72.6	-	56.4	30.4	654.1	1,410.8	197.2	502.7	112.4
Transactions											
2013 Q1	34.2	-4.4	-0.5	-	-1.7	-1.2	-0.9	38.5	3.7	16.8	5.8
Q2	19.1	1.8	1.3	-	-0.3	0.2	0.6	17.3	0.7	6.3	13.8
Q3 (p)	22.8	8.9	1.2	-	0.3	0.6	6.8	13.9	3.0	11.6	0.4

3. Investment fund/money market fund shares

	Total	Euro area							Rest of the world		
		Total	MFIs [2]	General government	Other financial intermediaries [2]	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 Q4	962.8	829.6	72.1	-	757.5	-	-	133.2	28.9	41.4	0.6
2013 Q1	1,026.1	888.7	74.5	-	814.2	-	-	137.4	32.5	43.5	0.6
Q2	1,018.5	880.2	86.8	-	793.4	-	-	138.3	31.4	46.0	0.6
Q3 (p)	1,064.7	925.1	86.1	-	839.0	-	-	139.6	33.9	46.3	0.5
Transactions											
2013 Q1	32.3	33.2	2.0	-	31.2	-	-	-0.9	2.1	0.9	0.0
Q2	2.3	4.2	11.8	-	-7.6	-	-	-1.9	-0.8	-0.1	0.0
Q3 (p)	32.8	31.1	-1.4	-	32.5	-	-	1.7	1.5	1.4	0.0

Source: ECB.
1) Other than money market funds. For further details, see the General Notes.
2) Investment fund shares (other than money market fund shares) are issued by other financial intermediaries. Money market fund shares are issued by MFIs.

2.10 Aggregated balance sheet of euro area financial vehicle corporations
(EUR billions; outstanding amounts at end of period; transactions during period)

1. Assets

	Total	Deposits and loan claims	Securitised loans							Securities other than shares	Other securitised assets	Shares and other equity	Other assets
			Total	Originated in euro area					Originated outside euro area				
				MFIs		Other financial intermediaries, insurance corporations and pension funds	Non-financial corporations	General government					
					Remaining on the MFI balance sheet [1]								
	1	2	3	4	5	6	7	8	9	10	11	12	13
					Outstanding amounts								
2012 Q3	2,091.7	303.6	1,407.5	1,092.5	476.1	159.5	23.9	4.4	127.3	193.1	85.8	36.0	65.8
Q4	2,057.2	285.8	1,388.2	1,070.4	469.8	164.3	24.7	4.0	124.9	195.6	87.9	35.7	63.9
2013 Q1	2,027.2	291.9	1,357.0	1,040.5	462.7	164.1	24.7	4.0	123.7	193.7	86.6	35.8	62.1
Q2	1,994.0	276.5	1,339.5	1,032.8	456.5	162.0	23.0	3.6	118.0	194.1	88.6	33.9	61.4
Q3	1,954.6	269.0	1,318.7	1,023.3	449.7	157.5	18.8	3.5	115.6	180.8	87.5	34.3	64.3
					Transactions								
2012 Q3	-81.1	-3.6	-61.5	-63.7	-	4.5	0.5	0.0	-2.7	-14.5	0.8	-1.6	-0.7
Q4	-37.5	-17.5	-17.7	-21.2	-	4.6	1.1	-0.4	-1.8	1.3	2.3	0.3	-6.3
2013 Q1	-29.1	6.2	-30.5	-28.9	-	-0.3	0.2	0.0	-1.5	0.4	-1.2	0.0	-4.0
Q2	-33.2	-15.1	-17.2	-7.8	-	-2.0	-1.6	-0.4	-5.5	1.0	2.6	-1.9	-2.6
Q3	-40.7	-6.9	-20.3	-9.2	-	-4.6	-4.1	0.0	-2.5	-13.8	-0.8	0.5	0.5

2. Liabilities

	Total	Loans and deposits received	Debt securities issued			Capital and reserves	Other liabilities
			Total	Up to 2 years	Over 2 years		
	1	2	3	4	5	6	7
			Outstanding amounts				
2012 Q3	2,091.7	145.9	1,688.6	51.3	1,637.3	31.0	226.2
Q4	2,057.2	140.4	1,664.1	52.1	1,612.1	30.6	222.0
2013 Q1	2,027.2	141.5	1,627.7	54.2	1,573.5	30.7	227.3
Q2	1,994.0	129.1	1,611.4	53.7	1,557.7	29.0	224.6
Q3	1,954.6	124.2	1,576.3	53.7	1,522.6	28.2	225.9
			Transactions				
2012 Q3	-81.1	-5.5	-70.7	-2.5	-68.2	-1.4	-3.6
Q4	-37.5	-5.2	-24.0	-0.1	-23.9	-0.5	-7.8
2013 Q1	-29.1	1.9	-34.1	2.1	-36.2	-0.4	3.5
Q2	-33.2	-12.2	-15.7	-0.5	-15.2	-1.6	-3.7
Q3	-40.7	-4.1	-35.8	0.0	-35.8	-0.9	0.0

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

	Securitised loans originated by euro area MFIs							Securities other than shares					
	Total	Euro area borrowing sector [2]					Non-euro area borrowing sector	Total	Euro area residents				Non-euro area residents
		Households	Non-financial corporations	Other financial intermediaries	Insurance corporations and pension funds	General government			Total	MFIs	Non-MFIs		
												Financial vehicle corporations	
	1	2	3	4	5	6	7	8	9	10	11	12	13
					Outstanding amounts								
2012 Q3	1,092.5	788.3	237.1	17.1	0.2	5.5	31.8	193.1	111.1	34.6	76.5	29.5	82.0
Q4	1,070.4	771.0	233.7	17.5	0.2	5.4	31.5	195.6	114.4	34.1	80.4	31.3	81.2
2013 Q1	1,040.5	751.3	229.6	15.0	0.2	5.4	29.0	193.7	112.8	32.9	79.9	31.8	80.9
Q2	1,032.8	759.3	224.2	15.1	0.2	5.1	29.1	194.1	115.3	34.8	80.5	31.9	78.8
Q3	1,023.3	758.0	213.8	15.2	0.2	5.5	30.6	180.8	109.9	30.6	79.4	30.5	70.8
					Transactions								
2012 Q3	-63.7	-47.0	-12.3	-1.0	0.0	-0.8	-1.6	-14.5	-6.8	-4.3	-2.5	-0.9	-7.7
Q4	-21.2	-17.7	-2.5	0.5	0.0	-0.1	0.3	1.3	4.2	0.0	4.2	1.9	-2.9
2013 Q1	-28.9	-20.8	-4.2	-2.3	0.0	0.0	-0.7	0.4	-0.7	-1.1	0.5	-0.5	1.1
Q2	-7.8	7.8	-5.2	0.2	0.0	-0.3	-0.1	1.0	2.9	2.1	0.8	0.0	-1.8
Q3	-9.2	-1.5	-9.4	0.2	0.0	0.5	1.1	-13.8	-5.6	-4.4	-1.2	-1.3	-8.2

Source: ECB.
1) 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.
   Whether or not loans are derecognised from the balance sheet of the MFI depends on the relevant accounting rules. For further information, see the General Notes.
2) Excludes securitisations of inter-MFI loans.

2.11 Aggregated balance sheet of euro area insurance corporations and pension funds
(EUR billions; outstanding amounts at end of period)

1. Assets

	Total	Currency and deposits	Loans	Securities other than shares	Shares and other equity	Investment fund shares	Money market fund shares	Prepayments of insurance premiums and reserves for outstanding claims	Other accounts receivable/ payable and financial derivatives	Non-financial assets
	1	2	3	4	5	6	7	8	9	10
2010 Q4	7,036.2	768.3	453.4	2,674.6	826.0	1,611.9	76.9	253.7	222.2	149.1
2011 Q1	7,139.7	769.6	456.4	2,735.7	844.0	1,621.5	76.6	261.8	223.6	150.5
Q2	7,155.2	772.7	464.0	2,747.0	842.6	1,623.7	79.8	254.2	222.3	148.9
Q3	7,154.3	789.6	463.0	2,772.4	788.3	1,580.8	87.6	255.6	268.7	148.4
Q4	7,164.4	782.4	472.6	2,731.2	793.9	1,615.7	91.3	253.6	273.6	150.0
2012 Q1	7,452.0	794.4	469.9	2,876.7	807.2	1,710.1	102.3	258.2	283.2	150.0
Q2	7,481.2	783.6	469.6	2,890.2	802.3	1,712.6	106.4	261.4	304.4	150.8
Q3	7,695.7	783.5	478.8	3,006.9	822.4	1,786.7	108.5	263.1	295.0	151.0
Q4	7,780.5	786.6	477.9	3,053.0	819.5	1,825.2	109.7	261.8	293.7	153.1
2013 Q1	7,905.9	794.0	476.1	3,081.9	836.3	1,900.6	114.3	265.2	284.0	153.5
Q2	7,844.0	773.3	474.6	3,071.5	833.5	1,894.0	98.9	264.4	278.2	155.6
Q3 (p)	7,942.9	763.4	477.4	3,110.1	851.4	1,954.6	96.7	264.6	268.2	156.5

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 Q4	2,674.6	2,250.8	599.4	1,243.5	234.3	17.6	156.1	423.8
2011 Q1	2,735.7	2,318.6	625.2	1,286.3	236.2	17.2	153.7	417.1
Q2	2,747.0	2,329.9	630.6	1,289.6	235.4	16.8	157.5	417.2
Q3	2,772.4	2,352.8	637.0	1,312.3	227.7	16.9	159.0	419.5
Q4	2,731.2	2,307.5	635.4	1,267.3	223.9	16.5	164.3	423.7
2012 Q1	2,876.7	2,427.1	670.3	1,325.0	235.9	17.1	178.7	449.6
Q2	2,890.2	2,423.3	675.6	1,309.3	238.4	17.0	183.0	466.9
Q3	3,006.9	2,514.7	707.7	1,348.6	246.0	17.4	195.0	492.3
Q4	3,053.0	2,549.2	693.1	1,386.8	251.7	18.1	199.5	503.8
2013 Q1	3,081.9	2,587.2	716.9	1,389.9	255.3	17.5	207.5	494.7
Q2	3,071.5	2,566.9	684.1	1,403.5	255.4	17.5	206.4	504.6
Q3 (p)	3,110.1	2,601.2	684.0	1,436.0	256.6	17.9	206.8	508.9

3. Liabilities and net worth

	Liabilities									Net worth
	Total	Loans received	Securities other than shares	Shares and other equity	Insurance technical reserves				Other accounts receivable/ payable and financial derivatives	
					Total	Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims		
	1	2	3	4	5	6	7	8	9	10
2010 Q4	6,871.5	250.3	40.3	451.5	5,960.7	3,260.4	1,889.6	810.7	168.7	164.6
2011 Q1	6,920.9	263.0	39.9	465.9	5,976.5	3,287.3	1,859.9	829.4	175.5	218.8
Q2	6,944.4	262.8	42.4	454.7	6,008.1	3,309.4	1,872.0	826.7	176.4	210.9
Q3	7,052.2	270.0	41.6	410.1	6,140.8	3,292.5	2,023.9	824.5	189.7	102.1
Q4	7,071.7	263.8	41.3	408.8	6,169.8	3,305.1	2,047.1	817.6	188.0	92.7
2012 Q1	7,229.4	272.1	44.4	439.1	6,282.8	3,342.5	2,103.0	837.2	191.0	222.6
Q2	7,300.4	281.3	43.3	421.2	6,349.5	3,344.6	2,169.4	835.5	205.1	180.9
Q3	7,373.6	292.7	44.9	452.7	6,387.7	3,390.6	2,163.4	833.6	195.6	322.1
Q4	7,472.6	267.0	48.8	482.6	6,454.0	3,425.8	2,201.8	826.4	220.2	307.9
2013 Q1	7,566.8	279.9	48.0	497.8	6,526.5	3,462.7	2,216.1	847.6	214.5	339.2
Q2	7,607.2	280.1	45.4	506.7	6,551.9	3,467.1	2,240.2	844.6	223.1	236.8
Q3 (p)	7,635.0	278.9	45.2	524.0	6,569.6	3,509.6	2,217.5	842.5	217.3	307.9

Source: ECB.

3 EURO AREA ACCOUNTS

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

Uses	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
2013 Q2						
External account						
Exports of goods and services						643
Trade balance [1]						-73
Generation of income account						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,186	117	761	58	251	
Other taxes less subsidies on production	40	9	24	4	4	
Consumption of fixed capital	382	101	217	11	51	
Net operating surplus and mixed income [1]	540	278	227	34	0	
Allocation of primary income account						
Net operating surplus and mixed income						
Compensation of employees						7
Taxes less subsidies on production						
Property income	892	31	462	324	76	126
Interest	328	29	53	170	76	45
Other property income	564	2	408	154	0	81
Net national income [1]	2,011	1,717	-5	60	240	
Secondary distribution of income account						
Net national income						
Current taxes on income, wealth, etc.	313	243	56	13	0	5
Social contributions	447	447				1
Social benefits other than social transfers in kind	476	1	17	36	421	1
Other current transfers	197	68	26	49	53	11
Net non-life insurance premiums	46	34	10	1	1	2
Non-life insurance claims	47			47		1
Other	103	34	16	1	52	8
Net disposable income [1]	1,987	1,519	-72	61	479	
Use of income account						
Net disposable income						
Final consumption expenditure	1,883	1,367			516	
Individual consumption expenditure	1,690	1,367			322	
Collective consumption expenditure	194				194	
Adjustment for the change in the net equity of households in pension fund reserves	15	0	1	14	0	0
Net saving/current external account [1]	104	167	-73	47	-36	-51
Capital account						
Net saving/current external account						
Gross capital formation	435	138	240	9	48	
Gross fixed capital formation	440	139	244	8	48	
Changes in inventories and acquisitions less disposals of valuables	-5	-1	-4	0	0	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0	-1	1	0	1	0
Capital transfers	49	9	1	5	33	5
Capital taxes	9	6	0	3		0
Other capital transfers	40	3	1	3	33	5
Net lending (+)/net borrowing (-) (from capital account) [1]	54	130	-82	60	-55	-54
Statistical discrepancy	0	-35	35	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 2013 Q2	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Imports of goods and services						570
Trade balance						
Generation of income account						
Gross value added (basic prices)	2,148	505	1,230	107	306	
Taxes less subsidies on products	243					
Gross domestic product (market prices)[2]	2,391					
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	540	278	227	34	0	
Compensation of employees	1,190	1,190				3
Taxes less subsidies on production	282				282	1
Property income	892	280	229	350	34	126
Interest	322	52	34	227	9	52
Other property income	571	228	195	123	25	74
Net national income						
Secondary distribution of income account						
Net national income	2,011	1,717	-5	60	240	
Current taxes on income, wealth, etc.	317				317	1
Social contributions	446	1	18	50	376	2
Social benefits other than social transfers in kind	474	474				3
Other current transfers	170	87	14	48	21	37
Net non-life insurance premiums	47			47		1
Non-life insurance claims	46	36	9	1	0	2
Other	78	52	6	0	20	33
Net disposable income						
Use of income account						
Net disposable income	1,987	1,519	-72	61	479	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in the net equity of households in pension fund reserves	15	15				0
Net saving/current external account						
Capital account						
Net saving/current external account	104	167	-73	47	-36	-51
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	382	101	217	11	51	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	51	8	16	15	12	3
Capital taxes	9				9	0
Other capital transfers	43	8	16	15	4	3
Net lending (+)/net borrowing (-) (from capital account)						
Statistical discrepancy						

Sources: ECB and Eurostat.
2) Gross domestic product is equal to the gross value added of all domestic sectors plus net taxes (i.e. taxes less subsidies) on products.

Assets 2013 Q2	Euro area	Households	Non-financial corporations	MFIs	Other financial inter- mediaries	Insurance corporations and pension funds	General govern- ment	Rest of the world
Opening balance sheet, financial assets								
Total financial assets		19,906	17,579	34,093	17,536	7,585	4,418	18,434
Monetary gold and special drawing rights (SDRs)				485				
Currency and deposits		7,082	2,034	10,398	2,403	813	771	3,315
Short-term debt securities		41	67	558	416	67	37	660
Long-term debt securities		1,226	245	6,645	3,037	3,029	436	4,229
Loans		84	3,077	13,225	4,280	489	828	2,476
of which: Long-term		63	1,884	10,273	3,076	363	730	.
Shares and other equity		4,615	8,326	1,885	7,001	2,786	1,543	6,897
Quoted shares		786	1,137	390	2,317	412	207	.
Unquoted shares and other equity		2,411	6,812	1,199	3,522	434	1,155	.
Mutual fund shares		1,418	377	295	1,162	1,940	180	.
Insurance technical reserves		6,338	184	3	0	244	4	259
Other accounts receivable and financial derivatives		521	3,647	895	398	157	799	599
Net financial worth								
Financial account, transactions in financial assets								
Total transactions in financial assets		95	-37	-414	190	25	117	-25
Monetary gold and SDRs				0				0
Currency and deposits		60	4	-284	-1	-16	80	-92
Short-term debt securities		-5	-6	-49	23	-11	-5	3
Long-term debt securities		-15	-5	69	34	35	6	6
Loans		0	-10	-77	73	-2	57	43
of which: Long-term		1	-2	-47	41	1	44	.
Shares and other equity		25	-19	-6	35	11	-5	44
Quoted shares		9	11	0	12	-4	15	.
Unquoted shares and other equity		-1	-15	14	27	3	-21	.
Mutual fund shares		16	-15	-20	-5	13	1	.
Insurance technical reserves		31	-1	0	0	1	0	2
Other accounts receivable and financial derivatives		0	1	-66	27	7	-17	-31
Changes in net financial worth due to transactions								
Other changes account, financial assets								
Total other changes in financial assets		-93	-158	-293	-221	-74	-27	-159
Monetary gold and SDRs				-118				
Currency and deposits		-2	-2	-48	19	0	0	-31
Short-term debt securities		0	0	-2	2	0	0	-9
Long-term debt securities		0	0	-84	-60	-35	-3	-41
Loans		0	-7	-31	-39	0	0	-19
of which: Long-term		0	-3	-29	-37	0	0	.
Shares and other equity		-58	-132	-16	-129	-37	-24	-72
Quoted shares		-20	-22	-11	-77	0	6	.
Unquoted shares and other equity		-24	-107	-3	-45	-3	-28	.
Mutual fund shares		-14	-3	-2	-7	-33	-2	.
Insurance technical reserves		-34	-1	0	0	-2	0	0
Other accounts receivable and financial derivatives		0	-17	5	-13	0	0	12
Other changes in net financial worth								
Closing balance sheet, financial assets								
Total financial assets		19,908	17,385	33,387	17,505	7,536	4,508	18,250
Monetary gold and SDRs				367				
Currency and deposits		7,140	2,036	10,066	2,421	797	851	3,192
Short-term debt securities		35	60	507	441	56	32	655
Long-term debt securities		1,211	240	6,630	3,011	3,029	439	4,194
Loans		84	3,060	13,117	4,315	486	886	2,500
of which: Long-term		63	1,880	10,196	3,081	364	773	.
Shares and other equity		4,582	8,175	1,862	6,906	2,761	1,514	6,868
Quoted shares		776	1,126	378	2,251	408	228	.
Unquoted shares and other equity		2,386	6,690	1,210	3,504	433	1,106	.
Mutual fund shares		1,420	359	273	1,150	1,919	179	.
Insurance technical reserves		6,336	183	3	0	243	4	261
Other accounts receivable and financial derivatives		521	3,631	834	412	164	782	580
Net financial worth								

Source: ECB.

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

Liabilities 2013 Q2	Euro area	Households	Non-financial corporations	MFIs	Other financial inter-mediaries	Insurance corporations and pension funds	General govern-ment	Rest of the world
Opening balance sheet, liabilities								
Total liabilities		6,854	27,169	32,916	17,117	7,574	10,722	16,716
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			33	23,837	33	0	271	2,643
Short-term debt securities			92	632	147	3	691	281
Long-term debt securities			979	4,591	3,088	53	6,863	3,273
Loans		6,160	8,388		4,000	303	2,247	3,361
of which: Long-term		5,816	6,122		2,275	110	1,959	.
Shares and other equity		8	13,785	2,621	9,661	489	4	6,484
Quoted shares			3,891	379	247	136	0	.
Unquoted shares and other equity		8	9,894	1,330	2,673	352	4	.
Mutual fund shares				912	6,741			.
Insurance technical reserves		36	350	64	1	6,580	1	
Other accounts payable and financial derivatives		650	3,542	1,171	187	146	646	674
Net financial worth [1]	-1,233	13,053	-9,589	1,177	419	11	-6,304	
Financial account, transactions in liabilities								
Total transactions in liabilities		0	10	-459	178	24	172	29
Monetary gold and SDRs								
Currency and deposits			0	-246	0	0	6	-11
Short-term debt securities			-1	-26	-3	0	-15	-7
Long-term debt securities			14	-98	47	-2	151	16
Loans		3	-18		54	-1	33	15
of which: Long-term		-2	1		35	-1	41	.
Shares and other equity		0	34	-37	67	0	0	20
Quoted shares			15	38	0	0	0	.
Unquoted shares and other equity		0	19	-31	-20	0	0	.
Mutual fund shares				-44	87			.
Insurance technical reserves		0	1	2	0	32	0	
Other accounts payable and financial derivatives		-3	-20	-55	13	-4	-4	-5
Changes in net financial worth due to transactions [1]	54	96	-47	46	12	1	-55	-54
Other changes account, liabilities								
Total other changes in liabilities		-9	-224	-186	-172	-10	-36	-270
Monetary gold and SDRs								
Currency and deposits			0	-62	2	0	0	-3
Short-term debt securities			0	-4	-2	0	0	-3
Long-term debt securities			-17	-50	-8	-1	-43	-103
Loans		-6	-23		-17	0	-1	-48
of which: Long-term		-7	-17		-16	0	-1	.
Shares and other equity		0	-159	-74	-128	7	0	-115
Quoted shares			-52	-9	13	4	0	.
Unquoted shares and other equity		0	-107	-52	22	3	0	.
Mutual fund shares				-12	-164			.
Insurance technical reserves		0	0	0	0	-37	0	
Other accounts payable and financial derivatives		-4	-24	4	-19	20	8	2
Other changes in net financial worth [1]	-229	-84	66	-107	-49	-64	9	111
Closing balance sheet, liabilities								
Total liabilities		6,844	26,955	32,270	17,122	7,587	10,858	16,474
Monetary gold and SDRs								
Currency and deposits			33	23,529	35	0	276	2,629
Short-term debt securities			92	602	142	2	676	272
Long-term debt securities			976	4,443	3,127	50	6,971	3,187
Loans		6,157	8,347		4,036	302	2,280	3,327
of which: Long-term		5,807	6,105		2,294	109	1,999	.
Shares and other equity		8	13,659	2,510	9,600	497	4	6,389
Quoted shares			3,854	408	261	140	0	.
Unquoted shares and other equity		8	9,806	1,247	2,675	355	4	.
Mutual fund shares				856	6,665			.
Insurance technical reserves		36	351	66	1	6,575	1	
Other accounts payable and financial derivatives		643	3,497	1,120	182	162	649	671
Net financial worth [1]	-1,408	13,064	-9,570	1,116	383	-51	-6,350	

Source: ECB.

3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2009	2010	2011	2011 Q3- 2012 Q2	2011 Q4- 2012 Q3	2012 Q1- 2012 Q4	2012 Q2- 2013 Q1	2012 Q3- 2013 Q2
Generation of income account								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	4,448	4,509	4,621	4,651	4,665	4,671	4,677	4,683
Other taxes less subsidies on production	85	81	95	111	116	124	124	125
Consumption of fixed capital	1,387	1,417	1,458	1,478	1,487	1,496	1,504	1,512
Net operating surplus and mixed income [1]	2,098	2,198	2,257	2,232	2,211	2,190	2,177	2,183
Allocation of primary income account								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	2,970	2,813	3,015	2,990	2,951	2,878	2,824	2,778
Interest	1,594	1,382	1,540	1,536	1,505	1,454	1,402	1,358
Other property income	1,375	1,430	1,475	1,454	1,445	1,424	1,423	1,420
Net national income [1]	7,540	7,759	7,978	8,008	8,015	8,030	8,027	8,039
Secondary distribution of income account								
Net national income								
Current taxes on income, wealth, etc.	1,029	1,057	1,115	1,141	1,154	1,172	1,177	1,194
Social contributions	1,677	1,703	1,751	1,770	1,776	1,787	1,794	1,801
Social benefits other than social transfers in kind	1,769	1,814	1,840	1,861	1,873	1,883	1,895	1,906
Other current transfers	770	773	779	787	789	787	790	794
Net non-life insurance premiums	179	179	181	183	184	184	183	184
Non-life insurance claims	181	181	183	186	186	186	186	186
Other	410	413	415	418	418	418	421	425
Net disposable income [1]	7,432	7,649	7,870	7,897	7,904	7,920	7,914	7,923
Use of income account								
Net disposable income								
Final consumption expenditure	7,152	7,315	7,476	7,511	7,516	7,520	7,520	7,534
Individual consumption expenditure	6,383	6,542	6,700	6,734	6,740	6,746	6,744	6,756
Collective consumption expenditure	769	773	776	776	777	774	776	778
Adjustment for the change in the net equity of households in pension fund reserves	61	56	58	60	58	58	57	58
Net saving [1]	280	334	394	386	387	401	394	389
Capital account								
Net saving								
Gross capital formation	1,702	1,778	1,871	1,824	1,794	1,776	1,743	1,727
Gross fixed capital formation	1,752	1,760	1,816	1,799	1,784	1,768	1,738	1,724
Changes in inventories and acquisitions less disposals of valuables	-50	18	55	24	10	9	4	3
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	1	1	0	10	10	9	3	1
Capital transfers	183	221	174	176	182	193	200	210
Capital taxes	34	25	31	29	29	26	26	29
Other capital transfers	149	196	142	147	153	168	174	181
Net lending (+)/net borrowing (-) (from capital account) [1]	-27	-19	-12	38	79	122	164	186

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 Q3-2012 Q2	2011 Q4-2012 Q3	2012 Q1-2012 Q4	2012 Q2-2013 Q1	2012 Q3-2013 Q2
Generation of income account								
Gross value added (basic prices)	8,018	8,206	8,431	8,471	8,478	8,481	8,482	8,503
Taxes less subsidies on products	894	942	973	974	974	977	972	977
Gross domestic product (market prices)2)	8,913	9,148	9,405	9,445	9,452	9,458	9,454	9,480
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	2,098	2,198	2,257	2,232	2,211	2,190	2,177	2,183
Compensation of employees	4,458	4,520	4,633	4,664	4,678	4,684	4,691	4,697
Taxes less subsidies on production	996	1,037	1,079	1,094	1,100	1,112	1,108	1,113
Property income	2,957	2,816	3,024	3,009	2,977	2,921	2,875	2,823
Interest	1,554	1,333	1,486	1,489	1,465	1,422	1,373	1,329
Other property income	1,403	1,483	1,538	1,520	1,512	1,499	1,502	1,494
Net national income								
Secondary distribution of income account								
Net national income	7,540	7,759	7,978	8,008	8,015	8,030	8,027	8,039
Current taxes on income, wealth, etc.	1,034	1,060	1,121	1,146	1,160	1,178	1,182	1,200
Social contributions	1,675	1,703	1,752	1,769	1,775	1,784	1,792	1,798
Social benefits other than social transfers in kind	1,762	1,807	1,834	1,855	1,867	1,877	1,889	1,900
Other current transfers	665	665	672	677	680	681	681	681
Net non-life insurance premiums	181	181	183	186	186	186	186	186
Non-life insurance claims	177	175	176	178	179	178	178	179
Other	308	309	313	313	315	316	317	317
Net disposable income								
Use of income account								
Net disposable income	7,432	7,649	7,870	7,897	7,904	7,920	7,914	7,923
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in the net equity of households in pension fund reserves	61	56	58	60	58	58	57	58
Net saving								
Capital account								
Net saving	280	334	394	386	387	401	394	389
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,387	1,417	1,458	1,478	1,487	1,496	1,504	1,512
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	192	230	180	184	191	205	212	222
Capital taxes	34	25	31	29	29	26	26	29
Other capital transfers	158	205	149	155	162	179	185	193
Net lending (+)/net borrowing (-) (from capital 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-quarter cumulated flows; outstanding amounts at end of period)

	2009	2010	2011	2011 Q3-2012 Q2	2011 Q4-2012 Q3	2012 Q1-2012 Q4	2012 Q2-2013 Q1	2012 Q3-2013 Q2
Income, saving and changes in net worth								
Compensation of employees (+)	4,458	4,520	4,633	4,664	4,678	4,684	4,691	4,697
Gross operating surplus and mixed income (+)	1,439	1,448	1,490	1,494	1,495	1,496	1,499	1,504
Interest receivable (+)	233	201	227	230	228	222	216	212
Interest payable (-)	148	124	146	143	138	131	125	120
Other property income receivable (+)	729	721	749	754	748	744	737	732
Other property income payable (-)	10	10	10	10	10	10	10	10
Current taxes on income and wealth (-)	843	850	884	907	920	934	941	951
Net social contributions (-)	1,672	1,698	1,746	1,765	1,772	1,782	1,789	1,796
Net social benefits (+)	1,757	1,802	1,829	1,850	1,862	1,872	1,883	1,895
Net current transfers receivable (+)	72	71	71	70	69	71	73	74
= Gross disposable income	6,016	6,081	6,212	6,235	6,239	6,232	6,234	6,237
Final consumption expenditure (-)	5,157	5,291	5,440	5,467	5,469	5,474	5,469	5,476
Changes in net worth in pension funds (+)	60	56	58	59	57	57	57	57
= Gross saving	920	845	830	827	828	815	822	818
Consumption of fixed capital (-)	379	386	393	397	399	401	402	403
Net capital transfers receivable (+)	9	13	2	2	0	1	0	0
Other changes in net worth (+)	-364	536	-235	-576	-469	-147	-603	-446
= Changes in net worth	185	1,008	204	-144	-40	269	-184	-32
Investment, financing and changes in net worth								
Net acquisition of non-financial assets (+)	555	558	572	566	561	555	548	543
Consumption of fixed capital (-)	379	386	393	397	399	401	402	403
Main items of financial investment (+)								
Short-term assets	2	40	124	161	172	191	172	166
Currency and deposits	121	118	117	164	175	224	225	215
Money market fund shares	-45	-59	-23	-19	-28	-31	-39	-30
Debt securities [1]	-75	-19	29	17	25	-2	-15	-18
Long-term assets	478	420	236	225	189	142	143	133
Deposits	82	59	55	45	30	13	7	4
Debt securities	-1	2	71	12	-2	-91	-125	-119
Shares and other equity	167	112	-5	65	54	92	114	96
Quoted and unquoted shares and other equity	119	104	44	95	62	55	42	18
Mutual fund shares	48	8	-50	-30	-8	37	72	78
Life insurance and pension fund reserves	230	248	115	103	107	129	147	152
Main items of financing (-)								
Loans	106	114	88	40	19	14	1	-12
of which: From euro area MFIs	64	146	81	13	1	25	21	0
Other changes in assets (+)								
Non-financial assets	-628	442	134	-389	-1,024	-791	-1,089	-984
Financial assets	197	140	-410	-235	504	592	420	481
Shares and other equity	83	49	-323	-281	315	353	295	349
Life insurance and pension fund reserves	191	120	15	91	181	179	159	120
Remaining net flows (+)	67	-93	29	-34	-22	-6	26	21
= Changes in net worth	185	1,008	204	-144	-40	269	-184	-32
Balance sheet								
Non-financial assets (+)	29,686	30,300	30,612	30,436	30,153	29,975	29,514	29,591
Financial assets (+)								
Short-term assets	5,766	5,808	5,946	6,023	6,032	6,117	6,132	6,173
Currency and deposits	5,474	5,596	5,727	5,821	5,837	5,948	5,979	6,029
Money market fund shares	242	184	166	148	136	121	112	109
Debt securities [1]	50	28	53	54	58	49	41	35
Long-term assets	11,576	12,114	11,937	12,189	12,437	12,690	12,852	12,811
Deposits	985	1,043	1,082	1,104	1,100	1,097	1,102	1,111
Debt securities	1,390	1,342	1,329	1,323	1,318	1,300	1,226	1,211
Shares and other equity	4,080	4,240	3,906	4,018	4,180	4,365	4,503	4,473
Quoted and unquoted shares and other equity	2,954	3,036	2,813	2,868	2,979	3,118	3,197	3,162
Mutual fund shares	1,126	1,204	1,093	1,150	1,200	1,247	1,306	1,311
Life insurance and pension fund reserves	5,121	5,489	5,619	5,745	5,840	5,927	6,021	6,017
Remaining net assets (+)	277	264	254	232	257	225	228	237
Liabilities (-)								
Loans	5,961	6,136	6,195	6,193	6,183	6,185	6,160	6,157
of which: From euro area MFIs	4,998	5,242	5,281	5,294	5,283	5,290	5,279	5,280
= Net worth	41,343	42,350	42,554	42,686	42,696	42,823	42,567	42,655

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

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

	2009	2010	2011	2011 Q3-2012 Q2	2011 Q4-2012 Q3	2012 Q1-2012 Q4	2012 Q2-2013 Q1	2012 Q3-2013 Q2
Income and saving								
Gross value added (basic prices) (+)	4,518	4,657	4,820	4,845	4,848	4,848	4,843	4,856
Compensation of employees (-)	2,787	2,831	2,929	2,957	2,968	2,976	2,979	2,983
Other taxes less subsidies on production (-)	40	32	41	46	48	50	50	52
= Gross operating surplus (+)	1,690	1,794	1,850	1,842	1,832	1,821	1,814	1,821
Consumption of fixed capital (-)	782	798	825	838	844	849	855	860
= Net operating surplus (+)	909	996	1,025	1,004	988	972	960	961
Property income receivable (+)	534	559	569	568	572	562	560	548
Interest receivable	171	158	165	161	157	150	144	138
Other property income receivable	362	400	404	407	416	412	417	410
Interest and rents payable (-)	297	258	287	286	280	270	259	250
= Net entrepreneurial income (+)	1,146	1,296	1,307	1,286	1,281	1,264	1,261	1,260
Distributed income (-)	932	930	981	979	973	956	948	944
Taxes on income and wealth payable (-)	151	169	192	196	196	201	198	203
Social contributions receivable (+)	71	69	73	74	74	74	74	74
Social benefits payable (-)	68	69	70	70	70	70	70	70
Other net transfers (-)	48	45	48	48	49	49	48	49
= Net saving	17	152	90	67	67	62	71	68
Investment, financing and saving								
Net acquisition of non-financial assets (+)	65	147	209	179	152	132	99	85
Gross fixed capital formation (+)	898	927	981	980	973	966	946	939
Consumption of fixed capital (-)	782	798	825	838	844	849	855	860
Net acquisition of other non-financial assets (+)	-52	19	53	36	23	16	7	6
Main items of financial investment (+)								
Short-term assets	95	35	-27	2	27	61	48	44
Currency and deposits	88	67	7	16	39	77	85	89
Money market fund shares	39	-32	-46	-29	-17	-9	-8	-17
Debt securities [1]	-31	0	12	15	6	-6	-29	-28
Long-term assets	146	422	481	363	297	183	168	69
Deposits	0	20	69	55	13	9	-20	-15
Debt securities	22	8	-23	-14	-11	-4	-2	-7
Shares and other equity	100	247	287	198	179	112	155	106
Other (mainly intercompany loans)	24	147	148	124	117	66	34	-16
Remaining net assets (+)	64	16	-22	-32	6	42	65	111
Main items of financing (-)								
Debt	25	172	261	169	178	117	90	34
of which: Loans from euro area MFIs	-109	-18	85	-41	-87	-134	-122	-150
of which: Debt securities	90	66	49	93	109	119	105	92
Shares and other equity	243	230	224	211	170	170	143	133
Quoted shares	59	31	27	15	16	26	11	21
Unquoted shares and other equity	184	199	197	196	154	143	132	112
Net capital transfers receivable (-)	82	64	67	64	65	65	70	69
= Net saving	17	152	90	67	67	62	71	68
Financial balance sheet								
Financial assets								
Short-term assets	1,932	1,957	1,932	1,919	1,931	1,989	1,955	1,946
Currency and deposits	1,632	1,695	1,706	1,697	1,717	1,780	1,764	1,774
Money market fund shares	213	182	134	131	128	128	125	111
Debt securities [1]	86	81	92	90	86	81	67	60
Long-term assets	10,274	10,759	10,763	11,069	11,385	11,523	11,793	11,626
Deposits	185	196	235	282	278	284	270	261
Debt securities	226	242	229	233	248	244	245	240
Shares and other equity	7,140	7,451	7,253	7,451	7,732	7,905	8,201	8,064
Other (mainly intercompany loans)	2,723	2,869	3,046	3,103	3,126	3,090	3,077	3,060
Remaining net assets	371	242	301	238	262	258	322	349
Liabilities								
Debt	9,291	9,592	9,744	9,862	9,908	9,843	9,809	9,766
of which: Loans from euro area MFIs	4,729	4,702	4,717	4,689	4,631	4,503	4,477	4,439
of which: Debt securities	814	882	886	971	1,028	1,051	1,071	1,068
Shares and other equity	12,460	13,007	12,313	12,482	12,951	13,372	13,785	13,659
Quoted shares	3,503	3,799	3,281	3,331	3,550	3,747	3,891	3,854
Unquoted shares and other equity	8,957	9,208	9,032	9,151	9,401	9,625	9,894	9,806

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

3.5 Insurance corporations and pension funds
(EUR billions; four-quarter cumulated flows; outstanding amounts at end of period)

	2009	2010	2011	2011 Q3-2012 Q2	2011 Q4-2012 Q3	2012 Q1-2012 Q4	2012 Q2-2013 Q1	2012 Q3-2013 Q2
Financial account, financial transactions								
Main items of financial investment (+)								
Short-term assets	-42	-6	54	72	51	43	19	-19
Currency and deposits	-33	-9	14	15	3	16	12	8
Money market fund shares	5	-8	16	44	36	32	10	-12
Debt securities 1)	-14	11	24	13	12	-5	-2	-14
Long-term assets	293	287	134	93	111	184	176	212
Deposits	15	-4	9	-6	-16	-17	-19	-16
Debt securities	104	183	44	42	79	137	95	113
Loans	8	32	12	3	15	8	13	12
Quoted shares	-50	-1	-12	-14	-17	-5	2	-2
Unquoted shares and other equity	-15	11	13	11	1	-1	-1	-1
Mutual fund shares	230	68	67	57	49	63	86	106
Remaining net assets (+)	18	8	-36	-7	-5	-41	-22	-24
Main items of financing (-)								
Debt securities	5	1	3	1	3	7	6	4
Loans	-4	7	11	7	9	-15	0	-7
Shares and other equity	5	7	4	4	3	1	2	2
Insurance technical reserves	246	280	115	112	125	149	167	171
Net equity of households in life insurance and pension fund reserves	240	261	110	104	116	136	155	160
Prepayments of insurance premiums and reserves for outstanding claims	6	19	5	9	8	13	12	11
= Changes in net financial worth due to transactions	16	-4	18	34	17	45	-2	0
Other changes account								
Other changes in financial assets (+)								
Shares and other equity	200	117	-105	-10	218	197	148	134
Other net assets	34	0	22	117	160	231	128	81
Other changes in liabilities (-)								
Shares and other equity	13	-1	-47	-38	39	70	52	79
Insurance technical reserves	169	136	16	99	190	188	163	122
Net equity of households in life insurance and pension fund reserves	197	125	19	94	187	186	161	120
Prepayments of insurance premiums and reserves for outstanding claims	-28	11	-3	5	2	2	2	1
= Other changes in net financial worth	52	-19	-52	45	149	170	61	14
Financial balance sheet								
Financial assets (+)								
Short-term assets	331	329	371	388	400	406	411	364
Currency and deposits	195	190	193	195	200	209	219	201
Money market fund shares	95	88	102	124	123	125	126	107
Debt securities 1)	41	51	76	70	77	72	67	56
Long-term assets	5,651	6,041	6,045	6,324	6,543	6,637	6,772	6,765
Deposits	613	607	611	608	604	594	594	596
Debt securities	2,467	2,638	2,660	2,827	2,939	2,998	3,029	3,029
Loans	434	467	479	477	487	488	489	486
Quoted shares	397	421	375	373	388	403	412	408
Unquoted shares and other equity	414	417	422	439	440	432	434	433
Mutual fund shares	1,327	1,492	1,498	1,601	1,684	1,723	1,815	1,813
Remaining net assets (+)	227	250	271	277	273	260	255	245
Liabilities (-)								
Debt securities	42	43	46	48	50	55	56	52
Loans	284	296	304	309	319	288	303	302
Shares and other equity	441	447	404	416	446	475	489	497
Insurance technical reserves	5,582	5,998	6,130	6,282	6,380	6,466	6,580	6,575
Net equity of households in life insurance and pension fund reserves	4,798	5,184	5,314	5,446	5,546	5,636	5,732	5,726
Prepayments of insurance premiums and reserves for outstanding claims	784	814	816	836	834	830	847	848
= Net financial wealth	-140	-164	-197	-66	21	19	11	-51

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.
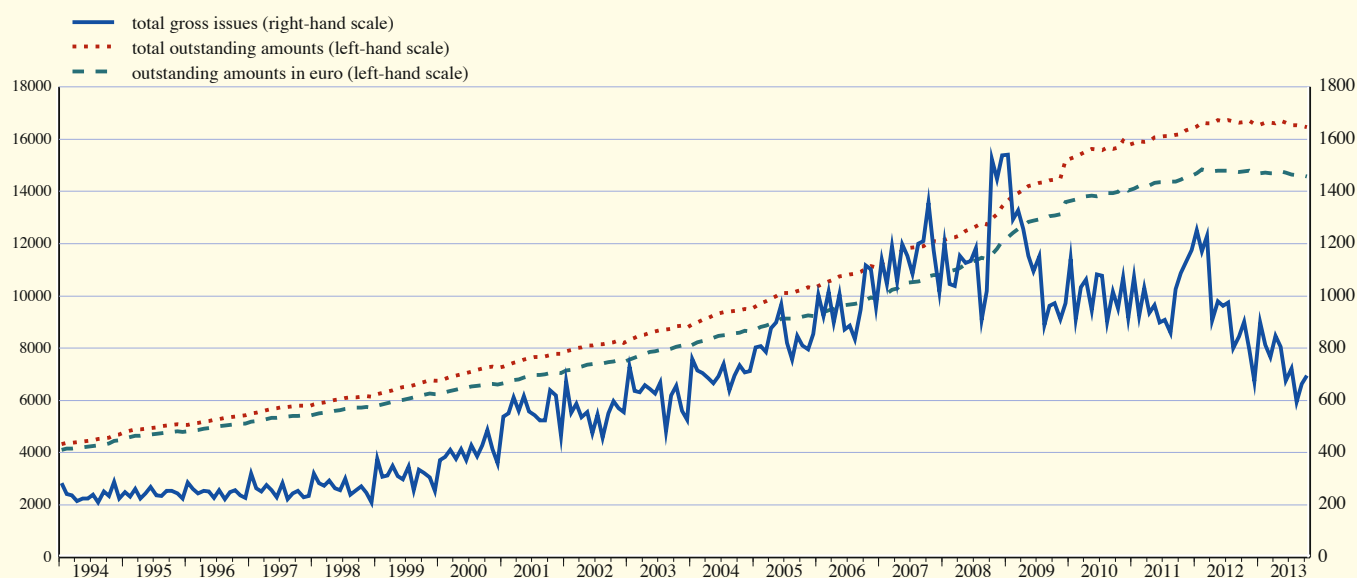
4.1 Securities other than shares by original maturity, residency of the issuer and currency
(EUR billions and period growth rates; seasonally adjusted; transactions during the month and end-of-period outstanding amounts; nominal values)

	Total in euro [1]			By euro area residents								
				In euro			In all currencies				Seasonally adjusted [2]	
	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Net issues	6-month growth rates
	1	2	3	4	5	6	7	8	9	10	11	12
Total												
2012 Oct.	17,052.5	817.7	-1.1	14,762.8	778.6	8.9	16,651.5	901.8	29.1	3.1	13.7	1.0
Nov.	17,083.1	720.1	27.2	14,793.1	680.5	27.0	16,698.3	795.4	46.9	2.7	-17.4	1.0
Dec.	17,000.2	631.6	-117.1	14,707.1	591.9	-120.2	16,581.1	673.7	-137.1	1.6	-34.7	0.2
2013 Jan.	16,994.4	816.6	-5.2	14,706.7	768.4	0.1	16,560.6	898.3	9.5	1.1	-13.4	-0.4
Feb.	17,003.7	706.4	-5.3	14,725.4	666.1	3.8	16,632.2	812.1	38.7	0.4	-20.8	-0.6
Mar.	16,932.9	683.9	-68.4	14,700.8	634.8	-22.1	16,629.3	767.0	-17.9	-0.2	-14.4	-1.0
Apr.	16,926.5	756.9	-6.7	14,688.3	708.3	-12.6	16,608.2	846.4	-5.8	-0.2	-11.6	-1.3
May	16,997.5	710.8	72.2	14,765.3	665.4	78.2	16,701.3	804.4	97.3	0.0	18.1	-0.9
June	16,934.7	601.4	-62.5	14,713.6	558.9	-51.3	16,634.2	675.9	-61.4	-0.2	-23.0	-0.8
July	16,868.1	636.9	-66.3	14,641.5	588.2	-71.5	16,544.1	722.8	-78.7	-0.9	-56.0	-1.3
Aug.	16,843.2	515.3	-25.0	14,615.0	481.7	-26.8	16,527.8	593.7	-19.2	-0.7	16.2	-0.8
Sep.	16,856.9	603.8	14.2	14,610.7	553.4	-3.9	16,516.5	662.9	-4.3	-0.6	42.0	-0.2
Oct.	.	.	.	14,583.2	560.2	-18.6	16,467.9	695.2	-28.5	-1.0	-44.4	-0.6
Long-term												
2012 Oct.	15,649.5	237.0	27.2	13,445.7	212.3	23.6	15,102.8	249.6	39.0	3.8	29.0	2.3
Nov.	15,702.9	219.1	52.7	13,491.5	194.3	45.0	15,159.2	222.5	59.0	3.5	1.8	2.4
Dec.	15,660.4	197.3	-64.4	13,447.0	173.3	-66.5	15,090.2	193.3	-78.0	2.5	-22.1	1.6
2013 Jan.	15,659.4	257.2	-0.7	13,447.0	227.0	0.4	15,060.2	259.9	-3.1	2.2	5.8	1.3
Feb.	15,661.6	229.9	-7.5	13,454.9	204.5	-2.0	15,109.8	244.5	23.5	1.3	-32.8	0.6
Mar.	15,603.5	246.6	-55.3	13,451.9	216.4	-0.2	15,124.9	249.9	2.8	0.9	8.3	-0.1
Apr.	15,600.7	247.5	-3.0	13,438.0	217.0	-14.0	15,109.5	248.7	-1.7	0.8	-8.5	-0.6
May	15,670.1	254.1	70.6	13,513.7	222.9	76.9	15,196.0	260.4	90.8	1.0	23.0	-0.3
June	15,648.9	208.0	-20.6	13,506.7	181.4	-6.3	15,174.1	201.1	-17.0	0.7	-9.9	-0.2
July	15,577.2	204.3	-71.8	13,422.4	172.8	-84.0	15,072.1	194.8	-92.9	0.1	-53.5	-1.0
Aug.	15,570.0	117.0	-7.4	13,411.7	97.4	-10.9	15,068.2	112.4	-7.7	0.2	35.1	-0.1
Sep.	15,591.9	222.4	22.4	13,422.4	189.6	11.1	15,078.2	214.2	18.7	0.2	59.4	0.6
Oct.	.	.	.	13,418.1	193.8	3.6	15,060.8	224.8	0.4	0.0	-11.3	0.6

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

— total gross issues (right-hand scale)
...... total outstanding amounts (left-hand scale)
- - - outstanding amounts in euro (left-hand scale)

Sources: ECB and BIS (for issues by non-euro area residents).
1) Total euro-denominated securities other than shares issued by euro area residents and non-euro area residents.
2) For details of the calculation of the growth rates, see the Technical Notes. The six-month growth rates have been annualised.

4.2 Securities other than shares issued by euro area residents, by sector of the issuer and instrument type
(EUR billions ; transactions during the month and end-of-period outstanding amounts; nominal values)

1. Outstanding amounts and gross issues

	Outstanding amounts						Gross issues [1]					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
Total												
2011	16,415	5,516	3,176	882	6,217	625	1,001	609	99	62	191	39
2012	16,581	5,399	3,228	1,001	6,268	684	957	589	82	67	187	32
2012 Q4	16,581	5,399	3,228	1,001	6,268	684	790	463	74	64	164	25
2013 Q1	16,629	5,260	3,225	1,030	6,425	690	826	439	81	61	212	32
Q2	16,634	5,121	3,238	1,037	6,559	678	776	408	65	67	202	34
Q3	16,516	5,002	3,227	1,066	6,550	671	660	350	51	62	171	25
2013 July	16,544	5,067	3,237	1,044	6,527	669	723	392	59	67	178	27
Aug.	16,528	5,043	3,224	1,053	6,532	675	594	343	41	45	144	20
Sep.	16,516	5,002	3,227	1,066	6,550	671	663	316	54	73	191	29
Oct.	16,468	4,974	3,205	1,069	6,551	670	695	349	56	74	192	25
Short-term												
2011	1,595	702	103	79	634	77	748	511	48	53	107	29
2012	1,491	601	136	81	608	64	703	490	37	52	104	21
2012 Q4	1,491	601	136	81	608	64	569	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	26	51	102	23
Q3	1,438	539	133	89	630	47	486	294	25	45	104	18
2013 July	1,472	562	136	91	633	50	528	331	23	48	106	20
Aug.	1,460	553	135	90	629	52	481	301	27	35	104	15
Sep.	1,438	539	133	89	630	47	449	251	25	52	104	18
Oct.	1,407	524	122	89	626	47	470	272	19	50	111	18
Long-term [2]												
2011	14,820	4,814	3,073	803	5,583	548	253	98	51	9	84	10
2012	15,090	4,798	3,091	920	5,660	621	254	99	45	16	83	12
2012 Q4	15,090	4,798	3,091	920	5,660	621	222	70	47	18	77	9
2013 Q1	15,125	4,678	3,085	940	5,801	621	251	78	50	14	100	9
Q2	15,174	4,564	3,103	949	5,934	624	237	70	40	16	101	10
Q3	15,078	4,463	3,094	977	5,920	624	174	56	26	17	67	8
2013 July	15,072	4,505	3,102	952	5,893	619	195	61	36	19	72	7
Aug.	15,068	4,490	3,089	963	5,903	623	112	42	14	10	40	6
Sep.	15,078	4,463	3,094	977	5,920	624	214	65	30	21	88	11
Oct.	15,061	4,450	3,083	980	5,925	623	225	77	37	23	81	7
of which: Long-term fixed rate												
2011	9,981	2,755	1,118	705	4,994	408	151	54	12	8	70	7
2012	10,520	2,809	1,295	821	5,151	444	165	54	18	15	71	7
2012 Q4	10,520	2,809	1,295	821	5,151	444	142	35	21	17	64	6
2013 Q1	10,656	2,763	1,346	839	5,257	450	165	41	25	12	80	7
Q2	10,768	2,716	1,390	847	5,360	455	155	34	21	13	79	8
Q3	10,755	2,668	1,414	871	5,350	454	123	32	14	14	58	5
2013 July	10,706	2,680	1,402	849	5,325	451	132	29	17	16	65	5
Aug.	10,724	2,678	1,404	857	5,332	453	77	23	7	8	36	3
Sep.	10,755	2,668	1,414	871	5,350	454	161	43	18	18	74	8
Oct.	10,761	2,660	1,413	883	5,351	454	165	47	18	22	73	6
of which: Long-term variable rate												
2011	4,341	1,789	1,806	94	513	139	85	37	32	1	11	3
2012	4,143	1,735	1,701	95	437	175	77	38	24	1	8	5
2012 Q4	4,143	1,735	1,701	95	437	175	70	30	25	1	10	4
2013 Q1	4,023	1,662	1,640	97	453	170	69	30	22	1	13	3
Q2	3,971	1,608	1,612	99	483	169	68	31	16	2	17	2
Q3	3,908	1,582	1,578	103	475	169	40	20	11	3	4	2
2013 July	3,933	1,596	1,598	101	471	168	52	28	16	4	3	2
Aug.	3,919	1,593	1,583	102	471	169	27	15	5	2	1	3
Sep.	3,908	1,582	1,578	103	475	169	42	18	11	3	8	3
Oct.	3,882	1,577	1,566	93	478	168	49	25	18	1	4	1

Source: ECB.
1) Monthly data on gross issues refer to transactions during the month. For the purposes of comparison, quarterly and annual data refer to the respective monthly averages.
2) The residual difference between total long-term debt securities and fixed and variable rate long-term debt securities consists of zero coupon bonds and revaluation effects.

4.2 Securities other than shares issued by euro area residents, by sector of the issuer and instrument type
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

2. Net issues

	Non-seasonally adjusted [1]						Seasonally adjusted [1]					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2011	51.1	22.1	-3.4	3.7	23.2	5.6	-	-	-	-	-	-
2012	21.5	-8.1	3.0	10.4	13.1	3.1	-	-	-	-	-	-
2012 Q4	-20.4	-40.4	26.4	8.0	-9.5	-4.9	-12.8	-28.6	6.2	11.1	4.7	-6.2
2013 Q1	10.1	-46.2	-6.2	9.2	51.9	1.5	-16.2	-60.9	1.4	6.8	35.9	0.7
Q2	10.0	-41.0	5.5	3.5	45.4	-3.3	-5.5	-39.9	4.8	2.3	30.4	-3.0
Q3	-34.0	-36.8	-3.1	10.4	-2.4	-2.1	0.8	-35.6	11.0	10.9	15.1	-0.6
2013 July	-78.7	-48.6	0.7	8.5	-31.3	-8.1	-56.0	-57.1	2.5	5.6	0.2	-7.2
Aug.	-19.2	-24.7	-14.0	8.8	5.4	5.2	16.2	-29.4	4.4	14.4	18.3	8.6
Sep.	-4.3	-37.2	4.1	13.8	18.5	-3.5	42.0	-20.4	26.1	12.8	26.9	-3.3
Oct.	-28.5	-21.4	-19.7	11.6	1.2	-0.3	-44.4	-11.0	-40.1	9.4	0.1	-2.8
	Long-term											
2011	47.0	11.4	-2.1	2.8	31.0	3.9	-	-	-	-	-	-
2012	31.3	0.5	1.1	10.2	15.3	4.2	-	-	-	-	-	-
2012 Q4	6.6	-18.0	18.9	10.5	-4.1	-0.7	2.9	-7.7	0.9	11.3	-1.5	-0.1
2013 Q1	7.8	-39.3	-5.8	6.2	46.7	0.0	-6.2	-46.9	1.4	5.9	34.9	-1.5
Q2	24.1	-33.3	6.9	4.1	45.1	1.4	1.5	-39.3	7.0	3.1	31.0	-0.2
Q3	-27.3	-30.9	-2.4	10.2	-4.4	0.1	13.7	-27.8	8.4	10.8	19.7	2.5
2013 July	-92.9	-54.6	0.4	5.9	-40.4	-4.2	-53.5	-58.2	-1.5	6.3	0.2	-0.3
Aug.	-7.7	-16.8	-13.7	9.4	9.8	3.6	35.1	-13.7	4.9	14.5	24.0	5.4
Sep.	18.7	-21.4	6.2	15.4	17.6	0.9	59.4	-11.4	21.9	11.7	34.8	2.3
Oct.	0.4	-8.3	-8.4	11.6	5.4	0.0	-11.3	-0.7	-26.6	9.8	5.6	0.7

C16 Net issues of securities other than shares: seasonally adjusted and non-seasonally adjusted
(EUR billions; transactions during the month; nominal values)

- net issues
- seasonally adjusted net issues
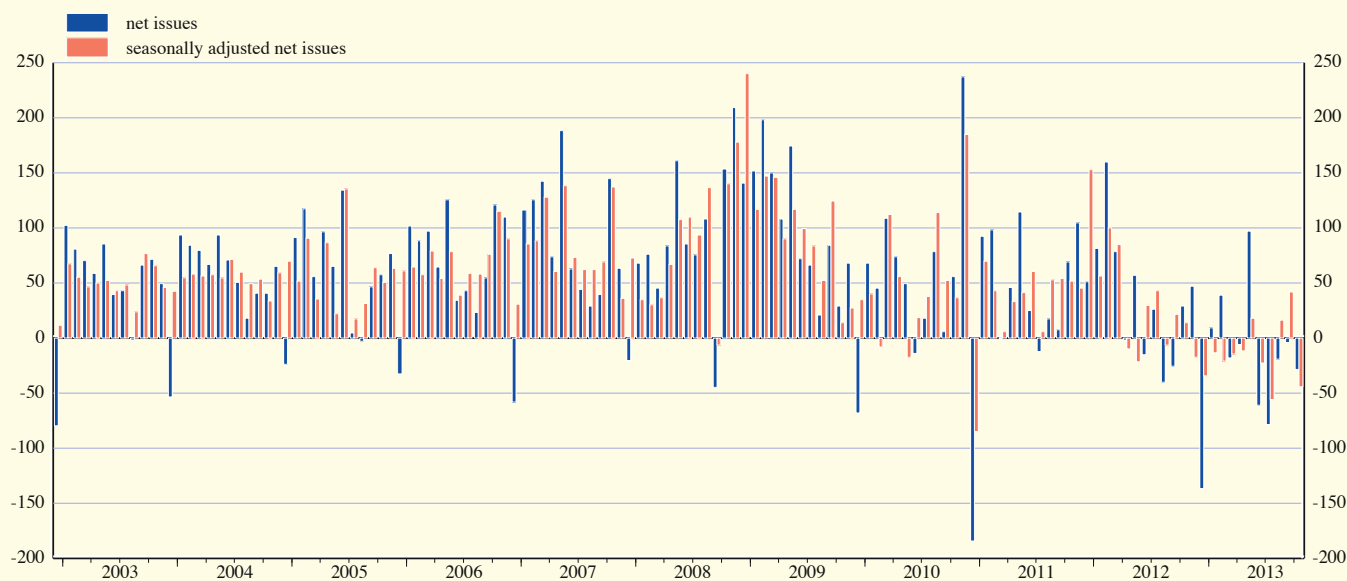
Source: ECB.
1)   Monthly data on net issues refer to transactions during the month. For the purposes of comparison, quarterly and annual data refer to the respective monthly averages.

		Annual growth rates (non-seasonally adjusted)					6-month seasonally adjusted growth rates				
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
						Total						
2012 Oct.	3.1	1.7	0.0	12.9	3.8	10.8	1.0	-1.7	-3.7	13.8	3.7	3.4
Nov.	2.7	0.7	0.2	12.6	3.9	8.0	1.0	-1.0	-4.4	13.5	3.7	2.0
Dec.	1.6	-1.8	1.1	14.2	2.5	6.1	0.2	-3.7	-0.4	14.8	2.4	-3.8
2013 Jan.	1.1	-2.3	0.9	13.6	2.2	4.6	-0.4	-5.8	0.2	14.3	2.4	-4.0
Feb.	0.4	-4.4	0.8	13.3	2.6	0.3	-0.6	-8.4	2.8	13.7	3.3	-6.1
Mar.	-0.2	-6.1	-0.6	12.7	3.6	-0.8	-1.0	-9.5	1.4	11.3	3.9	-4.7
Apr.	-0.2	-6.2	-0.7	12.4	3.5	0.4	-1.3	-10.6	2.2	10.9	3.5	-2.7
May	0.0	-6.5	-0.5	10.9	4.5	-0.4	-0.9	-11.5	3.4	8.5	5.3	-2.9
June	-0.2	-7.3	0.4	10.0	4.4	-2.6	-0.8	-10.8	1.2	5.5	6.4	-2.1
July	-0.9	-8.8	0.8	9.7	4.1	-4.7	-1.3	-11.6	1.4	5.5	5.9	-5.6
Aug.	-0.7	-9.2	1.7	10.2	4.2	-3.6	-0.8	-10.0	0.6	7.1	5.1	-1.4
Sep.	-0.6	-9.0	2.2	9.6	4.1	-3.8	-0.2	-8.5	3.0	7.9	4.3	-3.2
Oct.	-1.0	-9.0	1.0	9.5	3.8	-4.1	-0.6	-7.4	-0.3	8.1	4.1	-5.0
						Long-term						
2012 Oct.	3.8	1.4	0.0	14.2	5.7	10.7	2.3	-0.5	-3.2	16.9	5.4	6.8
Nov.	3.5	1.2	0.1	14.2	5.2	9.5	2.4	0.7	-4.0	18.1	4.6	7.0
Dec.	2.5	0.1	0.4	15.3	3.3	9.2	1.6	-1.1	-1.0	18.6	2.6	4.9
2013 Jan.	2.2	-0.3	0.3	14.9	2.9	8.6	1.3	-2.2	-0.4	18.0	2.5	3.8
Feb.	1.3	-2.4	-0.3	14.1	3.3	4.5	0.6	-4.9	0.5	15.8	3.2	1.0
Mar.	0.9	-4.3	-0.9	13.1	4.3	2.9	-0.1	-6.6	0.4	11.9	3.6	-1.6
Apr.	0.8	-4.5	-1.0	14.0	4.3	3.2	-0.6	-8.3	1.1	11.0	3.3	-0.1
May	1.0	-4.9	-0.8	12.8	5.1	2.9	-0.3	-10.0	2.5	7.8	5.5	-1.0
June	0.7	-5.9	0.3	12.1	4.8	1.6	-0.2	-10.5	1.6	5.9	7.1	-1.7
July	0.1	-7.2	0.6	11.6	4.5	0.3	-1.0	-12.0	1.5	5.7	6.5	-3.1
Aug.	0.2	-7.5	1.4	11.9	4.5	0.7	-0.1	-10.1	2.4	8.3	5.8	0.3
Sep.	0.2	-7.5	1.7	10.5	4.4	0.3	0.6	-8.4	3.0	9.1	5.3	2.2
Oct.	0.0	-7.6	0.9	10.2	4.2	0.8	0.6	-6.8	0.6	9.4	5.1	1.7

C17 Annual growth rates of long-term debt securities, by sector of the issuer, in all currencies combined
(annual percentage changes)

— general government
····· MFIs (including Eurosystem)
– – non-MFI corporations
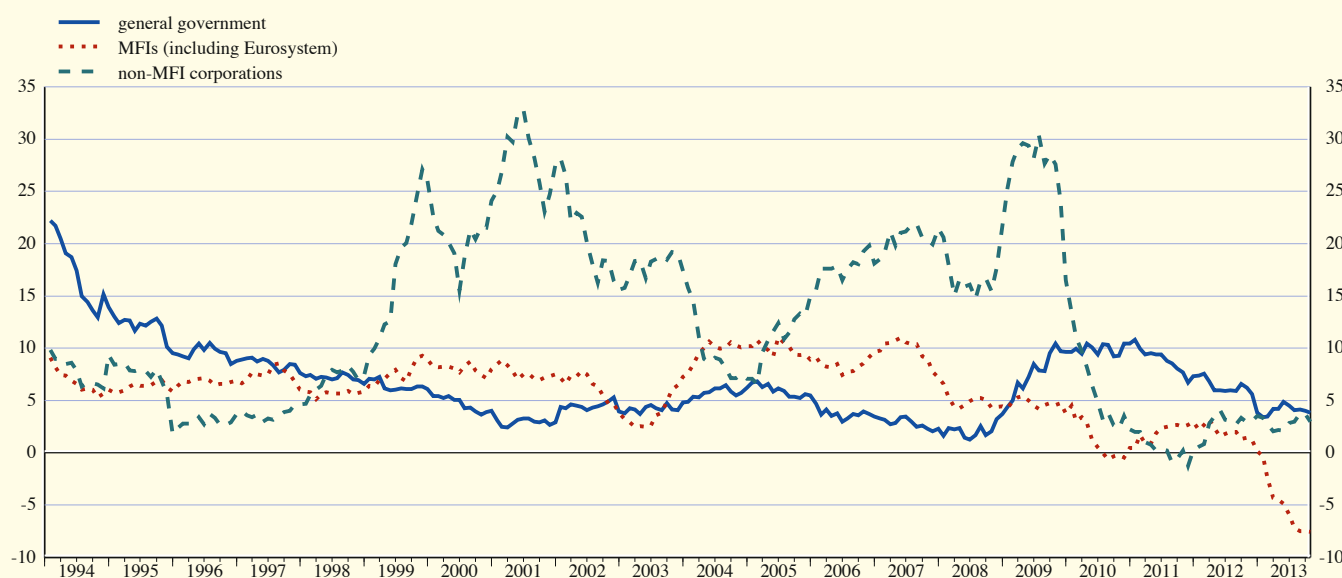
Source: ECB.
1) For details of the calculation of the growth rates, see the Technical Notes. The six-month growth rates have been annualised.

4.3 Growth rates of securities other than shares issued by euro area residents [1] (cont'd)
(percentage changes)

	Long-term fixed rate						Long-term variable rate					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	13	14	15	16	17	18	19	20	21	22	23	24
	In all currencies combined											
2011	6.4	4.8	3.6	6.3	7.8	7.7	-0.9	-1.3	-6.1	-2.0	22.3	16.1
2012	5.4	4.1	2.4	10.5	5.9	7.3	-0.8	-0.2	-5.0	-0.4	6.6	23.3
2012 Q4	5.6	2.9	3.9	15.5	5.9	6.8	-3.3	-0.7	-8.1	-0.3	-2.4	20.3
2013 Q1	4.4	0.4	6.5	15.7	4.3	6.0	-6.8	-4.1	-10.6	-0.4	-7.6	7.8
Q2	3.7	-3.3	7.8	14.5	5.1	4.5	-7.7	-6.7	-11.4	2.1	-1.8	-0.8
Q3	3.1	-4.9	8.4	12.5	4.8	3.4	-8.3	-9.6	-9.7	6.2	-1.9	-5.4
2013 May	3.7	-3.5	7.3	14.3	5.2	5.0	-7.5	-6.4	-12.0	2.4	1.3	-1.6
June	3.5	-4.0	8.3	13.2	5.1	3.9	-8.0	-8.5	-10.8	4.6	-0.6	-3.5
July	3.2	-5.1	8.4	12.8	5.0	3.5	-8.8	-9.6	-10.1	4.9	-4.2	-6.7
Aug.	3.0	-5.1	8.7	12.7	4.6	3.3	-8.3	-10.0	-9.4	6.9	-2.2	-5.0
Sep.	2.7	-5.0	7.8	10.8	4.3	2.9	-7.4	-9.9	-8.5	8.8	2.0	-5.2
Oct.	2.5	-5.1	6.4	10.6	4.4	3.3	-7.7	-9.9	-8.4	7.5	-0.9	-4.9
	In euro											
2011	6.5	4.0	3.8	6.6	8.1	7.3	-0.4	0.1	-6.7	-3.0	22.2	15.3
2012	5.6	4.6	2.1	10.8	6.0	7.2	-0.5	2.1	-6.6	-1.4	6.3	22.9
2012 Q4	5.7	3.3	3.3	16.4	6.0	6.3	-3.3	1.5	-10.2	-0.8	-2.9	20.5
2013 Q1	4.2	0.1	4.8	17.6	4.4	5.3	-7.0	-2.8	-12.3	-0.3	-8.4	7.9
Q2	3.5	-4.0	5.3	16.4	5.0	4.4	-7.9	-5.9	-12.7	3.7	-2.4	-1.4
Q3	2.8	-5.9	5.8	14.0	4.8	3.8	-8.6	-9.7	-10.5	7.6	-2.3	-5.8
2013 May	3.5	-4.2	4.9	15.9	5.2	4.9	-7.7	-5.8	-13.2	4.0	0.8	-1.9
June	3.2	-4.9	5.3	15.1	5.1	3.9	-8.4	-8.2	-12.1	5.5	-1.0	-4.1
July	3.0	-6.1	5.9	14.6	5.1	4.1	-9.0	-9.7	-10.7	6.5	-4.5	-7.2
Aug.	2.7	-6.1	6.2	14.0	4.7	3.9	-8.7	-10.2	-10.2	8.3	-2.7	-5.4
Sep.	2.3	-6.3	5.3	12.0	4.4	2.8	-7.8	-10.2	-9.3	10.5	1.7	-5.6
Oct.	2.3	-6.0	4.1	11.3	4.4	3.6	-8.1	-10.4	-8.9	10.5	-1.4	-5.4

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

- general government
- MFIs (including Eurosystem)
- non-MFI corporations
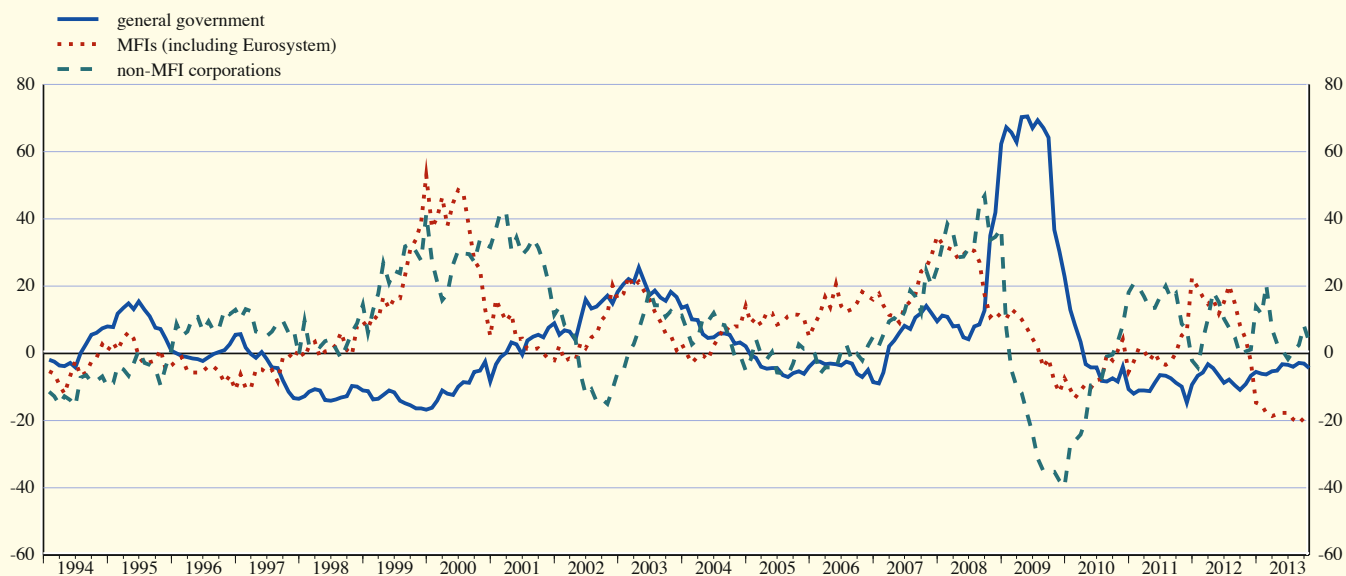
Source: ECB.
1)   Annual percentage changes for monthly data refer to the end of the month, whereas those for quarterly and yearly data refer to the annual change in the period average.
     See the Technical Notes for details.

4.4 Quoted shares issued by euro area residents [1]
(EUR billions, unless otherwise indicated; market values)

1. Outstanding amounts and annual growth rates
(outstanding amounts as at end of period)

	Total			MFIs		Financial corporations other than MFIs		Non-financial corporations	
	Total	Index: Dec. 2008 = 100	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)
	1	2	3	4	5	6	7	8	9
2011 Oct.	4,017.6	105.9	1.7	360.5	9.9	288.1	5.8	3,369.0	0.3
Nov.	3,866.8	106.0	1.5	329.8	8.9	271.6	4.6	3,265.3	0.3
Dec.	3,878.6	106.1	1.6	339.3	9.3	270.8	4.9	3,268.5	0.4
2012 Jan.	4,091.7	106.3	1.7	375.5	11.4	298.1	4.0	3,418.2	0.4
Feb.	4,257.8	106.3	1.5	394.7	10.7	311.3	3.1	3,551.9	0.3
Mar.	4,241.7	106.4	1.5	373.1	11.3	311.1	2.8	3,557.5	0.3
Apr.	4,067.5	106.5	1.4	327.3	10.7	292.0	3.1	3,448.2	0.2
May	3,761.8	106.5	1.5	280.9	10.0	265.1	3.4	3,215.8	0.4
June	3,924.4	106.6	1.1	317.6	7.7	284.7	2.8	3,322.1	0.3
July	4,050.4	106.8	1.0	309.9	5.8	291.8	2.7	3,448.7	0.3
Aug.	4,175.1	106.8	0.9	349.7	4.6	309.1	3.2	3,516.4	0.3
Sep.	4,231.4	106.9	0.9	365.0	4.9	323.6	2.7	3,542.9	0.4
Oct.	4,308.1	107.0	1.0	383.6	5.0	333.4	2.9	3,591.1	0.4
Nov.	4,396.1	106.9	0.9	395.7	5.5	342.0	2.3	3,658.4	0.3
Dec.	4,500.1	107.2	1.0	402.4	4.9	357.0	2.4	3,740.7	0.5
2013 Jan.	4,655.0	107.3	0.9	441.6	2.7	370.3	2.5	3,843.1	0.6
Feb.	4,639.6	107.1	0.8	416.1	2.7	364.2	2.7	3,859.4	0.4
Mar.	4,641.6	106.9	0.5	380.4	2.2	368.7	2.6	3,892.6	0.1
Apr.	4,743.9	106.8	0.3	410.5	0.9	394.6	2.7	3,938.8	0.1
May	4,860.6	107.1	0.5	440.6	1.9	407.6	2.5	4,012.4	0.2
June	4,660.4	107.9	1.2	413.9	7.6	394.2	2.6	3,852.2	0.4
July	4,900.1	108.0	1.1	447.0	7.9	418.3	1.8	4,034.8	0.3
Aug.	4,888.4	107.9	1.1	461.9	7.8	415.8	1.2	4,010.8	0.3
Sep.	5,132.8	107.9	1.0	492.2	7.8	427.3	0.7	4,213.3	0.3
Oct.	5,407.6	108.1	1.1	557.2	7.7	445.4	0.9	4,405.1	0.4

C19 Annual growth rates for quoted shares issued by euro area residents
(annual percentage changes)

- —— MFIs
- ····· financial corporations other than MFIs
- – – non-financial corporations
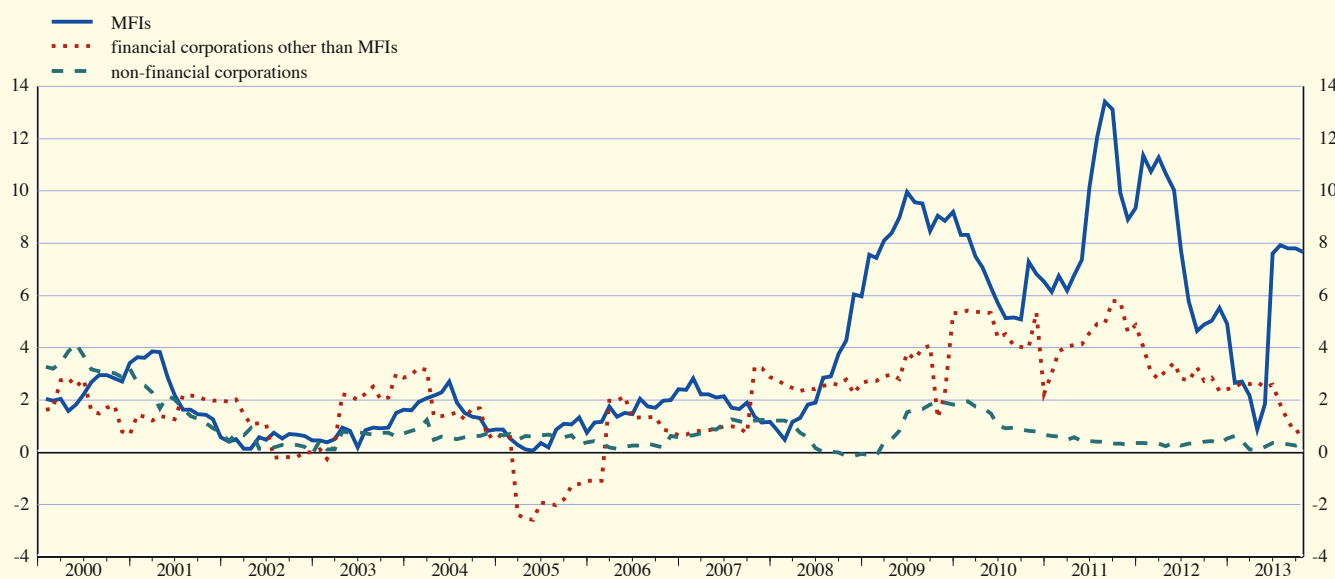
Source: ECB.
1) For details of the calculation of the index and the growth rates, see the Technical Notes.

## 4.4 Quoted shares issued by euro area residents
(EUR billions; market values)

2. Transactions during the month

	Total			MFIs			Financial corporations other than MFIs			Non-financial corporations		
	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
2011 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.	4.1	11.4	-7.3	0.3	0.0	0.3	0.3	0.0	0.3	3.5	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
Aug.	1.1	2.3	-1.2	0.0	0.0	0.0	0.0	0.5	-0.5	1.1	1.8	-0.7
Sep.	0.8	1.7	-0.9	0.1	0.0	0.1	0.1	0.6	-0.4	0.5	1.1	-0.5
Oct.	16.9	7.5	9.4	0.1	0.0	0.1	1.3	0.1	1.2	15.5	7.4	8.1

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

- non-financial corporations
- MFIs
- financial corporations other than MFIs
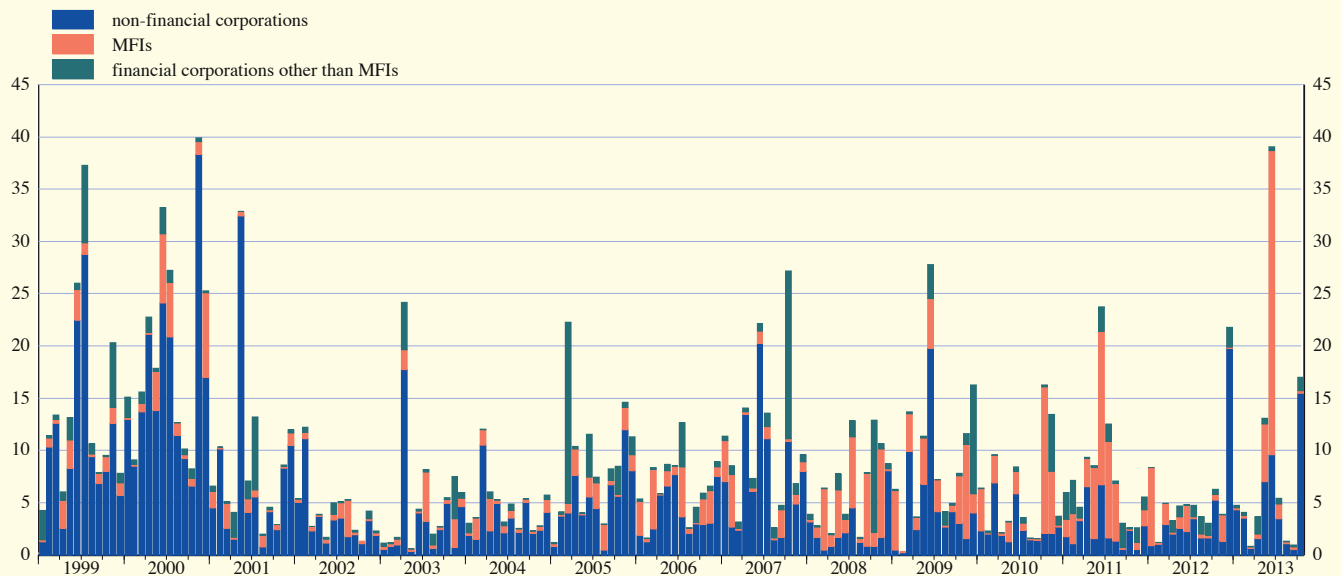
Source: ECB.

4.5 MFI interest rates on euro-denominated deposits from and loans to euro area residents [1]
(percentages per annum; outstanding amounts as at end of period, new business as period average, unless otherwise indicated)

1. Interest rates on deposits (new business)

	Deposits from households						Deposits from non-financial corporations				Repos
	Overnight	With an agreed maturity of:			Redeemable at notice of: [2]		Overnight	With an agreed maturity of:			
		Up to 1 year	Over 1 and up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 1 year	Over 1 and up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9	10	11
2012 Dec.	0.39	2.73	2.59	2.25	1.59	1.59	0.42	1.08	1.92	2.16	1.53
2013 Jan.	0.37	2.61	2.37	2.42	1.53	1.53	0.39	1.09	2.00	2.16	1.17
Feb.	0.36	2.44	2.23	2.29	1.39	1.47	0.40	1.05	1.99	2.08	0.63
Mar.	0.36	2.29	2.17	2.28	1.37	1.43	0.40	0.93	1.85	1.99	1.00
Apr.	0.34	2.33	2.10	2.25	1.36	1.36	0.38	0.96	1.70	1.90	0.68
May	0.33	2.04	2.06	2.25	1.31	1.30	0.38	0.83	1.86	1.98	0.48
June	0.32	1.88	1.88	2.12	1.30	1.27	0.38	0.83	1.65	1.77	0.72
July	0.31	1.88	1.90	2.08	1.28	1.23	0.36	0.82	1.63	1.78	0.88
Aug.	0.30	1.81	1.87	2.05	1.15	1.22	0.37	0.70	1.57	1.85	0.51
Sep.	0.30	1.71	1.86	2.06	1.15	1.17	0.35	0.81	1.68	1.87	0.56
Oct.	0.29	1.72	1.83	2.07	1.13	1.14	0.34	0.78	1.65	2.28	0.29
Nov.	0.29	1.60	1.76	2.02	1.12	1.10	0.34	0.75	1.57	1.73	0.46

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

	Revolving loans and overdrafts	Extended credit card debt [3]	Consumer credit				Lending for house purchase					Lending to sole proprietors and unincorporated partnerships		
			By initial rate fixation			APRC [4]	By initial rate fixation				APRC [4]	By initial rate fixation		
			Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2012 Dec.	7.94	16.93	5.36	6.05	7.55	6.94	2.87	3.25	3.25	3.45	3.41	3.15	4.12	3.01
2013 Jan.	7.97	17.06	5.77	6.11	7.88	7.27	2.87	3.17	3.03	3.35	3.34	3.19	4.06	3.08
Feb.	7.97	17.04	5.89	6.03	7.83	7.25	2.88	3.17	3.05	3.35	3.35	3.16	4.07	3.21
Mar.	7.95	17.06	5.86	5.98	7.75	7.15	2.86	3.19	3.13	3.34	3.38	3.16	4.16	3.17
Apr.	7.93	17.08	5.74	5.92	7.75	7.06	2.87	3.13	3.06	3.34	3.38	3.26	3.97	3.11
May	7.91	17.08	6.00	6.09	7.71	7.20	2.87	3.09	2.95	3.22	3.32	3.32	4.11	3.14
June	7.84	17.03	5.85	6.02	7.56	7.07	2.82	3.00	2.87	3.15	3.25	3.10	4.08	3.01
July	7.75	16.96	5.63	6.12	7.63	7.13	2.84	2.97	2.90	3.17	3.28	3.19	3.75	3.18
Aug.	7.74	17.01	5.62	6.15	7.64	7.15	2.80	3.01	2.97	3.18	3.31	3.00	4.06	3.15
Sep.	7.77	17.02	5.80	6.07	7.62	7.20	2.83	3.05	3.05	3.25	3.35	3.04	3.99	3.16
Oct.	7.67	17.02	5.70	6.04	7.63	7.13	2.77	3.04	3.12	3.27	3.35	3.10	3.95	3.26
Nov.	7.64	16.94	5.81	6.05	7.74	7.18	2.79	3.06	3.15	3.29	3.37	3.30	4.08	3.19

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

	Revolving loans and overdrafts	Other loans of up to EUR 0.25 million by initial rate fixation						Other loans of over EUR 1 million by initial rate fixation					
		Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 and up to 3 years	Over 3 and up to 5 years	Over 5 and up to 10 years	Over 10 years	Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 and up to 3 years	Over 3 and up to 5 years	Over 5 and up to 10 years	Over 10 years
	1	2	3	4	5	6	7	8	9	10	11	12	13
2012 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	4.12	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
Sep.	4.12	4.53	4.67	4.39	4.16	3.41	3.42	2.08	2.54	2.86	2.75	2.89	3.28
Oct.	4.14	4.60	4.83	4.39	4.14	3.51	3.50	2.16	2.64	3.10	2.86	3.28	3.38
Nov.	4.08	4.56	4.71	4.34	4.29	3.55	3.49	2.23	2.62	2.96	2.89	2.98	3.10

Source: ECB.
1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
2) For this instrument category, households and non-financial corporations are merged and allocated to the household sector, since the outstanding amounts of non-financial corporations are negligible compared with those of the household sector when all participating Member States are combined.
3) This instrument category excludes convenience credit card debt, i.e. credit granted at an interest rate of 0% during the billing cycle.
4) The annual percentage rate of charge (APRC) covers the total cost of a loan. The total cost comprises both an interest rate component and a component incorporating other (related) charges, such as the cost of inquiries, administration, preparation of documents and guarantees.

4.5 MFI interest rates on euro-denominated deposits from and loans to euro area residents [1), *]
(percentages per annum; outstanding amounts as at end of period, new business as period average, unless otherwise indicated)
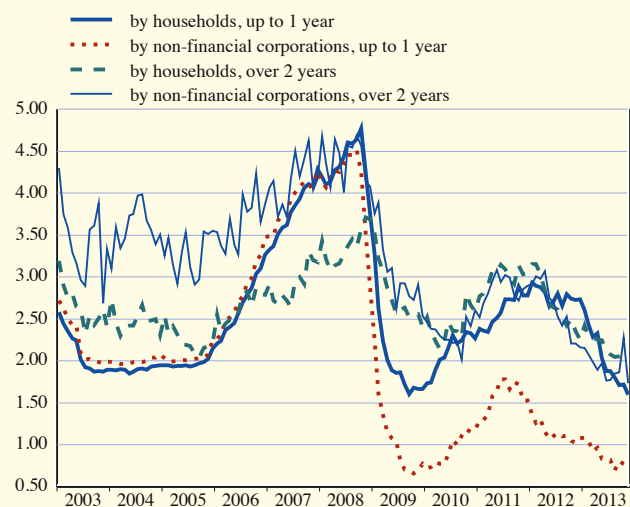
4. Interest rates on deposits (outstanding amounts)

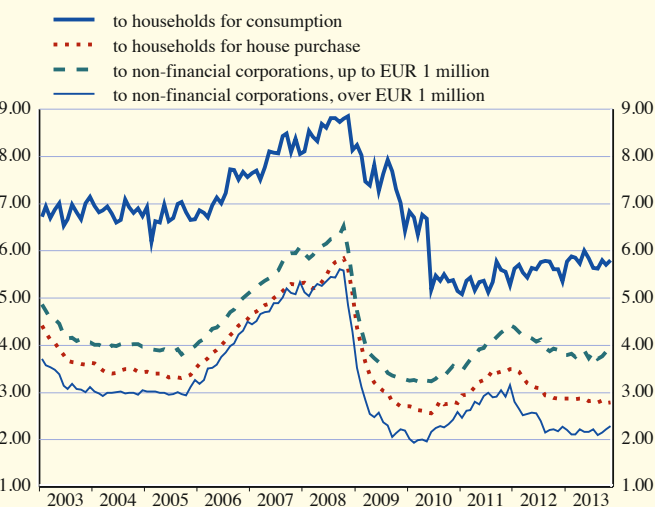|	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight [2)]	With an agreed maturity of:		Redeemable at notice of: [2),3)]		Overnight [2)]	With an agreed maturity of:		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2012 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	2.87	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	1.50
Sep.	0.30	2.16	2.63	1.15	1.17	0.35	1.41	2.85	1.66
Oct.	0.29	2.09	2.60	1.13	1.14	0.34	1.34	2.83	1.35
Nov.	0.29	2.02	2.61	1.12	1.10	0.34	1.32	2.84	1.34

5. Interest rates on loans (outstanding amounts)

	Loans to households						Loans to non-financial corporations		
	Lending for house purchase with a maturity of:			Consumer credit and other loans with a maturity of:			With a maturity of:		
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9
2012 Dec.	3.49	3.39	3.56	7.75	6.18	4.92	3.71	3.28	3.22
2013 Jan.	3.46	3.36	3.52	7.76	6.21	4.89	3.73	3.26	3.17
Feb.	3.45	3.35	3.51	7.77	6.24	4.91	3.72	3.26	3.19
Mar.	3.50	3.36	3.49	7.79	6.21	4.89	3.68	3.25	3.16
Apr.	3.49	3.33	3.49	7.74	6.19	4.88	3.67	3.25	3.15
May	3.47	3.30	3.46	7.65	6.14	4.86	3.65	3.24	3.13
June	3.50	3.29	3.43	7.62	6.18	4.87	3.62	3.24	3.14
July	3.51	3.24	3.40	7.59	6.18	4.84	3.62	3.26	3.14
Aug.	3.52	3.22	3.37	7.58	6.16	4.82	3.63	3.26	3.12
Sep.	3.55	3.22	3.37	7.64	6.16	4.82	3.65	3.24	3.13
Oct.	3.50	3.20	3.35	7.61	6.10	4.80	3.62	3.27	3.12
Nov.	3.51	3.22	3.34	7.52	6.11	4.79	3.59	3.28	3.12

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

- by households, up to 1 year
- by non-financial corporations, up to 1 year
- by households, over 2 years
- by non-financial corporations, over 2 years

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

- to households for consumption
- to households for house purchase
- to non-financial corporations, up to EUR 1 million
- to non-financial corporations, over EUR 1 million

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

4.6 Money market interest rates
(percentages per annum; period averages)

	Euro area [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
2011	0.87	1.18	1.39	1.64	2.01	0.34	0.19
2012	0.23	0.33	0.58	0.83	1.11	0.43	0.19
2013	0.09	0.13	0.22	0.34	0.54	0.27	0.15
2012 Q4	0.08	0.11	0.20	0.37	0.60	0.32	0.19
2013 Q1	0.07	0.12	0.21	0.34	0.57	0.29	0.16
Q2	0.08	0.12	0.21	0.31	0.51	0.28	0.16
Q3	0.09	0.13	0.22	0.34	0.54	0.26	0.15
Q4	0.12	0.16	0.24	0.35	0.53	0.24	0.14
2012 Dec.	0.07	0.11	0.19	0.32	0.55	0.31	0.18
2013 Jan.	0.07	0.11	0.20	0.34	0.58	0.30	0.17
Feb.	0.07	0.12	0.22	0.36	0.59	0.29	0.16
Mar.	0.07	0.12	0.21	0.33	0.54	0.28	0.16
Apr.	0.08	0.12	0.21	0.32	0.53	0.28	0.16
May	0.08	0.11	0.20	0.30	0.48	0.27	0.16
June	0.09	0.12	0.21	0.32	0.51	0.27	0.15
July	0.09	0.13	0.22	0.34	0.53	0.27	0.16
Aug.	0.08	0.13	0.23	0.34	0.54	0.26	0.15
Sep.	0.08	0.13	0.22	0.34	0.54	0.25	0.15
Oct.	0.09	0.13	0.23	0.34	0.54	0.24	0.15
Nov.	0.10	0.13	0.22	0.33	0.51	0.24	0.14
Dec.	0.17	0.21	0.27	0.37	0.54	0.24	0.15

C23 Euro area money market rates [1], [2]
(monthly averages; percentages per annum)

- 1-month rate
- 3-month rate
- 12-month rate

C24 3-month money market rates
(monthly averages; percentages per annum)

- euro area [1], [2]
- Japan
- United States
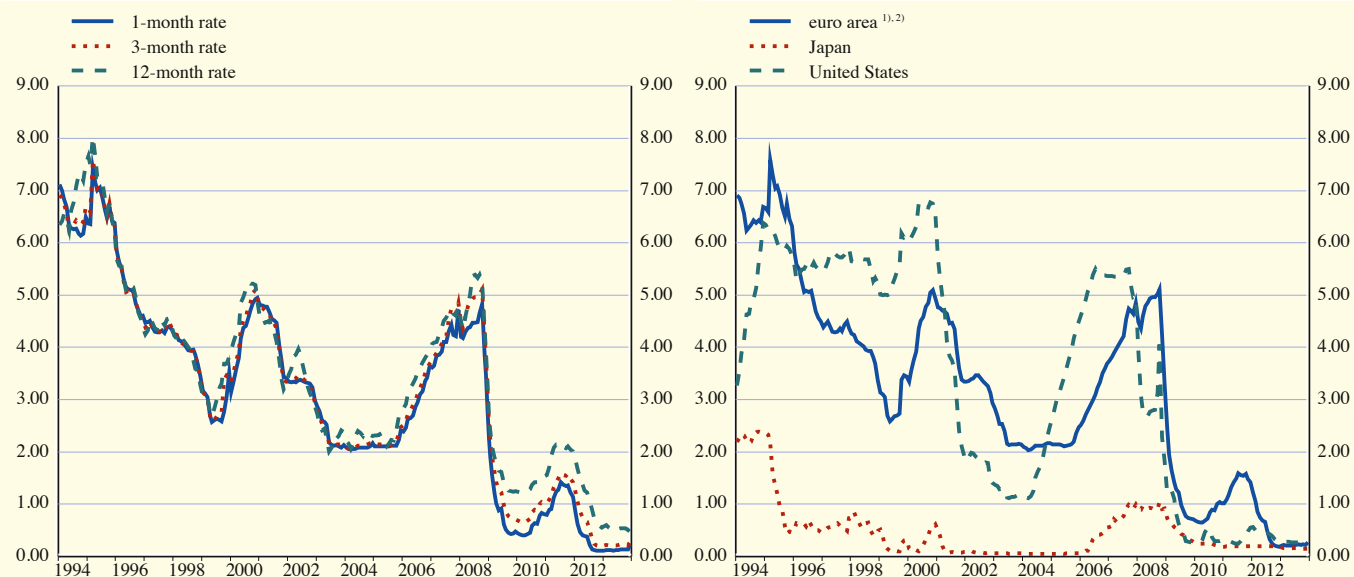
Source: ECB.
1) Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP. For further information, see the General Notes.
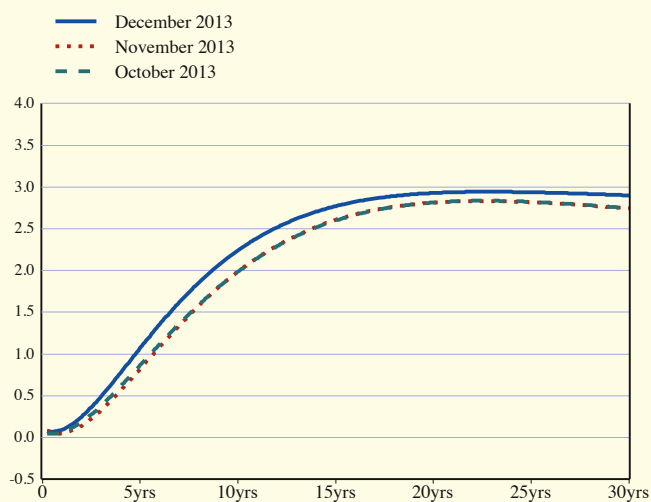2) Data refer to the changing composition of the euro area. For further information, see the General Notes.

4.7 Euro area yield curves [1]

(AAA-rated euro area central government bonds; end of period; rates in percentages per annum; spreads in percentage points)

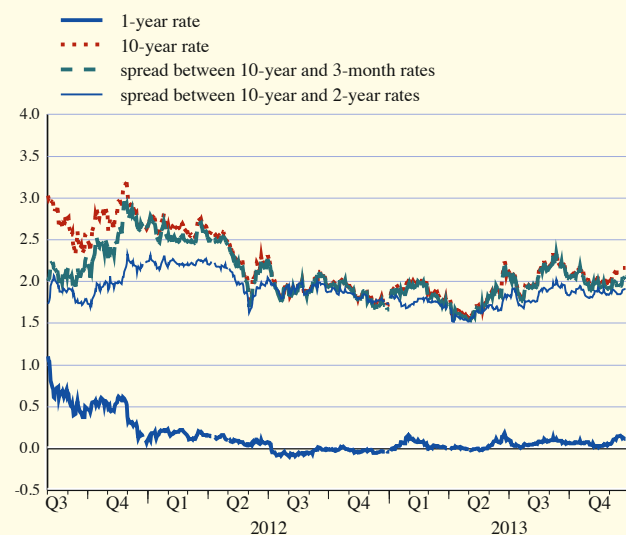|	Spot rates								Instantaneous forward rates			
	3 months	1 year	2 years	5 years	7 years	10 years	10 years - 3 months (spread)	10 years - 2 years (spread)	1 year	2 years	5 years	10 years
	1	2	3	4	5	6	7	8	9	10	11	12
2011	0.00	0.09	0.41	1.56	2.13	2.65	2.65	2.24	0.32	1.15	3.24	3.84
2012	0.06	-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2013	0.08	0.09	0.25	1.07	1.62	2.24	2.16	1.99	0.18	0.67	2.53	3.88
2012 Q4	0.06	-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2013 Q1	0.04	0.00	0.07	0.65	1.12	1.76	1.72	1.69	0.01	0.29	1.83	3.60
Q2	0.03	0.11	0.30	1.05	1.54	2.14	2.11	1.84	0.27	0.73	2.35	3.78
Q3	0.02	0.07	0.22	0.94	1.45	2.05	2.03	1.84	0.17	0.60	2.25	3.74
Q4	0.08	0.09	0.25	1.07	1.62	2.24	2.16	1.99	0.18	0.67	2.53	3.88
2012 Dec.	0.06	-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2013 Jan.	0.07	0.15	0.32	0.99	1.45	2.02	1.95	1.71	0.28	0.70	2.18	3.62
Feb.	0.03	0.01	0.10	0.74	1.24	1.88	1.86	1.78	0.05	0.38	1.99	3.72
Mar.	0.04	0.00	0.07	0.65	1.12	1.76	1.72	1.69	0.01	0.29	1.83	3.60
Apr.	0.03	-0.01	0.04	0.54	0.96	1.55	1.52	1.51	-0.01	0.23	1.58	3.28
May	0.02	0.03	0.13	0.75	1.22	1.84	1.82	1.71	0.08	0.41	1.95	3.62
June	0.03	0.11	0.30	1.05	1.54	2.14	2.11	1.84	0.27	0.73	2.35	3.78
July	0.01	0.04	0.18	0.88	1.36	1.95	1.95	1.77	0.14	0.54	2.14	3.59
Aug.	0.02	0.09	0.27	1.06	1.58	2.17	2.16	1.90	0.23	0.71	2.43	3.78
Sep.	0.02	0.07	0.22	0.94	1.45	2.05	2.03	1.84	0.17	0.60	2.25	3.74
Oct.	0.05	0.05	0.15	0.82	1.32	1.95	1.90	1.80	0.09	0.45	2.10	3.74
Nov.	0.08	0.05	0.14	0.82	1.34	1.99	1.91	1.84	0.08	0.43	2.14	3.79
Dec.	0.08	0.09	0.25	1.07	1.62	2.24	2.16	1.99	0.18	0.67	2.53	3.88

C25 Euro area spot yield curves [2]
(percentages per annum; end of period)

— December 2013
···· November 2013
– – October 2013

C26 Euro area spot rates and spreads [2]
(daily data; rates in percentages per annum; spreads in percentage points)

— 1-year rate
···· 10-year rate
– – spread between 10-year and 3-month rates
— spread between 10-year and 2-year rates

Sources: ECB calculations based on underlying data provided by EuroMTS and ratings provided by Fitch Ratings.
1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
2) Data cover AAA-rated euro area central government bonds.

4.8 Stock market indices
(index levels in points; period averages)

					Dow Jones EURO STOXX indices [1]								United States	Japan
	Benchmark					Main industry indices								
	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
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
2013	281.9	2,794.0	586.3	195.0	468.2	312.8	151.5	402.7	274.1	230.6	253.4	629.4	1,643.8	13,577.9
2012 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
Q4	304.9	3,017.6	620.6	211.9	492.2	325.7	169.9	442.8	301.9	249.5	287.4	631.8	1,768.7	14,951.3
2012 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
Oct.	301.4	2,988.9	602.2	210.0	487.3	329.2	168.4	436.3	293.4	249.6	290.6	616.5	1,720.0	14,329.0
Nov.	308.7	3,056.0	630.5	214.1	498.7	330.9	171.1	448.8	306.1	253.7	289.1	646.6	1,783.5	14,931.7
Dec.	304.7	3,010.2	631.3	211.7	490.9	316.3	170.3	443.9	307.2	245.0	282.0	633.9	1,807.8	15,655.2

C27 Dow Jones EURO STOXX broad index, Standard & Poor's 500 and Nikkei 225
(January 1994 = 100; monthly averages)
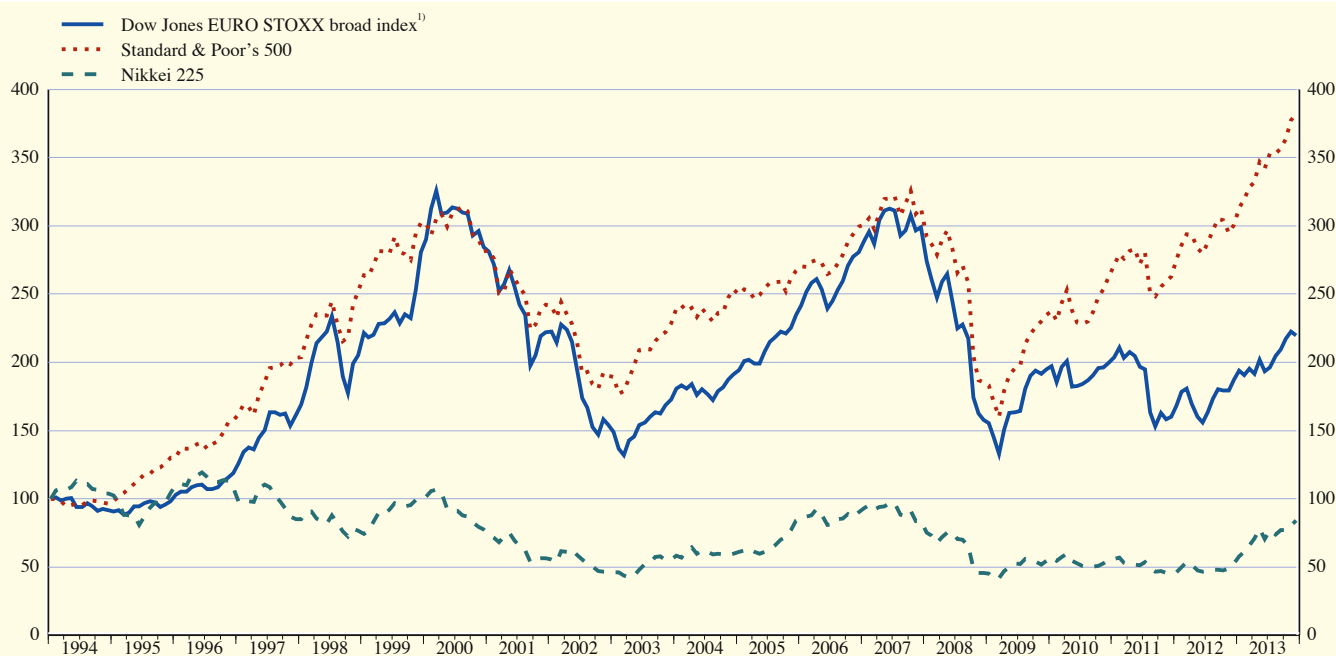
——— Dow Jones EURO STOXX broad index[1]
· · · · · Standard & Poor's 500
– – – Nikkei 225

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

PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

5.1 HICP, other prices and costs
(annual percentage changes, unless otherwise indicated)

1. Harmonised Index of Consumer Prices [1]

	Total					Total (s.a.; percentage change vis-à-vis previous period)						Memo item: Administered prices [2]	
	Index: 2005 = 100	Total		Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Administered prices
			Total excl. unprocessed food and energy										
% of total in 2012	100.0	100.0	81.7	57.7	42.3	100.0	12.0	7.3	27.4	11.0	42.3	87.7	12.3
	1	2	3	4	5	6	7	8	9	10	11	12	13
2010	109.8	1.6	1.0	1.8	1.4	-	-	-	-	-	-	1.6	1.7
2011	112.8	2.7	1.7	3.3	1.8	-	-	-	-	-	-	2.6	3.6
2012	115.6	2.5	1.8	3.0	1.8	-	-	-	-	-	-	2.3	3.8
2013	117.2	1.3	.	.	1.4	-	-	-	-	-	-	.	.
2012 Q4	116.7	2.3	1.6	2.7	1.7	0.4	0.7	1.8	0.3	-0.1	0.3	2.0	4.1
2013 Q1	116.4	1.9	1.5	2.0	1.7	0.4	0.6	0.5	0.1	1.0	0.4	1.7	3.1
Q2	117.5	1.4	1.3	1.5	1.3	0.1	0.5	1.4	0.1	-1.8	0.2	1.3	2.2
Q3	117.3	1.3	1.3	1.3	1.4	0.5	0.7	0.5	0.0	1.0	0.6	1.3	1.7
Q4	117.6	0.8	.	.	1.2	.	.	.	.	-1.1	.	.	.
2013 July	117.0	1.6	1.3	1.7	1.4	0.2	0.4	-0.1	-0.1	0.8	0.2	1.6	1.7
Aug.	117.1	1.3	1.3	1.2	1.4	0.1	0.2	0.1	0.0	0.5	0.1	1.3	1.9
Sep.	117.7	1.1	1.2	0.9	1.4	0.0	0.1	-1.0	0.0	0.5	0.0	1.0	1.6
Oct.	117.6	0.7	1.0	0.4	1.2	-0.2	0.1	-0.6	0.0	-1.2	-0.1	0.6	1.3
Nov.	117.5	0.9	1.1	0.4	1.4	0.0	0.1	-0.2	0.0	-0.8	0.3	0.8	1.3
Dec. [3]	117.9	0.8	.	.	1.0	.	.	.	.	0.6	.	.	.

	Goods						Services					
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing		Transport	Communication	Recreation and personal	Miscellaneous
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy		Rents				
% of total in 2012	19.4	12.0	7.3	38.3	27.4	11.0	10.3	6.0	7.2	3.1	14.7	7.1
	14	15	16	17	18	19	20	21	22	23	24	25
2010	1.1	0.9	1.3	2.2	0.5	7.4	1.8	1.5	2.3	-0.8	1.0	1.5
2011	2.7	3.3	1.8	3.7	0.8	11.9	1.8	1.4	2.9	-1.3	2.0	2.1
2012	3.1	3.1	3.0	3.0	1.2	7.6	1.8	1.5	2.9	-3.2	2.2	2.0
2013	2.7	.	.	.	0.6	0.6	.	.	.	.	.	.
2012 Q4	3.1	2.4	4.3	2.5	1.1	6.3	1.8	1.5	3.1	-3.8	2.1	1.9
2013 Q1	2.9	2.3	3.9	1.5	0.8	3.2	1.8	1.5	3.1	-4.6	2.8	0.7
Q2	3.1	2.1	4.8	0.6	0.8	0.3	1.6	1.3	2.5	-4.5	2.0	0.9
Q3	3.1	2.5	4.2	0.3	0.4	0.1	1.8	1.7	2.3	-4.0	2.2	0.8
Q4	1.8	.	.	.	0.3	-0.9	.	.	.	.	.	.
2013 July	3.5	2.5	5.1	0.8	0.4	1.6	1.8	1.7	2.3	-4.0	2.1	0.8
Aug.	3.2	2.5	4.4	0.2	0.4	-0.3	1.8	1.8	2.3	-4.3	2.2	0.8
Sep.	2.6	2.4	2.9	0.0	0.4	-0.9	1.7	1.5	2.4	-3.6	2.2	0.9
Oct.	1.9	2.2	1.4	-0.3	0.3	-1.7	1.7	1.4	2.0	-4.0	1.9	0.4
Nov.	1.6	2.0	0.9	-0.1	0.2	-1.1	1.7	1.4	1.9	-3.3	2.5	0.5
Dec. [3]	1.8	.	.	.	0.2	0.0	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.
1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
2) These experimental statistics can only provide an approximate measure of price administration, since changes in administered prices cannot be fully isolated from other influences. Please refer to Eurostat's website (http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/introduction) for a note explaining the methodology used in the compilation of this indicator.
3) Estimate based on provisional national releases, which usually cover around 95% of the euro area, as well as on early information on energy prices.

2. Industry, construction and residential property prices

	Industrial producer prices excluding construction										Construction [1]	Residential property prices [2]
	Total (index: 2010 = 100)	Total		Industry excluding construction and energy						Energy		
			Manu-facturing	Total	Intermediate goods	Capital goods	Consumer goods					
							Total	Durable	Non-durable			
% of total in 2010	100.0	100.0	75.4	68.1	27.5	18.7	21.9	2.2	19.7	31.9		
	1	2	3	4	5	6	7	8	9	10	11	12
2009	97.4	-4.8	-5.1	-2.8	-5.4	0.4	-2.1	1.2	-2.5	-10.9	0.3	-3.2
2010	100.0	2.7	3.3	1.7	3.6	0.3	0.4	0.7	0.4	5.5	2.0	1.0
2011	105.7	5.7	5.3	3.8	5.9	1.5	3.3	1.9	3.4	10.7	3.3	1.1
2012	108.6	2.8	2.0	1.4	0.8	1.0	2.5	1.6	2.6	6.1	1.6	-1.7
2012 Q3	109.0	2.5	1.8	1.1	0.2	0.9	2.4	1.5	2.5	5.9	1.4	-2.6
Q4	109.2	2.4	1.9	1.6	1.3	0.8	2.5	1.2	2.7	4.1	1.3	-2.3
2013 Q1	109.3	1.2	0.8	1.2	0.8	0.8	2.2	0.8	2.4	0.9	0.8	-2.8
Q2	108.2	-0.1	-0.1	0.5	-0.5	0.6	1.9	0.8	2.1	-1.8	0.4	-2.4
Q3	108.3	-0.6	-0.3	0.3	-1.0	0.5	1.7	0.6	1.9	-2.5	0.4	.
2013 June	108.1	0.1	0.3	0.6	-0.5	0.5	2.0	0.7	2.2	-1.0	-	-
July	108.3	0.0	0.3	0.5	-0.5	0.5	2.0	0.6	2.2	-1.4	-	-
Aug.	108.3	-0.9	-0.4	0.3	-1.0	0.6	1.8	0.5	1.9	-3.5	-	-
Sep.	108.5	-0.9	-0.8	-0.1	-1.6	0.6	1.5	0.6	1.6	-2.7	-	-
Oct.	108.0	-1.3	-1.1	-0.3	-1.7	0.5	1.0	0.5	1.0	-3.5	-	-
Nov.	107.9	-1.2	-0.9	-0.3	-1.7	0.5	0.8	0.5	0.8	-3.2	-	-

3. Commodity prices and gross domestic product deflators

	Oil prices [3] (EUR per barrel)	Non-energy commodity prices						GDP deflators							
		Import-weighted [4]			Use-weighted [5]			Total (s.a.; index: 2005 = 100)	Total	Domestic demand				Exports [6]	Imports [6]
		Total	Food	Non-food	Total	Food	Non-food			Total	Private consumption	Government consumption	Gross fixed capital formation		
% of total		100.0	35.0	65.0	100.0	45.0	55.0								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2010	60.7	44.6	21.4	57.9	42.1	27.1	54.5	108.1	0.8	1.5	1.6	0.8	0.8	3.0	5.0
2011	79.7	12.2	22.4	7.7	12.8	20.7	7.5	109.4	1.2	2.0	2.4	0.8	1.5	3.6	5.8
2012	86.6	0.5	1.1	0.3	2.6	6.4	-0.3	110.8	1.3	1.6	2.1	1.1	1.1	1.6	2.3
2013	81.7	-8.2	-10.5	-7.0	-7.3	-7.3	-7.3	.	.	.	.	.	.	.	.
2012 Q4	84.4	4.4	6.0	3.7	7.0	10.2	4.5	111.3	1.4	1.5	1.8	0.5	0.9	1.4	1.6
2013 Q1	85.0	-3.0	-2.4	-3.3	-1.6	0.0	-2.8	111.9	1.5	1.3	1.3	1.6	0.4	0.2	-0.3
Q2	79.0	-5.2	-4.1	-5.8	-4.3	-2.1	-6.2	112.3	1.5	1.1	1.1	0.9	0.1	-0.1	-1.2
Q3	82.5	-12.7	-18.7	-9.4	-12.0	-14.4	-10.0	112.4	1.3	1.0	1.2	0.9	0.1	-0.8	-1.6
Q4	80.3	-11.8	-15.8	-9.7	-11.1	-11.8	-10.5	.	.	.	.	.	.	.	.
2013 July	81.9	-12.2	-16.7	-9.8	-11.8	-13.4	-10.3	-	-	-	-	-	-	-	-
Aug.	82.6	-12.9	-20.6	-8.7	-12.2	-15.9	-8.9	-	-	-	-	-	-	-	-
Sep.	83.0	-12.9	-18.8	-9.7	-12.1	-13.7	-10.7	-	-	-	-	-	-	-	-
Oct.	80.0	-12.2	-17.3	-9.6	-10.9	-12.0	-9.9	-	-	-	-	-	-	-	-
Nov.	80.0	-11.7	-16.5	-9.2	-11.3	-12.9	-9.9	-	-	-	-	-	-	-	-
Dec.	80.8	-11.4	-13.5	-10.4	-11.2	-10.6	-11.7	-	-	-	-	-	-	-	-

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).
3) Brent Blend (for one-month forward delivery).
4) Refers to prices expressed in euro. Weighted according to the structure of euro area imports in the period 2004-06.
5) Refers to prices expressed in euro. Weighted according to euro area domestic demand (domestic production plus imports minus exports) in the period 2004-06. Experimental data (see http://www.ecb.europa.eu/stats/intro/html/experiment.en.html for details).
6) Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.

5.1 HICP, other prices and costs
(annual percentage changes)

4. Unit labour costs, compensation per labour input and labour productivity
(quarterly data seasonally adjusted; annual data unadjusted)

	Total (index: 2005 = 100)	Total	By economic activity									
			Agriculture, forestry and fishing	Manufacturing, energy and utilities	Construction	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12
					Unit labour costs [1]							
2011	110.5	0.8	0.4	0.6	1.3	0.7	0.3	-0.4	0.8	3.1	0.2	1.5
2012	112.4	1.7	4.3	2.6	2.6	1.6	3.4	1.3	0.6	2.5	0.7	2.1
2012 Q4	113.3	1.8	5.8	2.7	3.3	2.2	5.4	-0.3	-0.7	2.6	-0.2	2.7
2013 Q1	113.9	1.8	2.6	2.7	0.4	2.3	3.7	-0.2	-1.0	2.0	0.9	2.2
Q2	113.8	1.2	2.0	2.1	0.0	1.8	3.3	1.1	-0.3	1.1	0.2	1.8
Q3	114.0	1.0	2.4	2.4	1.1	0.9	4.2	0.5	0.4	0.1	0.2	1.6
					Compensation per employee							
2011	114.3	2.1	2.9	3.4	3.6	1.6	2.9	1.5	2.4	3.0	1.0	1.7
2012	116.2	1.7	1.2	2.5	3.1	1.7	2.5	1.1	1.7	2.5	1.1	1.6
2012 Q4	116.9	1.5	1.1	2.6	3.0	1.4	2.3	1.4	1.1	2.1	0.2	1.2
2013 Q1	117.8	1.6	2.6	2.5	0.7	1.2	1.4	1.7	1.2	2.0	1.6	1.1
Q2	118.2	1.6	1.9	2.6	1.6	1.4	1.4	1.3	2.8	2.1	1.0	1.3
Q3	118.4	1.5	2.9	3.0	2.1	1.4	0.6	0.6	1.8	1.5	1.0	1.5
					Labour productivity per person employed [2]							
2011	103.4	1.3	2.5	2.8	2.2	0.9	2.6	2.0	1.5	-0.1	0.8	0.2
2012	103.3	0.0	-2.9	-0.1	0.5	0.1	-0.9	-0.2	1.1	0.0	0.4	-0.5
2012 Q4	103.2	-0.3	-4.4	0.0	-0.3	-0.7	-3.0	1.8	1.8	-0.4	0.4	-1.5
2013 Q1	103.5	-0.1	0.0	-0.2	0.3	-1.1	-2.2	1.9	2.3	0.1	0.6	-1.1
Q2	103.8	0.4	-0.1	0.4	1.6	-0.4	-1.9	0.2	3.1	1.1	0.8	-0.5
Q3	103.9	0.5	0.4	0.6	1.0	0.2	-3.1	0.1	1.3	1.4	0.8	-0.2
					Compensation per hour worked							
2011	116.0	2.0	2.0	2.6	4.1	1.8	2.7	1.2	1.7	2.7	0.9	1.7
2012	118.9	2.6	3.1	3.6	5.0	2.4	3.1	1.6	1.9	2.7	1.2	2.5
2012 Q4	119.9	2.2	3.2	3.8	4.3	2.3	2.6	2.3	1.7	2.5	0.0	2.3
2013 Q1	121.6	3.1	4.1	4.6	4.0	2.5	1.9	2.9	1.5	2.8	2.4	2.5
Q2	121.1	1.5	2.2	1.5	1.0	1.5	1.0	1.7	2.5	2.3	0.9	2.1
Q3	121.2	1.5	3.1	1.8	1.7	1.1	1.5	0.9	2.1	2.0	1.0	2.3
					Hourly labour productivity [2]							
2011	105.4	1.3	3.6	2.2	2.4	1.2	2.4	1.8	0.7	-0.3	0.6	0.3
2012	106.2	0.7	-2.0	1.0	2.0	0.8	-0.2	0.2	1.8	0.4	0.6	0.3
2012 Q4	106.6	0.5	-3.8	1.2	0.9	0.3	-2.3	2.7	2.9	0.2	0.3	-0.4
2013 Q1	107.4	1.2	0.0	1.8	3.1	-0.2	-1.6	3.0	2.9	1.2	1.4	0.6
Q2	106.9	0.3	-0.5	-0.5	0.8	-0.5	-2.1	0.2	2.8	1.3	0.7	0.2
Q3	107.0	0.5	0.5	-0.4	0.9	0.2	-2.3	0.1	1.6	2.0	0.9	0.7

5. Labour cost indices [3]

	Total (index: 2008 = 100)	Total	By component		For selected economic activities			Memo item: Indicator of negotiated wages [4]
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
% of total in 2008	100.0	100.0	75.2	24.8	32.4	9.0	58.6	
	1	2	3	4	5	6	7	8
2011	106.6	2.2	2.0	2.8	3.0	2.6	2.5	2.0
2012	108.6	1.9	2.0	1.7	2.4	2.3	2.1	2.2
2012 Q4	114.9	1.6	1.7	1.5	2.6	1.9	1.9	2.2
2013 Q1	102.6	1.9	2.1	1.6	3.2	1.5	1.6	1.9
Q2	114.0	1.1	1.4	0.3	1.9	0.8	1.1	1.7
Q3	107.1	1.0	1.3	0.4	1.6	-0.2	1.0	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).
1) Compensation (at current prices) per employee divided by labour productivity per person employed.
2) Total GDP and value added by economic activity (volumes) per labour input (persons employed and hours worked).
3) Hourly labour cost indices for the whole economy, excluding agriculture, forestry and fishing. Owing to differences in coverage, the estimates for the components may not be consistent with the total.
4) Experimental data (see http://www.ecb.europa.eu/stats/intro/html/experiment.en.html for further details).

5.2 Output and demand

(quarterly data seasonally adjusted; annual data unadjusted)

1. GDP and expenditure components

	GDP								
	Total	Domestic demand					External balance [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	8,921.5	8,804.3	5,135.4	1,988.5	1,731.1	-50.8	117.2	3,288.8	3,171.6
2010	9,167.6	9,046.5	5,271.3	2,016.4	1,737.8	20.9	121.1	3,784.3	3,663.2
2011	9,424.1	9,294.3	5,414.7	2,029.6	1,792.5	57.5	129.8	4,174.9	4,045.1
2012	9,483.5	9,235.8	5,449.5	2,040.3	1,738.8	7.2	247.8	4,348.2	4,100.4
2012 Q3	2,374.8	2,306.6	1,361.8	510.8	433.5	0.5	68.1	1,098.0	1,029.9
Q4	2,370.0	2,297.8	1,361.7	510.0	429.1	-3.1	72.2	1,092.3	1,020.1
2013 Q1	2,377.8	2,301.9	1,364.1	515.9	420.0	1.9	75.9	1,079.3	1,003.4
Q2	2,393.0	2,305.2	1,367.7	516.2	420.4	0.9	87.8	1,098.8	1,011.0
Q3	2,397.1	2,316.9	1,372.8	518.1	423.0	2.9	80.3	1,098.0	1,017.7
	percentage of GDP								
2012	100.0	97.4	57.5	21.5	18.3	0.1	2.6	-	-
	Chain-linked volumes (prices for the previous year)								
	quarter-on-quarter percentage changes								
2012 Q3	-0.1	-0.4	-0.1	-0.2	-0.6	-	-	0.7	0.3
Q4	-0.5	-0.7	-0.5	0.0	-1.2	-	-	-0.5	-0.9
2013 Q1	-0.2	-0.3	-0.1	0.3	-1.9	-	-	-1.0	-1.2
Q2	0.3	0.0	0.1	0.0	0.2	-	-	2.1	1.6
Q3	0.1	0.4	0.1	0.2	0.4	-	-	0.2	1.0
	annual percentage changes								
2009	-4.4	-3.7	-1.0	2.6	-12.8	-	-	-12.4	-10.9
2010	2.0	1.2	1.0	0.6	-0.4	-	-	11.6	10.0
2011	1.6	0.7	0.3	-0.1	1.6	-	-	6.5	4.5
2012	-0.7	-2.2	-1.4	-0.5	-4.1	-	-	2.5	-1.0
2012 Q3	-0.7	-2.5	-1.6	-0.6	-4.2	-	-	2.8	-1.1
Q4	-1.0	-2.3	-1.5	-0.7	-4.8	-	-	1.9	-0.8
2013 Q1	-1.2	-2.1	-1.2	-0.1	-5.6	-	-	0.1	-2.0
Q2	-0.6	-1.3	-0.6	0.2	-3.5	-	-	1.3	-0.3
Q3	-0.4	-0.5	-0.4	0.6	-2.5	-	-	0.8	0.5
	contributions to quarter-on-quarter percentage changes in GDP; percentage points								
2012 Q3	-0.1	-0.3	-0.1	0.0	-0.1	-0.1	0.2	-	-
Q4	-0.5	-0.7	-0.3	0.0	-0.2	-0.2	0.1	-	-
2013 Q1	-0.2	-0.3	-0.1	0.1	-0.4	0.1	0.1	-	-
Q2	0.3	0.0	0.1	0.0	0.0	-0.1	0.3	-	-
Q3	0.1	0.4	0.0	0.0	0.1	0.3	-0.3	-	-
	contributions to annual percentage changes in GDP; percentage points								
2009	-4.4	-3.7	-0.5	0.5	-2.7	-1.0	-0.7	-	-
2010	2.0	1.2	0.6	0.1	-0.1	0.6	0.7	-	-
2011	1.6	0.7	0.2	0.0	0.3	0.3	0.9	-	-
2012	-0.7	-2.2	-0.8	-0.1	-0.8	-0.5	1.5	-	-
2012 Q3	-0.7	-2.4	-0.9	-0.1	-0.8	-0.6	1.7	-	-
Q4	-1.0	-2.2	-0.8	-0.2	-0.9	-0.3	1.2	-	-
2013 Q1	-1.2	-2.1	-0.7	0.0	-1.0	-0.3	0.9	-	-
Q2	-0.6	-1.3	-0.3	0.0	-0.6	-0.4	0.7	-	-
Q3	-0.4	-0.5	-0.2	0.1	-0.5	0.0	0.2	-	-

Sources: Eurostat and ECB calculations.

1) 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.
2) Including acquisitions less disposals of valuables.

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

2. Value added by economic activity

	Total	Agriculture, forestry and fishing	Manufacturing, energy and utilities	Construction	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services	Taxes less subsidies on products
					Gross value added (basic prices)							
	1	2	3	4	5	6	7	8	9	10	11	12
					Current prices (EUR billions)							
2009	8,028.1	124.0	1,464.6	530.2	1,532.5	369.9	421.2	902.8	806.2	1,581.8	294.8	893.3
2010	8,226.0	136.3	1,578.8	498.3	1,547.7	370.1	438.2	917.6	826.3	1,612.6	300.2	941.6
2011	8,451.6	141.1	1,639.8	501.0	1,589.1	373.7	439.5	963.9	858.4	1,637.5	307.6	972.5
2012	8,506.2	143.4	1,639.9	490.5	1,601.3	369.1	433.2	980.4	876.3	1,658.9	313.2	977.3
2012 Q3	2,130.3	35.9	412.3	122.2	400.5	92.3	107.2	245.6	219.9	415.8	78.6	244.5
Q4	2,126.9	36.5	409.1	120.9	401.7	91.1	107.5	247.5	220.0	413.8	78.9	243.1
2013 Q1	2,133.8	35.7	409.7	119.8	401.4	90.0	109.1	248.2	220.7	420.2	79.1	244.0
Q2	2,144.2	35.9	412.9	119.2	403.6	89.5	109.9	249.9	223.3	420.6	79.4	248.8
Q3	2,150.4	34.9	413.2	119.6	406.4	88.8	109.3	252.1	224.4	421.4	80.4	246.7
					percentage of value added							
2012	100.0	1.7	19.3	5.8	18.8	4.3	5.1	11.5	10.3	19.5	3.7	-
					Chain-linked volumes (prices for the previous year)							
					quarter-on-quarter percentage changes							
2012 Q3	-0.1	-1.4	0.0	-1.1	-0.6	0.1	0.0	0.3	0.3	0.0	0.1	-0.3
Q4	-0.5	0.0	-1.6	-1.7	-0.9	-1.1	1.0	0.4	-0.3	0.4	0.2	-1.0
2013 Q1	-0.2	0.3	0.0	-1.3	-0.4	-0.6	-0.9	-0.1	0.6	-0.1	-0.4	-0.3
Q2	0.3	-0.3	0.5	-0.4	0.5	-0.1	-0.9	0.4	0.9	0.2	-0.1	0.5
Q3	0.1	-0.3	0.0	0.0	0.2	-0.8	0.5	0.2	0.2	0.2	0.1	-0.1
					annual percentage changes							
2009	-4.5	1.2	-12.9	-8.0	-5.1	2.8	0.4	0.4	-7.9	1.5	-0.6	-4.2
2010	2.0	-3.0	9.5	-5.7	0.7	1.8	0.2	-0.2	2.3	1.3	0.4	1.4
2011	1.8	0.4	3.0	-1.6	1.7	3.9	1.5	2.1	2.4	1.1	0.3	0.1
2012	-0.5	-4.8	-1.1	-4.2	-0.8	0.3	-0.6	0.6	0.7	0.1	0.1	-1.9
2012 Q3	-0.6	-6.3	-0.8	-3.8	-1.1	0.2	-0.7	0.5	0.8	-0.2	0.1	-1.8
Q4	-0.9	-6.4	-1.4	-5.3	-1.7	-1.4	0.9	0.7	0.0	0.2	-0.2	-2.0
2013 Q1	-1.0	-3.0	-1.7	-5.3	-2.3	-1.7	0.8	0.7	0.3	0.4	-0.6	-2.6
Q2	-0.5	-1.5	-1.0	-4.5	-1.4	-1.7	-0.8	1.0	1.5	0.5	-0.2	-1.0
Q3	-0.3	-0.4	-1.1	-3.5	-0.6	-2.6	-0.3	0.9	1.4	0.6	-0.2	-0.8
					contributions to quarter-on-quarter percentage changes in value added; percentage points							
2012 Q3	-0.1	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-
Q4	-0.5	0.0	-0.3	-0.1	-0.2	0.0	0.1	0.0	0.0	0.1	0.0	-
2013 Q1	-0.2	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	-
Q2	0.3	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	-
Q3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
					contributions to annual percentage changes in value added; percentage points							
2009	-4.5	0.0	-2.6	-0.5	-1.0	0.1	0.0	0.0	-0.8	0.3	0.0	-
2010	2.0	0.0	1.7	-0.4	0.1	0.1	0.0	0.0	0.2	0.3	0.0	-
2011	1.8	0.0	0.6	-0.1	0.3	0.2	0.1	0.2	0.2	0.2	0.0	-
2012	-0.5	-0.1	-0.2	-0.3	-0.1	0.0	0.0	0.1	0.1	0.0	0.0	-
2012 Q3	-0.6	-0.1	-0.2	-0.2	-0.2	0.0	0.0	0.1	0.1	0.0	0.0	-
Q4	-0.9	-0.1	-0.3	-0.3	-0.3	-0.1	0.0	0.1	0.0	0.0	0.0	-
2013 Q1	-1.0	-0.1	-0.3	-0.3	-0.4	-0.1	0.0	0.1	0.0	0.1	0.0	-
Q2	-0.5	0.0	-0.2	-0.3	-0.3	-0.1	0.0	0.1	0.2	0.1	0.0	-
Q3	-0.3	0.0	-0.2	-0.2	-0.1	-0.1	0.0	0.1	0.1	0.1	0.0	-

Sources: Eurostat and ECB calculations.

3. Industrial production

	Total	Industry excluding construction										Construction
		Total (s.a.; index: 2010 = 100)	Total		Industry excluding construction and energy						Energy	
				Manu-facturing	Total	Intermediate goods	Capital goods	Consumer goods				
								Total	Durable	Non-durable		
% of total in 2010	100.0	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	4.1	100.0	7.3	7.7	7.7	10.0	9.0	2.8	2.7	2.9	3.9	-7.6
2011	2.2	103.5	3.4	4.7	4.8	4.1	8.4	1.0	0.7	1.0	-4.4	-2.4
2012	-3.1	100.9	-2.5	-2.7	-2.8	-4.6	-1.2	-2.4	-4.9	-2.1	-0.4	-5.4
2012 Q4	-3.5	99.3	-3.3	-3.6	-3.8	-5.2	-3.3	-2.1	-5.5	-1.6	-0.5	-4.3
2013 Q1	-2.8	99.6	-2.2	-2.6	-2.9	-3.6	-3.4	-0.8	-4.7	-0.3	-0.1	-5.9
Q2	-1.5	100.3	-1.0	-0.9	-1.0	-2.0	-0.1	-0.7	-3.9	-0.2	-1.1	-3.7
Q3	-1.1	100.2	-1.1	-1.1	-1.0	-0.8	-1.3	-0.8	-3.8	-0.5	-1.8	-1.1
2013 June	-0.7	100.6	-0.2	0.0	0.0	-1.0	1.4	-0.5	-1.7	-0.5	-1.9	-1.9
July	-1.8	99.6	-2.0	-2.2	-2.1	-1.5	-3.3	-1.3	-4.4	-0.8	-1.6	-1.6
Aug.	-1.2	100.5	-1.5	-1.5	-1.1	-0.8	-0.8	-2.2	-4.2	-2.0	-3.3	-0.9
Sep.	-0.1	100.3	0.2	0.2	0.2	-0.1	0.3	0.8	-3.0	1.3	-0.6	-0.7
Oct.	-0.1	99.2	0.2	0.6	0.5	1.6	1.2	-1.1	-5.4	-0.6	-3.4	-2.4
				month-on-month percentage changes (s.a.)								
2013 June	0.8	-	0.7	1.0	1.1	0.5	2.2	0.3	3.7	-0.4	-1.1	1.6
July	-0.6	-	-1.0	-1.1	-1.1	-0.4	-1.9	-0.8	-1.5	-0.4	-0.5	0.6
Aug.	1.0	-	0.9	1.0	1.6	0.7	1.9	0.5	-0.5	0.4	-0.8	0.2
Sep.	-0.6	-	-0.2	-0.3	-1.0	-0.4	-0.7	0.3	-1.5	0.3	1.5	-0.5
Oct.	-0.8	-	-1.1	-0.7	-0.7	0.4	-1.3	-1.4	-2.4	-0.9	-4.0	-1.2

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

	Indicator on industrial new orders [1]		Industrial turnover		Retail sales (including automotive fuel)								New passenger car registrations	
	Manufacturing		Manufacturing (current prices)		Current prices	Constant 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	Non-food			Fuel	Total (s.a.; thousands) [2]	Total
									Total	Textiles, clothing, footwear	Household equipment			
% of total in 2010	100.0	100.0	100.0	100.0	100.0	100.0	100.0	40.1	51.1	9.4	11.9	8.8		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2010	100.0	17.7	100.0	10.1	2.1	100.0	0.5	0.4	1.3	2.2	0.2	-3.0	843	-8.5
2011	108.6	8.6	109.2	9.1	1.7	99.7	-0.3	-1.0	0.5	1.4	-0.2	-3.3	838	-1.1
2012	104.3	-3.9	108.7	-0.5	0.4	97.9	-1.8	-1.2	-1.7	-4.1	-2.6	-5.2	744	-11.0
2012 Q4	103.0	-2.5	107.3	-1.7	-0.9	96.8	-2.6	-2.0	-2.8	-4.6	-4.3	-5.9	709	-14.1
2013 Q1	102.5	-2.6	106.9	-2.7	-1.3	97.0	-2.0	-1.6	-2.2	-3.5	-4.6	-3.7	687	-11.3
Q2	103.2	-1.5	106.7	-2.0	-0.3	97.2	-0.8	-1.7	0.0	2.2	-3.0	-0.8	709	-7.2
Q3	105.2	0.9	107.2	-1.6	-0.1	97.6	-0.3	-0.6	0.0	1.8	-2.7	-0.1	706	-2.0
2013 July	103.7	-0.7	106.4	-1.9	0.1	97.5	-0.7	0.1	-1.0	1.2	-3.7	-1.3	703	-0.1
Aug.	105.3	0.2	108.2	-1.9	0.0	98.0	-0.2	-0.6	0.1	3.5	-2.9	-0.4	708	-4.1
Sep.	106.5	3.2	106.9	-1.0	-0.2	97.4	0.0	-1.3	1.0	1.0	-1.4	1.5	706	-2.5
Oct.	104.2	0.6	106.6	-1.2	-0.6	97.0	-0.3	-0.3	-0.7	0.5	-1.7	0.6	723	4.2
Nov.	.	.	.	.	1.4	98.3	1.6	1.4	2.4	.	.	0.2	732	4.8
				month-on-month percentage changes (s.a.)										
2013 July	-	-0.4	-	-0.4	0.5	-	0.5	1.1	0.4	0.0	0.3	-0.1	-	-1.3
Aug.	-	1.5	-	1.6	0.4	-	0.5	-0.2	0.5	1.1	0.2	-0.3	-	0.7
Sep.	-	1.1	-	-1.2	-0.7	-	-0.6	-1.0	0.0	-1.1	0.4	-0.3	-	-0.2
Oct.	-	-2.2	-	-0.3	-0.4	-	-0.4	0.5	-1.0	-1.6	-1.4	-0.6	-	2.4
Nov.	-	.	-	.	1.3	-	1.4	1.1	1.9	.	.	0.1	-	1.3

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

5.2 Output and demand
(percentage balances,[1] unless otherwise indicated; seasonally adjusted)

5. Business and Consumer Surveys

	Economic sentiment indicator[2] (long-term average = 100)	Manufacturing industry					Consumer confidence indicator				
		Industrial confidence indicator				Capacity utilisation[3] (%)	Total[4]	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total[4]	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
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
2013	.	.	.	.	.	-18.8	.	.	.	.	.
2012 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	-8.3	-24.9	4.5	4.4	78.4	-16.0	-8.0	-16.8	29.8	-9.3
Q4	.	.	.	.	.	.	-14.5	.	.	.	.
2013 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	-6.6	-23.2	3.7	7.0	-	-14.9	-7.2	-13.6	28.6	-10.3
Oct.	97.7	-5.0	-21.2	3.3	9.4	78.4	-14.5	-7.2	-11.7	29.3	-9.6
Nov.	98.5	-3.9	-17.9	3.5	9.8	-	-15.4	-6.1	-13.5	31.4	-10.6
Dec.	.	.	.	.	.	-	-13.6	.	.	.	.

| | Construction confidence indicator | | | Retail trade confidence indicator | | | | Services confidence indicator | | | |
| | Total[4] | Order books | Employment expectations | Total[4] | 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
Q4	-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	-40.1	-22.9	-10.5	-16.7	8.6	-6.1	-5.4	-8.2	-8.7	0.8
2013 June	-31.5	-38.0	-25.1	-14.6	-21.9	10.2	-11.6	-9.6	-14.7	-12.5	-1.5
July	-32.6	-41.3	-23.8	-14.0	-21.1	10.3	-10.4	-7.8	-11.6	-10.4	-1.3
Aug.	-33.2	-41.9	-24.6	-10.6	-17.8	8.3	-5.6	-5.2	-7.6	-8.4	0.5
Sep.	-28.8	-37.2	-20.3	-6.9	-11.3	7.1	-2.3	-3.2	-5.5	-7.3	3.1
Oct.	-29.7	-39.5	-20.0	-7.8	-11.4	5.5	-6.5	-3.7	-6.7	-7.0	2.6
Nov.	-30.6	-39.8	-21.4	-7.7	-11.2	7.7	-4.1	-0.8	-4.0	-2.7	4.5

Source: European Commission (Economic and Financial Affairs DG).
1) Difference between the percentages of respondents giving positive and negative replies.
2) The economic sentiment indicator is composed of the industrial, services, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator a weight of 30%, the consumer confidence indicator a weight of 20% and the two other indicators a weight of 5% each. Values for the economic sentiment indicator of above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period since 1990.
3) Data are collected in January, April, July and October each year. The quarterly figures shown are averages of two successive surveys. Annual data are derived from quarterly averages.
4) The confidence indicators are calculated as simple averages of the components shown; the assessments of stocks (columns 4 and 17) and unemployment (column 10) are used with inverted signs for the calculation of confidence indicators.

1. Employment

	By employment status			By economic activity									
	Total	Employees	Self-employed	Agriculture, forestry and fishing	Manufacturing, energy and utilities	Construction	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12	13

Persons employed

levels (thousands)

2012	146,198	124,956	21,242	4,975	22,961	9,484	35,933	4,044	4,059	1,282	18,260	34,387	10,812

percentage of total persons employed

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

annual percentage changes

2010	-0.5	-0.5	-0.4	-1.0	-2.9	-3.9	-0.5	-1.7	-1.0	0.1	2.0	1.0	0.6
2011	0.3	0.3	-0.2	-2.0	0.1	-3.8	0.7	1.2	-0.4	0.6	2.5	0.3	0.1
2012	-0.7	-0.8	-0.1	-1.9	-1.0	-4.7	-0.8	1.2	-0.4	-0.4	0.7	-0.3	0.7
2012 Q4	-0.7	-0.9	-0.1	-2.1	-1.4	-5.0	-1.0	1.6	-0.9	-1.1	0.5	-0.2	1.3
2013 Q1	-1.0	-1.0	-1.1	-2.9	-1.6	-5.6	-1.2	0.5	-1.1	-1.6	0.2	-0.2	0.5
Q2	-1.0	-1.0	-0.6	-1.4	-1.5	-6.1	-1.0	0.2	-1.0	-2.1	0.4	-0.3	0.3
Q3	-0.8	-0.9	-0.5	-0.8	-1.6	-4.5	-0.8	0.5	-0.4	-0.4	0.0	-0.2	-0.1

quarter-on-quarter percentage changes

2012 Q4	-0.3	-0.4	0.0	-0.8	-0.5	-1.6	-0.4	0.8	-0.1	-0.6	-0.3	0.1	-0.1
2013 Q1	-0.4	-0.5	-0.4	-1.5	-0.4	-1.6	-0.4	-0.2	-0.1	-0.7	-0.6	-0.2	0.0
Q2	0.0	-0.1	0.1	1.8	-0.4	-1.0	0.0	0.1	-0.1	0.5	0.5	-0.2	-0.1
Q3	0.0	0.0	-0.2	-0.3	-0.3	-0.3	0.0	-0.1	-0.1	0.4	0.4	0.1	0.1

Hours worked

levels (millions)

2012	229,673	184,775	44,897	9,933	36,043	16,503	59,738	6,484	6,394	1,970	28,440	48,981	15,184

percentage of total hours worked

2012	100.0	80.5	19.5	4.3	15.7	7.2	26.0	2.8	2.8	0.9	12.4	21.3	6.6

annual percentage changes

2010	0.0	0.1	-0.4	-1.2	-0.4	-4.0	-0.3	-0.9	-0.5	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	1.4	2.7	0.5	0.1
2012	-1.4	-1.4	-1.3	-2.8	-2.1	-6.1	-1.6	0.5	-0.8	-1.2	0.4	-0.5	-0.1
2012 Q4	-1.6	-1.5	-1.7	-2.7	-2.6	-6.2	-2.0	0.9	-1.7	-2.2	-0.2	-0.1	0.2
2013 Q1	-2.3	-2.4	-2.1	-2.9	-3.5	-8.1	-2.1	-0.2	-2.2	-2.2	-0.9	-1.0	-1.2
Q2	-0.8	-0.9	-0.4	-1.0	-0.6	-5.3	-0.9	0.4	-1.0	-1.7	0.2	-0.2	-0.4
Q3	-0.9	-0.8	-1.0	-0.9	-0.6	-4.3	-0.9	-0.2	-0.4	-0.6	-0.6	-0.3	-0.9

quarter-on-quarter percentage changes

2012 Q4	-0.7	-0.6	-1.1	-0.8	-0.7	-1.9	-1.0	0.0	-0.7	-1.2	-0.8	0.2	-0.8
2013 Q1	-1.0	-1.0	-0.7	-0.4	-1.2	-2.4	-0.8	-0.1	-0.2	-0.2	-1.0	-0.9	-0.5
Q2	0.7	0.7	0.8	0.8	1.4	0.6	0.8	0.3	0.4	1.0	0.8	0.4	-0.1
Q3	0.1	0.1	0.0	-0.5	-0.1	-0.6	0.3	-0.4	0.1	-0.3	0.4	0.1	0.4

Hours worked per person employed

levels (thousands)

2012	1,571	1,479	2,114	1,997	1,570	1,740	1,662	1,603	1,575	1,538	1,558	1,424	1,404

annual percentage changes

2010	0.5	0.6	0.0	-0.3	2.5	-0.1	0.2	0.8	0.5	1.1	0.8	0.0	-0.3
2011	0.0	0.2	-0.5	-1.1	0.7	-0.1	-0.2	0.2	0.1	0.8	0.2	0.2	0.0
2012	-0.8	-0.7	-1.2	-1.0	-1.1	-1.5	-0.8	-0.7	-0.4	-0.8	-0.3	-0.2	-0.8
2012 Q4	-0.8	-0.7	-1.6	-0.7	-1.2	-1.2	-1.0	-0.7	-0.9	-1.1	-0.6	0.1	-1.1
2013 Q1	-1.3	-1.4	-1.0	0.0	-2.0	-2.7	-0.9	-0.6	-1.1	-0.6	-1.1	-0.8	-1.7
Q2	0.1	0.1	0.2	0.4	0.9	0.8	0.1	0.2	0.0	0.3	-0.2	0.1	-0.7
Q3	-0.1	0.0	-0.5	-0.1	1.0	0.1	-0.1	-0.8	0.0	-0.2	-0.6	-0.1	-0.8

quarter-on-quarter percentage changes

2012 Q4	-0.4	-0.2	-1.1	0.1	-0.2	-0.3	-0.7	-0.8	-0.6	-0.6	-0.5	0.1	-0.7
2013 Q1	-0.5	-0.6	-0.3	1.1	-0.8	-0.8	-0.4	0.1	-0.2	0.5	-0.4	-0.8	-0.5
Q2	0.7	0.7	0.7	-1.0	1.8	1.6	0.8	0.2	0.5	0.5	0.3	0.6	0.0
Q3	0.1	0.1	0.2	-0.2	0.3	-0.3	0.2	-0.3	0.2	-0.7	0.0	0.0	0.4

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

5.3 Labour markets
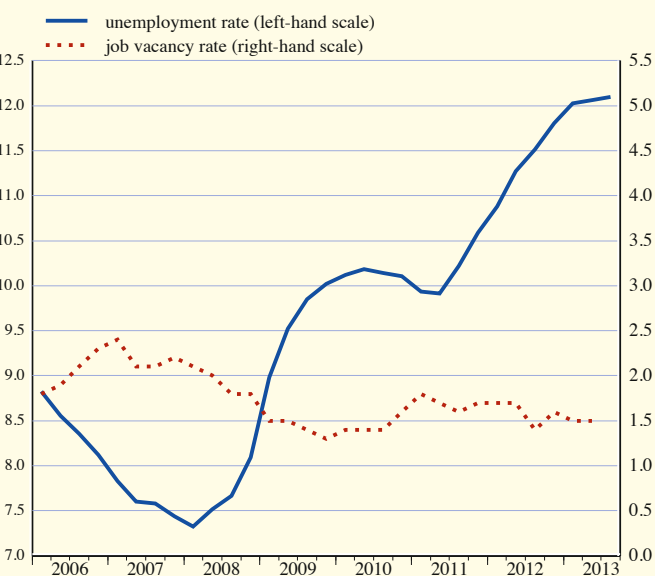(seasonally adjusted, unless otherwise indicated)

2. Unemployment and job vacancies [1]

	Unemployment										Job vacancy rate [2]
	Total		By age [3]				By gender [4]				
	Millions	% of labour force	Adult		Youth		Male		Female		% of total posts
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	
% of total in 2010	100.0		79.5		20.5		54.0		46.0		
	1	2	3	4	5	6	7	8	9	10	11
2009	15.052	9.6	11.767	8.4	3.286	20.3	8.145	9.4	6.907	9.8	1.4
2010	15.934	10.1	12.657	8.9	3.277	20.9	8.603	10.0	7.331	10.3	1.5
2011	16.030	10.2	12.826	9.0	3.205	20.9	8.540	9.9	7.490	10.5	1.7
2012	18.060	11.4	14.578	10.1	3.481	23.1	9.693	11.2	8.367	11.6	1.6
2012 Q3	18.318	11.5	14.791	10.3	3.526	23.5	9.833	11.4	8.484	11.7	1.4
Q4	18.774	11.8	15.204	10.6	3.570	23.8	10.060	11.6	8.714	12.0	1.6
2013 Q1	19.107	12.0	15.532	10.8	3.574	24.0	10.262	11.9	8.845	12.2	1.5
Q2	19.186	12.1	15.656	10.9	3.530	23.9	10.303	11.9	8.883	12.2	1.5
Q3	19.253	12.1	15.728	10.9	3.525	24.0	10.402	12.1	8.850	12.2	.
2013 June	19.187	12.1	15.665	10.9	3.522	23.9	10.331	12.0	8.855	12.2	-
July	19.205	12.1	15.694	10.9	3.511	23.9	10.370	12.0	8.835	12.1	-
Aug.	19.252	12.1	15.738	10.9	3.514	23.9	10.409	12.1	8.843	12.1	-
Sep.	19.301	12.1	15.752	10.9	3.549	24.1	10.427	12.1	8.873	12.2	-
Oct.	19.237	12.1	15.668	10.9	3.569	24.2	10.399	12.1	8.838	12.1	-
Nov.	19.241	12.1	15.666	10.9	3.575	24.2	10.429	12.1	8.812	12.1	-

C28 Employment - persons employed and hours worked
(annual percentage changes)

- employment in terms of persons employed
- employment in terms of hours worked
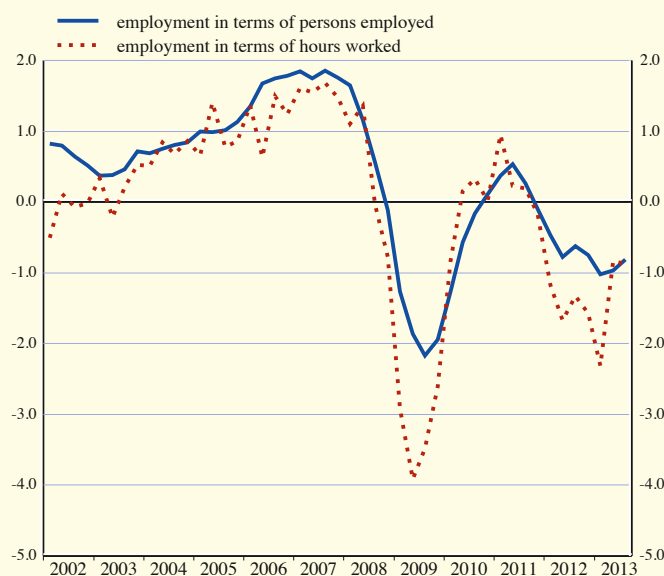
C29 Unemployment and job vacancy [2] rates

- unemployment rate (left-hand scale)
- job vacancy rate (right-hand scale)

Source: Eurostat.
1) Data for unemployment refer to persons and follow ILO recommendations.
2) Industry, construction and services (excluding households as employers and extra-territorial organisations and bodies); non-seasonally adjusted.
3) Adult: 25 years of age and over; youth: below 25 years of age; rates are expressed as a percentage of the labour force for the relevant age group.
4) Rates are expressed as a percentage of the labour force for the relevant gender.

6.1 Revenue, expenditure and deficit/surplus [1]
(as a percentage of GDP)

1. Euro area − revenue

	Total		Current revenue									Capital revenue		Memo item:
			Direct taxes	Households	Corporations	Indirect taxes	Received by EU institutions	Social contributions	Employers	Employees	Sales		Capital taxes	Fiscal burden [2]
	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	40.8
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	44.6	11.6	8.9	2.5	13.0	0.3	15.7	8.2	4.5	2.6	0.3	0.3	40.5
2011	45.4	45.0	11.9	9.1	2.7	13.0	0.3	15.7	8.2	4.5	2.6	0.3	0.3	40.9
2012	46.2	46.0	12.4	9.6	2.7	13.3	0.3	15.9	8.3	4.7	2.6	0.2	0.3	41.8

2. Euro area − expenditure

	Total		Current expenditure								Capital expenditure				Memo item:
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments	Subsidies	Paid by EU institutions	Investment	Capital transfers	Paid by EU institutions			Primary expenditure [3]
	1	2	3	4	5	6	7	8	9	10	11	12	13		14
2004	47.4	43.5	10.5	5.0	3.1	24.9	22.1	1.7	0.5	3.9	2.5	1.5	0.1		44.3
2005	47.3	43.4	10.5	5.0	3.0	24.9	22.1	1.7	0.5	3.9	2.5	1.4	0.0		44.3
2006	46.7	42.8	10.3	5.0	2.9	24.6	21.8	1.7	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		43.0
2008	47.2	43.3	10.3	5.2	3.0	24.8	21.9	1.6	0.4	3.9	2.6	1.3	0.0		44.2
2009	51.3	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	27.3	24.2	1.8	0.4	4.4	2.6	1.9	0.0		48.2
2011	49.5	46.0	10.6	5.5	3.0	26.8	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		46.8

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

	Deficit (-)/surplus (+)					Primary deficit (-)/surplus (+)	Government consumption [4]						Collective consumption	Individual consumption
	Total	Central gov.	State gov.	Local gov.	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	13.8
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 (+) [5]

	BE	DE	EE	IE	GR	ES	FR	IT	CY	LV	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2009	-5.6	-3.1	-2.0	-13.7	-15.7	-11.1	-7.5	-5.5	-6.1	-9.8	-0.7	-3.7	-5.6	-4.1	-10.2	-6.3	-8.0	-2.5
2010	-3.7	-4.2	0.2	-30.6	-10.7	-9.6	-7.1	-4.5	-5.3	-8.1	-0.8	-3.5	-5.1	-4.5	-9.8	-5.9	-7.7	-2.5
2011	-3.7	-0.8	1.1	-13.1	-9.5	-9.5	-5.3	-3.8	-6.3	-3.6	0.1	-2.8	-4.3	-2.5	-4.3	-6.3	-5.1	-0.7
2012	-4.0	0.1	-0.2	-8.2	-9.0	-10.6	-4.8	-3.0	-6.4	-1.3	-0.6	-3.3	-4.1	-2.5	-6.4	-3.8	-4.5	-1.8

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit/surplus.
1) The concepts "revenue", "expenditure" and "deficit/surplus" are based on the ESA 95. Transactions involving the EU budget are included and consolidated. Transactions among Member States' governments are not consolidated.
2) The fiscal burden comprises taxes and social contributions.
3) Comprises total expenditure minus interest expenditure.
4) Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
5) Includes settlements under swaps and forward rate agreements.

6.2 Debt [1]
(as a percentage of GDP)

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

	Total	Financial instruments				Holders				Other creditors [3]
		Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors [2]				
						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	60.3	40.5	24.4	10.6	5.6	44.9
2011	87.3	2.4	15.4	7.4	62.1	42.7	24.5	11.4	6.8	44.6
2012	90.6	2.6	17.3	6.8	64.0	45.6	26.5	12.6	6.5	45.1

2. Euro area − by issuer, maturity and currency denomination

	Total	Issued by: [4]				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currencies	Other currencies
	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	62.0	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	68.0	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	69.2	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	69.3	8.4	5.9	1.9	13.0	72.4	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	6.1	20.8	30.4	36.1	85.6	1.7
2012	90.6	73.6	8.8	6.0	2.3	11.7	78.9	7.3	20.0	32.2	38.4	88.7	2.0

3. Euro area countries

	BE	DE	EE	IE	GR	ES	FR	IT	CY	LV	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2009	95.7	74.5	7.1	64.4	129.7	54.0	79.2	116.4	58.5	36.9	15.5	66.5	60.8	69.2	83.7	35.2	35.6	43.5
2010	95.7	82.5	6.7	91.2	148.3	61.7	82.4	119.3	61.3	44.4	19.5	66.8	63.4	72.3	94.0	38.7	41.0	48.7
2011	98.0	80.0	6.1	104.1	170.3	70.5	85.8	120.7	71.5	41.9	18.7	69.5	65.7	72.8	108.2	47.1	43.4	49.2
2012	99.8	81.0	9.8	117.4	156.9	86.0	90.2	127.0	86.6	40.6	21.7	71.3	71.3	74.0	124.1	54.4	52.4	53.6

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' debt.
1) Gross general government debt at nominal value and consolidated between sub-sectors of government. Holdings by non-resident governments are not consolidated. Intergovernmental lending in the context of the financial crisis is consolidated. Data are partially estimated.
2) Holders resident in the country whose government has issued the debt.
3) Includes residents of euro area countries other than the country whose government has issued the debt.
4) Excludes debt held by general government in the country whose government has issued it.

6.3 Change in debt [1]
(as a percentage of GDP)

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

	Total	Source of change			Financial instruments				Holders			
		Borrowing requirement [2]	Valuation effects [3]	Other changes in volume [4]	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors [5]	MFIs	Other financial corporations	Other creditors [6]
	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	3.6	1.6	3.4
2011	4.2	4.0	0.1	0.0	0.0	0.4	0.2	3.5	3.3	0.8	1.1	0.9
2012	3.9	5.3	-1.4	0.0	0.2	2.0	-0.5	2.2	3.1	2.1	1.2	0.7

2. Euro area − deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+)	Deficit-debt adjustment [7]											Other [8]
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Loans	Securities [9]	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2004	3.2	-2.9	0.3	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	0.0	0.0	0.1
2005	3.3	-2.5	0.8	0.6	0.3	0.0	0.1	0.1	-0.3	0.2	0.2	0.0	0.0	0.0
2006	1.6	-1.4	0.2	0.2	0.3	-0.1	0.2	-0.2	-0.4	0.1	0.1	0.0	0.0	-0.1
2007	1.2	-0.7	0.5	0.6	0.2	0.0	0.2	0.1	-0.3	0.2	0.0	0.0	0.0	-0.1
2008	5.3	-2.1	3.2	3.1	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	3.9	-3.7	0.2	1.3	0.2	0.5	0.0	0.6	-0.2	0.3	-1.4	0.0	0.0	0.3

Source: ECB.
1) Data are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e. [debt(t) - debt(t-1)] ÷ GDP(t).
    Intergovernmental lending in the context of the financial crisis is consolidated.
2) The borrowing requirement is by definition equal to transactions in debt.
3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
4) Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.
5) Holders resident in the country whose government has issued the debt.
6) Includes residents of euro area countries other than the country whose government has issued the debt.
7) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
8) Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).
9) Excluding financial derivatives.

6.4 Quarterly revenue, expenditure and deficit/surplus [1]
(as a percentage of GDP)

1. Euro area − quarterly revenue

| | Total | | Current revenue | | | | | Capital revenue | | Memo item: Fiscal burden [2] |
| | | | Direct taxes | Indirect taxes | Social contributions | Sales | Property income | | Capital taxes | |
	1	2	3	4	5	6	7	8	9	10
2007 Q2	45.8	45.3	13.1	12.9	15.0	2.2	1.4	0.4	0.3	41.2
Q3	43.7	43.2	12.3	12.4	14.8	2.2	0.7	0.5	0.3	39.7
Q4	49.2	48.6	14.7	13.8	15.7	2.5	1.0	0.6	0.3	44.5
2008 Q1	42.4	42.1	10.9	12.3	14.8	2.2	1.1	0.3	0.2	38.3
Q2	45.3	44.9	12.9	12.3	15.1	2.3	1.5	0.4	0.3	40.6
Q3	43.4	43.0	12.1	12.1	15.0	2.3	0.8	0.4	0.3	39.5
Q4	48.7	48.2	13.9	13.4	16.4	2.6	1.1	0.5	0.3	43.8
2009 Q1	42.5	42.4	10.5	12.0	15.6	2.4	1.1	0.1	0.2	38.3
Q2	45.3	44.8	11.9	12.5	15.7	2.5	1.4	0.6	0.5	40.5
Q3	42.9	42.5	10.9	12.0	15.5	2.5	0.7	0.3	0.3	38.8
Q4	48.6	47.8	12.9	13.6	16.4	2.7	1.0	0.8	0.5	43.5
2010 Q1	42.5	42.3	10.2	12.3	15.5	2.4	0.9	0.2	0.3	38.3
Q2	45.2	44.8	11.9	12.7	15.4	2.6	1.3	0.5	0.3	40.3
Q3	43.1	42.8	10.9	12.5	15.3	2.5	0.7	0.3	0.3	39.0
Q4	48.3	47.6	13.1	13.2	16.4	2.9	1.0	0.7	0.3	43.1
2011 Q1	43.1	42.9	10.7	12.6	15.3	2.5	1.0	0.3	0.3	38.9
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	39.6
Q4	49.0	48.0	13.4	13.2	16.7	2.8	1.0	1.1	0.4	43.6
2012 Q1	43.7	43.4	11.0	12.8	15.4	2.5	1.0	0.3	0.2	39.4
Q2	46.3	45.9	12.6	12.8	15.6	2.6	1.4	0.3	0.3	41.4
Q3	44.7	44.3	11.9	12.7	15.5	2.6	0.8	0.4	0.3	40.4
Q4	50.2	49.5	14.1	13.6	17.0	2.9	1.0	0.7	0.3	44.9
2013 Q1	44.0	43.8	11.2	12.6	15.7	2.5	1.0	0.2	0.3	39.7
Q2	47.3	46.8	13.2	12.9	15.7	2.6	1.4	0.5	0.4	42.3

2. Euro area − quarterly expenditure and deficit/surplus

| | Total | Current expenditure | | | | | | | Capital expenditure | | | Deficit (-)/ surplus (+) | Primary deficit (-)/ surplus (+) |
| | | Total | Compensation of employees | Intermediate consumption | Interest | Current transfers | Social benefits | Subsidies | | Investment | Capital transfers | | |
	1	2	3	4	5	6	7	8	9	10	11	12	13
2007 Q2	45.0	41.6	10.0	4.8	3.2	23.6	20.6	1.1	3.4	2.5	0.9	0.8	4.0
Q3	44.6	41.0	9.6	4.8	2.9	23.8	20.6	1.2	3.6	2.6	0.9	-0.9	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	-0.1	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	-0.7	2.6
Q3	45.7	42.0	9.8	5.0	3.0	24.4	21.2	1.2	3.7	2.7	1.0	-2.3	0.6
Q4	51.3	46.7	11.2	6.3	2.9	26.3	22.3	1.4	4.6	2.9	1.6	-2.6	0.3
2009 Q1	49.3	45.5	10.7	5.1	2.8	26.9	22.9	1.3	3.8	2.6	1.2	-6.8	-4.0
Q2	50.7	46.5	11.1	5.5	3.0	26.9	23.3	1.3	4.2	2.8	1.3	-5.4	-2.3
Q3	50.0	46.0	10.5	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	28.5	24.0	1.5	4.9	3.0	1.8	-6.1	-3.3
2010 Q1	50.5	46.5	10.8	5.1	2.7	27.9	23.6	1.4	3.9	2.4	1.6	-8.0	-5.3
Q2	49.6	46.1	11.0	5.5	3.0	26.7	23.2	1.3	3.5	2.5	1.1	-4.4	-1.4
Q3	50.5	45.2	10.3	5.4	2.7	26.9	23.2	1.3	5.2	2.6	2.7	-7.4	-4.7
Q4	53.5	48.8	11.5	6.7	2.9	27.8	23.7	1.5	4.7	2.7	2.0	-5.1	-2.2
2011 Q1	48.5	45.4	10.4	4.9	2.9	27.1	23.1	1.3	3.1	2.2	1.0	-5.4	-2.5
Q2	48.6	45.3	10.6	5.3	3.2	26.2	22.8	1.2	3.3	2.3	0.9	-3.2	0.0
Q3	48.0	44.5	10.0	5.2	2.9	26.4	22.9	1.2	3.5	2.3	1.1	-4.3	-1.4
Q4	52.8	48.7	11.2	6.6	3.2	27.7	23.7	1.5	4.0	2.5	1.8	-3.7	-0.5
2012 Q1	48.1	45.4	10.3	4.9	3.0	27.3	23.3	1.2	2.7	1.9	0.8	-4.4	-1.5
Q2	49.1	45.8	10.6	5.3	3.3	26.7	23.2	1.2	3.3	2.1	1.2	-2.9	0.5
Q3	48.4	44.9	10.0	5.3	2.9	26.7	23.3	1.2	3.6	2.2	1.3	-3.7	-0.8
Q4	53.9	48.9	11.0	6.5	3.2	28.1	24.1	1.4	5.1	2.3	2.8	-3.8	-0.6
2013 Q1	48.9	46.2	10.4	4.9	2.8	28.0	23.8	1.2	2.7	1.8	1.1	-4.9	-2.1
Q2	49.6	46.1	10.5	5.3	3.2	27.2	23.6	1.2	3.4	2.0	1.4	-2.3	0.9

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

1. Euro area − Maastricht debt by financial instrument

	Total	Financial instruments			
		Currency and deposits	Loans	Short-term securities	Long-term securities
	1	2	3	4	5
2010 Q3	83.0	2.4	13.4	7.9	59.3
Q4	85.4	2.4	15.4	7.3	60.3
2011 Q1	86.3	2.4	15.2	7.4	61.2
Q2	87.2	2.4	14.9	7.5	62.3
Q3	86.8	2.4	15.1	7.8	61.4
Q4	87.3	2.4	15.4	7.4	62.1
2012 Q1	88.2	2.5	15.8	7.6	62.4
Q2	89.9	2.5	16.7	7.3	63.4
Q3	90.0	2.5	16.5	7.2	63.7
Q4	90.6	2.6	17.3	6.8	64.0
2013 Q1	92.3	2.6	16.9	7.1	65.8
Q2	93.4	2.5	16.9	6.9	67.1

2. Euro area − deficit-debt adjustment

	Change in debt	Deficit (-)/ surplus (+)	Deficit-debt adjustment								Memo item: Borrowing requirement
			Total	Transactions in main financial assets held by general government					Valuation effects and other changes in volume	Other	
				Total	Currency and deposits	Loans	Securities	Shares and other equity			
	1	2	3	4	5	6	7	8	9	10	11
2010 Q3	2.8	-7.4	-4.6	-2.9	-2.3	-0.6	0.0	0.1	0.0	-1.7	2.8
Q4	11.6	-5.1	6.5	5.7	-0.4	1.7	4.4	0.0	0.0	0.8	11.6
2011 Q1	6.9	-5.4	1.5	0.7	2.1	-0.8	-0.6	-0.1	0.2	0.6	6.7
Q2	5.9	-3.2	2.7	2.5	2.8	0.5	-0.3	-0.5	0.1	0.0	5.8
Q3	0.9	-4.3	-3.4	-3.7	-3.6	-0.5	0.2	0.2	0.5	-0.2	0.4
Q4	3.2	-3.7	-0.5	-0.6	-0.3	-0.2	-0.1	0.1	-0.2	0.2	3.4
2012 Q1	5.0	-4.4	0.5	3.5	4.2	-0.1	-0.6	0.0	-3.8	0.8	8.7
Q2	7.1	-2.9	4.3	4.0	1.6	1.0	0.6	0.7	-0.5	0.9	7.7
Q3	0.7	-3.7	-3.0	-2.0	-2.1	0.5	-0.6	0.1	0.1	-1.0	0.6
Q4	2.8	-3.8	-1.0	-0.3	-2.7	0.5	0.4	1.5	-1.3	0.7	4.1
2013 Q1	6.6	-4.9	1.8	1.8	1.4	0.1	-0.2	0.5	-0.1	0.0	6.7
Q2	5.2	-2.3	2.9	3.7	3.1	0.8	0.0	-0.2	-0.3	-0.5	5.5

C30 Deficit, borrowing requirement and change in debt
(four-quarter moving sum as a percentage of GDP)

- deficit
- change in debt
- borrowing requirement
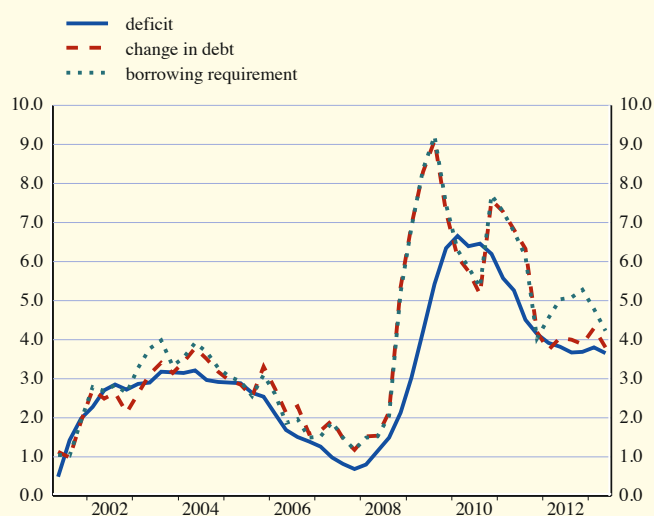
C31 Maastricht debt
(annual change in the debt-to-GDP ratio and underlying factors)

- deficit-debt adjustment
- primary deficit/surplus
- interest-growth differential
- change in debt-to-GDP ratio
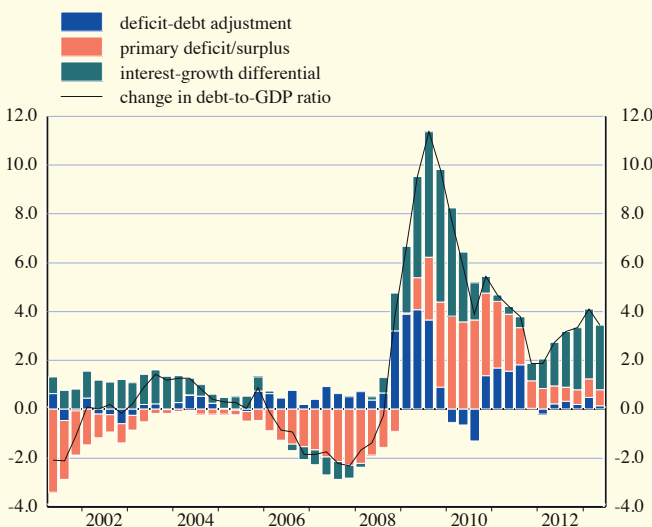
Sources: ECB calculations based on Eurostat and national data.
1) Intergovernmental lending in the context of the financial crisis is consolidated.

7.1 Summary balance of payments [1)]
(EUR billions; net transactions)

|	Current account					Capital account	Net lending/ borrowing to/from rest of the world (columns 1+6)	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers			Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2010	5.3	15.6	60.4	38.0	-108.7	5.5	10.8	6.0	-79.0	109.2	10.3	-24.0	-10.5	-16.8
2011	8.2	2.3	72.7	39.4	-106.3	11.0	19.2	-44.2	-85.8	231.1	-5.3	-173.9	-10.3	25.0
2012	126.2	94.9	88.7	49.3	-106.8	5.0	131.2	-140.9	-3.6	72.3	3.4	-199.2	-13.9	9.8
2012 Q3	43.5	29.8	25.5	17.4	-29.3	3.8	47.2	-39.7	30.9	-22.7	-2.9	-45.0	-0.1	-7.5
Q4	61.9	35.0	22.1	18.7	-14.0	6.3	68.2	-100.2	-27.6	72.9	25.4	-168.1	-2.8	32.0
2013 Q1	24.6	30.7	17.5	18.5	-42.1	1.8	26.4	-25.1	-24.0	16.5	8.4	-26.0	0.0	-1.2
Q2	52.8	52.1	28.6	3.8	-31.7	5.3	58.1	-56.3	-48.7	67.1	2.4	-75.9	-1.1	-1.8
Q3	53.8	41.7	30.1	13.8	-31.9	4.2	58.0	-60.5	-16.6	-19.1	9.7	-31.8	-2.9	2.5
2012 Oct.	13.7	10.5	7.0	5.0	-8.8	2.3	16.0	-27.1	-50.5	59.8	9.8	-43.5	-2.6	11.1
Nov.	20.9	13.4	5.6	6.7	-4.8	2.2	23.1	-34.5	19.2	17.4	6.2	-76.3	-1.0	11.4
Dec.	27.3	11.1	9.6	7.0	-0.4	1.7	29.1	-38.5	3.8	-4.3	9.5	-48.3	0.8	9.5
2013 Jan.	-6.8	-2.7	4.5	4.7	-13.3	0.1	-6.7	4.7	-10.9	26.9	4.6	-11.1	-4.8	2.0
Feb.	9.0	11.2	5.9	7.7	-15.9	1.1	10.1	-11.1	2.2	-13.9	2.7	-4.6	2.6	0.9
Mar.	22.4	22.2	7.1	6.1	-13.0	0.5	22.9	-18.8	-15.3	3.6	1.1	-10.4	2.3	-4.2
Apr.	13.9	16.4	7.9	0.6	-11.1	1.8	15.7	-18.4	-12.2	-0.2	-5.6	-0.5	0.0	2.8
May	9.9	17.2	8.5	-5.8	-10.0	2.5	12.4	-11.9	-15.9	38.7	-7.3	-26.9	-0.6	-0.5
June	29.1	18.5	12.2	9.0	-10.6	1.0	30.1	-26.0	-20.7	28.6	15.3	-48.6	-0.6	-4.1
July	26.1	19.7	11.4	4.5	-9.5	2.3	28.4	-29.6	-2.9	-41.5	-0.7	15.1	0.3	1.2
Aug.	12.4	8.3	8.0	7.6	-11.4	1.4	13.8	-13.9	-7.2	24.5	7.0	-36.3	-2.0	0.1
Sep.	15.2	13.7	10.7	1.8	-11.0	0.5	15.8	-17.0	-6.5	-2.1	3.4	-10.6	-1.2	1.2
Oct.	26.2	19.6	9.2	6.1	-8.7	2.3	28.5	-25.6	-1.9	-4.8	2.9	-22.6	0.9	-2.9
	12-month cumulated transactions													
2013 Oct.	205.7	168.6	100.7	55.9	-119.5	17.5	223.2	-240.6	-68.2	73.0	38.9	-281.0	-3.4	17.5
	12-month cumulated transactions as a percentage of GDP													
2013 Oct.	2.2	1.8	1.1	0.6	-1.3	0.2	2.3	-2.5	-0.7	0.8	0.4	-2.9	0.0	0.2

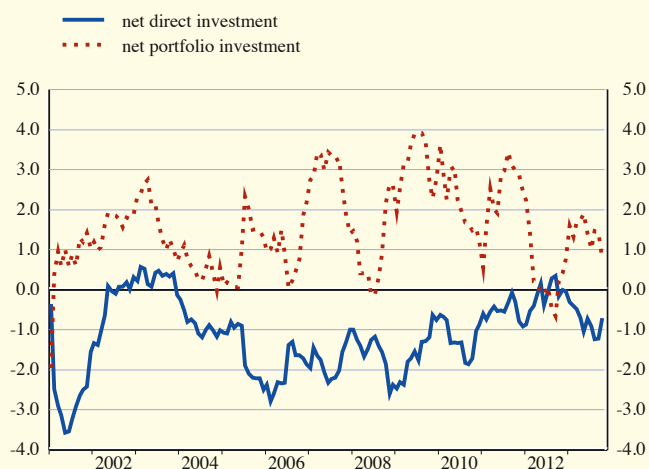## C32 Euro area b.o.p.: current account
(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)

current account balance
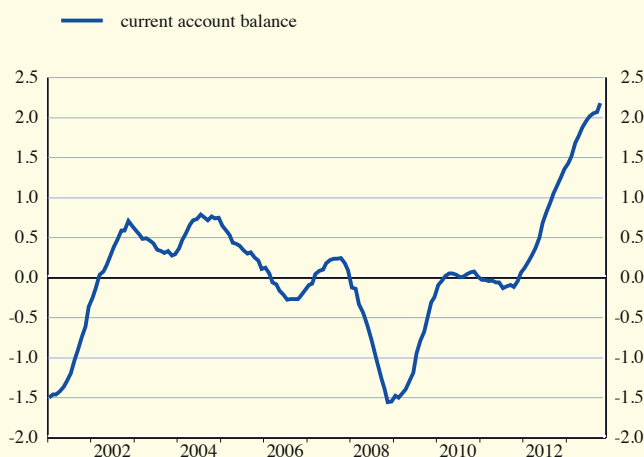
C33 Euro area b.o.p.: direct and portfolio investment
(12-month cumulated transactions as a percentage of GDP)

net direct investment
net portfolio investment

Source: ECB.
1) The sign convention is explained in the General Notes.

1. Summary current and capital accounts

	Current account													Capital account	
	Total			Goods		Services		Income		Current transfers				Credit	Debit
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit		Debit			
											Workers' remit-tances		Workers' remit-tances		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2010	2,706.4	2,701.1	5.3	1,576.1	1,560.5	544.4	484.0	497.8	459.7	88.2	6.3	197.0	26.3	20.2	14.7
2011	3,018.1	3,009.9	8.2	1,789.1	1,786.7	584.3	511.6	549.9	510.5	94.8	6.5	201.1	27.2	25.2	14.2
2012	3,179.0	3,052.7	126.2	1,919.5	1,824.6	626.6	537.9	535.5	486.1	97.3	6.8	204.1	26.0	28.8	23.8
2012 Q3	796.2	752.7	43.5	480.7	450.9	166.9	141.3	131.4	114.0	17.2	1.9	46.4	6.6	6.9	3.2
Q4	816.5	754.6	61.9	489.5	454.5	161.8	139.7	131.9	113.1	33.3	1.7	47.3	6.7	10.7	4.5
2013 Q1	765.2	740.6	24.6	470.6	439.9	144.9	127.3	122.0	103.5	27.8	1.6	69.9	5.9	5.9	4.2
Q2	808.9	756.1	52.8	489.7	437.6	164.1	135.5	135.2	131.4	19.8	1.9	51.5	6.2	7.6	2.2
Q3	792.7	739.0	53.8	477.9	436.2	171.8	141.7	124.2	110.4	18.8	.	50.7	.	6.3	2.0
2013 Aug.	248.3	235.9	12.4	147.7	139.4	55.0	47.0	40.6	33.0	5.0	-	16.4	-	2.1	0.7
Sep.	267.6	252.4	15.2	162.1	148.4	58.3	47.6	41.2	39.4	6.0	-	17.0	-	1.1	0.6
Oct.	277.4	251.1	26.2	176.5	156.9	56.3	47.1	38.5	32.4	6.1	-	14.8	-	2.8	0.6
Seasonally adjusted															
2013 Q1	793.9	743.5	50.4	483.4	442.6	158.2	134.3	127.0	112.3	25.3	-	54.4	-	-	-
Q2	801.4	743.2	58.2	486.0	437.5	163.2	138.0	127.8	113.4	24.4	-	54.2	-	-	-
Q3	792.2	743.9	48.3	477.1	437.5	162.3	136.1	127.2	115.6	25.7	-	54.7	-	-	-
2013 Aug.	264.9	247.0	17.9	160.5	145.7	53.6	45.4	42.7	37.9	8.2	-	17.9	-	-	-
Sep.	267.3	252.4	14.9	161.5	147.7	55.7	46.9	41.7	39.2	8.4	-	18.6	-	-	-
Oct.	265.8	244.1	21.8	163.2	146.2	54.5	45.0	40.7	35.9	7.5	-	16.9	-	-	-
12-month cumulated transactions															
2013 Oct.	3,187.0	2,978.7	208.3	1,932.1	1,764.2	644.8	544.5	510.5	455.0	99.5	-	215.0	-	-	-
12-month cumulated transactions as a percentage of GDP															
2013 Oct.	33.4	31.2	2.2	20.3	18.5	6.8	5.7	5.4	4.8	1.0	-	2.3	-	-	-

C34 Euro area b.o.p.: goods
(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)

exports (credit)
imports (debit)
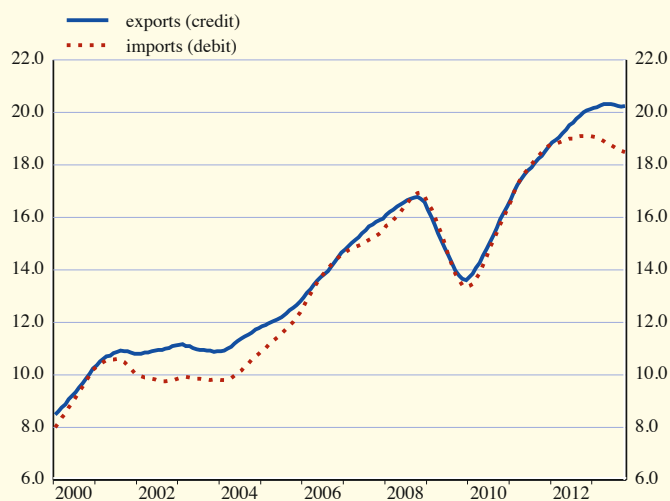
C35 Euro area b.o.p.: services
(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)

exports (credit)
imports (debit)

Source: ECB.

**EURO AREA
STATISTICS**

External
transactions
and
positions
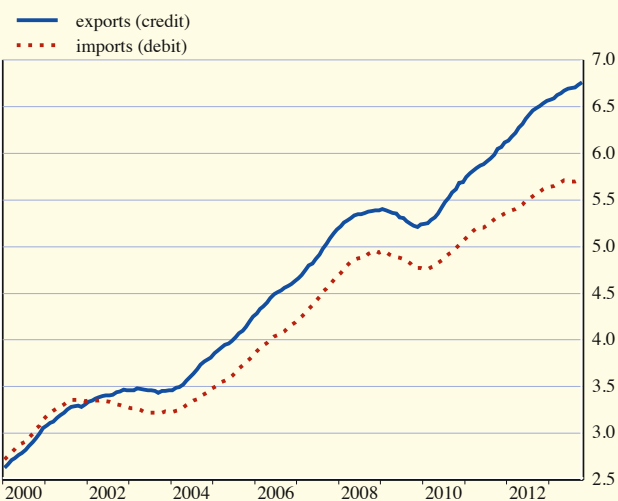
7.2 Current and capital accounts
(EUR billions)

2. Income account
(transactions)

	Compensation of employees		Investment income													
	Credit	Debit	Total		Direct investment						Portfolio investment				Other investment	
			Credit	Debit	Equity				Debt		Equity		Debt		Credit	Debit
					Credit		Debit		Credit	Debit	Credit	Debit	Credit	Debit		
						Reinv. earnings		Reinv. earnings								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2010	25.1	12.4	472.7	447.4	247.2	47.2	153.6	46.0	23.4	24.3	28.8	83.8	95.7	120.9	77.6	64.7
2011	27.2	12.8	522.7	497.7	271.9	38.1	171.6	58.4	40.3	35.0	36.2	98.5	97.3	124.3	77.1	68.2
2012	28.8	13.2	506.7	472.9	251.5	49.7	155.4	16.2	44.4	38.2	43.0	104.0	99.2	117.1	68.6	58.2
2012 Q2	7.1	3.5	137.0	139.7	67.6	2.3	41.2	4.0	10.9	9.2	16.1	46.0	24.8	28.5	17.5	14.8
Q3	7.1	3.9	124.3	110.1	61.1	17.4	37.7	12.4	11.3	9.0	10.0	20.4	25.2	29.2	16.7	13.8
Q4	7.5	3.3	124.3	109.8	64.0	6.2	37.5	-15.0	11.5	10.4	8.0	20.3	24.8	27.9	16.1	13.7
2013 Q1	7.1	2.5	114.9	101.0	57.4	24.1	34.3	15.4	9.9	7.9	7.5	17.5	24.6	28.6	15.4	12.6
Q2	7.3	3.3	127.9	128.1	63.1	3.3	34.6	3.0	10.0	7.5	14.5	45.2	25.1	28.3	15.2	12.5

3. Geographical breakdown
(cumulated transactions)

| 2012 Q3 to 2013 Q2 | Total | EU Member States outside the euro area | | | | | | Brazil | Canada | China | India | Japan | Russia | Switzer-land | United States | Other |
| | | Total | Den-mark | Sweden | United Kingdom | Other EU countries [1] | EU insti-tutions | | | | | | | | | |
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
							Credits									
Current account	3,186.7	1,002.6	54.7	96.6	476.0	312.8	62.6	64.9	46.1	152.5	39.6	69.3	126.2	251.0	426.1	1,008.5
Goods	1,930.5	596.2	35.4	57.6	257.5	245.6	0.2	33.7	23.8	116.9	29.3	44.1	90.1	133.6	225.9	636.8
Services	637.7	194.1	12.5	19.1	119.8	36.0	6.7	10.8	10.7	22.6	7.7	15.0	21.0	61.0	96.3	198.5
Income	520.5	149.0	5.8	17.7	87.2	28.0	10.1	19.9	10.9	12.3	2.4	9.4	14.5	46.9	97.8	157.5
Investment income	491.4	141.3	5.0	17.6	85.7	27.2	5.8	19.9	10.8	12.2	2.4	9.3	14.4	31.7	96.3	153.0
Current transfers	98.1	63.3	1.0	2.2	11.4	3.2	45.6	0.4	0.8	0.7	0.2	0.8	0.6	9.5	6.0	15.6
Capital account	31.2	27.2	0.0	0.0	1.9	0.6	24.7	0.1	0.0	0.0	0.0	0.1	0.1	0.9	0.4	2.3
							Debits									
Current account	3,003.9	949.0	53.6	92.0	409.3	281.1	113.0	41.6	28.9	-	35.4	93.0	155.5	211.4	395.3	-
Goods	1,782.9	506.8	30.0	51.1	199.5	226.2	0.0	27.6	13.8	197.5	26.6	44.9	137.8	106.5	149.4	572.1
Services	543.9	157.1	9.1	15.2	92.5	40.0	0.3	5.4	7.2	15.5	7.0	9.7	11.2	49.4	110.2	171.0
Income	462.1	156.2	13.3	23.9	104.9	9.5	4.6	7.3	5.8	-	0.9	37.8	5.5	45.8	129.5	-
Investment income	449.0	149.3	13.2	23.8	103.4	4.3	4.6	7.2	5.6	-	0.7	37.6	5.4	45.4	128.5	-
Current transfers	215.1	128.9	1.2	1.8	12.4	5.4	108.1	1.3	2.0	3.6	1.0	0.7	1.0	9.7	6.2	60.7
Capital account	14.0	4.0	0.1	0.1	3.2	0.5	0.2	0.2	0.1	0.4	0.2	0.1	0.1	0.7	1.3	7.1
							Net									
Current account	182.8	53.5	1.1	4.6	66.6	31.7	-50.4	23.3	17.3	-	4.2	-23.8	-29.3	39.6	30.8	-
Goods	147.6	89.4	5.4	6.5	58.0	19.4	0.2	6.1	9.9	-80.5	2.8	-0.8	-47.7	27.1	76.5	64.8
Services	93.8	37.0	3.4	3.8	27.4	-4.0	6.4	5.4	3.4	7.1	0.7	5.3	9.8	11.5	-13.9	27.4
Income	58.4	-7.3	-7.4	-6.2	-17.6	18.5	5.5	12.7	5.1	-	1.5	-28.4	9.0	1.1	-31.7	-
Investment income	42.4	-8.1	-8.1	-6.2	-17.8	22.9	1.2	12.7	5.2	-	1.6	-28.2	9.0	-13.7	-32.2	-
Current transfers	-117.0	-65.6	-0.3	0.4	-1.1	-2.2	-62.5	-0.8	-1.2	-2.9	-0.8	0.1	-0.4	-0.1	-0.2	-45.1
Capital account	17.1	23.2	0.0	0.0	-1.3	0.1	24.5	-0.2	0.0	-0.4	-0.2	0.0	0.1	0.3	-0.9	-4.8

Source: ECB.
1) Excluding Croatia.

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

1. Summary financial account

	Total [1]			Total as a % of GDP			Direct investment		Portfolio investment		Net financial derivatives	Other investment		Reserve assets
	Assets	Liabilities	Net	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities		Assets	Liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts (international investment position)														
2009	13,739.1	15,225.6	-1,486.4	154.0	170.7	-16.7	4,412.8	3,532.5	4,340.9	6,863.8	-1.3	4,527.2	4,829.3	459.6
2010	15,183.9	16,474.3	-1,290.4	165.6	179.7	-14.1	4,930.6	3,891.9	4,898.7	7,471.2	-31.1	4,794.5	5,111.2	591.2
2011	15,892.7	17,348.1	-1,455.4	168.6	184.1	-15.4	5,633.2	4,339.5	4,750.9	7,721.5	-29.7	4,871.2	5,287.0	667.1
2012 Q4	16,636.5	17,899.5	-1,262.9	175.4	188.7	-13.3	5,881.3	4,444.6	5,265.0	8,375.5	-17.6	4,818.4	5,079.3	689.4
2013 Q1	17,085.0	18,258.0	-1,173.0	180.3	192.6	-12.4	5,957.5	4,501.4	5,535.1	8,621.7	-28.0	4,932.6	5,134.9	687.8
Q2	16,734.8	18,048.1	-1,313.3	176.1	189.9	-13.8	5,959.8	4,536.8	5,365.8	8,539.8	-25.3	4,870.2	4,971.5	564.3
Changes 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	1,444.8	1,248.7	196.0	15.8	13.6	2.1	517.7	359.3	557.8	607.4	-29.8	267.3	282.0	131.6
2011	708.8	873.8	-165.0	7.5	9.3	-1.8	702.6	447.6	-147.8	250.3	1.4	76.7	175.8	75.9
2012	743.9	551.4	192.5	7.8	5.8	2.0	248.1	105.1	514.1	654.0	12.2	-52.8	-207.7	22.3
2013 Q1	448.5	358.5	89.9	19.3	15.4	3.9	76.2	56.8	270.1	246.2	-10.5	114.1	55.5	-1.5
Q2	-350.2	-209.9	-140.2	-14.6	-8.8	-5.9	2.3	35.3	-169.3	-81.9	2.8	-62.4	-163.4	-123.5
Transactions														
2009	-89.4	-74.4	-15.0	-1.0	-0.8	-0.2	352.9	285.9	96.0	342.8	-19.0	-514.7	-703.1	-4.6
2010	646.5	652.6	-6.0	7.1	7.1	-0.1	352.6	273.6	130.9	240.1	-10.3	162.8	138.9	10.5
2011	670.3	626.2	44.2	7.1	6.6	0.5	524.0	438.2	-53.2	177.9	5.3	183.9	10.0	10.3
2012	522.0	381.0	140.9	5.5	4.0	1.5	329.9	326.3	186.4	258.7	-3.4	-4.8	-204.0	13.9
2013 Q1	202.4	177.3	25.1	8.7	7.6	1.1	56.7	32.7	104.5	121.0	-8.4	49.6	23.5	0.0
Q2	27.7	-28.6	56.3	1.2	-1.2	2.4	63.1	14.4	21.0	88.1	-2.4	-55.2	-131.1	1.1
Q3	21.2	-39.3	60.5	0.9	-1.6	2.5	48.3	31.7	57.4	38.3	-9.7	-77.6	-109.3	2.9
2013 June	-102.3	-128.3	26.0	-	-	-	30.0	9.3	-42.5	-13.9	-15.3	-75.1	-123.7	0.6
July	0.4	-29.2	29.6	-	-	-	9.3	6.4	26.7	-14.8	0.7	-36.0	-20.8	-0.3
Aug.	11.9	-2.0	13.9	-	-	-	23.0	15.8	-6.0	18.5	-7.0	-0.1	-36.4	2.0
Sep.	8.9	-8.1	17.0	-	-	-	16.0	9.5	36.7	34.5	-3.4	-41.5	-52.1	1.2
Oct.	84.1	58.5	25.6	-	-	-	24.1	22.2	6.8	2.0	-2.9	57.0	34.4	-0.9
Other changes														
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	798.2	596.2	202.1	8.7	6.5	2.2	165.2	85.8	426.9	367.3	-19.4	104.5	143.1	121.1
2011	38.4	247.6	-209.2	0.4	2.6	-2.2	178.6	9.4	-94.6	72.5	-3.9	-107.2	165.8	65.6
2012	221.9	170.4	51.5	2.3	1.8	0.5	-81.7	-221.2	327.7	395.3	15.6	-48.0	-3.7	8.4
Other changes due to exchange rate changes														
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	477.4	325.0	152.4	5.2	3.5	1.7	143.4	35.0	160.0	128.5	.	160.9	161.5	13.1
2011	214.2	176.7	37.5	2.3	1.9	0.4	70.7	18.4	72.8	67.1	.	63.1	91.3	7.6
2012	-86.6	-91.4	4.8	-0.9	-1.0	0.1	-22.0	-5.6	-41.3	-37.5	.	-16.7	-48.3	-6.6
Other changes due to price changes														
2009	634.8	492.7	142.1	7.1	5.5	1.6	147.4	29.4	423.5	463.4	18.2	.	.	45.8
2010	300.8	148.4	152.5	3.3	1.6	1.7	33.2	-0.8	185.5	149.2	-19.4	.	.	101.6
2011	-116.3	-249.1	132.8	-1.2	-2.6	1.4	-38.1	7.1	-133.7	-256.2	-3.9	.	.	59.4
2012	266.0	588.2	-322.2	2.8	6.2	-3.4	38.8	-6.4	194.7	594.6	15.6	.	.	16.9
Other changes due to other adjustments														
2009	8.4	25.5	-17.1	0.1	0.3	-0.2	2.0	-48.3	24.0	124.6	.	-64.4	-50.8	46.9
2010	20.0	122.8	-102.7	0.2	1.3	-1.1	-11.4	51.6	81.4	89.6	.	-56.4	-18.4	6.4
2011	-59.4	320.0	-379.4	-0.6	3.4	-4.0	146.0	-16.0	-33.8	261.5	.	-170.3	74.5	-1.4
2012	42.5	-326.4	368.9	0.4	-3.4	3.9	-98.6	-209.2	174.3	-161.8	.	-31.3	44.6	-1.9
Growth rates of outstanding amounts														
2009	-0.7	-0.5	-	.	.	.	8.9	8.8	2.4	5.6	.	-10.1	-12.5	-1.3
2010	4.6	4.2	-	.	.	.	7.7	7.5	2.9	3.4	.	3.6	2.8	2.0
2011	4.5	3.8	-	.	.	.	10.7	11.2	-1.2	2.4	.	4.0	0.2	1.6
2012	3.3	2.2	-	.	.	.	5.9	7.6	3.8	3.3	.	-0.1	-3.8	2.0
2013 Q1	2.5	1.3	-	.	.	.	5.5	6.1	3.3	4.1	.	-1.2	-6.7	1.7
Q2	2.1	0.7	-	.	.	.	4.9	4.9	4.8	4.7	.	-3.1	-8.7	0.6
Q3	1.8	0.3	.	.	.	.	4.9	3.7	5.1	4.9	.	-4.1	-9.5	1.1

Source: ECB.
1) Net financial derivatives are included in assets.

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

2. Direct investment

| | By resident units abroad | | | | | | | By non-resident units in the euro area | | | | | | |
| | Total | Equity capital and reinvested earnings | | | Other capital (mostly inter-company loans) | | | Total | Equity capital and reinvested earnings | | | Other capital (mostly inter-company loans) | | |
| | | Total | MFIs | Non-MFIs | Total | MFIs | Non-MFIs | | Total | Into MFIs | Into non-MFIs | Total | To MFIs | To non-MFIs |
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Oustanding amounts (international investment position)													
2011	5,633.2	4,229.4	283.2	3,946.2	1,403.7	13.3	1,390.5	4,339.5	3,089.1	99.9	2,989.1	1,250.5	11.3	1,239.2
2012	5,881.3	4,374.3	290.2	4,084.1	1,507.0	12.0	1,495.0	4,444.6	3,124.5	106.6	3,017.8	1,320.2	11.3	1,308.9
2013 Q1	5,957.5	4,424.3	287.0	4,137.3	1,533.2	13.2	1,520.0	4,501.4	3,186.0	109.2	3,076.8	1,315.5	12.3	1,303.2
Q2	5,959.8	4,402.8	280.0	4,122.8	1,557.0	12.3	1,544.7	4,536.8	3,185.7	108.1	3,077.6	1,351.1	12.3	1,338.8
	Transactions													
2010	352.6	233.1	23.5	209.6	119.5	1.1	118.4	273.6	293.4	11.0	282.4	-19.8	-5.8	-14.0
2011	524.0	444.1	25.8	418.3	80.0	-3.2	83.1	438.2	400.6	10.1	390.5	37.6	0.6	37.0
2012	329.9	190.0	-1.7	191.7	139.9	-0.3	140.2	326.3	246.2	8.2	238.0	80.1	0.1	80.1
2013 Q1	56.7	44.3	-0.9	45.2	12.5	1.1	11.4	32.7	56.9	3.3	53.5	-24.1	0.7	-24.8
Q2	63.1	4.8	2.6	2.2	58.4	-0.8	59.1	14.4	-29.5	1.0	-30.5	43.9	0.2	43.7
Q3	48.3	34.1	1.8	32.3	14.2	0.1	14.1	31.7	31.2	1.5	29.7	0.5	-0.3	0.8
2013 June	30.0	-1.7	0.3	-2.1	31.7	0.7	31.0	9.3	-16.6	0.6	-17.2	25.9	-1.3	27.2
July	9.3	3.5	-0.2	3.8	5.8	-0.3	6.0	6.4	14.3	0.7	13.6	-7.9	-0.2	-7.7
Aug.	23.0	11.6	0.7	10.9	11.4	0.2	11.2	15.8	6.6	0.5	6.1	9.2	0.0	9.2
Sep.	16.0	19.0	1.3	17.7	-3.0	0.2	-3.2	9.5	10.3	0.4	9.9	-0.8	-0.1	-0.7
Oct.	24.1	21.5	-0.1	21.6	2.6	0.0	2.6	22.2	16.4	0.4	16.0	5.8	-0.1	5.9
	Growth rates													
2011	10.7	11.6	9.6	11.8	7.4	-19.9	7.8	11.2	13.7	10.7	13.8	3.9	0.9	3.9
2012	5.9	4.5	-0.6	4.9	10.0	-2.5	10.2	7.6	8.1	8.3	8.1	6.4	0.4	6.5
2013 Q1	5.5	4.2	-0.4	4.6	9.3	3.1	9.4	6.1	7.7	8.6	7.7	2.4	19.0	2.3
Q2	4.9	3.0	0.9	3.2	10.7	5.2	10.7	4.9	6.1	7.7	6.0	2.0	19.7	1.9
Q3	4.9	3.0	1.2	3.1	10.4	4.2	10.4	3.7	5.4	6.7	5.4	-0.3	0.4	-0.3

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

- net international investment position

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

- net direct investment
- net portfolio investment
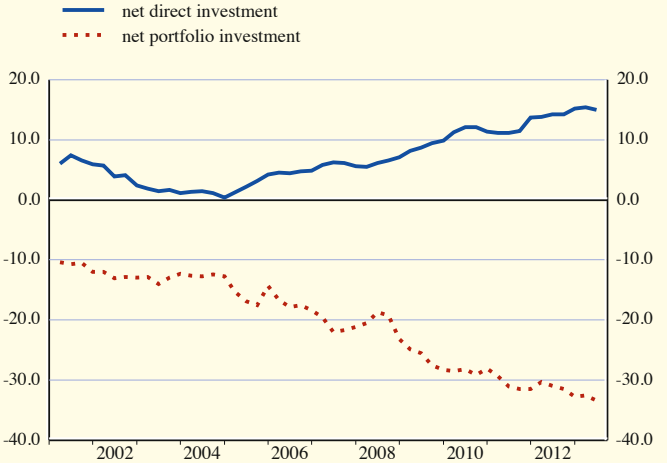
Source: ECB.

7.3 Financial account

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

3. Portfolio investment assets

	Total	Equity					Debt instruments									
							Bonds and notes					Money market instruments				
		Total	MFIs		Non-MFIs		Total	MFIs		Non-MFIs		Total	MFIs		Non-MFIs	
				Euro-system		General government			Euro-system		General government			Euro-system		General government
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
						Outstanding amounts (international investment position)										
2011	4,750.9	1,693.8	59.3	2.6	1,634.5	39.4	2,587.2	721.2	16.1	1,866.1	96.0	469.8	302.5	58.8	167.4	0.5
2012	5,265.0	1,947.3	70.2	2.8	1,877.2	42.5	2,852.0	673.5	15.6	2,178.4	97.3	465.7	287.9	53.8	177.8	1.4
2013 Q1	5,535.1	2,145.1	87.7	3.1	2,057.4	48.9	2,915.7	654.8	16.6	2,260.9	98.1	474.3	290.1	51.1	184.2	0.5
Q2	5,365.8	2,066.6	92.7	3.1	1,973.9	47.6	2,828.9	632.0	15.8	2,196.9	94.6	470.4	281.9	61.9	188.5	0.2
						Transactions										
2010	130.9	75.2	-2.4	-0.7	77.6	1.9	100.4	-125.9	-0.6	226.3	51.5	-44.7	-64.0	-10.6	19.4	-1.9
2011	-53.2	-66.0	-10.7	-0.2	-55.4	-7.3	-21.4	-60.7	0.2	39.3	-2.8	34.2	25.9	10.4	8.3	0.2
2012	186.4	57.6	3.0	0.1	54.6	0.2	126.5	-38.8	-0.9	165.3	-8.5	2.3	-18.0	2.3	20.3	0.1
2013 Q1	104.5	62.7	13.8	0.1	48.9	3.4	34.4	-17.1	1.1	51.5	0.7	7.4	4.8	0.6	2.6	-0.2
Q2	21.0	12.7	3.8	0.0	8.9	0.8	9.2	-6.7	-0.6	15.9	-1.6	-0.9	-5.8	14.7	4.9	-0.3
Q3	57.4	31.8	10.1	0.0	21.7	.	19.7	-9.8	3.5	29.5	.	5.9	9.4	-5.2	-3.5	.
2013 June	-42.5	-17.0	-1.6	0.0	-15.3	-	-19.0	-6.2	-0.1	-12.8	-	-6.5	-6.6	3.6	0.1	-
July	26.7	11.3	2.3	0.0	9.0	-	14.3	-2.7	0.4	16.9	-	1.1	3.0	0.4	-1.9	-
Aug.	-6.0	-5.4	0.0	0.0	-5.4	-	-2.9	-6.5	0.5	3.7	-	2.2	4.8	-2.6	-2.5	-
Sep.	36.7	25.9	7.8	0.0	18.1	-	8.3	-0.6	2.6	8.9	-	2.5	1.6	-3.0	0.9	-
Oct.	6.8	9.4	2.2	0.0	7.2	-	0.5	-2.7	-0.1	3.2	-	-3.2	-5.6	-5.4	2.4	-
						Growth rates										
2011	-1.2	-3.9	-15.2	-7.2	-3.4	-15.9	-0.8	-7.7	1.3	2.2	-2.9	8.3	8.5	25.5	8.0	120.3
2012	3.8	3.1	5.0	3.0	3.1	0.1	4.8	-5.5	-5.7	8.6	-8.3	0.5	-5.5	3.7	12.3	29.8
2013 Q1	3.3	5.3	20.9	5.9	4.7	14.3	3.8	-6.8	4.8	7.5	-6.2	-6.9	-12.1	13.0	3.3	56.2
Q2	4.8	7.5	47.4	5.2	6.2	15.5	4.3	-3.9	3.3	6.9	-4.5	-2.3	-7.8	50.9	7.8	-67.0
Q3	5.1	8.8	63.5	5.8	7.1	.	3.7	-4.0	30.1	6.1	.	-1.2	-3.8	31.2	3.4	.

4. Portfolio investment liabilities

	Total	Equity			Debt instruments							
					Bonds and notes				Money market instruments			
		Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs		Total	MFIs	Non-MFIs	
								General government				General government
	1	2	3	4	5	6	7	8	9	10	11	12
					Outstanding amounts (international investment position)							
2011	7,721.5	3,048.8	558.3	2,490.5	4,228.3	1,254.4	2,973.9	1,748.7	444.4	86.8	357.6	313.1
2012	8,375.5	3,475.4	537.3	2,938.1	4,438.9	1,192.2	3,246.8	1,962.7	461.2	87.9	373.3	298.1
2013 Q1	8,621.7	3,622.4	520.1	3,102.3	4,498.1	1,192.0	3,306.0	2,008.3	501.2	104.3	396.9	321.1
Q2	8,539.8	3,609.9	493.0	3,116.8	4,436.4	1,153.1	3,283.2	2,006.7	493.6	111.8	381.8	306.3
					Transactions							
2010	240.1	125.4	-16.9	142.3	161.1	50.2	110.9	187.5	-46.4	12.3	-58.7	-38.2
2011	177.9	73.8	18.4	55.4	151.7	75.7	76.0	80.6	-47.6	2.0	-49.6	-37.7
2012	258.7	144.1	-18.1	162.2	119.3	-55.5	174.7	160.8	-4.7	5.4	-10.0	-30.3
2013 Q1	121.0	57.4	-8.2	65.6	27.3	-4.2	31.5	43.9	36.3	18.5	17.8	24.3
Q2	88.1	81.5	-17.0	98.4	7.4	-12.4	19.8	20.3	-0.7	0.4	-1.1	-1.5
Q3	38.3	40.3	7.1	33.2	-39.1	-22.3	-16.8	.	37.1	23.8	13.3	.
2013 June	-13.9	17.3	-16.3	33.5	-33.3	-12.2	-21.1	-	2.1	7.9	-5.8	-
July	-14.8	8.4	2.5	5.9	-39.3	-20.6	-18.7	-	16.1	2.4	13.7	-
Aug.	18.5	27.1	7.9	19.2	-13.0	-9.5	-3.5	-	4.4	8.7	-4.3	-
Sep.	34.5	4.8	-3.4	8.1	13.2	7.8	5.4	-	16.6	12.7	3.9	-
Oct.	2.0	10.7	-7.8	18.6	11.9	9.6	2.3	-	-20.7	-6.8	-13.9	-
					Growth rates							
2011	2.4	2.3	2.9	2.0	4.1	6.7	3.0	5.0	-9.2	8.2	-12.2	-11.1
2012	3.3	4.5	-3.3	6.1	2.8	-4.5	5.8	9.2	-0.9	6.1	-2.6	-9.2
2013 Q1	4.1	4.8	-6.4	7.1	3.5	-2.2	5.8	9.3	4.4	22.0	0.4	-3.6
Q2	4.7	7.5	-7.3	10.4	2.6	-2.0	4.4	7.4	3.1	12.6	0.8	-0.3
Q3	4.9	7.6	-5.3	10.1	1.1	-3.4	2.7	.	21.8	61.7	12.7	.

Source: ECB.

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

5. Other investment assets

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government				Other sectors			
		Total	Loans/ currency and deposits	Other assets	Total	Loans/ currency and deposits	Other assets		Trade credits	Loans/currency and deposits	Currency and deposits		Trade credits	Loans/currency and deposits	Currency and deposits
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Outstanding amounts (international investment position)															
2011	4,871.2	35.5	35.2	0.3	3,069.1	3,007.5	61.6	162.7	6.8	116.4	30.2	1,604.0	247.7	1,161.4	491.3
2012	4,818.4	40.1	39.9	0.3	2,923.8	2,853.6	70.2	167.9	5.3	121.4	29.2	1,686.6	253.9	1,236.8	524.7
2013 Q1	4,932.6	33.1	32.8	0.3	2,954.5	2,884.7	69.8	155.0	5.2	108.0	24.2	1,790.0	249.7	1,277.7	558.0
Q2	4,870.2	17.9	17.6	0.3	2,938.7	2,871.6	67.1	150.6	5.1	103.9	23.9	1,763.0	250.7	1,241.6	556.6
Transactions															
2010	162.8	-2.9	-2.8	0.0	10.1	1.3	8.9	41.5	-0.2	41.1	4.9	114.1	8.6	81.6	50.6
2011	183.9	-2.7	-2.8	0.1	50.5	20.7	29.9	4.4	-0.3	4.2	10.3	131.7	8.5	99.0	38.1
2012	-4.8	5.2	5.2	0.0	-122.4	-130.5	8.1	4.7	-1.5	6.4	-1.0	107.7	8.4	74.5	37.7
2013 Q1	49.6	-6.8	-6.8	0.0	11.9	12.7	-0.8	-10.7	-0.3	-11.0	-5.1	55.1	2.4	40.1	55.8
Q2	-55.2	-10.9	-10.9	0.0	12.3	14.5	-2.2	-4.7	0.0	-4.4	-0.2	-51.8	1.1	-56.1	-24.2
Q3	-77.6	6.2	.	.	-76.3	.	.	-2.3	.	.	-1.5	-5.2	.	.	13.1
2013 June	-75.1	-2.8	-	-	-39.9	-	-	-2.2	-	-	-0.7	-30.2	-	-	-15.5
July	-36.0	3.4	-	-	-34.1	-	-	-5.2	-	-	-2.7	-0.1	-	-	0.4
Aug.	-0.1	-2.3	-	-	8.8	-	-	2.6	-	-	0.9	-9.1	-	-	7.9
Sep.	-41.5	5.1	-	-	-50.9	-	-	0.3	-	-	0.3	4.0	-	-	4.8
Oct.	57.0	-4.6	-	-	76.7	-	-	1.7	-	-	2.1	-16.7	-	-	-2.0
Growth rates															
2011	4.0	-5.4	-5.5	40.4	1.8	0.8	76.8	3.0	-3.3	4.2	51.5	8.3	3.9	8.1	9.0
2012	-0.1	13.1	13.2	-0.6	-3.9	-4.3	13.7	3.1	-22.2	5.9	-3.3	6.8	3.4	6.5	7.8
2013 Q1	-1.2	-9.1	-9.1	-3.2	-4.6	-5.1	22.6	3.5	-24.3	5.3	-1.7	4.8	-2.4	5.8	9.8
Q2	-3.1	-22.3	-22.5	0.1	-4.2	-4.2	-5.9	-3.7	-25.0	-4.7	-20.3	-0.7	-1.9	-2.9	2.9
Q3	-4.1	-13.4	.	.	-5.5	.	.	0.6	.	.	-10.7	-1.9	.	.	4.3

6. Other investment liabilities

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government				Other sectors			
		Total	Loans/ currency and deposits	Other liabilities	Total	Loans/ currency and deposits	Other liabilities	Total	Trade credits	Loans	Other liabilities	Total	Trade credits	Loans	Other liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Outstanding amounts (international investment position)															
2011	5,287.0	412.7	409.9	2.8	3,212.3	3,145.5	66.8	224.1	0.1	217.2	6.8	1,438.0	226.3	1,027.2	184.5
2012	5,079.3	428.9	428.0	0.9	2,963.8	2,881.1	82.7	227.5	0.1	219.9	7.4	1,459.2	228.8	994.0	236.4
2013 Q1	5,134.9	398.6	397.8	0.9	2,976.9	2,893.6	83.3	224.3	0.1	218.3	5.9	1,535.0	231.6	1,034.8	268.7
Q2	4,971.5	373.3	371.9	1.4	2,851.2	2,787.9	63.3	222.2	0.1	216.3	5.9	1,524.6	228.6	1,025.8	270.2
Transactions															
2010	138.9	9.4	6.8	2.6	-8.7	-14.6	5.9	64.9	0.0	64.3	0.5	73.2	16.0	31.1	26.2
2011	10.0	135.1	135.3	-0.2	-289.1	-327.8	38.7	74.1	0.0	74.1	0.0	90.0	10.5	63.5	16.0
2012	-204.0	19.0	20.9	-1.8	-234.6	-251.7	17.2	3.7	0.0	2.7	1.0	7.8	7.4	-14.3	14.7
2013 Q1	23.5	-32.2	-32.2	0.0	-0.4	0.2	-0.7	-0.8	0.0	0.4	-1.2	57.0	2.5	31.4	23.1
Q2	-131.1	-21.4	-21.9	0.5	-93.6	-75.8	-17.8	-1.0	0.0	-1.2	0.2	-15.1	-1.5	1.3	-15.0
Q3	-109.3	-11.3	.	.	-100.9	.	.	3.8	.	.	.	-1.0	.	.	.
2013 June	-123.7	-9.1	-	-	-81.5	-	-	3.0	-	-	-	-36.0	-	-	-
July	-20.8	-5.2	-	-	-24.6	-	-	0.9	-	-	-	8.0	-	-	-
Aug.	-36.4	-2.2	-	-	-26.5	-	-	0.7	-	-	-	-8.3	-	-	-
Sep.	-52.1	-3.8	-	-	-49.9	-	-	2.2	-	-	-	-0.6	-	-	-
Oct.	34.4	-7.1	-	-	52.9	-	-	-3.8	-	-	-	-7.6	-	-	-
Growth rates															
2011	0.2	50.4	51.0	.	-8.3	-9.6	90.9	50.4	.	52.7	-0.6	7.6	5.2	7.4	11.0
2012	-3.8	4.8	5.3	.	-7.3	-8.0	25.8	1.7	.	1.2	16.0	0.5	3.3	-1.5	8.5
2013 Q1	-6.7	18.6	19.3	.	-12.5	-13.3	29.0	-2.0	.	-2.0	-3.0	0.2	1.0	-1.6	7.1
Q2	-8.7	-8.1	-8.0	.	-12.1	-12.0	-15.8	-5.3	.	-5.3	-7.1	-1.9	0.2	-2.4	-1.7
Q3	-9.5	-15.1	.	.	-12.9	.	.	-1.6	.	.	.	-2.0	.	.	.

Source: ECB.

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

7. Reserve assets [1]

	Total	Monetary gold		SDR holdings	Reserve position in the IMF	Foreign exchange								Financial derivatives	Other claims	Other foreign currency assets	Pre-determined short-term net drains on foreign currency	SDR allo-cations
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities									
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes	Money market instruments						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
					Outstanding amounts (international investment position)												
2009	462.4	266.1	347.180	50.8	10.5	134.9	11.7	8.1	115.2	0.5	92.0	22.7	-0.1	0.0	32.1	-24.2	51.2
2010	591.2	366.2	346.962	54.2	15.8	155.0	7.7	16.0	131.3	0.5	111.2	19.5	0.0	0.0	26.3	-24.4	54.5
2011	667.0	422.1	346.846	54.0	30.2	160.8	5.3	7.8	148.1	0.8	134.1	13.3	-0.4	0.0	97.4	-86.0	55.9
2012 Q4	689.4	437.2	346.693	52.8	31.9	166.8	6.1	8.8	151.3	0.2	130.9	20.2	0.6	0.6	32.8	-35.0	55.0
2013 Q1	687.8	432.7	346.696	52.5	32.4	169.6	5.3	10.0	154.4	0.2	132.6	21.6	-0.1	0.6	31.2	-35.8	55.1
Q2	564.3	315.9	346.672	51.3	31.5	164.7	5.3	7.8	151.6	0.2	133.8	17.6	0.0	0.8	27.3	-31.0	54.2
2013 Oct.	579.6	336.4	346.566	50.6	29.5	162.2	5.0	9.0	148.1	0.2	135.4	12.5	0.1	0.9	22.2	-29.0	53.1
Nov.	561.5	319.0	346.566	50.7	28.9	162.0	4.5	8.8	148.5	0.2	137.2	11.1	0.3	0.9	23.0	-29.5	53.2
					Transactions												
2010	10.5	0.0	-	-0.1	4.9	5.6	-5.4	6.6	4.3	0.0	10.6	-6.3	0.0	0.0	-	-	-
2011	10.3	0.0	-	-1.6	13.0	-1.2	-2.3	-8.3	9.3	0.1	15.9	-6.8	0.1	0.0	-	-	-
2012	13.9	0.0	-	-0.3	3.4	10.2	0.6	1.2	8.0	-0.4	-0.7	9.1	0.4	0.7	-	-	-
2013 Q1	0.0	0.0	-	-0.5	0.3	0.2	-1.1	0.8	0.9	0.0	-0.8	1.7	-0.5	0.0	-	-	-
Q2	1.1	0.0	-	-0.3	-0.3	1.5	0.1	-1.8	3.5	0.0	6.3	-2.8	-0.2	0.2	-	-	-
Q3	2.9	.	-	.	.	.	.	.	.	.	.	.	.	.	-	-	-
					Growth rates												
2010	2.0	0.0	-	-0.1	46.7	3.7	-43.3	75.9	3.6	-5.2	10.3	-24.5	-	-	-	-	-
2011	1.6	0.0	-	-3.0	83.3	-1.3	-30.0	-52.7	6.8	27.4	14.2	-45.3	-	-	-	-	-
2012	2.0	0.0	-	-0.5	11.0	6.5	12.2	15.2	5.6	-53.5	-0.6	82.5	-	-	-	-	-
2013 Q1	1.7	0.0	-	-0.9	7.4	6.1	-6.6	30.5	5.5	-50.1	-0.3	67.7	-	-	-	-	-
Q2	0.6	0.0	-	-0.9	2.4	1.9	-19.1	-1.6	3.4	-41.8	4.7	-4.5	-	-	-	-	-
Q3	1.1	.	-	.	.	.	.	.	.	.	.	.	-	-	-	-	-

8. Gross external debt

	Total	By instrument						By sector (excluding direct investment)			
		Loans, currency and deposits	Money market instruments	Bonds and notes	Trade credits	Other debt liabilities	Direct investment: inter-company lending	General government	Eurosystem	MFIs (excluding Eurosystem)	Other sectors
	1	2	3	4	5	6	7	8	9	10	11
		Outstanding amounts (international investment position)									
2009	10,341.7	4,469.0	525.7	3,523.2	176.9	184.9	1,462.1	1,966.1	253.4	4,579.8	2,080.3
2010	10,910.7	4,708.7	453.3	3,824.0	202.5	200.0	1,522.2	2,140.9	271.0	4,743.7	2,232.9
2011	11,929.7	4,799.8	444.4	4,228.3	226.4	260.9	1,970.0	2,285.9	412.7	4,553.5	2,707.8
2012 Q4	12,091.6	4,522.9	461.2	4,438.9	229.0	327.5	2,112.2	2,488.3	428.9	4,243.9	2,818.4
2013 Q1	12,254.2	4,544.4	501.2	4,498.1	231.7	358.7	2,119.9	2,553.8	398.6	4,273.2	2,908.6
Q2	12,063.1	4,401.9	493.6	4,436.4	228.7	340.8	2,161.6	2,535.4	373.3	4,116.1	2,876.7
		Outstanding amounts as a percentage of GDP									
2009	116.0	50.1	5.9	39.5	2.0	2.1	16.4	22.0	2.8	51.3	23.3
2010	119.1	51.4	4.9	41.7	2.2	2.2	16.6	23.4	3.0	51.8	24.4
2011	126.7	51.0	4.7	44.9	2.4	2.8	20.9	24.3	4.4	48.3	28.7
2012 Q4	127.5	47.7	4.9	46.8	2.4	3.5	22.3	26.2	4.5	44.7	29.7
2013 Q1	129.1	47.9	5.3	47.4	2.4	3.8	22.3	26.9	4.2	45.0	30.6
Q2	126.8	46.3	5.2	46.6	2.4	3.6	22.7	26.6	3.9	43.3	30.2

Source: ECB.
1) Data refer to the changing composition of the euro area, in line with the approach adopted for the reserve assets of the Eurosystem. For further information, see the General Notes.

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

9. Geographical breakdown

	Total	EU Member States outside the euro area						Canada	China	Japan	Switzer-land	United States	Offshore financial centres	Interna-tional organisa-tions	Other countries
		Total	Denmark	Sweden	United Kingdom	Other EU countries [1]	EU institutions								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2012	Outstanding amounts (international investment position)														
Direct investment	1,436.7	421.2	-16.2	19.6	135.0	284.0	-1.2	103.4	79.0	-22.3	161.0	176.1	-223.4	-0.2	741.7
Abroad	5,881.3	1,689.6	29.4	171.7	1,156.7	331.7	0.1	211.4	99.6	79.2	597.2	1,322.6	585.4	0.1	1,296.3
Equity/reinvested earnings	4,374.3	1,250.6	22.8	103.9	867.4	256.4	0.0	165.3	81.3	57.1	451.3	929.8	486.6	0.1	952.2
Other capital	1,507.0	439.0	6.5	67.8	289.4	75.2	0.1	46.1	18.3	22.1	145.9	392.7	98.8	0.0	344.2
In the euro area	4,444.6	1,268.4	45.6	152.2	1,021.7	47.7	1.3	108.0	20.6	101.5	436.1	1,146.4	808.7	0.3	554.6
Equity/reinvested earnings	3,124.5	1,017.0	36.8	136.2	810.0	32.7	1.3	86.9	7.8	88.1	262.7	856.5	425.6	0.0	379.7
Other capital	1,320.2	251.4	8.7	16.0	211.8	14.9	0.0	21.1	12.7	13.4	173.4	289.9	383.1	0.2	174.9
Portfolio investment assets	5,265.0	1,678.1	99.7	227.9	1,044.3	120.0	186.3	102.1	61.2	215.1	131.4	1,637.4	433.2	33.0	973.4
Equity	1,947.3	391.2	17.2	48.9	310.4	14.4	0.1	39.6	57.2	105.7	117.1	621.1	237.0	0.9	377.6
Debt instruments	3,317.7	1,286.9	82.4	178.9	733.8	105.6	186.1	62.4	4.0	109.5	14.3	1,016.3	196.2	32.2	595.8
Bonds and notes	2,852.0	1,135.7	75.8	148.5	621.7	104.7	185.0	58.1	2.6	36.8	11.2	855.2	184.4	31.6	536.3
Money market instruments	465.7	151.3	6.6	30.4	112.1	0.9	1.2	4.3	1.3	72.7	3.0	161.1	11.8	0.6	59.5
Other investment	-260.9	-240.7	10.7	-26.1	-47.1	45.0	-223.1	1.7	-15.7	5.1	-32.8	54.5	51.3	-77.1	-7.3
Assets	4,818.4	2,188.4	77.4	85.7	1,840.4	165.6	19.3	27.9	48.9	81.9	268.0	676.7	537.3	36.6	952.8
General government	167.9	65.6	1.0	4.6	43.4	1.8	14.9	1.8	3.1	0.9	1.5	11.0	3.3	30.6	50.2
MFIs	2,963.9	1,530.7	58.4	49.8	1,292.0	128.2	2.2	16.4	24.3	65.9	146.8	394.7	392.6	5.2	387.4
Other sectors	1,686.6	592.0	18.0	31.2	505.0	35.6	2.2	9.7	21.5	15.1	119.8	270.9	141.4	0.8	515.2
Liabilities	5,079.3	2,429.0	66.8	111.7	1,887.5	120.6	242.4	26.2	64.6	76.8	300.8	622.1	485.9	113.7	960.0
General government	227.5	107.1	0.3	0.9	26.3	0.2	79.4	0.1	0.0	0.1	1.1	29.6	1.2	83.1	5.1
MFIs	3,392.7	1,644.5	56.3	86.6	1,306.0	92.9	102.7	17.0	38.2	50.7	239.2	338.5	387.9	28.1	648.5
Other sectors	1,459.2	677.4	10.1	24.2	555.1	27.6	60.3	9.1	26.4	26.0	60.6	254.0	96.8	2.5	306.5
2012 Q3 to 2013 Q2	Cumulated transactions														
Direct investment	69.3	60.5	-11.6	-33.5	96.7	8.9	0.0	-12.6	7.5	1.2	11.2	-21.9	-29.3	0.0	52.7
Abroad	284.9	95.3	0.7	2.8	79.3	12.6	0.0	1.3	9.4	1.1	21.3	46.3	-8.3	0.0	118.6
Equity/reinvested earnings	130.3	82.3	0.7	8.2	68.3	5.1	0.0	-4.5	8.9	1.4	-5.1	30.5	-18.7	0.0	35.4
Other capital	154.6	13.1	0.0	-5.4	11.0	7.5	0.0	5.8	0.5	-0.3	26.3	15.7	10.4	0.0	83.2
In the euro area	215.6	34.9	12.2	36.3	-17.4	3.7	0.0	13.9	1.9	-0.1	10.0	68.2	21.1	0.0	65.9
Equity/reinvested earnings	188.1	27.4	12.6	22.9	-10.1	2.0	0.0	11.4	1.3	4.0	9.7	51.3	47.3	0.0	35.8
Other capital	27.5	7.5	-0.4	13.4	-7.3	1.7	0.0	2.5	0.6	-4.2	0.3	16.9	-26.2	0.0	30.0
Portfolio investment assets	247.6	-10.1	5.2	11.2	-45.9	9.4	10.0	6.7	5.8	37.6	0.9	65.7	4.0	-0.8	137.8
Equity	141.4	35.0	0.9	3.4	30.8	-0.1	0.0	2.8	5.0	21.4	2.7	45.9	1.3	0.0	27.3
Debt instruments	106.2	-45.1	4.4	7.8	-76.7	9.4	10.0	3.9	0.7	16.2	-1.8	19.8	2.7	-0.8	110.5
Bonds and notes	117.6	-15.2	1.4	8.3	-45.6	8.2	12.4	2.4	0.4	-8.2	-1.2	26.4	-0.6	-1.3	114.8
Money market instruments	-11.5	-29.9	2.9	-0.5	-31.1	1.2	-2.4	1.5	0.3	24.4	-0.6	-6.6	3.3	0.5	-4.3
Other investment	315.0	179.5	-25.5	1.6	225.7	-17.4	-4.8	11.0	31.5	8.7	64.1	13.9	4.9	-21.4	23.0
Assets	-158.4	-147.6	-20.0	-0.4	-110.4	-15.5	-1.3	7.3	0.1	4.4	-0.6	-5.1	-32.9	0.3	15.7
General government	-6.0	-6.3	1.5	0.2	-7.9	-0.9	0.8	0.2	-0.1	-1.1	0.3	0.0	0.2	0.1	0.5
MFIs	-137.9	-135.0	-22.9	2.3	-95.1	-17.1	-2.3	2.9	1.9	8.4	1.2	-6.0	0.9	0.1	-12.4
Other sectors	-14.4	-6.3	1.4	-2.9	-7.5	2.6	0.2	4.2	-1.7	-2.9	-2.1	0.9	-34.0	0.0	27.6
Liabilities	-473.4	-327.1	5.4	-1.9	-336.1	1.9	3.5	-3.7	-31.4	-4.2	-64.7	-18.9	-37.8	21.7	-7.3
General government	-12.6	-18.5	0.1	0.3	-24.6	0.1	5.7	0.0	0.0	0.0	0.0	-6.3	-0.2	12.8	-0.5
MFIs	-432.3	-269.9	3.6	-1.3	-265.2	-0.7	-6.3	-6.2	-31.5	-4.1	-66.4	-17.7	-36.5	8.3	-8.3
Other sectors	-28.5	-38.7	1.8	-0.9	-46.4	2.5	4.2	2.5	0.1	-0.1	1.7	5.0	-1.1	0.5	1.5

Source: ECB.
1) Excluding Croatia.

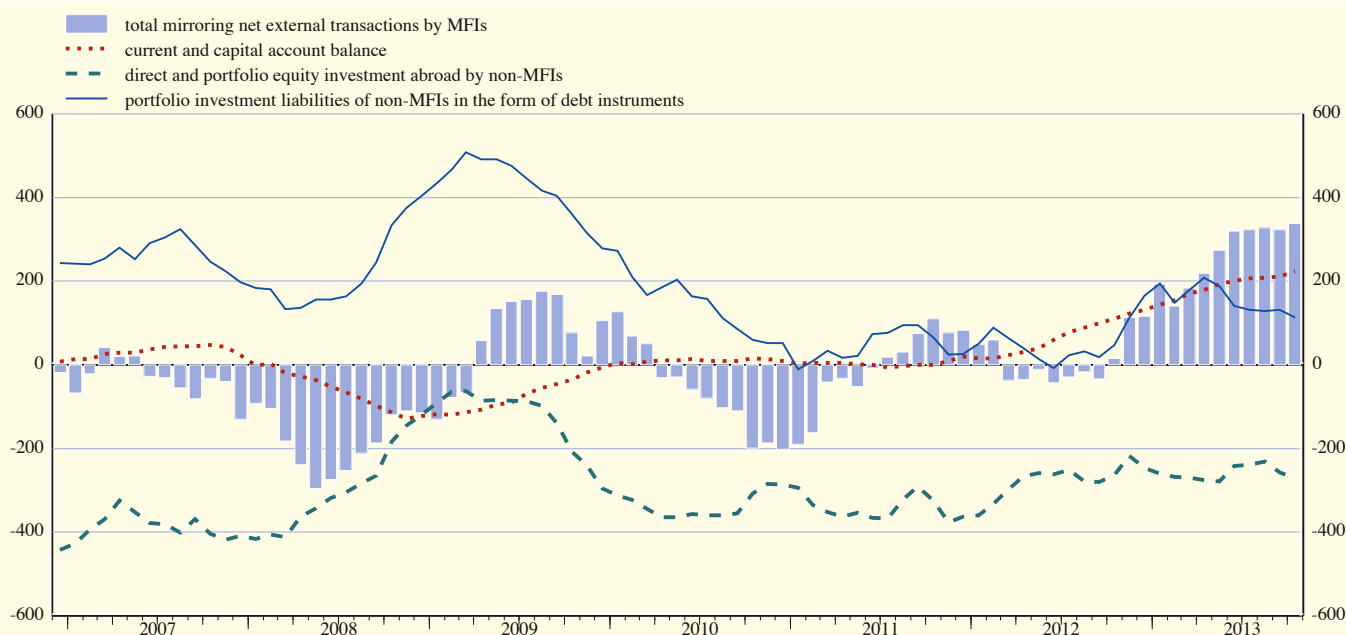## 7.4 Monetary presentation of the balance of payments [1]
(EUR billions; transactions)

	Total	Current and capital account balance	B.o.p. items mirroring net transactions by MFIs								Financial derivatives	Errors and omissions
			Transactions by non-MFIs									
			Direct investment		Portfolio investment				Other investment			
			By resident units abroad	By non-resident units in euro area	Assets		Liabilities		Assets	Liabilities		
					Equity	Debt instruments	Equity	Debt instruments				
	1	2	3	4	5	6	7	8	9	10	11	12
2010	-202.5	9.4	-327.7	268.0	-77.4	-245.6	142.4	52.3	-154.8	138.0	10.3	-17.4
2011	82.5	19.2	-501.4	427.5	55.4	-47.6	55.4	26.4	-136.1	164.1	-5.3	25.0
2012	116.3	131.2	-331.9	318.1	-54.6	-185.6	162.2	164.7	-112.4	11.5	3.4	9.8
2012 Q3	43.2	47.2	-50.9	79.1	-5.6	-48.2	37.7	5.2	-7.2	-3.8	-2.9	-7.5
Q4	108.3	68.2	-112.9	84.6	-50.5	-34.8	91.4	66.9	15.5	-77.4	25.4	32.0
2013 Q1	29.3	26.4	-56.6	28.7	-48.9	-54.1	65.6	49.3	-44.5	56.2	8.4	-1.2
Q2	138.4	58.1	-61.3	13.2	-8.9	-20.8	98.4	18.7	56.5	-16.1	2.4	-1.8
Q3	46.8	58.0	-46.4	30.5	-21.7	-26.0	33.2	-3.4	7.5	2.9	9.7	2.5
2012 Oct.	9.0	16.0	-61.1	12.8	-8.5	-12.2	39.3	6.8	5.3	-10.3	9.8	11.1
Nov.	64.5	23.1	-28.0	43.7	-7.8	-21.2	21.8	37.9	-15.7	-6.9	6.2	11.4
Dec.	34.9	29.1	-23.8	28.1	-34.2	-1.3	30.3	22.2	25.9	-60.2	9.5	9.5
2013 Jan.	39.1	-6.7	-23.7	11.3	-16.9	-19.5	38.1	14.6	-1.2	36.5	4.6	2.0
Feb.	-32.6	10.1	-14.4	15.5	-17.3	-28.2	10.3	4.2	-27.6	11.1	2.7	0.9
Mar.	22.9	22.9	-18.5	2.0	-14.8	-6.5	17.2	30.6	-15.7	8.6	1.1	-4.2
Apr.	7.0	15.7	-22.2	9.5	-18.8	-24.8	16.8	27.7	-15.0	21.0	-5.6	2.8
May	75.1	12.4	-10.1	-6.3	-5.4	-8.8	48.1	17.9	39.2	-4.1	-7.3	-0.5
June	56.3	30.1	-29.0	9.9	15.3	12.8	33.5	-26.9	32.4	-33.0	15.3	-4.1
July	16.1	28.4	-9.8	5.9	-9.0	-15.0	5.9	-5.0	5.3	8.9	-0.7	1.2
Aug.	28.6	13.8	-22.1	15.4	5.4	-1.1	19.2	-7.8	6.5	-7.7	7.0	0.1
Sep.	2.0	15.8	-14.5	9.2	-18.1	-9.8	8.1	9.4	-4.3	1.6	3.4	1.2
Oct.	23.9	28.5	-24.2	21.8	-7.2	-5.6	18.6	-11.6	15.0	-11.4	2.9	-2.9
12-month cumulated transactions												
2013 Oct.	337.7	223.2	-240.3	166.0	-128.7	-129.0	267.9	113.0	44.8	-35.5	38.9	17.5

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

- total mirroring net external transactions by MFIs
- current and capital account balance
- direct and portfolio equity investment abroad by non-MFIs
- portfolio investment liabilities of non-MFIs in the form of debt instruments

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

7.5 Trade in goods

1. Values and volumes by product group [1]
(seasonally adjusted, unless otherwise indicated)

	Total (n.s.a.)		Exports (f.o.b.)					Imports (c.i.f.)					
			Total				Memo item:	**Total**				Memo items:	
	Exports	Imports		Intermediate	Capital	Consumption	Manufacturing		Intermediate	Capital	Consumption	Manufacturing	Oil
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Values (EUR billions; annual percentage changes for columns 1 and 2)												
2011	13.0	13.3	1,748.1	879.3	353.7	474.5	1,426.8	1,761.6	1,128.1	240.4	367.3	1,104.9	324.4
2012	7.5	1.9	1,877.9	931.6	385.9	516.3	1,523.8	1,791.3	1,148.8	246.7	369.5	1,093.3	361.5
2012 Q4	5.7	1.1	468.6	231.8	96.5	128.6	378.7	439.6	280.4	59.6	91.8	268.8	90.3
2013 Q1	0.7	-5.1	473.5	235.6	96.0	132.7	383.3	437.2	279.0	59.9	91.3	269.4	86.9
Q2	1.6	-3.2	473.6	230.8	96.8	132.4	385.3	433.1	274.8	59.2	91.0	267.4	84.6
Q3	0.1	-2.0	471.8	229.7	93.9	133.3	383.9	436.1	274.0	59.3	93.1	269.4	85.5
2013 May	-0.3	-5.6	156.1	76.1	31.6	43.4	130.3	142.9	90.4	19.5	30.2	90.7	28.1
June	-2.9	-5.2	158.2	77.0	32.1	44.6	127.8	145.6	92.2	19.8	30.6	88.6	27.8
July	3.1	0.3	156.2	76.1	31.6	44.0	127.7	145.5	92.4	19.5	30.8	89.7	29.2
Aug.	-6.0	-7.6	157.0	76.5	31.0	44.6	127.9	144.4	91.3	20.3	30.5	88.9	28.4
Sep.	2.9	1.5	158.6	77.1	31.3	44.7	128.2	146.2	90.2	19.5	31.8	90.8	27.9
Oct.	1.2	-3.5	159.0	.	.	.	129.3	144.5	.	.	.	88.9	.
	Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)												
2011	7.6	3.2	108.2	107.5	111.1	107.8	108.8	103.0	103.7	103.1	100.8	104.7	98.0
2012	3.7	-2.9	111.9	110.2	117.0	111.8	112.6	99.6	100.8	99.4	96.1	99.8	99.3
2012 Q4	2.7	-2.3	111.3	109.5	116.9	110.7	111.5	97.9	99.0	96.2	95.1	97.8	100.3
2013 Q1	0.0	-4.2	113.2	111.9	116.3	115.6	113.8	98.3	99.6	96.1	95.5	98.9	97.4
Q2	1.5	-1.3	113.2	110.3	116.1	114.5	113.8	98.9	100.8	93.9	94.6	97.9	100.8
Q3	1.7	1.8	113.5	110.8	113.1	115.6	114.1	99.6	100.1	96.1	97.2	99.5	98.9
2013 Apr.	8.3	2.9	114.1	110.9	119.4	115.5	112.7	98.1	100.4	93.5	93.5	96.0	101.0
May	-0.1	-3.4	112.1	109.3	113.8	112.9	115.7	98.4	100.1	93.5	94.6	100.2	101.8
June	-3.0	-3.3	113.3	110.6	115.0	115.1	113.0	100.2	102.0	94.7	95.7	97.5	99.6
July	4.3	2.9	112.8	110.3	113.7	114.8	113.9	100.3	102.5	93.8	96.5	99.0	104.6
Aug.	-4.0	-3.3	113.4	110.6	112.0	116.2	114.1	98.8	99.8	99.7	95.1	98.5	97.3
Sep.	4.5	5.9	114.3	111.5	113.7	115.7	114.2	99.8	98.1	94.9	99.9	100.8	94.7

2. Prices [2]
(annual percentage changes, unless otherwise indicated)

	Industrial producer export prices (f.o.b.) [3]							Industrial import prices (c.i.f.)						
	Total (index: 2010 = 100)	**Total**					Memo item: Manufac-turing	Total (index: 2010 = 100)	**Total**					Memo item: Manufac-turing
			Intermediate goods	Capital goods	Consumer goods	Energy				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	103.8	3.8	5.4	1.1	1.6	22.4	3.6	107.6	7.5	4.1	-1.5	3.6	25.5	2.9
2012	106.1	2.3	0.9	1.8	2.2	9.5	2.2	111.2	3.4	0.2	1.6	3.2	7.2	2.1
2013 Q1	105.8	-0.1	-0.5	0.3	1.3	-5.3	-0.1	109.9	-1.6	-0.9	-1.2	1.2	-4.1	-0.6
Q2	105.1	-0.9	-1.6	0.1	1.1	-8.8	-0.8	107.9	-2.8	-2.1	-1.6	0.6	-6.0	-1.4
Q3	105.0	-1.5	-1.8	-0.6	0.7	-9.4	-1.3	108.1	-3.3	-3.2	-2.9	-0.9	-5.5	-2.6
2013 May	105.2	-1.0	-1.8	0.1	1.1	-9.3	-0.8	107.8	-3.1	-2.1	-1.8	0.7	-6.7	-1.5
June	104.8	-0.9	-1.7	-0.5	0.7	-3.6	-0.8	107.4	-1.9	-2.7	-2.3	-0.3	-1.9	-1.7
July	105.1	-1.1	-1.5	-0.6	0.7	-5.6	-0.9	107.9	-2.8	-3.2	-3.2	-0.8	-3.8	-2.5
Aug.	105.0	-1.7	-1.8	-0.7	0.6	-11.2	-1.6	108.1	-4.1	-3.3	-3.0	-1.2	-7.4	-2.8
Sep.	104.9	-1.6	-2.1	-0.3	0.8	-11.4	-1.5	108.2	-3.1	-3.0	-2.3	-0.7	-5.3	-2.5
Oct.	104.5	-1.6	-2.1	-0.5	0.6	-11.1	-1.4	107.2	-3.4	-3.0	-2.5	-0.8	-5.7	-2.7

Source: Eurostat.
1) 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.
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.
3) 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.

3. Geographical breakdown

	Total	EU Member States outside the euro area				Russia	Switzer-land	Turkey	United States	Asia			Africa	Latin America	Other countries
		Denmark	Sweden	United Kingdom	Other EU countries						China	Japan			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Exports (f.o.b.)															
2011	1,748.1	32.9	60.5	213.5	250.6	79.9	109.2	56.8	200.6	405.6	115.6	39.4	112.3	84.6	141.8
2012	1,877.9	33.8	58.9	230.5	252.4	90.1	116.6	59.5	224.4	440.0	120.8	44.8	126.3	97.3	148.1
2012 Q2	468.1	8.5	14.9	57.3	63.1	22.7	29.3	14.5	56.2	109.3	30.5	11.4	31.4	24.4	36.5
Q3	475.2	8.4	14.8	58.3	63.3	22.9	29.2	15.0	58.5	110.6	29.8	11.6	31.2	24.5	38.4
Q4	468.6	8.5	14.3	58.2	62.6	22.5	28.7	15.3	53.9	111.3	29.2	11.2	32.5	24.8	36.0
2013 Q1	473.5	8.6	14.5	58.5	64.0	23.1	28.2	15.6	55.5	110.4	29.6	11.0	34.2	25.0	36.0
Q2	473.6	8.6	14.6	59.0	63.3	22.4	27.4	15.5	55.0	110.0	29.9	10.7	33.1	24.6	40.1
Q3	471.8	8.8	15.0	59.9	64.6	21.4	27.8	14.7	55.5	110.1	31.3	11.2	31.8	24.8	37.4
2013 May	156.1	2.9	5.0	20.1	21.3	7.6	9.3	5.3	18.8	37.4	10.0	3.6	11.1	8.6	8.7
June	158.2	2.9	4.8	20.0	21.3	7.3	8.9	5.1	17.8	36.0	9.9	3.6	11.0	8.0	15.2
July	156.2	2.9	5.2	19.9	21.4	7.4	9.6	4.9	17.8	36.5	10.2	3.6	10.9	8.4	11.3
Aug.	157.0	2.9	5.0	19.7	21.6	7.0	9.2	4.9	18.7	37.0	10.8	3.8	10.6	8.2	12.3
Sep.	158.6	2.9	4.8	20.3	21.6	7.0	9.0	5.0	18.9	36.6	10.3	3.8	10.4	8.2	13.9
Oct.	159.0	.	.	.	.	7.3	9.3	4.8	18.9	37.4	10.5	3.6	10.4	8.3	.
Percentage share of total exports															
2012	100.0	1.8	3.1	12.3	13.4	4.8	6.2	3.2	11.9	23.4	6.4	2.4	6.7	5.2	7.9
Imports (c.i.f.)															
2011	1,761.6	29.9	53.2	166.9	231.7	138.8	81.6	35.0	140.8	553.5	218.5	52.6	129.2	91.2	110.0
2012	1,791.3	28.8	52.8	167.2	232.5	144.0	81.9	34.1	151.2	540.8	214.1	49.2	157.5	92.8	107.7
2012 Q2	449.8	7.3	13.2	41.1	57.9	35.1	20.1	8.4	38.0	138.0	56.1	12.7	38.5	22.9	29.3
Q3	448.6	7.2	13.5	42.2	58.3	34.2	21.4	8.4	39.3	133.4	53.5	12.2	39.4	23.3	28.0
Q4	439.6	7.1	12.8	41.7	58.2	36.7	20.1	8.7	35.9	130.9	51.2	11.5	39.7	22.6	25.2
2013 Q1	437.2	7.7	13.3	42.0	59.1	38.8	20.2	8.8	35.4	128.0	51.8	11.0	38.6	21.2	24.1
Q2	433.1	7.6	13.4	40.9	58.5	34.2	20.4	8.7	37.4	127.4	50.8	10.8	36.3	20.2	28.2
Q3	436.1	8.0	13.7	40.9	60.2	36.2	20.8	8.9	37.8	128.5	50.8	10.6	34.2	20.1	26.7
2013 May	142.9	2.5	4.5	14.1	19.5	11.5	7.1	2.9	12.7	43.5	17.8	3.7	11.7	6.9	6.1
June	145.6	2.6	4.5	13.6	19.8	10.5	7.0	2.9	12.4	41.4	16.5	3.5	12.0	6.8	12.0
July	145.5	2.6	4.7	13.6	19.9	11.7	6.9	3.0	12.6	42.8	16.9	3.4	11.9	6.8	9.1
Aug.	144.4	2.7	4.5	13.9	20.0	12.4	7.1	2.9	12.4	42.7	16.9	3.6	11.3	6.5	8.0
Sep.	146.2	2.7	4.5	13.5	20.4	12.1	6.7	3.0	12.9	43.0	17.0	3.6	11.0	6.9	9.6
Oct.	144.5	.	.	.	.	11.7	6.9	3.0	13.1	42.7	16.6	3.6	11.5	6.7	.
Percentage share of total imports															
2012	100.0	1.6	2.9	9.3	13.0	8.0	4.6	1.9	8.4	30.2	12.0	2.7	8.8	5.2	6.0
Balance															
2011	-13.6	3.0	7.3	46.6	18.9	-58.9	27.6	21.7	59.8	-147.9	-102.9	-13.2	-16.9	-6.5	31.8
2012	86.6	5.0	6.1	63.3	19.9	-53.9	34.7	25.5	73.2	-100.9	-93.3	-4.5	-31.2	4.6	40.4
2012 Q2	18.2	1.3	1.7	16.2	5.2	-12.5	9.2	6.1	18.2	-28.7	-25.6	-1.3	-7.1	1.5	7.2
Q3	26.6	1.2	1.2	16.1	5.1	-11.3	7.8	6.6	19.3	-22.8	-23.7	-0.6	-8.2	1.3	10.4
Q4	29.0	1.4	1.4	16.6	4.4	-14.3	8.6	6.6	18.0	-19.6	-22.1	-0.2	-7.3	2.2	10.8
2013 Q1	36.4	0.9	1.2	16.5	4.9	-15.7	8.0	6.8	20.1	-17.5	-22.2	0.0	-4.4	3.8	11.9
Q2	40.5	1.0	1.2	18.2	4.8	-11.8	7.0	6.8	17.7	-17.4	-20.9	0.0	-3.2	4.4	11.9
Q3	35.7	0.8	1.2	19.0	4.4	-14.8	7.0	5.8	17.7	-18.4	-19.6	0.6	-2.4	4.7	10.7
2013 May	13.1	0.4	0.5	6.0	1.8	-3.8	2.2	2.4	6.1	-6.1	-7.8	-0.1	-0.6	1.7	2.6
June	12.6	0.2	0.3	6.3	1.6	-3.2	1.8	2.2	5.3	-5.4	-6.7	0.1	-1.0	1.2	3.2
July	10.7	0.3	0.5	6.3	1.5	-4.3	2.6	1.9	5.3	-6.3	-6.7	0.2	-1.0	1.6	2.1
Aug.	12.6	0.2	0.4	5.8	1.7	-5.5	2.1	1.9	6.3	-5.7	-6.2	0.2	-0.8	1.8	4.2
Sep.	12.4	0.2	0.3	6.8	1.2	-5.1	2.3	1.9	6.1	-6.4	-6.6	0.2	-0.6	1.3	4.3
Oct.	14.5	.	.	.	.	-4.4	2.4	1.8	5.8	-5.4	-6.1	0.1	-1.1	1.7	.

Source: Eurostat.

EXCHANGE RATES

8

(period averages; index: 1999 Q1=100)

	EER-21						EER-40	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM [2]	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2011	103.4	100.6	97.6	94.9	105.2	96.4	112.2	97.6
2012	97.9	95.5	93.3	89.6	99.8	91.2	107.1	92.8
2013	101.7	98.9	96.7	.	.	.	112.0	96.1
2012 Q4	97.9	95.5	93.7	89.5	99.1	89.9	107.4	92.9
2013 Q1	100.8	98.2	96.2	92.3	102.0	93.0	110.2	94.9
Q2	100.9	98.2	96.1	92.7	101.3	92.3	110.6	95.0
Q3	101.9	99.1	96.9	93.1	102.1	93.1	112.9	96.8
Q4	103.1	99.9	97.8	.	.	.	114.7	97.7
2012 Dec.	98.7	96.2	94.4	-	-	-	108.3	93.5
2013 Jan.	100.4	97.9	96.0	-	-	-	109.9	94.8
Feb.	101.7	99.0	97.0	-	-	-	111.2	95.7
Mar.	100.2	97.8	95.6	-	-	-	109.5	94.4
Apr.	100.5	97.8	95.8	-	-	-	109.8	94.3
May	100.6	98.0	95.8	-	-	-	110.0	94.5
June	101.6	98.8	96.6	-	-	-	112.0	96.1
July	101.5	98.9	96.6	-	-	-	112.0	96.1
Aug.	102.2	99.5	97.1	-	-	-	113.4	97.3
Sep.	102.0	99.1	97.0	-	-	-	113.3	97.0
Oct.	102.9	99.7	97.7	-	-	-	114.2	97.4
Nov.	102.7	99.5	97.3	-	-	-	114.2	97.2
Dec.	103.9	100.6	98.3	-	-	-	115.8	98.5
	Percentage change versus previous month							
2013 Dec.	1.2	1.1	1.0	-	-	-	1.4	1.3
	Percentage change versus previous year							
2013 Dec.	5.2	4.5	4.1	-	-	-	6.9	5.4

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

- nominal EER-21
- real CPI-deflated EER-21

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

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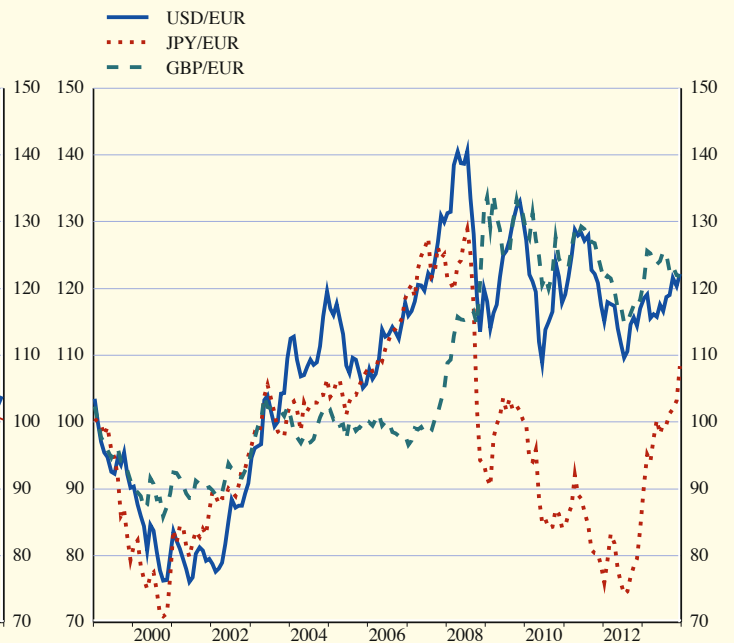
Source: ECB.
1) For a definition of the trading partner groups and other information, please refer to the General Notes.
2) ULCM-deflated series are available only for the EER-20 trading partner group.

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
2011	1.9558	24.590	7.4506	7.4390	0.7063	3.4528	279.37	4.1206	4.2391	9.0298	0.86788	2.3378
2012	1.9558	25.149	7.4437	7.5217	0.6973	3.4528	289.25	4.1847	4.4593	8.7041	0.81087	2.3135
2013	1.9558	25.980	7.4579	7.5786	0.7015	3.4528	296.87	4.1975	4.4190	8.6515	0.84926	2.5335
2013 Q2	1.9558	25.831	7.4555	7.5566	0.7009	3.4528	295.53	4.1982	4.3958	8.5652	0.85056	2.4037
Q3	1.9558	25.853	7.4580	7.5459	0.7025	3.4528	297.96	4.2477	4.4410	8.6798	0.85453	2.6092
Q4	1.9558	26.658	7.4593	7.6290	0.7028	3.4528	297.43	4.1853	4.4506	8.8575	0.84074	2.7537
2013 June	1.9558	25.759	7.4576	7.4901	0.7019	3.4528	295.70	4.2839	4.4803	8.6836	0.85191	2.5028
July	1.9558	25.944	7.4579	7.5061	0.7024	3.4528	294.90	4.2745	4.4244	8.6609	0.86192	2.5274
Aug.	1.9558	25.818	7.4580	7.5372	0.7027	3.4528	299.46	4.2299	4.4371	8.7034	0.85904	2.6125
Sep.	1.9558	25.789	7.4579	7.5985	0.7026	3.4528	299.75	4.2371	4.4633	8.6758	0.84171	2.6952
Oct.	1.9558	25.662	7.4592	7.6193	0.7028	3.4528	294.76	4.1902	4.4444	8.7479	0.84720	2.7095
Nov.	1.9558	26.927	7.4587	7.6326	0.7028	3.4528	297.68	4.1887	4.4452	8.8802	0.83780	2.7316
Dec.	1.9558	27.521	7.4602	7.6365	0.7027	3.4528	300.24	4.1760	4.4635	8.9597	0.83639	2.8276
	Percentage change versus previous month											
2013 Dec.	0.0	2.2	0.0	0.1	0.0	0.0	0.9	-0.3	0.4	0.9	-0.2	3.5
	Percentage change versus previous year											
2013 Dec.	0.0	9.2	0.0	1.4	0.9	0.0	5.1	2.0	-0.6	3.6	3.0	20.6

	Australian dollar	Brazilian real	Canadian dollar	Chinese yuan renminbi	Hong Kong dollar	Indian rupee [1]	Indonesian rupiah	Israeli shekel	Japanese yen	Malaysian ringgit
	13	14	15	16	17	18	19	20	21	22
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	1.3777	2.8687	1.3684	8.1646	10.3016	77.9300	13,857.50	4.7948	129.66	4.1855
2013 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
Q4	1.4662	3.0931	1.4275	8.2903	10.5522	84.4048	15,682.97	4.7994	136.48	4.3633
2013 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
Oct.	1.4328	2.9860	1.4128	8.3226	10.5724	84.0071	15,109.54	4.8232	133.32	4.3283
Nov.	1.4473	3.0959	1.4145	8.2221	10.4604	84.4990	15,575.06	4.7711	134.97	4.3176
Dec.	1.5243	3.2133	1.4580	8.3248	10.6254	84.7631	16,455.73	4.8019	141.68	4.4517
	Percentage change versus previous month									
2013 Dec.	5.3	3.8	3.1	1.2	1.6	0.3	5.7	0.6	5.0	3.1
	Percentage change versus previous year									
2013 Dec.	21.7	17.9	12.3	1.8	4.5	18.2	30.2	-3.1	29.1	11.1

	Mexican peso	New Zealand dollar	Norwegian krone	Philippine peso	Russian rouble	Singapore dollar	South African rand	South Korean won	Swiss franc	Thai baht	US dollar
	23	24	25	26	27	28	29	30	31	32	33
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	16.9641	1.6206	7.8067	56.428	42.3370	1.6619	12.8330	1,453.91	1.2311	40.830	1.3281
2013 Q2	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
Q4	17.7331	1.6439	8.2375	59.354	44.2920	1.7006	13.8224	1,445.53	1.2294	43.151	1.3610
2013 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
Oct.	17.7413	1.6351	8.1208	58.809	43.7440	1.6956	13.5283	1,454.73	1.2316	42.549	1.3635
Nov.	17.6340	1.6327	8.2055	58.811	44.1581	1.6833	13.7626	1,434.06	1.2316	42.695	1.3493
Dec.	17.8278	1.6659	8.4053	60.552	45.0628	1.7244	14.2234	1,446.99	1.2245	44.323	1.3704
	Percentage change versus previous month										
2013 Dec.	1.1	2.0	2.4	3.0	2.0	2.4	3.3	0.9	-0.6	3.8	1.6
	Percentage change versus previous year										
2013 Dec.	5.7	5.6	14.4	12.6	11.8	7.7	25.7	2.5	1.3	10.3	4.5

Source: ECB.
1) For this currency the ECB computes and publishes euro reference exchange rates as from 1 January 2009. Previous data are indicative.

9.1 Economic and financial developments in other EU Member States
(annual percentage changes, unless otherwise indicated)

	Bulgaria	Czech Republic	Denmark	Croatia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10
HICP										
2011	3.4	2.1	2.7	2.2	4.1	3.9	3.9	5.8	1.4	4.5
2012	2.4	3.5	2.4	3.4	3.2	5.7	3.7	3.4	0.9	2.8
2013 Q2	1.1	1.5	0.5	2.3	1.4	1.9	0.5	4.4	0.3	2.7
Q3	-0.7	1.2	0.2	2.2	0.5	1.6	0.9	2.4	0.7	2.7
2013 Sep.	-1.3	1.0	0.2	1.7	0.5	1.6	0.9	1.1	0.5	2.7
Oct.	-1.1	0.8	0.3	0.8	0.5	1.1	0.7	1.2	0.2	2.2
Nov.	-1.0	1.0	0.3	0.7	0.5	0.4	0.5	1.3	0.3	2.1
General government deficit (-)/surplus (+) as a percentage of GDP										
2010	-3.1	-4.7	-2.5	-6.4	-7.2	-4.3	-7.9	-6.8	0.3	-10.1
2011	-2.0	-3.2	-1.8	-7.8	-5.5	4.3	-5.0	-5.6	0.2	-7.7
2012	-0.8	-4.4	-4.1	-5.0	-3.2	-2.0	-3.9	-3.0	-0.2	-6.1
General government gross debt as a percentage of GDP										
2010	16.2	38.4	42.7	44.9	37.8	82.2	54.9	30.5	39.4	78.4
2011	16.3	41.4	46.4	51.6	38.3	82.1	56.2	34.7	38.6	84.3
2012	18.5	46.2	45.4	55.5	40.5	79.8	55.6	37.9	38.2	88.7
Long-term government bond yield as a percentage per annum; period average										
2013 June	3.40	2.14	1.72	4.63	3.54	6.02	3.95	5.43	2.05	1.96
July	3.46	2.23	1.77	4.91	3.54	5.78	3.97	5.26	2.16	2.09
Aug.	3.51	2.40	1.94	5.04	3.65	6.31	4.30	5.04	2.34	2.29
Sep.	3.64	2.42	2.10	4.92	3.89	6.16	4.49	5.27	2.60	2.44
Oct.	3.71	2.33	1.93	4.99	4.01	5.58	4.28	5.22	2.44	2.26
Nov.	3.64	2.18	1.80	4.97	3.99	5.82	4.38	5.29	2.30	2.31
3-month interest rate as a percentage per annum; period average										
2013 June	1.20	0.46	0.26	1.71	0.73	4.48	2.69	4.20	1.22	0.51
July	1.18	0.46	0.27	2.22	0.55	4.36	2.70	4.27	1.20	0.51
Aug.	1.09	0.46	0.27	1.91	0.41	3.92	2.70	3.66	1.20	0.51
Sep.	1.05	0.45	0.27	1.90	0.40	-	2.69	3.40	1.21	0.52
Oct.	1.03	0.45	0.27	1.72	0.40	3.60	2.67	2.86	1.21	0.52
Nov.	0.97	0.40	0.25	1.35	0.40	3.33	2.65	2.44	1.16	0.52
Real GDP										
2011	1.8	1.8	1.1	-0.2	6.0	1.6	4.5	2.3	2.9	1.1
2012	0.8	-1.0	-0.4	-1.9	3.7	-1.7	1.9	0.4	0.9	0.3
2013 Q1	0.4	-2.4	-0.7	-1.0	3.8	-0.3	0.8	2.3	1.6	0.7
Q2	0.2	-1.5	0.5	-0.7	3.8	0.5	1.2	1.6	0.6	2.0
Q3	0.7	-1.3	0.5	-0.6	2.3	1.6	1.7	4.1	0.3	1.9
Current and capital account balance as a percentage of GDP										
2011	1.4	-2.3	6.3	-0.8	-1.2	2.8	-3.0	-3.9	5.9	-1.1
2012	0.1	-1.1	6.0	0.2	2.0	3.6	-1.5	-3.0	5.9	-3.5
2013 Q1	-4.7	1.6	3.0	-14.2	-2.5	5.9	-1.6	1.3	6.7	-4.9
Q2	6.1	-1.5	8.3	-2.2	9.2	6.2	4.0	2.4	6.1	-1.1
Q3	11.4	2.6	8.7	.	2.8	6.6	0.2	0.8	5.9	-6.3
Gross external debt as a percentage of GDP										
2011	94.3	59.6	183.3	103.3	77.4	149.3	72.3	77.2	200.0	419.6
2012	94.9	60.2	181.8	102.1	75.4	128.9	71.1	75.2	191.2	385.3
2013 Q1	93.8	61.8	182.2	102.4	74.0	133.6	72.7	74.8	195.1	393.1
Q2	93.2	62.7	174.8	105.0	70.0	128.1	73.7	73.3	197.8	388.7
Q3	92.4	61.4	174.4	.	69.7	120.9	72.6	71.4	197.6	358.5
Unit labour costs										
2011	2.5	0.5	0.0	-0.3	0.7	2.3	1.1	0.6	0.1	1.4
2012	-0.5	3.3	1.5	1.1	1.9	2.7	2.0	6.8	2.9	2.9
2013 Q1	12.9	0.7	1.6	3.5	0.4	9.7	2.0	1.6	2.1	-0.1
Q2	13.0	0.9	1.3	1.1	3.3	9.8	1.0	1.9	0.5	1.4
Q3	8.3	1.8	0.8	0.5	3.7	8.7	1.3	-2.4	1.7	1.9
Standardised unemployment rate as a percentage of labour force (s.a.)										
2011	11.3	6.7	7.6	13.5	15.4	11.0	9.6	7.4	7.8	8.0
2012	12.3	7.0	7.5	15.9	13.4	10.9	10.1	7.0	8.0	7.9
2013 Q2	12.9	7.0	6.8	17.1	11.9	10.4	10.5	7.4	8.0	7.7
Q3	12.8	6.9	7.1	17.8	11.5	10.1	10.3	7.3	7.9	7.5
2013 Sep.	12.8	7.0	6.9	17.9	11.4	10.0	10.2	7.3	8.0	7.4
Oct.	12.9	6.8	7.0	18.4	11.1	9.5	10.2	7.3	7.9	.
Nov.	12.9	6.9	6.9	18.6	11.3	.	10.2	7.3	8.0	.

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

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

	Consumer price index	Unit labour costs [1]	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force [2] (s.a.)	Broad money [3]	3-month interbank deposit rate [4]	10-year zero coupon government bond yield; [4] end of period	Exchange rate [5] as national currency per euro	Government deficit (-)/ surplus (+) as a % of GDP	Govern-ment debt [6] as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
2010	1.6	-1.2	2.5	6.6	9.6	2.5	0.34	3.57	1.3257	-12.2	79.2
2011	3.2	2.0	1.8	3.6	8.9	7.3	0.34	2.10	1.3920	-10.7	83.1
2012	2.1	1.1	2.8	4.2	8.1	8.6	0.43	1.88	1.2848	-9.3	86.5
2013	.	.	.	.	.	.	0.27	3.27	1.3281	.	.
2012 Q4	1.9	4.3	2.0	3.3	7.8	7.6	0.32	1.88	1.2967	-9.0	86.5
2013 Q1	1.7	1.7	1.3	2.5	7.7	7.3	0.29	2.09	1.3206	-7.2	88.0
Q2	1.4	2.0	1.6	2.1	7.6	7.0	0.28	2.82	1.3062	-5.7	87.2
Q3	1.6	2.0	2.0	2.4	7.3	6.6	0.26	2.91	1.3242	.	.
Q4	.	.	.	.	.	.	0.24	3.27	1.3610	.	.
2013 Aug.	1.5	-	-	2.9	7.3	6.7	0.26	3.11	1.3310	-	-
Sep.	1.2	-	-	2.8	7.2	6.4	0.25	2.91	1.3348	-	-
Oct.	1.0	-	-	3.8	7.3	6.8	0.24	2.84	1.3635	-	-
Nov.	1.2	-	-	3.0	7.0	6.1	0.24	2.99	1.3493	-	-
Dec.	.	-	-	.	.	.	0.24	3.27	1.3704	-	-
Japan											
2010	-0.7	-4.8	4.7	15.6	5.1	2.8	0.23	1.18	116.24	-8.3	188.3
2011	-0.3	0.8	-0.4	-2.8	4.6	2.7	0.19	1.00	110.96	-8.9	204.4
2012	0.0	-2.3	1.4	0.6	4.4	2.5	0.19	0.84	102.49	.	.
2013	.	.	.	.	.	.	0.15	0.95	129.66	.	.
2012 Q4	-0.2	-1.0	-0.3	-6.0	4.2	2.3	0.19	0.84	105.12	.	.
2013 Q1	-0.6	-0.3	-0.1	-7.8	4.2	2.9	0.16	0.70	121.80	.	.
Q2	-0.3	-0.5	1.3	-3.1	4.0	3.5	0.16	1.02	129.07	.	.
Q3	0.9	-2.4	2.4	2.2	4.0	3.8	0.15	0.88	131.02	.	.
Q4	.	.	.	.	.	.	0.14	0.95	136.48	.	.
2013 Aug.	0.9	-	-	-0.4	4.1	3.8	0.15	0.93	130.34	-	-
Sep.	1.1	-	-	5.1	4.0	3.9	0.15	0.88	132.41	-	-
Oct.	1.1	-	-	5.4	4.0	4.2	0.15	0.76	133.32	-	-
Nov.	1.5	-	-	5.0	4.0	4.3	0.14	0.79	134.97	-	-
Dec.	.	-	-	.	.	.	0.15	0.95	141.68	-	-

C41 Real gross domestic product
(annual percentage changes; quarterly data)

- euro area
- United States
- Japan
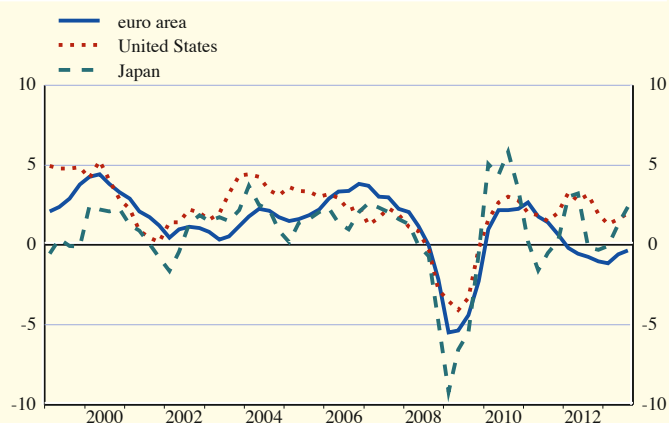
C42 Consumer price indices
(annual percentage changes; monthly data)

- euro area [7]
- United States
- Japan
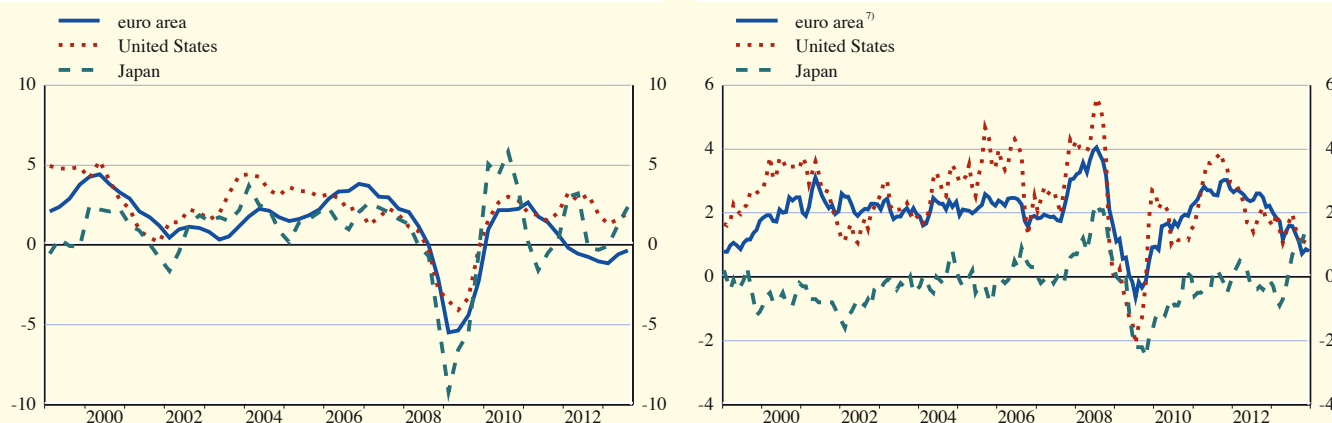
Sources: National data (columns 1, 2 (United States), 3, 4, 5 (United States), 6, 9 and 10); OECD (column 2 (Japan)); Eurostat (column 5 (Japan), euro area chart data);
Thomson Reuters (columns 7 and 8); ECB calculations (column 11).
1) Seasonally adjusted. The data for the United States refer to the private non-agricultural business sector.
2) Japanese data from March to August 2011 include estimates for the three prefectures most affected by the earthquake in that country. Data collection was reinstated as of
    September 2011.
3) Period averages; M2 for the United States, M2+CDs for Japan.
4) Percentages per annum. For further information on the three-month interbank deposit rate, see Section 4.6.
5) For more information, see Section 8.2.
6) General government debt consists of deposits, securities other than shares and loans outstanding at nominal value and is consolidated within
    the general government sector (end of period).
7) Data refer to the changing composition of the euro area. For further information, see the General Notes.

LIST OF CHARTS

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:

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

where I_t is the index of 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:

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

SECTION 1.3

CALCULATION OF INTEREST RATES ON INDEXED LONGER-TERM REFINANCING OPERATIONS

The interest rate on an indexed longer-term refinancing operation (LTRO) is equal to the average of the minimum bid rates on the main refinancing operations (MROs) over the life of that LTRO. According to this definition, if an LTRO is outstanding for D number of days and the minimum bid rates prevailing in MROs are $R_{1,\,MRO}$ (over D_1 days), $R_{2,\,MRO}$ (over D_2 days), etc., until $R_{i,\,MRO}$ (over D_i days), where $D_1 + D_2 + \ldots + D_i = D$, the applicable annualised rate (R_{LTRO}) is calculated as:

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

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:

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

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

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

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

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

CALCULATION OF GROWTH RATES FOR MONTHLY SERIES

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

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

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

h) $\quad a_t = \left(\dfrac{I_t}{I_{t-12}} - 1\right) \times 100$

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

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

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

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

CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

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

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

The annual growth rate in the four quarters ending in month t (i.e. a_t) can be calculated using formula h).

SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS[1]

The approach used is based on multiplicative decomposition using X-12-ARIMA.[2] 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.[3] 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.

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

2   For details, see Findley, D., Monsell, B., Bell, W., Otto, M. and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program", Journal of Business and Economic Statistics, 16, 2, pp.127-152, or"X-12-ARIMA Reference Manual", Time Series Staff, Bureau of the Census, Washington, D.C.
    For internal purposes, the model-based approach of TRAMO-SEATS is also used. For details of TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Banco de España, Working Paper No 9628, Madrid.

3   It follows that for the seasonally adjusted series, the level of the index for the base period (i.e. December 2010) generally differs from 100, reflecting the seasonality of that month.

CALCULATION OF BALANCING ITEMS

The balancing items at the end of each account in Sections 3.1, 3.2 and 3.3 are computed as follows.

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

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

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

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

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

Net lending/net borrowing is computed from the capital account as net saving plus net capital transfers (resources minus uses) minus gross capital formation (uses) minus acquisitions less disposals of non-produced non-financial assets (uses) plus consumption of fixed capital (resources). It can also be calculated in the financial account as total transactions in financial assets minus total transactions in liabilities (also known as changes in net financial worth (wealth) due to transactions). For the household and non-financial corporation sectors, there is a statistical discrepancy between the balancing items computed from the capital account and the financial account.

Changes in net financial worth (wealth) due to transactions are computed as total transactions in financial assets minus total transactions in liabilities, whereas other changes in net financial worth (wealth) are calculated as (total) other changes in financial assets minus (total) other changes in liabilities.

Net financial worth (wealth) is calculated as total financial assets minus total liabilities, whereas changes in net financial worth (wealth) are equal to the sum of changes in net financial worth (wealth) due to transactions (lending/net borrowing from the financial account) and other changes in net financial worth (wealth).

Changes in net worth (wealth) are calculated as changes in net worth (wealth) due to savings and capital transfers plus other changes in net financial worth (wealth) and other changes in non-financial assets.

The net worth (wealth) of households is calculated as the sum of the non-financial assets and net financial worth (wealth) of households.

SECTIONS 4.3 AND 4.4

CALCULATION OF GROWTH RATES FOR DEBT SECURITIES AND QUOTED SHARES

Growth rates are calculated on the basis of financial transactions and therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. They can be calculated from transactions or from the index of notional stocks. If N_t^M represents the transactions (net issues) in month t and L_t the level outstanding at the end of month t, the index I_t of notional stocks in month t is defined as:

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

As a base, the index is set equal to 100 in December 2008. The growth rate a_t for month t, corresponding to the change in the 12 months ending in month t, can be calculated using either of the following two formulae:

l) $$a_t = \left[\prod_{i=0}^{11}\left(1 + N_{t-i}^M \Big/ L_{t-1-i}\right) - 1\right] \times 100$$

m) $$a_t = \left(I_t \Big/ I_{t-12} - 1\right) \times 100$$

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 [4]

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:

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

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

TABLE 1 IN SECTION 5.1

SEASONAL ADJUSTMENT OF THE HICP [4]

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

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[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:

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

The growth rate for the annual series is equal to the growth rate in the last quarter of the year.

GENERAL NOTES

The "Euro area statistics" section of the Monthly Bulletin focuses on statistics for the euro area as a whole. More detailed and longer runs of data, with further explanatory notes, are available in the "Statistics" section of the ECB's website (www.ecb.europa.eu). 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 8 January 2014.

Unless otherwise indicated, all data series relate to the group of 18 countries that are members of the euro area (the Euro 18) 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; Slovakia joined in 2009, forming the Euro 16; and Estonia joined in 2011, forming the Euro 17. Latvia joined in 2014, bringing the number of euro area countries to 18. 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 18 for all years, despite the fact that the euro area has only had this composition since 1 January 2014. 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 [1] 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, Lithuania, Hungary, Poland, Romania, Sweden and the United Kingdom.

In most cases, the terminology used within the tables follows international standards, such as those contained in the European System of Accounts 1995 and the IMF Balance of Payments Manual. Transactions refer to voluntary exchanges (measured directly or derived), while flows also encompass changes in outstanding amounts owing to price and exchange rate changes, write-offs and other changes.

In the tables, the wording "up to (x) years" means "up to and including (x) years".

OVERVIEW

Developments in key indicators for the euro area are summarised in an overview table.

MONETARY POLICY STATISTICS

Section 1.4 shows statistics on minimum reserve and liquidity factors. Maintenance periods for minimum reserve requirements start every month on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting for which the monthly assessment of the monetary policy stance is scheduled. They end on the day preceding the corresponding settlement day in the following month. Annual/quarterly observations refer to averages for the last reserve maintenance period of the year/quarter.

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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 €100,000. The resulting required reserves are then aggregated at the euro area level (column 1). Current account holdings (column 2) are the aggregate average daily current account holdings of credit institutions, including those that serve to fulfil reserve requirements. Excess reserves (column 3) are the average current account holdings over the maintenance period in excess of the required reserves. Deficiencies (column 4) are defined as the average shortfalls of current account holdings from required reserves over the maintenance period, computed on the basis of those credit institutions that have not fulfilled their reserve requirements. The interest rate on minimum reserves (column 5) is equal to the average, over the maintenance period, of the ECB's rate (weighted according to the number of calendar days) on the Eurosystem's MROs (see Section 1.3).

Table 3 in Section 1.4 shows the banking system's liquidity position, which is defined as euro area credit institutions' current account holdings with the Eurosystem in euro. All amounts are derived from the consolidated financial statement of the Eurosystem. Other liquidity-absorbing operations (column 7) exclude the issuance of debt certificates initiated by NCBs in Stage Two of EMU. Net other factors (column 10) represent the netted remaining items in the consolidated financial statement of the Eurosystem. Credit institutions' current accounts (column 11) are equal to the difference between the sum of liquidity-providing factors (columns 1 to 5) and the sum of liquidity-absorbing factors (columns 6 to 10). Base money (column 12) is calculated as the sum of the deposit facility (column 6), banknotes in circulation (column 8) and credit institutions' current account holdings (column 11).

MONEY, BANKING AND OTHER FINANCIAL CORPORATIONS

Chapter 2 shows balance sheet statistics for MFIs and other financial corporations. Other financial corporations comprise investment funds (other than money market funds, which are part of the MFI sector), financial vehicle corporations, insurance corporations and pension funds.

Section 2.1 shows the aggregated balance sheet of the MFI sector, i.e. the sum of the harmonised balance sheets of all MFIs resident in the euro area. MFIs comprise central banks, credit institutions as defined under EU law, money market funds and other institutions whose business it is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or make investments in securities. A complete list of MFIs is published on the ECB's website.

Section 2.2 shows the consolidated balance sheet of the MFI sector, which is obtained by netting the aggregated balance sheet positions of MFIs in the euro area. Owing to a small amount of heterogeneity in recording practices, the sum of the inter-MFI positions is not necessarily zero; the balance is shown in column 10 of the liabilities side of Section 2.2. Section 2.3 sets out the euro area monetary aggregates and counterparts. These are derived from the consolidated MFI balance sheet and include positions of non-MFIs resident in the euro area held with MFIs resident in the euro area; they also take account of some monetary assets/liabilities of central government. Statistics on monetary aggregates and counterparts are adjusted for seasonal and trading day effects. The external liabilities item in Sections 2.1 and 2.2 shows the holdings by non-euro area residents of: (i) shares/units issued by money market funds located in the euro area; and (ii) debt securities issued with a maturity of up to two years by MFIs located in the euro area. In Section 2.3, however, these holdings are excluded from the monetary aggregates and contribute to the item "net external assets".

Section 2.4 provides analysis, broken down by sector, type and original maturity, of loans granted by MFIs other than the Eurosystem (i.e. the banking system) resident in the euro area. Section 2.5 provides analysis, broken down by sector and instrument, of deposits held with the euro area banking system. Section 2.6 shows the securities held by the euro area banking system, broken down by type of issuer. Section 2.7 shows a quarterly currency breakdown for selected MFI balance sheet items.

Sections 2.2 to 2.6 also provide growth rates based on those transactions in the form of annual percentage changes.

Since 1 January 1999 statistical information has been collected and compiled on the basis of various ECB regulations concerning the balance sheet of the monetary financial institution sector. Since July 2010 this has been carried out on the basis of Regulation ECB/2008/32 [2]. Detailed sector definitions are set out in the third edition of the "Monetary financial institutions and markets statistics sector manual – Guidance for the statistical classification of customers" (ECB, March 2007).

Section 2.8 shows outstanding amounts and transactions on the balance sheet of euro area investment funds (other than money market funds, which are included in the MFI balance sheet statistics). An investment fund is a collective investment undertaking that invests capital raised from the public in financial and/or non-financial assets. A complete list of euro area investment funds is published on the ECB's website. The balance sheet is aggregated, so investment funds' assets include their holdings of shares/units issued by other investment funds. Shares/units issued by investment funds are also broken down by investment policy (i.e. into bond funds, equity funds, mixed funds, real estate funds, hedge funds and other funds) and by type (i.e. into open-end funds and closed-end funds). Section 2.9 provides further details on the main types of asset held by euro area investment funds. This section contains a geographical breakdown of the issuers of securities held by investment funds, as well as breaking issuers down by economic sector where they are resident in the euro area.

Since December 2008 harmonised statistical information has been collected and compiled on the basis of Regulation ECB/2007/8 [3] 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).

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

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[4] 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 conceptually also equals net lending/net borrowing as calculated from the capital account.

4   OJ L 15, 20.01.2009, p. 1.

In addition, opening and closing financial balance sheets are presented, which provide a picture of the financial wealth of each individual sector at a given point in time. Finally, other changes in financial assets and liabilities (e.g. those resulting from the impact of changes in asset prices) are also shown.

The sectoral coverage of the financial account and the financial balance sheets is more detailed for the financial corporation sector, which is broken down into MFIs, other financial intermediaries (including financial auxiliaries), and insurance corporations and pension funds.

Section 3.2 shows four-quarter cumulated flows (transactions) for the "non-financial accounts" of the euro area (i.e. accounts (1) to (5) above), also following the simplified sequence of accounts.

Section 3.3 shows four-quarter cumulated flows (transactions and other changes) for households' income, expenditure and accumulation accounts, as well as outstanding amounts in the financial and non-financial balance sheet accounts, presenting data in a more analytical manner. Sector-specific transactions and balancing items are arranged in a way that more clearly depicts the financing and investment decisions of households, while respecting the accounting identities presented in Sections 3.1 and 3.2.

Section 3.4 displays four-quarter cumulated flows (transactions) for non-financial corporations' income and accumulation accounts, as well as outstanding amounts for the financial balance sheet accounts, presenting data in a more analytical manner.

Section 3.5 shows four-quarter cumulated financial flows (transactions and other changes) and outstanding amounts for the financial balance sheets of insurance corporations and pension funds.

FINANCIAL MARKETS

The series on financial market statistics for the euro area cover those EU Member States that had adopted the euro at the time to which the statistics relate (i.e. a changing composition), with the exception of statistics on securities issues (Sections 4.1 to 4.4), which relate to the Euro 17 for the whole time series (i.e. a fixed composition).

Statistics on securities other than shares and statistics on quoted shares (Sections 4.1 to 4.4) are produced by the ECB using data from the ESCB and the BIS. Section 4.5 presents MFI interest rates on euro-denominated deposits from and loans to euro area residents. Statistics on money market interest rates, long-term government bond yields and stock market indices (Sections 4.6 to 4.8) are produced by the ECB using data from wire services.

Statistics on securities issues cover: (i) securities other than shares, excluding financial derivatives; and (ii) quoted shares. The former are presented in Sections 4.1, 4.2 and 4.3, while the latter are presented in Section 4.4. Debt securities are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in exceptional cases, two years or less). Securities with (i) a longer maturity, (ii) optional maturity dates, the latest of which is more than one year away, or (iii) indefinite maturity dates are classified as "long-term". Long-term debt securities issued by euro area residents are broken down further into fixed and variable rate issues. Fixed rate issues consist of issues where the coupon rate does not change during the life of the issue. Variable rate issues comprise all issues where the coupon is periodically refixed

with reference to an independent interest rate or index. The euro-denominated securities indicated in Sections 4.1, 4.2 and 4.3 also include items expressed in national denominations of the euro.

Section 4.1 shows securities other than shares, broken down by original maturity, residency of the issuer and currency. It presents outstanding amounts, gross issues and net issues of securities other than shares, broken down into: (i) issues denominated in euro and issues in all currencies; (ii) issues by euro area residents and total issues; and (iii) total and long-term maturities. Net issues differ from the changes in outstanding amounts owing to valuation changes, reclassifications and other adjustments. This section also presents seasonally adjusted statistics, including six-month annualised seasonally adjusted growth rates for total and long-term debt securities. Seasonally adjusted data are derived from the index of notional stocks, from which the seasonal effects have been removed. See the Technical Notes for details.

Section 4.2 contains a sectoral breakdown of outstanding amounts, gross issues and net issues for issuers resident in the euro area in line with the ESA 95. The ECB is included in the Eurosystem.

The total outstanding amounts for total and long-term debt securities in column 1 of Table 1 in Section 4.2 correspond to the data on outstanding amounts for total and long-term debt securities issued by euro area residents in column 7 of Section 4.1. The outstanding amounts for total and long-term debt securities issued by MFIs in column 2 of Table 1 in Section 4.2 are broadly comparable with the data on debt securities issued on the liabilities side of the aggregated MFI balance sheet in column 8 of Table 2 in Section 2.1. The total net issues for total debt securities in column 1 of Table 2 in Section 4.2 correspond to the data on total net issues by euro area residents in column 9 of Section 4.1. The residual difference between long-term debt securities and total fixed and variable rate long-term debt securities in Table 1 of Section 4.2 consists of zero coupon bonds and revaluation effects.

Section 4.3 shows seasonally adjusted and non-seasonally adjusted growth rates for debt securities issued by euro area residents (broken down by maturity, type of instrument, sector of the issuer and currency), which are based on financial transactions that occur when an institutional unit incurs or redeems liabilities. The growth rates therefore exclude reclassifications, revaluations, exchange rate variations and any other changes that do not arise from transactions. The seasonally adjusted growth rates have been annualised for presentational purposes. See the Technical Notes for details.

Columns 1, 4, 6 and 8 in Table 1 of Section 4.4 show the outstanding amounts of quoted shares issued by euro area residents broken down by issuing sector. The monthly data for quoted shares issued by non-financial corporations correspond to the quarterly series shown in Section 3.4 (financial balance sheet; quoted shares).

Columns 3, 5, 7 and 9 in Table 1 of Section 4.4 show annual growth rates for quoted shares issued by euro area residents (broken down by the sector of the issuer), which are based on financial transactions that occur when an issuer issues or redeems shares for cash, excluding investments in the issuer's own shares. The calculation of annual growth rates excludes reclassifications, revaluations and any other changes that do not arise from transactions.

Section 4.5 presents statistics on all the interest rates that MFIs resident in the euro area apply to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area. Euro area MFI interest rates are calculated as a weighted average (by corresponding business volume) of the euro area countries' interest rates for each category.

MFI interest rate statistics are broken down by type of business coverage, sector, instrument category and maturity, period of notice or initial period of interest rate fixation. These MFI interest rate statistics replaced the ten transitional statistical series on euro area retail interest rates that had been published in the Monthly Bulletin as of January 1999.

Section 4.6 presents money market interest rates for the euro area, the United States and Japan. For the euro area, a broad spectrum of money market interest rates is covered, ranging from interest rates on overnight deposits to those on twelve-month deposits. Before January 1999, synthetic euro area interest rates were calculated on the basis of national rates weighted by GDP. With the exception of the overnight rate prior to January 1999, monthly, quarterly and yearly values are period averages. Overnight deposits are represented by end-of-period interbank deposit bid rates up to and including December 1998 and period averages for the euro overnight index average (EONIA) thereafter. As of January 1999, euro area interest rates on one, three, six and twelve-month deposits are euro interbank offered rates (EURIBOR); prior to that date, they are London interbank offered rates (LIBOR) where available. For the United States and Japan, interest rates on three-month deposits are represented by LIBOR.

Section 4.7 shows end-of-period rates estimated from nominal spot yield curves based on AAA-rated euro-denominated bonds issued by euro area central governments. The yield curves are estimated using the Svensson model[5]. 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

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5   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[6]. 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[7], 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[8]. 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[9] and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003[10]. 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[11] quarterly national accounts. The ESA 95 was amended by Commission Regulation (EU) No 715/2010 of 10 August 2010[12] 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.

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6 OJ L 162, 5.6.1998, p. 1.
7 OJ L 393, 30.12.2006, p. 1.
8 OJ L 155, 15.6.2007, p. 3.
9 OJ L 69, 13.3.2003, p. 1.
10 OJ L 169, 8.7.2003, p. 37.
11 OJ L 310, 30.11.1996, p. 1.
12 OJ L 210, 11.8.2010, p. 1.

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 statistical reporting requirements laid down in the ECB Guideline of 31 July 2009 on government finance statistics (ECB/2009/20)[13]. Harmonised data provided by the NCBs 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[14] 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 government deficit/surplus and debt data for the individual euro area countries owing to their importance within the framework of the Stability and Growth Pact as reported to the Commission under Council Regulation (EU) No 679/2010. 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[15]. 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 228. 1.9.2009, p. 25.
14 OJ L 172, 12.7.2000, p. 3.
15 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)[16] and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)[17]. Additional information regarding the methodologies and sources used in the euro area b.o.p. and i.i.p. statistics can be found in the ECB publication entitled "European Union balance of payments/international investment position statistical methods" (May 2007) and in the reports of the Task Force on Portfolio Investment Collection Systems (June 2002), the Task Force on Portfolio Investment Income (August 2003) and the Task Force on Foreign Direct Investment (March 2004), all of which can be downloaded from the ECB's website. In addition, a report by the ECB/European Commission (Eurostat) Task Force on Quality looking at balance of payments and international investment position statistics (June 2004) is available on the website of the Committee on Monetary, Financial and Balance of Payments Statistics (www.cmfb.org). 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)[18] 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

16 OJ L 354, 30.11.2004, p. 34.
17 OJ L 159, 20.6.2007, p. 48.
18 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 investment (e.g. loans and deposits). The quarterly i.i.p. is compiled on the basis of the same methodological framework as the annual i.i.p. As some data sources are not available on a quarterly basis (or are available with a delay), the quarterly i.i.p. is partly estimated on the basis of financial transactions, asset prices and foreign exchange developments.

Table 1 in Section 7.3 summarises the i.i.p. and financial transactions in the euro area b.o.p. The breakdown of the change in the annual i.i.p. is obtained by applying a statistical model to i.i.p. changes other than transactions, using information from the geographical breakdown and currency composition of assets and liabilities, as well as price indices for different financial assets. In this table, columns 5 and 6 refer to direct investment by resident units abroad and direct investment by non-resident units in the euro area.

In Table 5 in Section 7.3, the breakdown into "loans" and "currency and deposits" is based on the sector of the non-resident counterpart – i.e. assets vis-à-vis non-resident banks are classified as deposits, whereas assets vis-à-vis other non-resident sectors are classified as loans. This breakdown follows the distinction made in other statistics, such as the MFI consolidated balance sheet, and conforms to the IMF Balance of Payments Manual.

The outstanding amounts for the Eurosystem's international reserves and related assets and liabilities are shown in Table 7 of Section 7.3. These figures are not fully comparable with those in the Eurosystem's weekly financial statement owing to differences in coverage and valuation. The data in Table 7 are in line with the recommendations for the template on international reserves and foreign currency liquidity. By definition, the assets included in the Eurosystem's international reserves take account of the changing composition of the euro area. Before countries join the euro area, the assets of their national central banks are included in portfolio investment (in the case of securities) or other investment (in the case of other assets). Changes in the gold holdings of the Eurosystem (column 3) are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999, which was updated on 27 September 2009. More information on the statistical treatment of the Eurosystem's international reserves can be found in a publication entitled "Statistical treatment of the Eurosystem's international reserves" (October 2000), which can be downloaded from the ECB's website. The website also contains more comprehensive data in accordance with the template on international reserves and foreign currency liquidity.

The euro area's gross external debt statistics in Table 8 of Section 7.3 represent outstanding actual (rather than contingent) liabilities vis-à-vis non-euro area residents that require the payment of principal and/or interest by the debtor at one or more points in the future. Table 8 shows a breakdown of gross external debt by instrument and institutional sector.

Section 7.4 contains a monetary presentation of the euro area balance of payments, showing the transactions by non-MFIs that mirror the net external transactions by MFIs. Included in the transactions by non-MFIs are b.o.p. transactions for which a sectoral breakdown is not available. These concern the current and capital accounts (column 2) and financial derivatives (column 11). An up-to-date methodological note on the monetary presentation of the euro area balance of payments is available in the "Statistics" section of the ECB's website. See also Box 1 in the June 2003 issue of the Monthly Bulletin.

Section 7.5 shows data on euro area external trade in goods. The source is Eurostat. Value data and volume indices are seasonally and working day-adjusted. The breakdown by product group in columns 4 to 6 and 9 to 11 of Table 1 in Section 7.5 is in line with the classification contained in the Broad Economic Categories and corresponds to the basic classes of goods in the System of National Accounts. Manufactured goods (columns 7 and 12) and oil (column 13) are in line with the SITC Rev. 4 definition. The geographical breakdown (Table 3 in Section 7.5) shows major trading partners both individually and in regional groups. China excludes Hong Kong. On account of differences in definitions, classification, coverage and time of recording, external trade data, in particular for imports, are not fully comparable with the goods item in the b.o.p. statistics (Sections 7.1 and 7.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of imported goods in external trade data.

Industrial import prices and industrial producer export prices (or industrial output prices for the non-domestic market) shown in Table 2 in Section 7.5 were introduced by Regulation (EC) No 1158/2005 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) No 1165/98, which is the principal legal basis for short-term statistics. The industrial import price index covers industrial products imported from outside the euro area under sections B to E of the Statistical Classification of Products by Activity in the European Economic Community (CPA) and all institutional import sectors except households, governments and non-profit institutions. It reflects the cost, insurance and freight price excluding import duties and taxes, and refers to actual transactions in euro recorded at the point when ownership of the goods is transferred. The industrial producer export prices cover all industrial products exported directly by euro area producers to the extra-euro area market under sections B to E of NACE Revision 2. Exports from wholesalers and re-exports are not covered. The indices reflect the free on board price expressed in euro and calculated at the euro area frontier, including any indirect taxes except VAT and other deductible taxes. Industrial import prices and industrial producer export prices are available by Main Industrial Grouping as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007. For more details, see Box 11 in the December 2008 issue of the Monthly Bulletin.

EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate indices for the euro, which are calculated by the ECB on the basis of weighted averages of the euro's bilateral exchange rates against the currencies of the selected trading partners of the euro area. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with those trading partners in the periods 1995-1997, 1998-2000, 2001-2003, 2004-2006 and 2007-2009 and are calculated to account for third-market effects. The EER indices are obtained by chain-linking the indicators based on each of these five sets of trade weights at the end of each three-year period. The base period of the resulting EER index is the first quarter of 1999. The EER-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[1]

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.

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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.

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, 1 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.

7 NOVEMBER 2013

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 0.25%, starting from the operation to be settled on 13 November 2013. In addition, it decides to decrease the interest rate on the marginal lending facility by 25 basis points to 0.75%, with effect from 13 November 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 7 July 2015, notably to continue its fixed rate tender procedures with full allotment.

5 DECEMBER 2013 AND 9 JANUARY 2014

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 0.25%, 0.75% 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
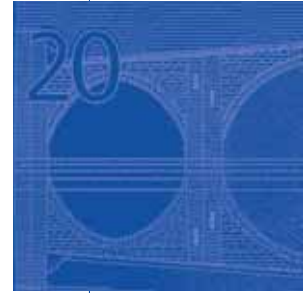
GLOSSARY

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.

Excess liquidity: the amount of central bank reserves held by banks in excess of the aggregate needs of the banking system, which are determined by reserve requirements and autonomous factors.

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).

Forward guidance: communication by a central bank on the orientation of monetary policy with respect to the future path of policy interest rates.

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.

Maximum bid rate: the upper limit to the interest rates at which counterparties may submit bids in variable rate liquidity-absorbing tender operations.

MFI credit to euro area residents: MFI loans granted to non-MFI euro area residents (including general government and the private sector) and MFI holdings of securities (shares, other equity and debt securities) issued by non-MFI euro area residents.

MFI interest rates: the interest rates that are applied by resident credit institutions and other MFIs, excluding central banks and money market funds, to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area.

MFI longer-term financial liabilities: deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued by euro area MFIs with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

MFI net external assets: the external assets of the euro area MFI sector (such as gold, foreign currency banknotes and coins, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the euro area MFI sector (such as non-euro area residents' deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

MFIs (monetary financial institutions): financial institutions which together form the money-issuing sector of the euro area. These include (i) the Eurosystem, (ii) resident credit institutions (as defined in EU law), (iii) other financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities, as well as electronic money institutions that are principally engaged in financial intermediation in the form of issuing electronic money, and (iv) money market funds, i.e. collective investment undertakings that invest in short-term and low-risk instruments.

Minimum bid rate: the lower limit to the interest rates at which counterparties may submit bids in variable rate liquidity-providing tender operations.

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.

Structural fiscal balance (general government): the actual budget balance corrected for cyclical factors (i.e. the cyclically adjusted balance) and one-off fiscal measures.

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.