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EUROPEAN CENTRAL BANK

EUROSYSTEM

MONTHLY BULLETIN 08 | 2013

EUROPEAN CENTRAL BANK

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In 2013 all ECB publications feature a motif taken from the €5 banknote.

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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 1 August to keep the key ECB interest rates unchanged. Incoming information has confirmed the Governing Council's previous assessment. Underlying price pressures in the euro area are expected to remain subdued over the medium term. In keeping with this picture, monetary and, in particular, credit dynamics remain subdued. Inflation expectations for the euro area continue to be firmly anchored in line with the Governing Council's aim of maintaining inflation rates below, but close to, 2% over the medium term. At the same time, recent confidence indicators based on survey data have shown some further improvement from low levels and tentatively confirm the expectation of a stabilisation in economic activity. The monetary policy stance continues to be geared towards maintaining the degree of monetary accommodation warranted by the outlook for price stability and promoting stable money market conditions. It thereby provides support to a gradual recovery in economic activity in the remaining part of the year and in 2014. Looking ahead, the monetary policy stance will remain accommodative for as long as necessary. The Governing Council confirms that it expects the key ECB interest rates to remain at present or lower levels for an extended period of time. This expectation continues to be based on an unchanged overall subdued outlook for inflation extending into the medium term, given the broad-based weakness in the economy and subdued monetary dynamics. In the period ahead, the Governing Council will monitor all incoming information on economic and monetary developments and assess any impact on the outlook for price stability.

With regard to the economic analysis, following a six-quarter economic contraction in the euro area, recent confidence indicators based on survey data have shown some further improvement from low levels and tentatively confirm the expectation of a stabilisation in economic activity at low levels. At the same time, labour market conditions remain weak. Looking ahead to the remainder of the year and to 2014, euro area export growth should benefit from a gradual recovery in global demand, while domestic demand should be supported by the accommodative monetary policy stance as well as the recent gains in real income owing to generally lower inflation. Furthermore, the overall improvements in financial markets seen since last summer appear to be gradually working their way through to the real economy, as should the progress made in fiscal consolidation. This being said, the remaining necessary balance sheet adjustments in the public and private sectors will continue to weigh on economic activity. Overall, euro area economic activity should stabilise and recover at a slow pace.

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

According to Eurostat's flash estimate, euro area annual HICP inflation was 1.6% in July 2013, unchanged from June. Annual inflation rates are currently expected to temporarily fall over the coming months, owing particularly to base effects relating to energy price developments 12 months earlier. Taking the appropriate medium-term perspective, underlying price pressures are expected to remain subdued, reflecting the broad-based weakness in aggregate demand and the modest pace of the recovery. Medium to long-term inflation expectations continue to be firmly anchored in line with price stability.

The risks to the outlook for price developments are expected to be still broadly balanced over the medium term, with upside risks relating to stronger than expected increases in administered prices

and indirect taxes, as well as higher commodity prices, and downside risks stemming from weaker than expected economic activity.

Turning to the monetary analysis, underlying money and, in particular, credit growth remained subdued in June. Annual growth in broad money (M3) decreased in June to 2.3%, from 2.9% in May. Moreover, annual growth in M1 decreased to 7.5% in June, from 8.4% in May. The annual rate of change of loans to the private sector weakened further. While the annual growth rate of loans to households (adjusted for loan sales and securitisation) remained at 0.3% in June, broadly unchanged since the turn of the year, the annual rate of change of loans to non-financial corporations (adjusted for loan sales and securitisation) was -2.3% in June, after -2.1% in May. Weak loan dynamics continue to reflect primarily the current stage of the business cycle, heightened credit risk and the ongoing adjustment of financial and non-financial sector balance sheets. The bank lending survey for the second quarter of 2013 confirms that borrowers' risk and macroeconomic uncertainty remained the main factors restraining banks' lending policies. At the same time, the degree of net tightening of credit standards for loans to non-financial corporations remained unchanged in the second quarter of 2013, compared with the first quarter, and declined for loans to households.

Since the summer of 2012 substantial progress has been made in improving the funding situation of banks and, in particular, in strengthening the domestic deposit base in a number of stressed countries. In order to ensure an adequate transmission of monetary policy to the financing conditions in euro area countries, it is essential that the fragmentation of euro area credit markets declines further and that the resilience of banks is strengthened where needed. Further decisive steps for establishing a banking union will help to accomplish this objective.

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

As regards fiscal policies, in order to bring debt ratios back on a downward path, euro area countries should not unravel their efforts to reduce government budget deficits. The emphasis should be on growth-friendly fiscal strategies which have a medium-term perspective and combine improving the quality and efficiency of public services with minimising distortionary effects of taxation. To reinforce the overall impact of such a strategy, Member States must step up the implementation of the necessary structural reforms so as to foster competitiveness, growth and job creation. Removing rigidities in the labour market, lowering the administrative burden and strengthening competition in product markets will particularly support small and medium-sized enterprises. These structural reform measures are essential to bring down the currently high level of unemployment, in particular among the younger citizens of the euro area.

This issue of the Monthly Bulletin contains two articles. The first article analyses the interest rate pass-through in the euro area in a context of high financial fragmentation and provides new empirical evidence on the pass-through in the four largest euro area economies. The second article presents the ECB's macro stress-testing framework for bank solvency assessments and gives examples of how it is used for policy analysis.

ECONOMIC AND MONETARY DEVELOPMENTS

1 THE EXTERNAL ENVIRONMENT OF THE EURO AREA

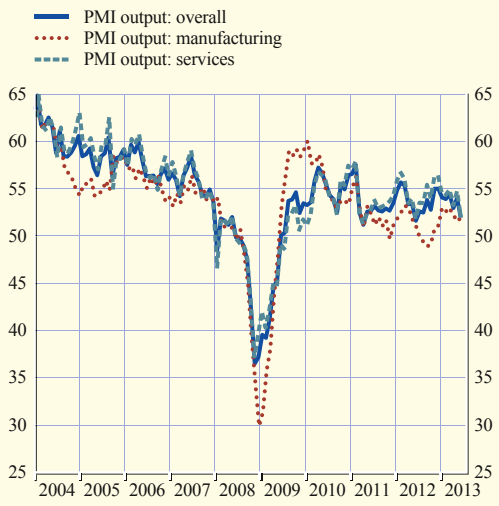
The global economy continues to expand at a modest pace. Growth prospects in emerging markets seem to be losing some momentum, but there are signs that the outlook for growth is firming up in key advanced economies. The uncertain and fragile nature of the global recovery has been highlighted by the recent volatility in financial markets. Consumer prices picked up again in June in a number of advanced and emerging economies, but overall global inflation remains contained as a result of abundant spare capacity.

1.1 GLOBAL ECONOMIC ACTIVITY AND TRADE

The expansion of global economic activity remains subdued. There was a slight softening in sentiment indicators in June, while hard data have been rather mixed. The Purchasing Managers' Index (PMI) for all-industry output stood at 51.4 in June, down from 52.9 in May, driven mainly by a slowdown in the pace of growth in the global services sector. Excluding the euro area, the all-industry output PMI declined to 52.0 in June (see Chart 1), the lowest level in a year. Growth has started to gain some traction in a few advanced economies, but the pace of recovery is likely to remain moderate, as activity is restrained by ongoing balance sheet repair, fiscal tightening and continuing tight credit conditions in some countries. Growth prospects in emerging markets have softened recently as weaker domestic demand, tightening financing conditions in some countries and a weak external environment weigh on activity. However, growth in these economies remains substantially higher than in advanced economies, thereby making a significant contribution to global economic activity.

Chart 1 Global PMI (excluding the euro area)

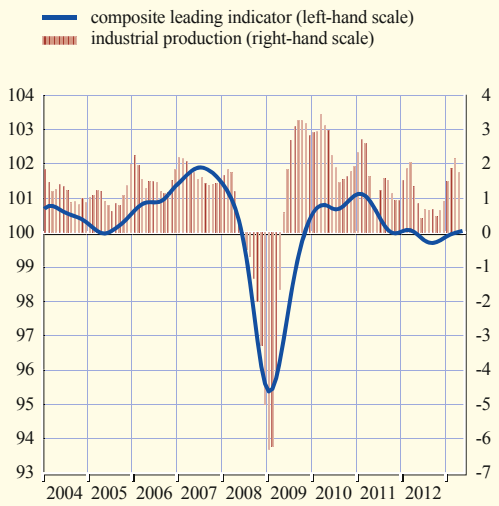
(seasonally adjusted monthly data)



Source: Markit.

Chart 2 Composite leading indicator and industrial production

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



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.

Forward-looking global indicators have been somewhat mixed in recent months, but continue to point to a modest pace of expansion in the second half of 2013. The new orders component of the global (excluding the euro area) all-industry PMI fell in June to 51.8. In addition, the global manufacturing new export orders index (excluding the euro area) declined sizeably in June to 48.4, falling below the neutral growth threshold of 50 for the first time in four months and suggesting continued subdued momentum in global trade. Meanwhile, the OECD's composite leading indicator for May 2013, designed to anticipate turning points in economic activity relative to trend, improved for the ninth successive month and continues to suggest that growth is gaining some traction in the OECD area as a whole (see Chart 2). The individual country indicators continued to point to diverging patterns across the major economies, with growth seen as firming up in the United States and Japan, while the largest emerging market economies recorded stabilising or slowing momentum.

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

1.2 GLOBAL PRICE DEVELOPMENTS

In the majority of advanced economies, inflation increased further in June. In the OECD area, annual headline consumer price inflation rose to 1.8% in June from 1.5% in May, driven by higher energy and food prices. The increase in annual headline inflation was observed in the majority of the OECD countries, but was particularly sharp in the United States, Japan and Canada. Excluding food and energy, inflation in the OECD area declined slightly in June, to 1.4%. Meanwhile, annual consumer price inflation accelerated in most large emerging economies in June, notably in China (see Table 1).

Turning to commodity markets, energy commodity prices increased whereas non-energy commodity prices remained broadly stable in July. Between 1 July and 31 July 2013, Brent crude oil prices increased by 4.3% to around USD 107 per barrel (see Chart 3). Oil prices increased owing to a combination of weaker OPEC supply and expectations of stronger refinery

Table 1 Price developments in selected economies

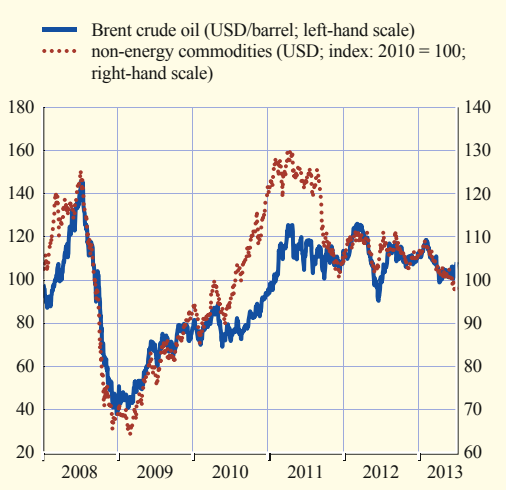
(annual percentage changes)

	2011	2012	2013					
			Jan.	Feb.	Mar.	Apr.	May	June
OECD	2.9	2.3	1.7	1.8	1.6	1.3	1.5	1.8
United States	3.2	2.1	1.6	2.0	1.5	1.1	1.4	1.8
Japan	-0.3	0.0	-0.3	-0.6	-0.9	-0.7	-0.3	0.2
United Kingdom	4.5	2.8	2.7	2.8	2.8	2.4	2.7	2.9
China	5.4	2.6	2.0	3.2	2.1	2.4	2.1	2.7
Memo item:								
OECD core inflation[1)]	1.7	1.8	1.5	1.6	1.6	1.4	1.5	1.4

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

oil demand. On the supply side, production losses in Libya, Nigeria and Iraq were not fully offset by increased supply from Saudi Arabia and non-OPEC countries, causing global oil supply to be lower in June. Political instability in Egypt put further upward pressure on oil prices given its importance for crude oil transport, although no production disruptions have occurred. On the demand side, oil prices rose in response to expectations of increased refinery demand as crude oil refineries return from maintenance. Over the medium term, market participants expect lower prices, with December 2014 futures prices standing at USD 100 per barrel.

Chart 3 Main developments in commodity prices



Sources: Bloomberg and HWWI.

After declining over the past few months on aggregate, prices of non-energy commodities remained broadly stable in July 2013, amid some volatility (see Chart 3). In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was about 9% lower towards the end of July 2013 compared with the same period a year earlier.

1.3 DEVELOPMENTS IN SELECTED ECONOMIES

UNITED STATES

In the United States, real GDP growth accelerated in the second quarter of 2013. According to the "advance" estimate by the Bureau of Economic Analysis, real GDP increased at an annualised quarterly rate of 1.7% in the second quarter of 2013, up from the downwardly revised 1.1% growth recorded in the previous three months. The increase in the second quarter was driven by personal consumption expenditure – although it had decelerated somewhat from the previous quarter – and by strong private fixed investment, in both the non-residential and residential segments. The change in inventories added 0.4 percentage point to growth. In contrast, government consumption continued to be a drag on growth for the third consecutive quarter, although the decline in the second quarter was relatively small (-0.4% annualised), given that government consumption had already contracted substantially in the previous two quarters. Net exports subtracted 0.8 percentage point from growth, reflecting buoyant import growth, which was only partly offset by rising exports. At the same time, this report included comprehensive revisions to the GDP data going back to 1929, namely methodological changes that incorporate research and development spending under non-residential investment, and changes to pension accounting that affect the personal saving rate. The new data show stronger annual average GDP growth of around 0.2 percentage point over the last ten years. In particular, growth in 2012 was revised up notably, from 2.2% to 2.8%, owing to a stronger first half of the year.

Recent survey-based indicators suggest that the economy will continue to grow at a moderate pace, supported by a continued improvement in housing and labour markets, together with a gradual lessening of the drag from balance sheet repair and fiscal restraint. The July edition of the Federal Reserve System's Beige Book showed that economic activity continued to firm up across

Table 2 Real GDP growth in selected economies

(percentage changes)

	Annual growth rates					Quarterly growth rates		
	2011	2012	2012 Q4	2013 Q1	2013 Q2	2012 Q4	2013 Q1	2013 Q2
United States	1.8	2.8	2.0	1.3	1.4	0.0	0.3	0.4
Japan	-0.5	1.9	0.4	0.2	-	0.3	1.0	-
United Kingdom	1.1	0.2	0.0	0.3	1.4	-0.2	0.3	0.6
China	9.3	7.8	7.9	7.7	7.5	1.9	1.6	1.7

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

districts, while regional manufacturing surveys have confirmed that manufacturing activity is projected to pick up in the third quarter. The housing market recovery is set to remain robust, as evidenced by strong homebuilders' confidence in July. Furthermore, consumer confidence stood at historically high levels in July, suggesting private consumption should remain resiliant.

Annual CPI inflation increased by 0.4 percentage point to 1.8% in June, from 1.4% in May. This increase was largely due to higher energy price inflation, which moved into positive territory after three consecutive months of negative growth rates. Food price inflation remained at 1.4%, whereas core inflation fell slightly to 1.6%, from 1.7% in May, on account of subdued increases in prices for medical care and transportation services. For the second quarter of 2013 as a whole, annual CPI inflation averaged 1.4%, down from 1.7% in the first quarter. Looking ahead, inflation is expected to remain contained as considerable spare capacity in the economy persists.

On 31 July 2013 the Federal Open Market Committee (FOMC) decided to keep the target range for the federal funds rate at 0% to 0.25%, and anticipated that exceptionally low levels for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6.5%, inflation between one and two years ahead is not projected to be above 2.5%, and longer-term inflation expectations continue to be well anchored. As previously announced, the FOMC will continue to purchase additional agency mortgage-backed securities at a pace of USD 40 billion per month and longer-term Treasury securities at a pace of USD 45 billion per month. The FOMC is expected to slow down the current pace of asset purchases later in the year, should the economy continue to improve as expected. The asset purchase programme is then expected to end in mid-2014.

JAPAN

The Japanese economy continued to expand at a robust pace, with domestic demand and the external sector both contributing positively to growth. Sentiment indicators suggest further solid growth over the remainder of the year. On the domestic side, industrial production increased by 1.4% on a quarterly basis, although it dropped in June by 3.3% month on month. Growth in private consumption declined in June, although at a slower pace than in the previous month. Meanwhile, real exports and imports of goods increased in June by 2.0% and 3.1% month on month, respectively. Recent consumer and business confidence indicators showed some softness, with the manufacturing Purchasing Managers' overall diffusion index falling to 52.3 from 54.2, indicating a slight slowdown in growth momentum in July, although the index remaind in expansionary territory for the fifth consecutive month.

Consumer price inflation has maintained an upward trend since the beginning of the year, with the headline index moving out of negative territory in June 2013. Annual consumer price inflation increased to 0.2% in June, compared with -0.3% in the previous month, largely owing to increasing

energy prices. Accordingly, annual core consumer price inflation (excluding food, beverages and energy) picked up to a lesser extent, from -0.4% to -0.2% in June.

At its latest monetary policy meeting on 10 and 11 July 2013, the Bank of Japan decided to keep its target for the monetary base unchanged. Following the outcome of the Upper House election on 21 July 2013, progress is expected to proceed on structural reforms, for which targets were outlined earlier in the "Basic Policies for Economic and Fiscal Management and Reform".

UNITED KINGDOM

In the United Kingdom, economic growth gained momentum in the first half of 2013. Real GDP increased by 0.6% quarter on quarter in the second quarter of this year, according to the preliminary estimate. This increase was mainly due to growth in the services sector, although the industrial and construction sectors also made positive contributions. Despite the relatively strong growth dynamic during the first half of 2013, the pace of the economic recovery is likely to remain gradual. Private and public sector balance sheet adjustment, notwithstanding recent progress, is set to constrain domestic demand for some time, while prospects for export growth remain modest. Weak household real income growth is also likely to dampen domestic demand, although labour markets have remained relatively resilient, with the unemployment rate hovering just below 8%. Housing markets, buoyed by recent policy measures, have shown signs of picking up, but credit growth dynamics have remained weak. Looking ahead, the steady improvement in the main survey indicators in recent months suggests that the recovery will continue in the short term.

Annual CPI inflation has stayed relatively high amidst some volatility in recent months. This volatility has mainly been owing to one-off factors. In June 2013 the headline inflation rate increased by 0.2 percentage point to 2.9%, while CPI inflation excluding energy and unprocessed food remained steady at 2.5%. Looking ahead, it is expected that inflationary pressures will be contained by existing spare capacity in labour and capital utilisation in the medium term. However, rises in administered and regulated prices, as well as the pound sterling's depreciation earlier this year, could put some upward pressures on inflation. At its meeting on 4 July 2013, the Bank of England's Monetary Policy Committee maintained the policy rate at 0.5% and the size of its asset purchase programme at GBP 375 billion.

CHINA

In China, data releases continue to point to a slowdown in the growth momentum. Real GDP growth decelerated to 7.5% in the second quarter of 2013, from 7.7% in the first three months of the year. Growth was driven by strong investment and, to a lesser extent, consumption. The sluggish external environment is a key factor behind the loss in the growth momentum. Given China's export-oriented economic structure, weak external demand together with the strengthening of the renminbi in the first half of the year weighed on exports, which declined in June compared with a year ago. Accordingly, manufacturing growth slowed down, as evidenced by a further decline in industrial production growth in June. Imports also declined, partly reflecting China's close integration in global supply chains. However, other parts of the economy continued to be more robust, as confirmed by rising retail sales and continued strength in the housing market, with house prices rising across China. The flash Markit manufacturing PMI for July continued to weaken, suggesting that growth in the manufacturing sector is losing momentum. As a result, the Chinese government took steps in late July to stabilise growth, including a temporary VAT and business tax exemption for SMEs, a simplification of customs procedures and a more rapid expansion of railway construction.

Annual CPI inflation stood at 2.7% in June, well below the 3.5% target for 2013, while PPI inflation has remained negative since March 2012. Credit and loan growth slowed down further in June, but remained well above nominal GDP growth.

1.4 EXCHANGE RATES

In July the euro appreciated against the currencies of most of its trading partners. On 31 July 2013 the nominal effective exchange rate of the euro, as measured against the currencies of 21 of the euro area's most important trading partners, stood 0.9% above its level at the beginning of the month, and 7.9% above the level recorded a year earlier (see Chart 4 and Table 3).

Chart 4 Nominal effective exchange rate of the euro

(daily data; index: Q1 1999 = 100)

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

In bilateral terms, in July the euro appreciated against most major currencies, including the US dollar (by 1.8%) and the pound sterling (by 2.0%), but remained unchanged against the Japanese yen. During this period the euro also appreciated against the currencies of major emerging economies, but mostly depreciated against the currencies of non-euro area EU Member States, including the Polish zloty (by 2.2%), the Czech koruna (by 0.5%) and the Romanian leu (by 1.0%).

The currencies participating in ERM II remained broadly stable against the euro, trading at, or close to, their respective central rates. On 9 July 2013 the EU Council adopted a decision allowing Latvia to adopt the euro as its currency on 1 January 2014 (see also Box 1).

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 31 July 2013 with respect to	
		1 July 2013	31 July 2012
EER-21		0.9	7.9
Chinese renminbi	18.6	1.8	4.1
US dollar	16.8	1.8	8.1
Pound sterling	14.8	2.0	11.4
Japanese yen	7.1	0.0	35.4
Swiss franc	6.4	-0.2	2.5
Polish zloty	6.1	-2.2	3.2
Czech koruna	5.0	-0.5	2.4
Swedish krona	4.7	0.2	4.2
Korean won	3.9	0.7	7.4
Hungarian forint	3.2	1.9	7.4
Danish krone	2.6	-0.1	0.2
Romanian leu	2.0	-1.0	-3.8
Croatian kuna	0.6	0.8	-0.1

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

Box 1

THE INTRODUCTION OF THE EURO IN LATVIA ON 1 JANUARY 2014

Following a request submitted by Latvia on 5 March 2013, the ECB and the European Commission prepared their respective Convergence Reports in line with Article 140 of the Treaty on the Functioning of the European Union, which requires them to report to the EU Council on an EU Member State's progress in fulfilling its obligations regarding the achievement of Economic and Monetary Union. The two reports were published on 5 June 2013. On the basis of the results of the underlying examination, the European Commission concluded that Latvia had fulfilled the necessary conditions for the adoption of the single currency. On 9 July 2013 the EU Council adopted a decision allowing Latvia to adopt the euro as its currency on 1 January 2014. As of that date, the euro area will comprise 18 countries.

The EU Council also adopted a regulation fixing the irrevocable conversion rate between the Latvian lats and the euro. The conversion rate is set at 0.702804 lats to one euro, which corresponds to the central rate of the lats in the exchange rate mechanism (ERM II), agreed when the Latvian currency entered the mechanism. Since its participation in ERM II as of May 2005, the Latvian currency's central rate against the euro has not been changed, and the exchange rate has been maintained by Latvijas Banka within a fluctuation band of ±1% around the central rate as a unilateral commitment, thus placing no additional obligations on the ECB. The ECB supported the choice of the current central rate as the conversion rate for the lats. Following the determination of this rate, the ECB and Latvijas Banka will monitor developments in the market exchange rate of the lats against the euro in the context of the ERM II Agreement until the end of 2013.

Adopting the euro has been a long-standing objective for Latvia. The introduction of the single currency will provide the country with an anchor for sustained macroeconomic stability and further economic convergence.

At the same time, joining a currency union entails taking the irrevocable decision to forego national monetary and exchange rate instruments and therefore implies an increased importance of domestic policies to maintain the economy on a balanced and sustainable growth path. In order to fully reap the benefits of the euro it will be important for Latvia to continue comprehensive fiscal consolidation in line with the requirements of the Stability and Growth Pact and overall EU fiscal governance. It will also be important to lock in the competitiveness gains achieved in recent years by avoiding a renewed increase in unit labour cost growth. In addition, while Latvia has shown strong economic adjustment capacity, it will need to make further progress in improving the quality of its institutions and governance.

In the financial sector, the reliance by a significant part of the banking sector on non-resident deposits as a source of funding, while not a recent phenomenon, represents an important risk to financial stability. In addition to appropriate micro-prudential policies, it is crucial that a comprehensive policy toolkit is available to safeguard financial stability. This should include: (i) macro-prudential measures, national balance sheet analysis and stress tests; (ii) proper funding mechanisms for the deposit insurance scheme; (iii) effective resolution and recovery tools; (iv) strengthened monitoring of any build-up of macroeconomic imbalances that could threaten financial stability, with readiness to adopt additional measures if warranted; and (v) the highest standards possible in the implementation of international anti-money laundering rules.

Latvia has already made important progress in this direction. Finally, financial stability should also benefit from Latvia's participation in the single supervisory mechanism, which is expected to enter into force during the second half of 2014.

All in all, it is important that Latvia avoids complacency after adopting the euro so that it can take advantage of the opportunities the single currency offers. The Latvian authorities have announced important policy commitments to ensure the sustainability of the convergence of the Latvian economy once it is a part of the euro area. These policies should be vigorously pursued in order to facilitate Latvia's smooth participation in Monetary Union over the long term.

2 MONETARY AND FINANCIAL DEVELOPMENTS

2.1 MONEY AND MFI CREDIT

Annual M3 growth weakened in June 2013, confirming subdued underlying monetary dynamics. M1 annual growth decreased but, driven by the continued preference for liquidity, remained strong and was the only contributor to M3 growth. On the counterpart side, annual growth in broad money was mainly supported by continued net capital inflows into the euro area and reductions in longer-term financial liabilities. By contrast, MFI lending to the euro area non-financial private sector contracted further, mainly reflecting low levels of demand, although supply constraints remained in a number of countries.

THE BROAD MONETARY AGGREGATE M3

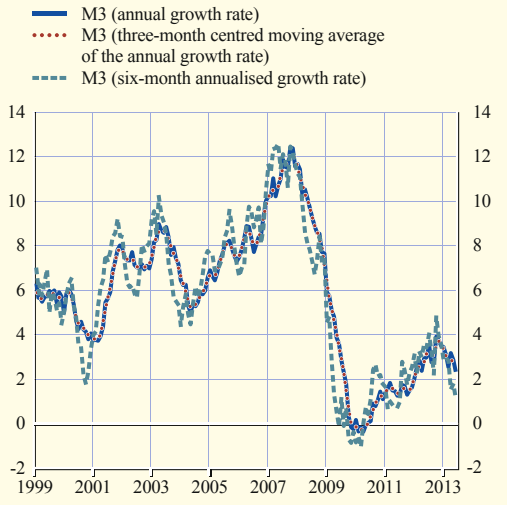
The annual growth rate of M3 declined to 2.3% in June 2013, down from 2.9% in May, reflecting a significant monthly outflow which can be partly explained by the unwinding of special factors recorded in April (see Chart 5). On the component side, the only contributor to annual M3 growth in June was the growth in M1, which – although decreasing – remains driven by a strong preference for liquidity, which is probably linked to the low opportunity costs of holding overnight deposits in an environment of extremely low short-term interest rates. The contributions to annual M3 growth from the other components remained broadly stable in June, at around zero for short-term deposits other than overnight deposits (M2 minus M1) and in negative territory for marketable instruments (M3 minus M2). These developments also point towards a search for yield in an environment of low remuneration of monetary assets.

On the counterpart side, the annual growth of euro area M3 in June was again supported by an increase in the MFIs' net external asset position, resulting from the ongoing net capital inflows into the euro area. Further purchases of government bonds by MFIs, particularly in selected euro area countries, and outflows from longer-term financial liabilities, in particular net redemptions of MFI longer-term debt securities, were also a source of money creation. By contrast, as in the previous two months, M3 developments were dampened by strong net redemptions of loans to the private sector.

The volume of euro area MFIs' main assets contracted further in June, continuing the deleveraging observed since spring 2012. The month-on-month decline in June was driven mainly by net redemptions in loans to the private sector and inter-MFI loans. By contrast, external assets and MFI holdings of government debt securities continued to expand. June also saw an increase in euro area MFIs' reliance on Eurosystem liquidity provision, a development which, as indicated by preliminary data for July, appears to be a temporary halt in the downward trend observed since August 2012. Improvements in the deposit base in a number of stressed countries remain consistent with a further reduction in financial fragmentation.

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

MAIN COMPONENTS OF M3

As regards the components of M3, the annual growth rate of M1 decreased to 7.5% in June 2013, down from 8.4% in May. This growth moderation reflected a substantial monthly outflow from overnight deposits, especially those held by non-monetary financial intermediaries other than insurance corporations and pension funds (OFIs). These outflows resulted in part from the unwinding of special factors affecting that sector in April. By contrast, the household sector saw a mild inflow into overnight deposits in June. The annual growth of overnight deposits remained strong, reflecting the money-holding sector's continued preference for liquidity against the backdrop of relatively low opportunity costs of holding narrow money.

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

The annual growth rate of marketable instruments declined further, standing at -16.4% in June, down from -15.8% in May. This mainly reflected monthly outflows from money market fund shares/units and to a lesser extent outflows from repurchase agreements, while short-term MFI debt securities (i.e. debt securities with maturities of up to two years) registered a small inflow. The further outflow from money market fund shares/units is in line with the pattern of negative monthly readings observed during most of the past 12 months and can be associated with the prevailing low return on this asset class and a reduction in the risk aversion of the money-holding sector, leading to a search for yield.

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 4.1% in June, down from 4.7% in May. This was driven by declines in the contributions of deposits held by both households and non-financial corporations. These contributions had seen gradual increases between mid-2012 and May 2013, driven by a prevailing preference for liquidity. At the country level, the annual growth rates of M3 deposits were heterogeneous in June, but improvements could be seen in the deposit base of a number of countries under stress, notably Spain and Ireland, contributing to a further reduction in financial fragmentation.

MAIN COUNTERPARTS OF M3

MFI credit to euro area residents contracted at an annual rate of -0.3% in June 2013, down from -0.2% in May (see Table 4). The annual growth rate of credit to general government decreased to 2.7%, down from 3.2% in May. The monthly flow for credit to general government was mildly positive, reflecting net redemptions in loans which were more than offset by sizeable purchases of domestic government bonds by MFIs in a number of euro area countries.

The annual growth rate of credit to the private sector decreased slightly to -1.1% in June, after -1.0% in May. This mainly reflected a further decline in the annual growth rate of loans, while the annual growth rate of securities other than shares became less negative and that of shares and other equities increased for the second consecutive month. The decline in the annual growth rate of loans to the private sector to -1.0% in June, down from -0.7% in May (adjusted for sales and securitisation) reflected monthly net redemptions across sectors, mainly accounted for by OFIs and non-financial corporations.

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 Q3	2012 Q4	2013 Q1	2013 Q2	2013 May	2013 June
M1	**53.5**	**4.6**	**6.2**	**6.8**	**8.1**	**8.4**	**7.5**
Currency in circulation	9.0	5.3	3.0	1.7	2.7	2.6	2.1
Overnight deposits	44.6	4.5	6.9	7.8	9.3	9.7	8.6
M2-M1 (=other short-term deposits)	39.4	1.3	1.6	1.3	0.1	0.0	-0.1
Deposits with an agreed maturity of up to two years	17.8	-0.9	-1.8	-3.7	-6.0	-6.2	-5.9
Deposits redeemable at notice of up to three months	21.6	3.5	4.8	6.0	5.8	5.7	5.4
M2	**93.0**	**3.2**	**4.2**	**4.3**	**4.6**	**4.7**	**4.1**
M3-M2 (=marketable instruments)	7.0	1.9	-2.3	-8.5	-15.0	-15.8	-16.4
M3	**100.0**	**3.1**	**3.6**	**3.2**	**2.8**	**2.9**	**2.3**
Credit to euro area residents		**0.9**	**0.5**	**0.0**	**-0.1**	**-0.2**	**-0.3**
Credit to general government		9.2	8.3	4.2	3.3	3.2	2.7
Loans to general government		1.5	1.9	-0.8	-2.5	-3.2	-5.9
Credit to the private sector		-1.0	-1.3	-1.0	-1.0	-1.0	-1.1
Loans to the private sector		-0.6	-0.8	-0.8	-1.1	-1.1	-1.6
Loans to the private sector adjusted for sales and securitisation[2]		-0.1	-0.4	-0.3	-0.6	-0.7	-1.0
Longer-term financial liabilities (excluding capital and reserves)		**-4.3**	**-5.1**	**-5.1**	**-4.6**	**-4.3**	**-4.3**

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.

The monthly net redemptions in loans to non-financial corporations were sizeable in June at €12 billion, following the strong net redemptions of €18 billion in both May and April. These net redemptions were spread across the large euro area countries and tended to be concentrated in shorter-term loans. Thus, the annual growth rate of MFI loans to non-financial corporations (adjusted for sales and securitisation) decreased further to -2.3% in June, down from -2.1% in May (see Table 5). Box 2 presents a new composite indicator of the changes in the external financing gap for small and medium-size enterprises in the euro area as perceived by firms themselves. The annual growth rate of MFI loans to households (adjusted for sales and securitisation) remained unchanged at 0.3% on account of moderate monthly net redemptions. In June such redemptions were concentrated in credit for consumption, while lending for house purchase and other lending registered negligible monthly flows.

Overall, growth in loans to the non-financial private sector remains subdued in the euro area, mainly reflecting low levels of demand, although supply constraints remained in a number of countries. Weak economic activity and persistently high levels of economic uncertainty continue to weigh on the demand and supply of bank loans. In this respect, the July 2013 bank lending survey identifies subdued fixed investment activity as the main factor explaining the weakness in loans to non-financial corporations. Moreover, while the July 2013 bank lending survey signalled limited changes in the net tightening of banks' credit standards overall (and even a decline with respect to loans to households), it continued to identify borrowers' risk and macroeconomic uncertainty as the main factors restraining lending policies (see Box 3). At the same time, the persisting fragmentation of financial markets and tight credit supply constraints, although receding in recent months, continue to curb credit growth. Finally, the still high level of indebtedness for both households and non-financial corporations in a number of countries is also weighing on loan growth. A broad analysis of savings, investment and financing broken down by institutional sector is presented in Box 5.

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 Q3	2012 Q4	2013 Q1	2013 Q2	2013 May	2013 June
Non-financial corporations	**41.6**	**-0.8**	**-1.9**	**-2.5**	**-3.0**	**-3.1**	**-3.2**
Adjusted for sales and securitisation[2]	-	*-0.5*	*-1.4*	*-1.4*	*-1.9*	*-2.1*	*-2.3*
Up to one year	24.9	-0.4	-1.3	0.7	-0.7	-1.4	-2.1
Over one and up to five years	17.3	-3.8	-5.2	-5.9	-6.5	-6.3	-6.4
Over five years	57.8	0.0	-1.0	-2.7	-2.8	-2.9	-2.7
Households[3]	**48.9**	**0.2**	**0.4**	**0.5**	**0.2**	**0.2**	**0.0**
Adjusted for sales and securitisation[2]	-	*1.0*	*0.8*	*0.4*	*0.3*	*0.3*	*0.3*
Consumer credit[4]	11.2	-2.4	-2.9	-3.2	-3.4	-3.5	-3.6
Lending for house purchase[4]	73.3	0.7	1.1	1.4	1.1	1.0	0.8
Other lending	15.5	-0.5	-0.6	-1.0	-0.9	-1.0	-1.0
Insurance corporations and pension funds	**0.9**	**-9.1**	**-4.2**	**6.1**	**12.1**	**12.0**	**11.1**
Other non-monetary financial intermediaries	**8.7**	**-2.8**	**-1.4**	**-0.1**	**-0.1**	**0.3**	**-3.2**

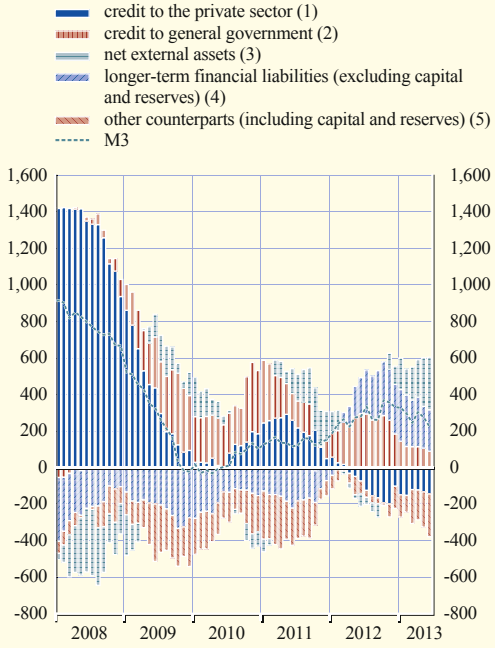
Source: ECB.
Notes: MFI sector including the Eurosystem; sectoral classification based on the ESA 95. For further details, see the relevant technical notes.
1) As at the end of the last month available. Sector loans as a percentage of total MFI loans to the private sector; maturity breakdown and breakdown 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) remained negative at -4.3% in June. The monthly flow was also negative, reflecting net redemptions in longer-term MFI debt securities. The decline in the money-holding sector's holdings of MFI debt securities reflects funding and regulatory considerations. First, the ongoing deleveraging supports the reduction in market funding. Second, changes in liquidity regulation are encouraging banks to source more of their funding from deposits and less from debt securities. Finally, ongoing discussions on the bank recovery and resolution framework may increase investors' risk perceptions of bank debt. By contrast with longer-term debt securities, longer-term deposits (adjusting for the impact of non-derecognised securitisations, i.e. excluding longer-term deposits held by financial vehicle corporations engaged in securitisation transactions) registered monthly inflows, linked in part to regulatory actions. Capital and reserves increased further in June.

Strong capital inflows into the euro area, observed since July 2012, are currently the main factor supporting M3 growth, counteracting the negative contribution from the net redemptions

Chart 6 Counterparts of M3

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



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

in loans to the private sector. Over the 12 months up to June, the net external asset position of euro area MFIs increased by €288 billion, compared with an increase of €267 billion over the 12 months up to May (see Chart 6).

Overall, data for the first six months of 2013 support the view that the underlying dynamics of money and particularly credit growth remain subdued. In addition, the latest monetary data suggest that financial fragmentation in the euro area has receded in recent months, albeit remaining substantial.

Box 2

THE PERCEIVED EXTERNAL FINANCING GAP INDICATOR FOR SMALL AND MEDIUM-SIZED ENTERPRISES IN THE EURO AREA

This box introduces a new composite indicator of the changes in the external financing gap for small and medium-sized enterprises (SMEs) in the euro area as perceived by firms themselves.[1] The indicator is based on data from the "Survey on the Access to Finance of small and medium-sized Enterprises in the euro area" (SAFE).[2] It combines survey answers on changes in firms' external financing needs with answers on perceived changes in the availability of external financing.[3] The granularity of the survey (with responses at enterprise level) permits an assessment of the perceived changes in the external financing gap across countries, firm size and sectors of economic activity. In addition, regression analysis is presented of the link between the composite indicator and firm-level characteristics as reported in the SAFE.

Rationale for having an indicator of the changes in the perceived external financing gap

The gap between SMEs' perceived external financing needs, in particular for fixed investment or working capital, and the perceived availability of external financing to SMEs (such as bank loans, bank overdrafts, trade credit, debt securities and equity), as reported by SMEs in the SAFE, forms the basis for an assessment of the degree to which SMEs face financing constraints. In the event that SMEs require a high level of external financing, especially if combined with limited availability of external finance, this is expected to have significant adverse implications for the effective funding of economic activity, delaying corporate investment and hiring plans and increasing SMEs' liquidity risks. Conversely, limited access to external finance may have comparatively fewer adverse effects on the real economy when external financing needs remain subdued. Against this background, an indicator of the external financing gap aims to combine information on supply and demand conditions (in both cases from the borrowing firms' perspective) in the provision of external financing.

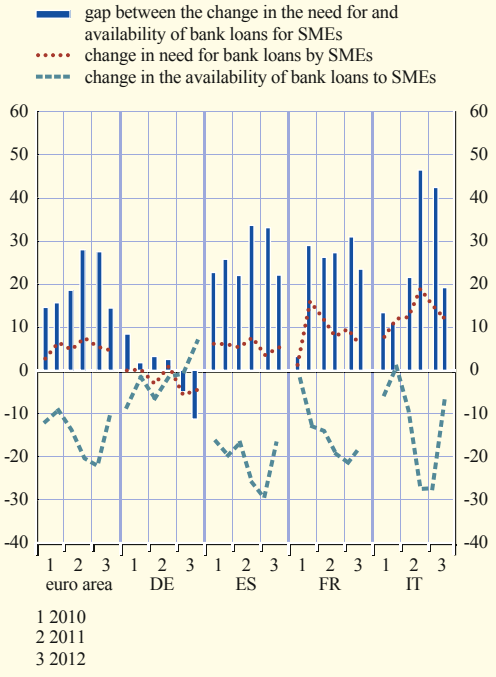
1 For details, see Ferrando, A., Griesshaber, S., Köhler-Ulbrich, P., Perez-Duarte, S., Schmitt, N., Measuring the opinion of firms on the supply and demand of external financing in the euro area, in: Bank for International Settlements, Proceedings of the Sixth IFC Conference on "Statistical issues and activities in a changing environment", Basel, 28-29 August 2012, IFC Bulletin No 36, February 2013.
2 The SAFE is published bi-annually on the ECB website.
3 The survey-based perceived change of the external financing gap, based on the SAFE, differs from the financing gap calculated on the basis of the Integrated Euro Area Accounts, which is the ratio of net lending/net borrowing to GDP and broadly measures the surplus/deficit of corporate revenues over capital expenditures.

SMEs' need for and availability of bank loans at the aggregate level

As a starting point, Chart A shows the net percentage of SMEs reporting an increase/decrease in their need for bank loans (as the main external financing instrument of SMEs), the net percentage of SMEs reporting an increase/decrease in the availability of bank loans, and the difference between the two series. This difference reflects a proxy, derived from the aggregate level, of the perceived changes in the external financing gap of SMEs for bank loans. It can be seen that the gap widened increasingly for euro area SMEs until September 2012, but less so in the period from the fourth quarter of 2012 to the first quarter of 2013 (which represents the latest SAFE survey wave). In respect of the larger euro area countries, the gap for bank loans widened considerably up to 2012, in particular for SMEs in Italy and Spain, and to a lesser extent in France. By contrast, the gap widened very slightly for SMEs in Germany in 2010-11, before narrowing (i.e. a larger increase in availability than in needs in net terms) in 2012.

Chart A Change in the need for and availability of bank loans for SMEs across large euro area countries

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



Source: SAFE.
Note: The chart covers the suvey period from Q1 2010 to Q1 2013 (which corresponds to the end of the latest survey period).

A composite indicator of perceived changes in the external financing gap for SMEs at firm level

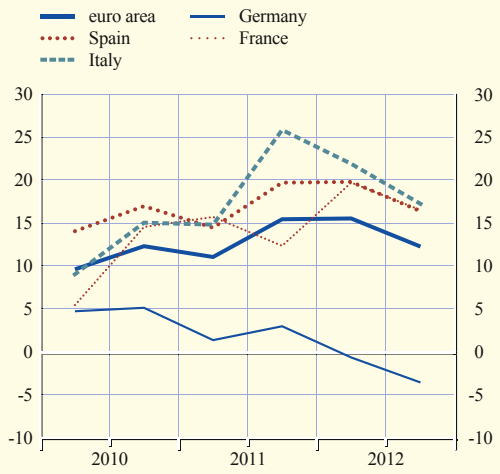
On the basis of aggregate data, as presented in Chart A above, it is not possible to know whether firms which perceive their external financing needs as increasing/decreasing are also the ones which regard the availability of external financing to have deteriorated/improved. By contrast, the composite indicator of the perceived changes in the external financing gap, which is based on firm-level data, can take this key information into account. First, at the firm level, the perceived change in the external financing gap is calculated for each financing instrument (bank loans, bank overdrafts, trade credit, debt securities and equity[4]) that is relevant for the respective firm, based on evidence also provided in the SAFE.[5] Second, the perceived financing gaps for each relevant financing instrument are aggregated to a composite indicator of the perceived financing gap at the firm level by taking an average of the single financing gaps. Third, the perceived changes in external financing gaps at the firm level are aggregated further (for instance, across firm size, sectors, across countries or at the euro area level), based on the weighted number of firms, reflecting the

4 Debt securities and equity are only used to a small extent by SMEs in the euro area.

5 Specifically, to consider all possible cases of a change in the financing gap, the composite indicator assigns a value of 1 (-1) to a two-sided increase/decrease of the financing gap and 0.5 (-0.5) to a one-sided increase/ decrease respectively. An increasing/decreasing financing gap can be composed of an increase/decrease in financing needs and, at the same time, a decrease/increase in the availability of financing (two-sided change). However, the financing gap can also increase/decrease when only one side changes, i.e. either an increase/decrease in financing needs or a decrease/increase in the availability of financing (one-sided change), while the other side remains unchanged. The composite indicator assigns a value of 0 when the situation remains unchanged.

Chart B Perceived change in the external financing gap of SMEs across large euro area countries

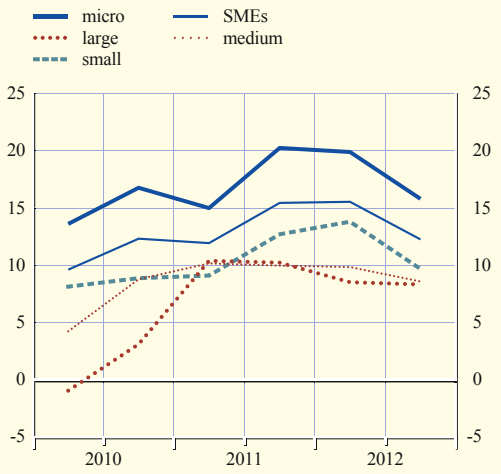
(net percentage of respondents)



Sources: ECB (SAFE) and ECB staff computations.
Notes: The perceived financing gap indicator combines financing needs and availability of bank loans, bank overdrafts, trade credit, debt securities and equity at the firm level. A positive value of the indicator suggests an increasing financing gap.

Chart C Perceived change in the external financing gap of euro area firms across firm size

(net percentage of respondents)



Sources: ECB (SAFE) and ECB staff computations.
Notes: The perceived financing gap indicator combines financing needs and availability of bank loans, bank overdrafts, trade credit, debt securities and equity at the firm level. A positive value of the indicator suggests an increasing financing gap.

economic importance of the firms (based on the number of persons employed).[6] A positive value of the composite indicator suggests an increase in the perceived external financing gap, whereas a negative value suggests a decrease. However, while an assessment of the level of the financing gap would be ideal, the SAFE only allows the construction of a composite indicator of the perceived changes in the external financing gap.

Looking at the resulting overall composite indicator, the perceived external financing gap across the larger euro area countries has increased most since the second half of 2011 for Italian SMEs, followed by Spanish SMEs (Chart B). This evidence broadly resembles the gap between the change in the need for and availability of bank loans for SMEs (Chart A above). The higher increase in the perceived external financing gap for Italian and Spanish SMEs reflects the stronger decline in SMEs' creditworthiness in these countries compared with SMEs in France or Germany, but also more severe strains in the banking system. In the most recent period, the gap did not grow so much, reflecting some receding financing tensions despite a continued challenging financing situation for SMEs. In Germany, by contrast, SMEs reported only a very small increase in their external financing gap in 2010-2011, and a declining gap thereafter (as indicated by negative values of the indicator), until the first quarter of 2013.

It appears that the change in the perceived external financing gap is inversely related to firm size, indicating that very small firms are subject to the largest widening of the gap between external financing needs and available external financing (Chart C). Indeed, euro area micro firms have perceived the strongest increase in their external financing gap since 2010, whereas the rise in the perceived financing gap has been rather modest for large firms. In the most recent survey period

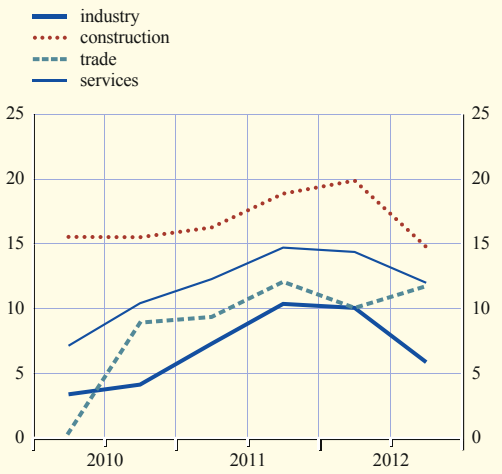
6 For details of the methodology used in the SAFE, including the aggregation method, see Annex 3 of the bi-annual website report: "Survey on the access to finance of small and medium-sized enterprises in the euro area", published on the ECB's website.

(covering the fourth quarter of 2012 to the first quarter of 2013), the increase in the perceived external financing gap became smaller, in particular for micro and small firms.

SMEs in the euro area construction sector have perceived the strongest rise in their external financing gap since 2010, although the increase has moderated more recently (Chart D). The bursting of the housing market bubble in some euro area countries and the related stronger decline in SMEs' profits in the construction sector compared with other sectors is likely to have contributed to the increase in the financing gap. By contrast, euro area SMEs in the industry sector reported the smallest rise in the gap between external financing needs and the availability of external financing. The more moderate worsening of the external financing gap for SMEs in this sector is probably related to the lower decline in profits and hence to SMEs' creditworthiness, as well as possibly to assets that may be used as collateral. Moreover, a larger share of firms in the industry sector are export-oriented (unlike, for example, the services sector) and thus relatively more resilient to weak domestic demand.

Chart D Perceived change in the external financing gap of euro area SMEs across different sectors of economic activity

(net percentage of respondents)



Sources: ECB (SAFE) and ECB staff computations.
Notes: The perceived financing gap indicator combines financing needs and availability of bank loans, bank overdrafts, trade credit, debt securities and equity at the firm level. A positive value of the indicator suggests an increasing financing gap.

SMEs' perceived changes in financing gap and firm characteristics

A simple way to investigate the role of firm characteristics in the perceived changes in the external financing gap is to regress the composite indicator of specific firm characteristics based on the following equation:

$$FinGap_{i\,k} = \alpha + \beta\, FirmCharacteristics_{i\,k} + \gamma\, Country + \varepsilon_{ik}$$

where $FinGap_{i,k}$ is the composite measure for firm i in country k. *FirmCharacteristics* is a vector of major firm attributes which are derived from the SAFE survey. *Country* is a vector of country dummies to control for country-specific impacts on firms' perceptions with respect to changes in the financing gap and $\varepsilon_{i,k}$ represents an error term. Although *FinGap* can only take a finite set of values within its range from -1 to 1, it is treated as a continuous variable in the regression analysis.[7] The table reports the regression results individually for the survey waves starting from mid-2010 (the second and third quarters of 2010) until the most recent one (the fourth quarter of 2012 and the first quarter of 2013). The model includes some major firm characteristics expected to be important determinants of firms' perceptions of recent developments in the (mis)match of supply and demand of relevant external financing: i.e. firm size (in terms of employees), a dichotomous variable which shows if a firm is an autonomous profit-oriented enterprise that makes independent financial

7 See Ferrando, A., Griesshaber, S., Köhler-Ulbrich, P., Perez-Duarte, S., Schmitt, N., *op.cit.* for a discussion on alternative econometric specifications if the indicator is considered as ordinal.

Perceived external financing gap and firm characteristics – regression results

	Q2 2010-Q3 2010	Q4 2010-Q1 2011	Q2 2011-Q3 2011	Q4 2011-Q1 2012	Q2 2012-Q3 2012	Q4 2012-Q1 2013
Small[1)]	-0.027	-0.020	-0.030*	-0.024	0.002	-0.008
Medium	-0.044**	0.005	0.013	-0.020	-0.014	-0.013
Large	-0.045	-0.015	0.034	0.021	-0.019	-0.020
Autonomous[2)]	0.011	0.046**	0.042***	0.051***	0.027	0.020
Industry[3)]	-0.008	-0.005	-0.029***	-0.018	-0.006	-0.025*
Construction	0.007	0.002	0.006	0.001	0.027	-0.009
Trade	-0.040***	-0.017	-0.032***	0.0042	-0.019	-0.0097
Log of firm age	-0.009	-0.032***	-0.026***	-0.016**	-0.019***	-0.026***
Ownership[4)]	0.031**	0.007	0.002	0.018	0.005	-0.006
Increase in turnover[5)]	0.007	-0.033**	-0.0098	0.004	0.022*	0.002
Decrease in turnover	0.091***	0.048***	0.062***	0.066***	0.068***	0.061***
Increase in profit margin	-0.076***	-0.069***	-0.044***	-0.038*	-0.069***	-0.066***
Decrease in profit margin	0.089***	0.092***	0.12***	0.105***	0.118***	0.099***
Observations	5,127	5,636	5,383	5,448	5,540	5,606
R-squared	0.077	0.081	0.094	0.108	0.108	0.085

Notes: OLS regression results using the composite measure of the perceived change in the gap between needs and availability of external financing as dependent variable. Missing elements for certain variables (i.e. financial autonomy, ownership, change in turnover and profit margins) are included as separate regressors but the results are not reported in the table. Estimated coefficients with robust standard errors using clusters by sector within countries. Significance levels: *** p<0.001, ** p<0.01, * p<0.05. 1) Reference category for firm size is micro firms; 2) Reference category for firm type is a non-autonomous enterprise; 3) Reference category is service sector; 4) Reference category for ownership is firms listed on the stock market or firms owned by other firms or business associates; 5) Reference category is turnover/profit margin remained unchanged during the previous six months. Country dummies are included but not reported.

decisions, the sector (industry, construction, trade or services), the natural log of firm age as well as a dichotomous variable capturing firm ownership (family or entrepreneurs, venture capital firms, business angels or a single natural person versus listed firms or firms owned by other companies or business associates). In addition, recent developments in turnover and profit margins over the previous six months are considered to serve as proxies for recent firm performance and credit quality.

The results show that changes in turnover and profit margin prove to be important variables for explaining changes in the perceived external financing gap. Firms that report a deterioration of their profit margins see their perceived external financing gap increase between 9% and 12% during the period, while the impact of a deterioration in turnover is slightly smaller, between 5% and 9%. The importance of growth in turnover and profit margin appears plausible, since enterprises which experience decreases in turnover and profit margin should be less likely to have internal funds available and, over time, might be perceived as less creditworthy. Contrary to the descriptive analysis provided in the previous section, firm size (in terms of the number of employees) turns out not to be significant, unless changes in turnover and profit margin are excluded from the model.[8]

Firm age also proves to be significantly related to perceived changes in the external financing gap.[9] In line with expectations, the younger the firm, the more likely it is to experience greater problems in its access to external financing, as it is less likely to possess an established network of good relations with lenders as well as a credit record. Moreover, autonomous firms seem to suffer more from an increasing financing mismatch than firms which are subsidiaries

8 This finding is more in line with Ferrando, A. and N. Griesshaber (2011): Financing obstacles among euro area firms. Who suffers the most? ECB Working Paper No 1293.

9 See, for instance, Westhead, P. and D.J. Storey (1997): Financial constraints on the growth of high technology small firms in the United Kingdom. Applied Financial Economics, 7 (2): 197-201 and Beck, T., Demirgüç-Kunt, A., Laeven, L. and V. Maksimovic (2006): The determinants of financing obstacles. Journal of International Money and Finance, 25: 932-952.

or branches. Overall, although the explanatory power of the model is limited, it increases in the later waves of the SAFE, indicating that the factors considered appear more important in the most recent past.

Conclusion

The composite indicator of the perceived changes in the external financing gap presented in the box is an instrument to gauge the financing constraints of SMEs. It is a synthetic indicator which combines information on both supply and demand conditions in the provision of external financing to SMEs, as reported by euro area firms in the SAFE. A positive or negative reading of the composite indicator would be interpreted as an increase or a decrease of firms' external financing constraints. As the indicator considers a range of financing instruments, it gives a broad-based assessment of the change in the gap between the demand and supply of external funds. In addition, as the gap is calculated at the firm level and aggregated only thereafter, it provides an assessment of the gaps that are actually perceived by the firms. At the same time, it has to be acknowledged that the indicator is not able to provide quantitative information on the actual level of the external financing gap, but only on the changes to it. Moreover, it depends on the subjective assessment of the firms and should therefore be interpreted with some caution. With respect to its development during the financial crisis, a descriptive analysis shows that SMEs in stressed euro area countries, such as Italy and Spain, and especially SMEs in the construction sector, were particularly affected by an increase in their financing gap. The econometric investigation, which takes into account firms' individual characteristics, reveals that changes in turnover and profit margins are key variables for explaining changes in the perceived external financing gap, while firm size turns out to be dominated by these variables. In addition, younger firms and autonomous profit-oriented firms tend to be more affected by increases in the financing gap.

Box 3

THE RESULTS OF THE EURO AREA BANK LENDING SURVEY FOR THE SECOND QUARTER OF 2013

This box summarises the main results of the euro area bank lending survey, conducted by the Eurosystem between 19 June and 4 July 2013[1], for the second quarter of 2013. Overall, the net tightening of credit standards remained unchanged for loans to enterprises and continued to decline for housing loans, while the net decline in the demand for loans moderated significantly, in particular for households.

Summary of the main results

In the second quarter of 2013, euro area banks reported a further net tightening of credit standards for loans to enterprises, unchanged from that reported in the previous quarter and still at a level below the historical average calculated over the period since the survey's inception in 2003. The net tightening of credit standards applied to housing loans decreased to a level below the historical average, while – for the first time since the end of 2007 – euro area banks reported a net easing of credit standards on loans for consumer credit.

1 The cut-off date for completion of the survey was 4 July 2013. A comprehensive assessment of its results was published on the ECB's website on 24 July 2013.

The above-mentioned developments were driven mainly by three factors. First, the contribution from the cost of funds and balance sheet constraints remained broadly unchanged. Second, the contribution from competition pointed to a net easing of credit standards. Third, euro area banks' risk perceptions contributed less to the net tightening of loans, although such risks remained their main concern in setting their lending policies.

As regards demand for loans, the net decrease in the second quarter of 2013 was smaller than in the preceding quarter. For loans to enterprises, the decline abated, while remaining at a level substantially higher than the historical average. In addition, the net decline in demand for both loans to households for house purchase and consumer credit slowed down sharply, reaching levels that are broadly in line with the respective long-term averages.

Looking ahead, for the third quarter of 2013, the banks participating in the survey expect a further decrease in the net tightening of credit standards for both corporate and housing loans, while anticipating unchanged credit standards for consumer credit. At the same time, euro area banks expect a less negative net decline in demand for all loan categories.

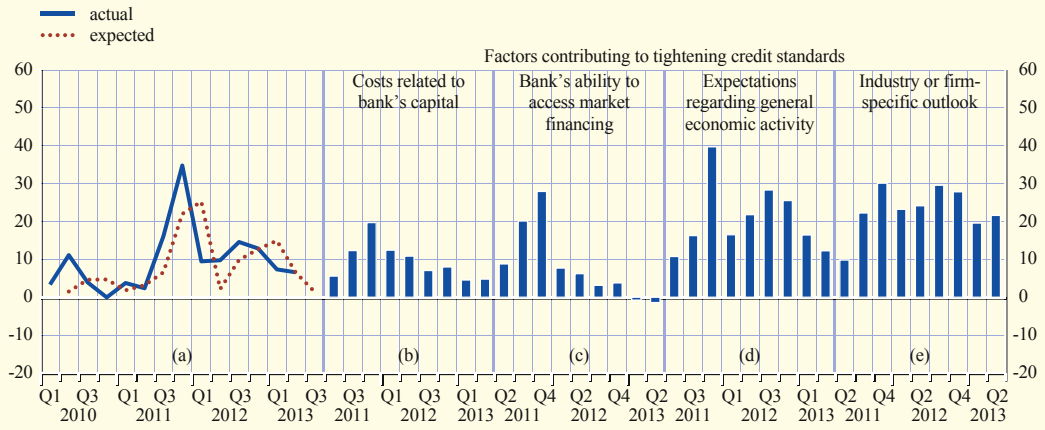
Loans and credit lines to enterprises

Where credit standards are concerned, the net percentage[2] of euro area banks reporting a tightening in the second quarter of 2013 was 7%, unchanged from the previous survey round (see Chart A). At the time of the previous survey round, participating banks expected a similar degree of net tightening in credit standards.

2 The reported net percentage refers to the difference between the proportion of banks reporting that credit standards have been tightened and the proportion of banks reporting that they have been eased. A positive net percentage indicates that banks have tended to tighten credit standards ("net tightening"), whereas a negative net percentage indicates that banks have tended to ease credit standards ("net easing").

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

(net percentages)



Notes: In panel (a), the net percentages refer to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably". The net percentages for the questions related to the factors are the difference between the percentage of banks reporting that the given factor contriuted to tightening and the percentage reporting that it contributed to easing. "Actual" values refer to the period in which the survey was conducted. "Expected" values refer to the expected changes over the next three months.

In line with the aggregate results, the net tightening of credit standards remained broadly unchanged across all maturities and borrowers in the second quarter of 2013. More specifically, euro area banks reported a net tightening of credit standards on loans to small and medium-sized enterprises (SMEs) and large firms in the order of 5% and 3% respectively (compared with 7% and 4% in the first quarter of 2013), while the net tightening of credit standards for short and long-term loans stood at 4% and 10% respectively (after 5% and 11% in the previous survey round).

Looking at the underlying factors, euro area banks reported that, on average, the contribution of the cost of funds and balance sheet constraints to the net percentage change in credit standards was neutral, as it was in the previous quarter. This resulted from unchanged contributions of costs related to banks' capital positions (5%), as well as of banks' access to market funding (-1%) and banks' liquidity positions (-3%). Similarly, the impact of risk perceptions on the tightening of credit standards was also reported to have remained stable, although still at a high level. Finally, competitive pressures were reported to have contributed to a net easing of credit standards in the second quarter of 2013, broadly unchanged from the previous survey round.

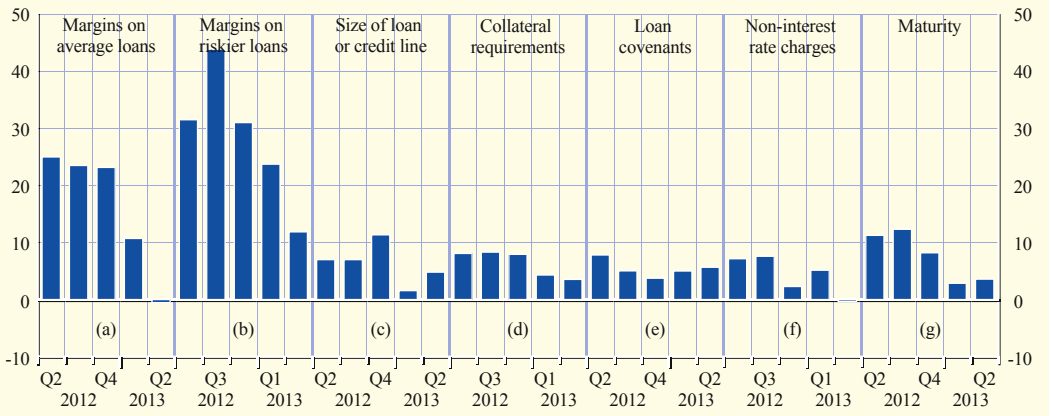
The stable net tightening of credit standards to enterprises in the second quarter of 2013 translated into a compression of margins on average loans for the first time since the beginning of 2011 and into a lesser widening of margins on riskier loans (see Chart B). For most of the other credit terms and conditions, with the exception of the loan size, euro area banks reported a reduced or broadly unchanged net tightening.

Looking ahead to the third quarter of 2013, on balance, euro area banks expect a lesser net tightening of credit standards for loans to enterprises (1%), for loans to large firms (4%) and for long-term loans (6%) than in the previous quarter. Furthermore, credit standards are expected to remain basically unchanged for loans to SMEs and for short-term loans (0%).

Turning to demand, in the second quarter of 2013, the net decline in demand for loans to enterprises abated in comparison with that reported in the previous survey round (to -18%,

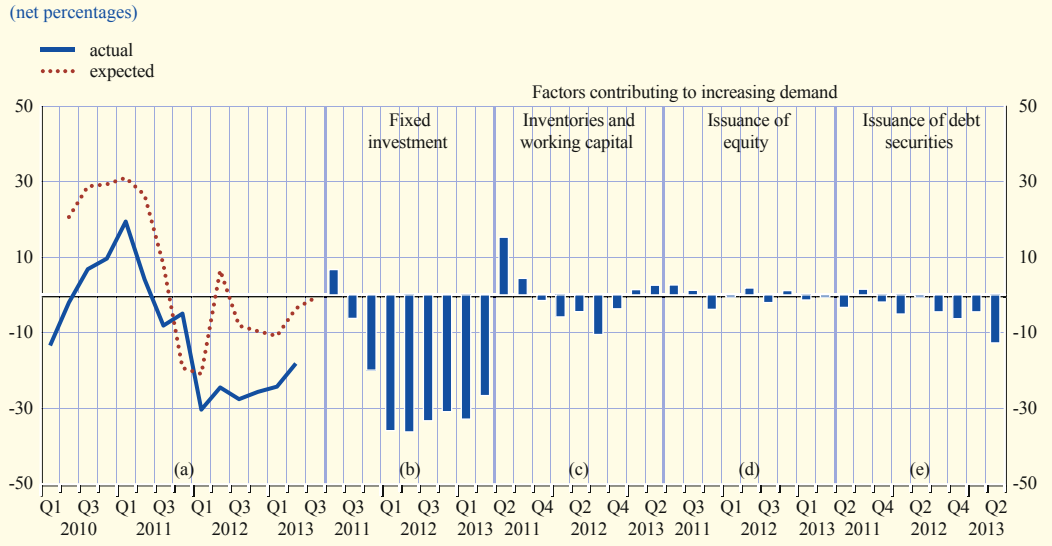
Chart B Changes in the terms and conditions for approving loans or credit lines to enterprises

(net percentages of banks reporting tightening terms and conditions)



Note: The net percentages refer to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably"

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



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

compared with -24%; see Chart C). Similar developments were recorded across loan sizes and maturities, except in the case of short-term loans where banks reported an unchanged net decline of -8%, as compared with the first quarter of 2013.

As in the previous quarter, the net fall in demand was driven mainly by the negative impact of reduced fixed investment (-27%, from -33%) on financing needs. Other financing needs such as those arising from mergers and acquisitions (-2%, after -10% in the first quarter of 2013) continued to contribute less to the net decline in demand, while financing needs for inventories and working capital, as well as for debt restructuring, had a positive impact on loan demand (3% and 15% respectively, after 1% and 12% respectively in the first quarter of 2013). On average, the contribution from the use of alternative sources of finance to the net decline in demand remained broadly unchanged in comparison with the previous survey round.

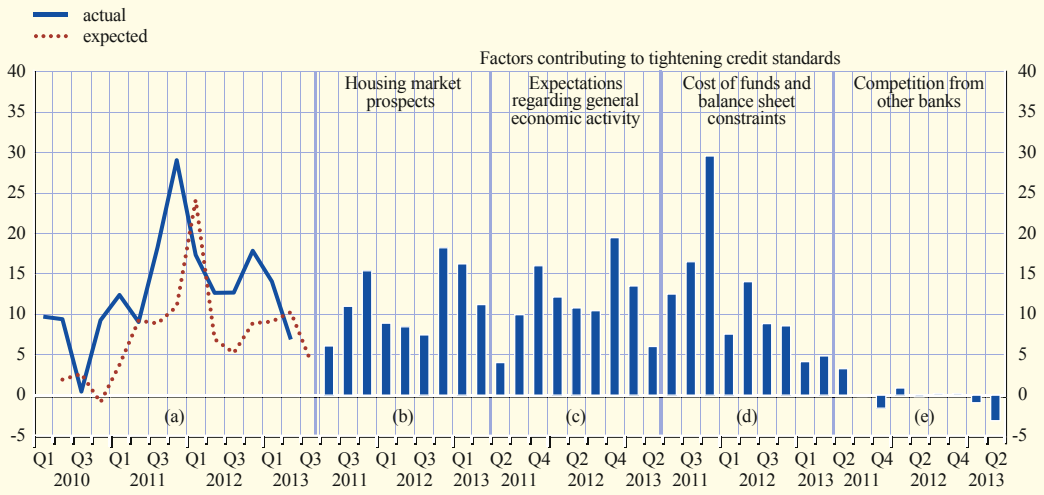
Looking ahead, banks expect a considerably smaller net decline in the demand for loans to enterprises in the third quarter of 2013 (-1%). A net decline in demand is expected for loans to large firms and for long-term loans (-1% and -3% respectively), while a net increase is expected in demand for loans to SMEs and short-term loans (3% and 1% respectively).

Loans to households for house purchase

In the second quarter of 2013, the net percentage of banks reporting a tightening of credit standards on loans to households for house purchase declined to 7%, from 14% in the first quarter (see Chart D). This decrease was slightly sharper than expected by respondents in the previous survey round (10%). As in the case of loans to enterprises, the contribution of the cost of funds and balance sheet constraints to the net tightening of credit standards remained broadly

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

(net percentages)



Note: See notes to Chart A.

unchanged in the second quarter of 2013 (5%, after 4% in the first quarter). At the same time, compared with the previous survey round, the contributions of both the general economic outlook and housing market prospects decreased in the second quarter of 2013. More specifically, the impact of the general economic outlook on net tightening declined to 6%, from 14% in the first quarter, while that of housing market prospects decreased to 11%, from 16% in the previous survey round. Competitive pressures were reported, all in all, to have contributed to a net easing of credit standards in a similar order of magnitude as in the previous quarter.

Most price and non-price terms and conditions applied to housing loans tightened in the second quarter of 2013. The net percentage of banks reporting a widening of margins on loans increased slightly in the case of both average loans (1%, after -1% in the first quarter) and riskier loans (12%, after 10% in the previous quarter). Responses regarding non-price categories pointed to a moderation in the contributions of collateral requirements and loan-to-value ratios to the net tightening (3% in both cases, from 5% and 8% respectively in the previous quarter), while indicating broadly unchanged contributions to the net tightening in the case of loan maturities (6%, as in the previous quarter) and non-interest rate charges (3%, after 1% in the first quarter of 2013).

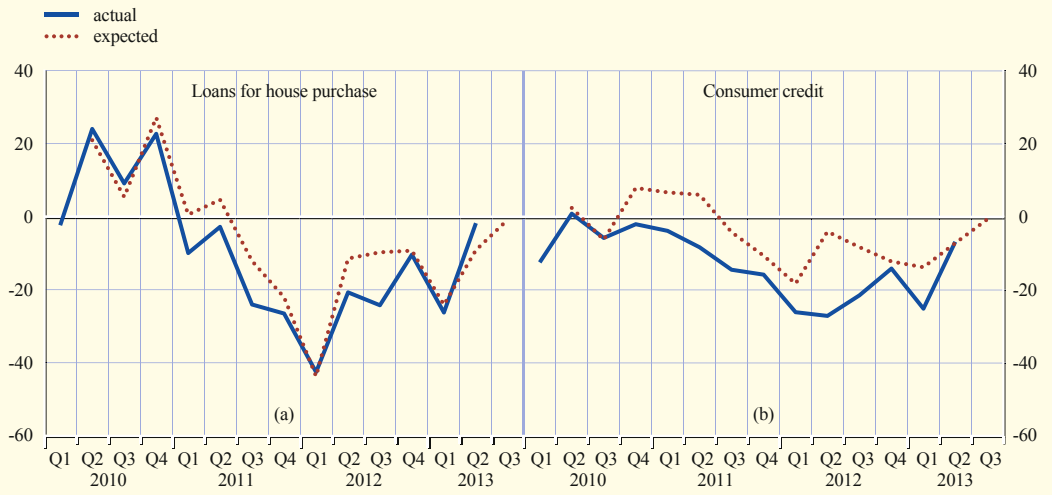
Looking ahead, banks expect a somewhat lower degree of net tightening of credit standards for loans for house purchase (4%) in the third quarter of 2013.

Turning to loan demand, euro area banks reported a sharp deceleration in the net decline in demand for housing loans (-2%, compared with -26% in the first quarter of 2013; see Chart E). Most of the underlying factors contributed to the sharp reduction of the net decline in comparison with the previous survey round. The only exception was the demand for loans from other banks, whose contribution to the net decline remained unchanged at -4%.

Looking ahead, banks continue to expect demand for housing loans to remain in negative territory, at a similar level to that reported in the second quarter of 2013 (-1%).

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

(net percentages)



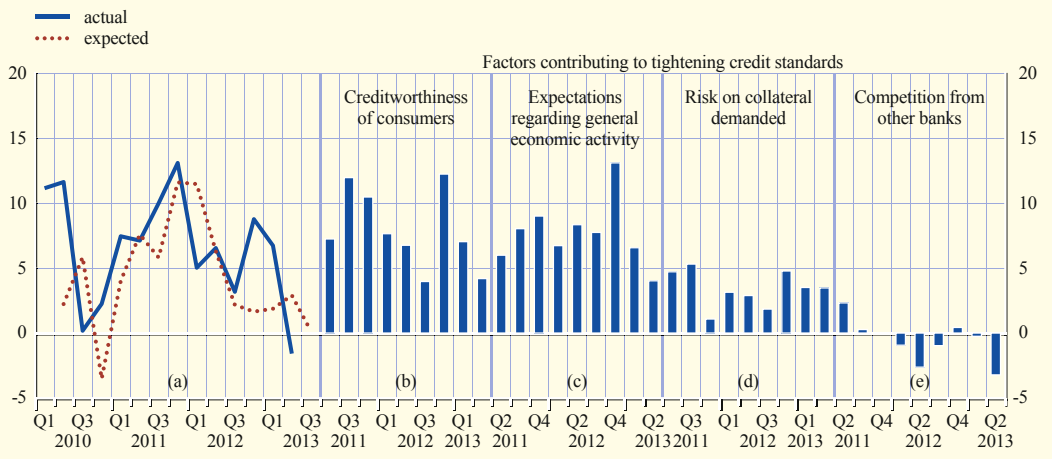
Notes: The net percentages refer to the difference between the sum of the percentages for "increased considerably" and "increased somewhat" and the sum of the percentages for "decreased somewhat" and "decreased considerably". "Actual" values refer to the period in which the survey was conducted. "Expected"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

Consumer credit and other lending to households

For the first time since the end of 2007, euro area banks reported a slight net easing of credit standards for consumer credit in the second quarter of 2013 (-2%, down from 7%; see Chart F). As for loans to enterprises and housing loans, pressures emerging from the cost of funds and balance sheet constraints remained broadly unchanged. At the same time, the contributions from the economic outlook and the creditworthiness of loan applicants moderated in the second quarter of 2013 (in both cases, to 4%, from 7% in the first quarter).

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

(net percentages)



Note: See notes to Chart A.

Turning to the terms and conditions for approving consumer credit, banks reported a narrowing of margins on average loans (-3%, compared with -2% in the previous survey round), whereas margins on riskier loans were tightened to a lesser degree (2%, after 4% in the first quarter of 2013). In addition, the net tightening of non-price terms and conditions on consumer credit remained broadly unchanged around zero.

Looking ahead, in net terms, euro area banks expect unchanged credit standards on consumer credit and other lending to households for the third quarter of 2013.

In the second quarter of 2013, the surveyed banks reported a deceleration of the net decline of demand for consumer credit (-7%, after -25% in the previous quarter; see Chart E). This was explained by a reduced contribution from all underlying factors. In particular, the contributions of household spending on durable goods and consumer confidence reached -14% and -19% respectively, after -27% and -25% in the previous survey round.

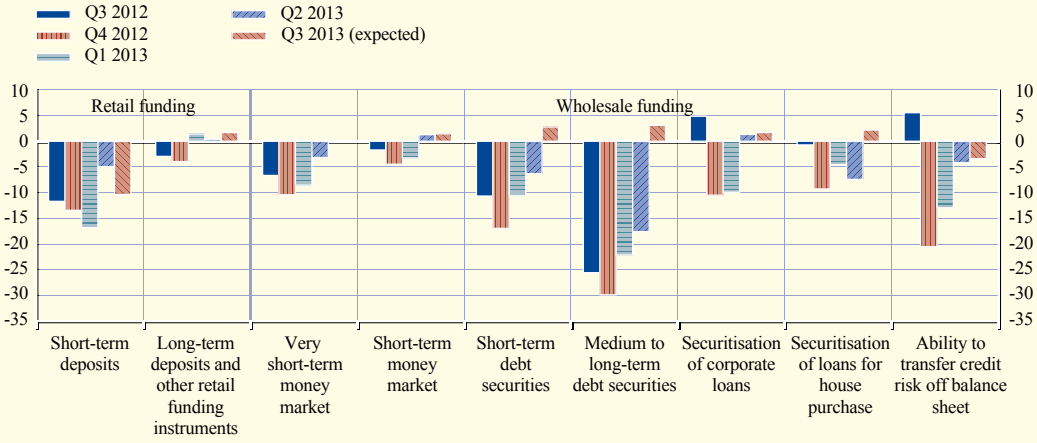
Looking ahead to the third quarter of 2013, euro area banks expect a further moderation of the net decline in demand for consumer credit (to -1%).

Ad hoc question on the impact of market tensions

As in previous survey rounds, the July 2013 bank lending survey contained an ad hoc question on banks' access to retail and wholesale funding in the second quarter of 2013. On balance in the second quarter of 2013, euro area banks reported a further, albeit less pronounced, improvement in their access to retail and wholesale funding across most funding categories in comparison with the previous quarter (see Chart G). In particular, euro area banks reported a net easing of banks' access to retail funding (-2%, from -8% in the first quarter), to money market funding (-1%, from -6%) and to funding through both debt securities issuance (-12%, from -16%) and securitisation (-3%, from -9%). The further improvement in banks' access to retail and wholesale markets was

Chart G Changes in access to funding over the past three months

(net percentages of banks reporting deteriorated market access)



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

somewhat weaker than expected at the time of the previous survey round – except for the case of debt securities and securitisation. Looking ahead to the third quarter of 2013, banks expect a small deterioration of funding conditions for most of the wholesale market segments, but a small improvement for retail funding.

Chart H Impact of the sovereign debt crisis on banks' funding conditions, credit standards and lending margins

(net percentages of banks reporting an impact on funding conditions, on the tightening of credit standards or on the widening of lending margins)

1 Direct exposure to sovereign debt
2 Value of sovereign collateral
3 Other effects

Note: The net percentages are defined as the difference between the sum of the percentages for "contributed considerably to a deterioration of funding conditions/tightening of credit standards/widening of lending margins" and "contributed somewhat" and the sum of the percentages for "contributed somewhat to an easing of funding conditions/easing of credit standards/narrowing of lending margins" and "contributed considerably".

Ad hoc question on the impact of the sovereign debt crisis on banks' funding conditions, credit standards and credit margins

The questionnaire for the July 2013 survey also included – as it had in previous survey rounds – an ad hoc question aimed at assessing the impact of the sovereign debt crisis on banks' funding conditions, credit standards and credit margins over the three previous months.

Replies to the July 2013 survey indicate that the impact of sovereign debt tensions on banks' funding conditions was marginal and that it abated further in some segments in the second quarter of 2013 (see Chart H). On balance, about 2% of the euro area banks reported that their direct exposure to sovereign debt had contributed to a marginal easing in funding conditions (after a net tightening of 1% in the previous quarter), while 2% of the banks reported that "other effects", which may include financial contagion, had contributed to a net tightening, from 4% in the previous quarter. The value of sovereign collateral, by contrast, reportedly contributed to a marginal net easing (-3%, unchanged from the previous quarter).

Compared with the previous quarter, the impact of the sovereign debt crisis on banks' credit standards remained broadly unchanged in the second quarter of 2013, at levels significantly below the peaks recorded in the period before the announcement of the three-year longer-term refinancing operations (LTROs). At the same time, banks reported that the impact of the sovereign debt crisis on banks' credit margins had declined marginally across all lending categories.

Ad hoc questions on the impact of the Capital Requirements Regulation/Capital Requirements Directive IV and other changes in banking regulations[3]

As was the case in the January 2013 round, the questionnaire for the July 2013 survey also included two ad hoc questions aimed at assessing the extent to which the new regulatory capital requirements affected banks' lending policies via their potential impact on the banks' capital positions and on the credit standards and credit margins they apply to loans. On balance, 24% of the participating euro area banks reported a decline in their risk-weighted assets in the first half of 2013 as a result of their endeavours to comply with new regulatory requirements, down from 32% in the second half of 2012. This adjustment process concerned both riskier loans and loans with average risks (28% for riskier loans and 16% for average-risk loans, down from 38% and 26% respectively in the second half of 2012). As regards the effect of regulation on banks' capital positions, on balance, 22% of the euro area banks noted an increase in their capital positions over the past six months, compared with 24% in the January 2013 survey. In the last six months, the strengthening in banks' capital positions was achieved comparatively more through retained earnings than through capital issuance, whereas the opposite had been the case in the second half of 2012.

Looking ahead, a slightly higher net percentage of euro area banks plan to continue reducing their risk-weighted assets in the second half of 2013 (27%, up from 24% in the first half of 2013),

3 See the regulatory requirements set out in the Capital Requirements Regulation/Capital Requirements Directive IV, as accepted by European Parliament in April 2013, which can be found at http://www.europarl.europa.eu, as well as those resulting from the regulations of the European Banking Authority and from any other specific national regulations concerning banks' capital requirements that have recently been approved or are expected to be approved in the near future.

while at the same time, 13% of the banks, on balance, intend to increase their capital positions (down from 22% in the first half of 2013).

As regards the effects of the new regulatory requirements on banks' credit standards and lending margins, euro area banks indicated that they had tightened their credit standards on loans to both large firms and SMEs in the first half of 2013 (17% and 9% respectively, as opposed to 19% and 15% in the January 2013 round). For loans to households, in net terms, 8% of the euro area banks reported a tightening of credit standards on housing loans owing to the new regulatory capital requirements, while 6% reported a tightening of those applied to consumer credit. These values are slightly lower than those observed in the second half of 2012. The impact of regulatory requirements on credit margins was of about the same order of magnitude as that on credit standards for each lending category.

For the second half of 2013, banks expect some moderation in the net tightening of credit standards for loans to enterprises and households that is due to regulatory pressures. At the same time, banks expect to continue to tighten their credit margins in the first half of 2013, across all lending categories.

2.2 SECURITIES ISSUANCE

In May 2013 debt securities issuance by euro area residents continued to contract, albeit at a slower pace than in the previous month. However, year-on-year growth of debt securities issued by non-financial corporations, although declining further, remained buoyant. The annual growth rate of issuance of quoted shares, although remaining low, increased in May, primarily as a result of rising equity issuance on the part of MFIs.

DEBT SECURITIES

In May 2013 the annual growth rate of debt securities issued by euro area residents remained negative at -0.1%, increasing marginally from -0.3% in the previous month (see Table 6).

Table 6 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions) 2013 May	Annual growth rates[1] 2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 April	2013 May
Debt securities	**16,789**	**4.2**	**3.7**	**2.8**	**0.8**	**-0.3**	**-0.1**
MFIs	5,205	3.6	3.5	1.2	-3.3	-6.0	-6.3
Non-monetary financial corporations	3,323	2.5	0.9	0.3	0.5	-1.6	-1.3
Non-financial corporations	1,043	9.2	10.8	12.5	13.1	12.2	11.2
General government	7,217	4.7	4.3	4.1	2.6	3.2	4.0
of which:							
Central government	6,532	3.8	3.5	3.6	2.6	3.5	4.5
Other general government	685	14.3	12.8	9.1	2.4	0.4	-0.4
Quoted shares	**4,853**	**1.4**	**1.0**	**1.0**	**0.8**	**0.3**	**0.5**
MFIs	444	10.1	5.6	5.2	3.0	0.9	1.9
Non-monetary financial corporations	396	3.1	2.9	2.6	2.6	2.7	2.5
Non-financial corporations	4,013	0.3	0.3	0.4	0.5	0.1	0.1

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

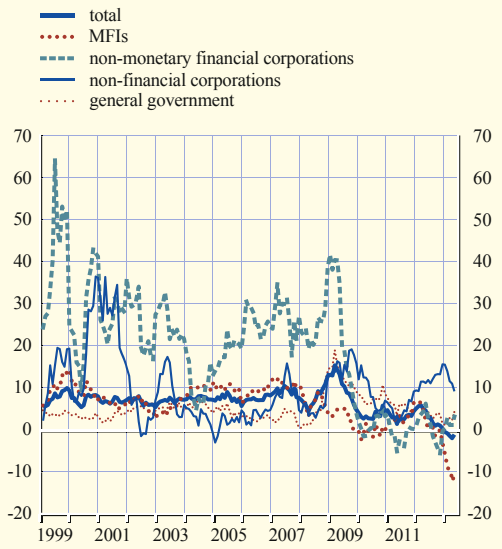
That slowdown in the pace of decline of debt securities issuance masks uneven developments across sectors. The annual growth rate of debt securities issued decreased from 12.2% to 11.2% in the case of non-financial corporations (NFCs), while it fell from -6.0% to -6.3% in that of MFIs. At the same time, the annual growth rate of debt securities issued by the general government increased to 4.0%, from 3.2% in April. Finally, the contraction in debt securities issuance by non-monetary financial corporations moderated somewhat, with the growth rate standing at -1.3% in May, around 0.3 percentage point higher than in April.

The slower pace of decline in overall debt securities issuance in May was attributable to a less pronounced contraction in issuance of short-term debt securities (-8.3%, after -9.1% in April) and to an increase in the annual growth rate of long-term debt securities issuance (0.8%, from 0.6% in the previous month). Refinancing activity remained concentrated on issuance in the long-term segment of the market, notably at fixed rates. Nonetheless, the annual growth rate of issuance of fixed rate long-term debt securities edged down to 3.6% in May (from 3.7% in April). At the same time, the annual rate of growth in issuance of floating rate long-term debt securities, although remaining in negative territory, as in the past ten months, increased marginally to -7.8% in May.

Looking at short-term trends, the moderation in the pace of decline in issuance activity was more pronounced than suggested by the annual rate of growth (see Chart 7). The six-month annualised growth rate of debt securities issuance rose by 0.8 percentage point in comparison with April, to stand at -1.1% in May. Over the same period, this rate increased from 1.2% to 3.2% in the case of non-monetary financial corporations, and from 2.3% to 4.4% in that of the general government. At the same time, the six-month annualised growth rate of debt securities issued declined from 11.0% to 9.2% in the case of NFCs, and from -11.1% to -12.0% in the case of MFIs.

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

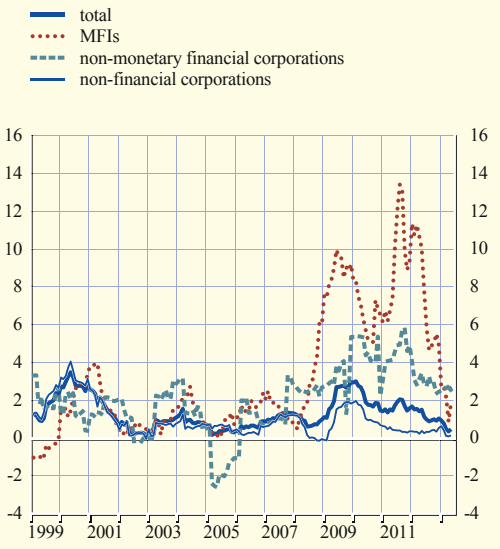
(six-month annualised growth rates; seasonally adjusted)



Source: ECB.

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

(annual growth rates)



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

QUOTED SHARES

In May 2013 the annual growth rate of quoted shares issued by euro area residents rose to 0.5%, from 0.4% in the previous month (see Chart 8), primarily on account of increasing equity issuance by MFIs. The annual rate of growth in equity issuance rose by 1 percentage point to 1.9% for MFIs and edged up a few basis points to 0.1% for NFCs, while it declined slightly to 2.5% in the case of non-monetary financial corporations.

2.3 MONEY MARKET INTEREST RATES

While overnight money market interest rates remained broadly stable in July, the money market yield curve flattened after the Governing Council's announcement of forward guidance on 4 July. In the seventh maintenance period of the year, which began on 10 July, the EONIA remained at low levels, reflecting the low key ECB interest rates, as well as the amount of excess liquidity in the overnight money market, which remained high, despite the ongoing repayment of funds borrowed in the three-year longer-term refinancing operations (LTROs).

Unsecured money market interest rates remained generally stable in July 2013. On 31 July the one-month, three-month, six-month and twelve-month EURIBOR stood at 0.13%, 0.23%, 0.34% and 0.54% respectively, and was thus 1 basis point higher for the one-month and three-month maturities, while unchanged for the other maturities. Consequently, the spread between the twelve-month and one-month EURIBOR – an indicator of the slope of the money market yield curve – decreased by 1 basis point to stand at 41 basis points on 31 July (see Chart 9).

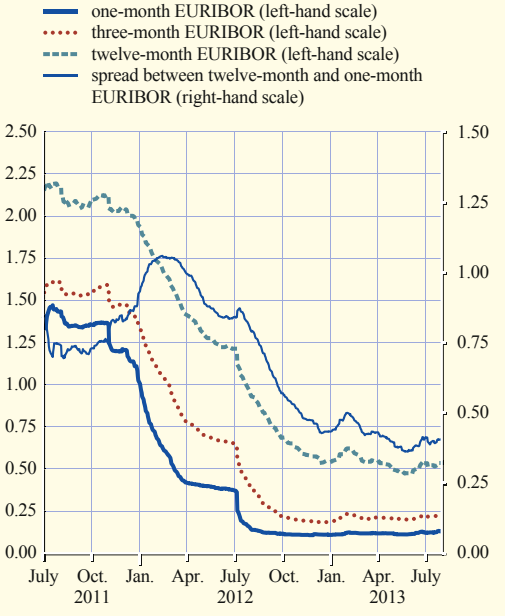
The three-month EONIA swap rate stood at 0.11% on 31 July, the same level observed on 3 July. Thus, the spread between the three-month EURIBOR and the three-month EONIA swap rate increased by 1 basis point.

The Governing Council's announcement of forward guidance following its meeting in July was followed by a modest flattening of the euro area money market term structure. The interest rates implied by the prices of three-month EURIBOR futures maturing in September and December 2013 and March and June 2014 decreased by 4, 5, 6 and 8 basis points respectively in comparison with the levels seen on 3 July, standing at 0.24%, 0.29%, 0.36% and 0.41% on 31 July.

Between 3 July and the end of the sixth maintenance period of 2013 on 9 July, the EONIA continued to stand at levels around 0.08% amid continued high levels of excess liquidity. Since the start of the seventh maintenance period the EONIA has been trading

Chart 9 Money market interest rates

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



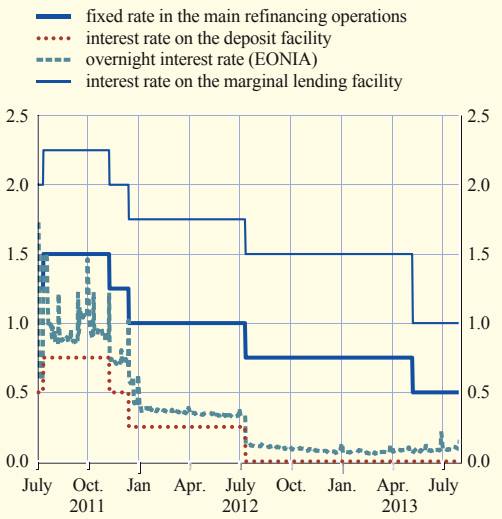
Sources: ECB and Thomson Reuters.

at levels between around 0.09% and 0.10% (see Chart 10). On 31 July the EONIA spiked at 0.14%.

Between 3 July and 31 July the Eurosystem conducted several refinancing operations. In the main refinancing operations of the seventh maintenance period, conducted on 9, 16, 23 and 30 July, the Eurosystem allotted €102.1 billion, €104.4 billion, €102.3 billion and €109.2 billion respectively. The Eurosystem also conducted two LTROs in July, both as fixed rate tender procedures with full allotment, namely a special-term refinancing operation with a maturity of one maintenance period on 9 July (in which €3.5 billion was allotted) and a three-month LTRO on 31 July (in which €2.7 billion was allotted).

Chart 10 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)



Sources: ECB and Thomson Reuters.

The Eurosystem also conducted four one-week liquidity-absorbing operations on 9, 16, 23 and 30 July as variable rate tender procedures with a maximum bid rate of 0.50%. With these operations, the Eurosystem absorbed all of the liquidity associated with bond holdings under the Securities Markets Programme.

Counterparties opted to repay, on a weekly basis, additional funds that were borrowed in the three-year LTROs allotted on 21 December 2011 and 29 February 2012 before maturity. As at 31 July a total of €316.7 billion had been repaid since 30 January 2013, with €211.5 billion relating to the LTRO allotted on 21 December 2011 and €105.2 billion relating to the LTRO allotted on 29 February 2012. Thus, of the €523 billion of net liquidity originally injected in the two three-year LTROs, around 61% has been repaid so far.

Excess liquidity declined further in the sixth maintenance period of 2013, falling from €285.5 billion on average in the previous maintenance period to €273.5 billion, significantly below the record levels of around €800 billion reached in the second quarter of 2012. The main factor contributing to the decrease in the sixth maintenance period was the early repayment of funds allotted in the two three-year LTROs, while average absorption by autonomous factors was comparable to the fifth maintenance period (around €500 billion). While average daily recourse to the deposit facility increased to €92.1 billion, up from €90.5 billion in the previous maintenance period, average current account holdings in excess of reserve requirements decreased from €195 billion to €181.4 billion. During the seventh maintenance period of the year, excess liquidity further declined to stand at €225.8 billion on 31 July, owing mostly to an increase in the liquidity absorbed by government deposits.

2.4 BOND MARKETS

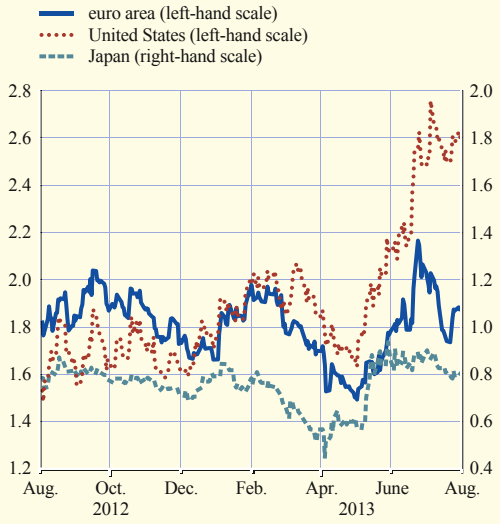
Between the end of June and 31 July 2013, AAA-rated long-term euro area government bond yields decreased by 18 basis points to stand at around 1.9%. Part of the decline was of a technical nature, due to the exclusion of French bonds from the computation of the yield curve after the

recent rating downgrade. By comparison, the long-term overnight indexed swap (OIS) rates declined by around 6 basis points over the same period. Apart from being due to technical factors, the decline in AAA-rated long-term euro area government bond yields was partly the result of the Governing Council's announcement regarding forward guidance on future key ECB interest rates. At the same time, economic survey data released towards the end of the month were better than expected by market participants, and may have limited the overall decrease in long-term yields. In the United States, long-term government bond yields increased by 9 basis points over the same period, standing at around 2.6% on 31 July. Over the period under review, uncertainty about future bond market developments decreased in both the United States and the euro area. The spreads of most euro area sovereign bond yields vis-à-vis OIS rates contracted slightly, and market-based indicators of long-term inflation expectations remained consistent with price stability.

Between the end of June and 31 July 2013, AAA-rated long-term euro area government bond yields decreased by around 18 basis points to stand at around 1.9% (see Chart 11). Part of the decline was technical in nature, and derived from the exclusion of French government bonds from the computation of the yield curve[1] after the rating downgrade by Fitch Ratings. Long-term OIS rates, by contrast, which are normally highly correlated with AAA-rated long-term government bond yields, declined by around 6 basis points. In the United States, long-term government bond yields increased slightly, by around 9 basis points, to stand at around 2.6% on 31 July. In Japan, ten-year government bond yields declined by around 6 basis points and stood at around 0.8% on the same date.

Chart 11 Long-term government bond yields

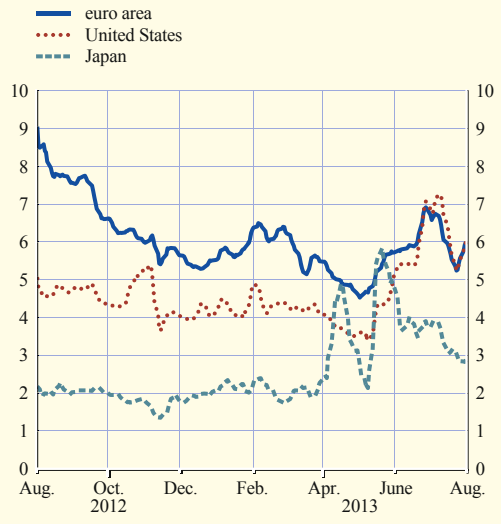
(percentages per annum; daily data)



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

Chart 12 Implied government bond market volatility

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



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

1 For further information, see the " Euro area yield curve" section of the ECB's website (available at http://www.ecb.europa.eu).

Apart from the contribution from technical factors, the decrease in long-term euro area government bond yields was partly due to the Governing Council's announcement regarding forward guidance on key ECB interest rates. After the announcement, the co-movement of long-term yields in the euro area with those in the United States was interrupted, with euro area yields decreasing and yields in the United States continuing to increase in the first part of the period under review. The increase in long-term yields in the euro area recorded in June, mostly reflecting spillovers from the United States after the Federal Reserve had announced that it might be appropriate to reduce the pace of bond purchases under its quantitative easing programme later this year, was partly reversed. In the euro area, economic data releases were mixed. However, a number of data releases were better than expected by market participants, including the results of surveys of consumer confidence and purchasing manager indices (PMIs), and resulted in rising yields towards the end of the period under review. The credit rating downgrade of France by Fitch Ratings, and of Italy by Standard & Poor's, had a limited impact on bond markets.

In the United States, the cumulated increase in long-term government bond yields over the review period masked relatively significant movements that were due mainly to market participants' changing expectations regarding the Federal Reserve's monetary policy stance. At the beginning of the period, long-term yields increased relatively sharply after the release of positive labour market data, as expectations emerged that the Federal Reserve could soon taper-off bond purchases within the scope of its quantitative easing policy. Later, long-term yields declined in the wake of comments by the Chairman of the Federal Open Market Committee (FOMC). For example, in his testimony to the United States Congress on 17 July, Chairman Bernanke emphasised that the Federal Reserve's asset purchases depend on economic and financial developments, and are therefore by no means on a pre-set course. Towards the end of the period under review, yields increased again, against the background of broadly positive economic data releases.

Investor uncertainty about near-term bond market developments, as measured by option-implied volatility, decreased slightly in both the euro area and the United States, to 6.2% and 6.1% respectively at the end of the period under review. In the euro area, implied volatility was somewhat lower than the average level of 2012, which was characterised by financial market tensions in the first half and improvements in the second half, and also lower than the average of the three previous years, which was also characterised by the financial crisis. In the United States implied volatility continued to be somewhat above the average level of 2012, but below the average of the three previous years.

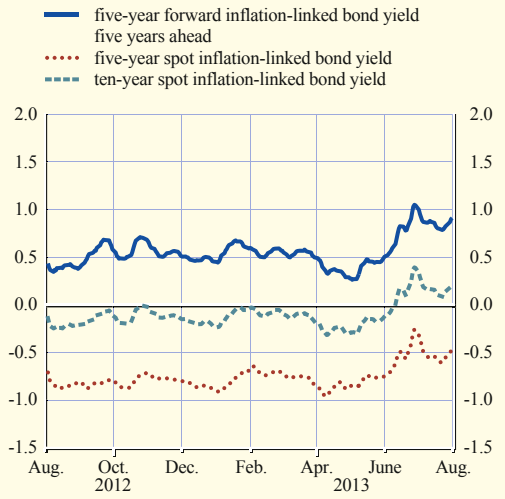
In the period under review, both long-term yields and their spreads vis-à-vis OIS rates declined in most euro area countries. The compression of spreads was slightly stronger in most stressed segments of the euro area government bond market. Domestic uncertainties in some euro area Member States influenced bond market developments, but contagion to other countries was limited.

Some nominal yields on long-term euro area government bonds can be broken down into market expectations of real yields and inflation. In this regard, the real yields on ten-year inflation-linked euro area government bonds[2] decreased over the review period, from around 0.3% to 0.2%, while the real yields on corresponding bonds with five-year maturity decreased slightly more sharply, namely by around 15 basis points to around -0.5% (see Chart 13). As a result, implied forward real interest rates in the euro area (five-year forward five years ahead) declined only slightly to stand at around 0.9%.

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

Chart 13 Euro area zero coupon inflation-linked bond yields

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



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

Chart 14 Euro area zero coupon break-even inflation rates and inflation-linked swap rates

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

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

Regarding market indicators of long-term inflation expectations in the euro area, both the five-year and the ten-year break-even inflation rates implied by inflation-linked bonds increased slightly to stand at around 1.3% and 1.8% respectively, as a result of a slightly sharper decline in real yields than in nominal yields. The five-year forward break-even inflation rates five years ahead consequently increased slightly to stand at around 2.3% at the end of the period under review (see Chart 14). Recent developments in break-even inflation rates seem to reflect a normalisation after the volatility and sizeable changes in both nominal and inflation-linked bond yields over the preceding two months. Indeed, the inflation swap forward rate with the same time horizon decreased slightly over the same period, to stand at around 2.2%, thus also supporting the view that no significant changes in inflation expectations occurred in the review period. Overall, taking into account not only market volatility but also inflation risk premia, market-based indicators suggest that inflation expectations remain fully consistent with price stability.[3] Furthermore, signals from market-based indicators of long-term inflation expectations continue to be consistent with signals from survey-based measures of long-term inflation expectations (see Box 6).

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

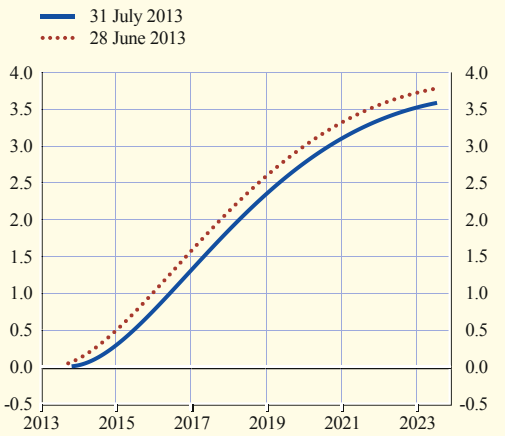
3 For a more thorough analysis of the anchoring of long-term inflation expectations, see the article entitled "Assessing the anchoring of longer-term inflation expectations" in *Monthly Bulletin,* ECB, July 2012.

but also the impact of the Governing Council's announcement regarding forward guidance on key ECB interest rates, while the releases of somewhat better than expected economic data limited the downward shift.

In the period under review, the spreads on investment-grade corporate bonds issued by non-financial and financial corporations in the euro area (relative to the Merrill Lynch EMU AAA-rated government bond index[4]) decreased slightly across all rating classes. Overall, corporate bond spreads for most rating classes ended the review period at around the average level recorded since the start of the year.

Chart 15 Implied forward euro area overnight interest rates

(percentages per annum; daily data)



Sources: ECB, EuroMTS (underlying data) and Fitch Ratings (ratings).
Notes: The implied forward yield curve, which is derived from the term structure of interest rates observed in the market, reflects market expectations of future levels for short-term interest rates. The method used to calculate these implied forward yield curves is outlined in the "Euro area yield curve" section of the ECB's website. The data used in the estimate are AAA-rated euro area government bond yields.

2.5 INTEREST RATES ON LOANS AND DEPOSITS

In June 2013, MFI lending rates eased somewhat for loans to both households and non-financial corporations. MFI lending rates on loans to households for house purchase edged down in the case of both short and long maturities. Lending rates for small loans to non-financial corporations also declined across all maturities. Conversely, lending rates on large loans to non-financial corporations increased somewhat in the case of long maturities, and remained stable for short maturities. Hence, the spreads between rates on small and large loans to non-financial corporations narrowed in June, nonetheless remaining at elevated levels.

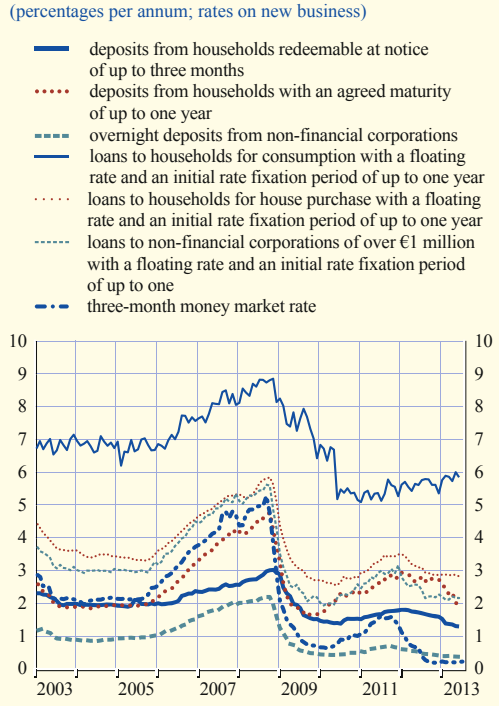
In June 2013, MFI interest rates on short-term deposits remained broadly unchanged in the case of non-financial corporations and declined somewhat for households. Short-term lending rates on loans to households for house purchase also edged down slightly, to 2.8% in June, and those on consumer credit declined from 6.0% in May to 5.8% in June. Regarding non-financial corporations, short-term interest rates on large loans (defined as loans of more than €1 million) remained unchanged at 2.2%, while those on small loans (i.e. loans of up to €1 million) declined by 15 basis points, to 3.7% (see Chart 16). Accordingly, the spread between short-term interest rates on small loans to non-financial corporations and corresponding interest rates on large loans narrowed to just below 160 basis points in June. The magnitude of the spread nonetheless suggests that financing conditions remain persistently tighter for small and medium-sized enterprises than for large firms.

Overall, given that the EURIBOR remained broadly unchanged in June, the spread between short-term MFI interest rates on loans to households for house purchase and the three-month money market rate declined to around 260 basis points, while the corresponding spread for short-term interest rates on large loans to non-financial corporations remained unchanged at around 200 basis points (see Chart 17).

4 The composition of bonds underlying the Merrill Lynch EMU AAA-rated government bond index was not affected by the downgrade of France during the period.

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

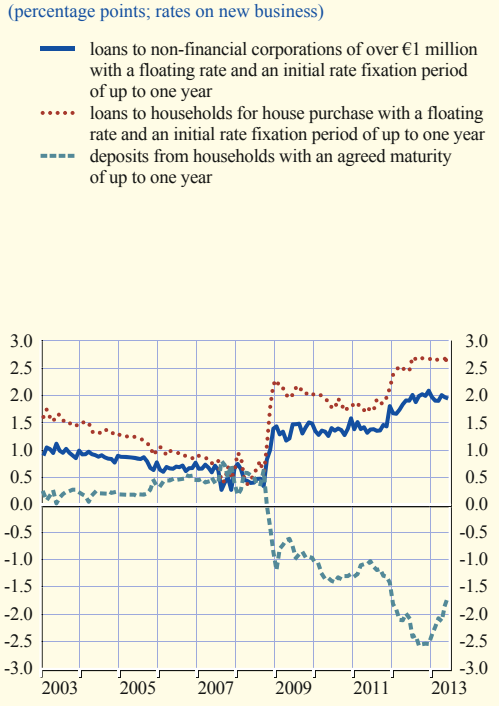
(percentages per annum; rates on new business)



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

Chart 17 Spreads of short-term MFI interest rates vis-à-vis the three-month money market rate

(percentage points; rates on new business)



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

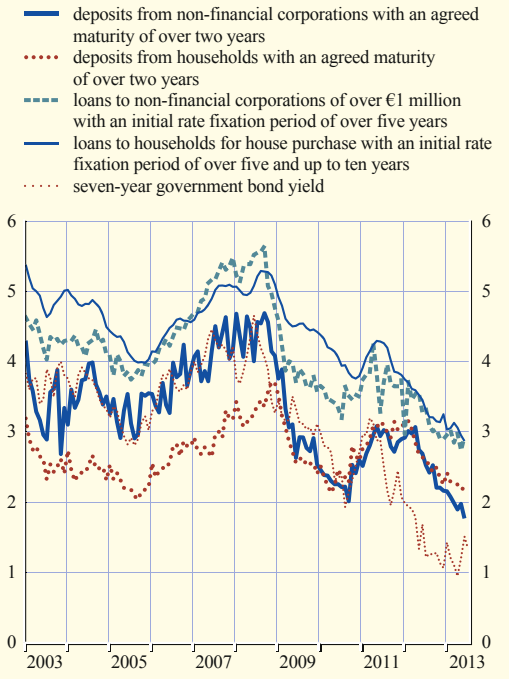
Taking a longer-term perspective, short-term MFI interest rates on loans to households for house purchase and those on loans to non-financial corporations have both declined by about 70 basis points since the beginning of 2012. In particular, these developments reflect the gradual pass-through of the reductions of key ECB interest rates since November 2011, and the effects of the non-standard measures implemented or announced by the ECB over that period.

Turning to longer maturities, MFI interest rates on long-term deposits from households declined by 13 basis points, to 2.1%, in June, while those on long-term deposits of non-financial corporations decreased by 20 basis points, to 1.8%. In the case of loans, interest rates on long-term loans to households for house purchase declined by 8 basis points, to 2.9%, while those on large loans to non-financial corporations increased by 20 basis points, to 2.9% (see Chart 18). Long-term rates on small loans to non-financial corporations declined to 3.3% in June, from 3.4% in the previous month. Hence, the spread between long-term rates on small loans and those on large loans contracted from around 60 basis points in May to 35 basis points in June, namely to around the historical average recorded over the period since 2003. As the yields on AAA-rated seven-year government bonds rose by about 30 basis points in June, to 1.5%, the spread between long-term lending rates and the yields on such bonds narrowed in the case of both housing loans and loans to non-financial corporations.

Taking a longer-term perspective, the spread between long-term lending rates and the yields on AAA-rated seven-year government bonds had fluctuated, in the course of 2012, between 200 and 280 basis points in the case of loans to non-financial corporations, and between 170 and 220 basis points in the case of loans to households for house purchase. These spreads widened steadily in early 2013, and have narrowed again since April, primarily mirroring the movements of yields on AAA-rated government bonds. The recent narrowing of the spreads predominantly reflects the decline in long-term lending rates that stems from the pass-through of past cuts in key ECB interest rates and the lasting positive effects of the ECB's non-standard measures, such as the two three-year longer-term refinancing operations (LTROs) of December 2011 and February 2012, as well as the benefits emanating from the announcement of Outright Monetary Transactions (OMTs) in the summer of 2012.

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

(percentages per annum; rates on new business)



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).

2.6 EQUITY MARKETS

Between the end of June and 31 July 2013, stock prices in the euro area increased by around 6%. In the United States, stock prices increased slightly less, namely by around 5%. Stock market developments in both areas were driven mainly by signals about future monetary policy, by economic data releases and by releases of company earnings. In the euro area, the economic data released were mixed, but slightly on the positive side of expectations, on average. In particular, economic survey data released towards the end of the month were perceived as positive surprises. In the United States, economic releases were also on the positive side of expectations, thereby continuing the recent trend. Stock market uncertainty, as measured by implied volatility, decreased over the period under review.

Between the end of June and 31 July 2013, stock prices in the euro area, as measured by the broad-based Dow Jones EURO STOXX index, increased by around 6%. Over the same period, stock prices in the United States, as measured by the Standard & Poor's 500 index, rose by around 5% (see Chart 19). In the euro area, stock prices of companies in the financial sector gained around 8%, while prices of those in the non-financial sector increased by around 5%. In the United States, stock prices of companies in both the financial sector and the non-financial sector rose by around 5%. Over the same period, stock prices in Japan, as measured by the Nikkei 225 index, were broadly unchanged.

In the euro area, releases of economic sentiment indicators pointed to a slightly improving economic outlook and supported increases in stock prices. A main focus of market participants was on the

future stance of monetary policy, and on releases of company earnings. Equity prices increased after the Governing Council's announcement of forward guidance on the key ECB interest rates, and also in response to comments by FOMC Chairman Bernanke. Emerging concerns of a possible slowdown of economic growth in China did not have a major impact on stock price developments. For more information on recent stock market developments in a historical context, see Box 4.

In the United States, the increase in stock prices was supported by generally positive economic data, particularly for the housing and labour markets. Comments by FOMC Chairman Bernanke also supported stock prices, as the comments were generally seen by market participants as not necessarily suggesting an imminent tapering-off of bond purchases under the quantitative easing programme, despite the recently positive developments in the labour market. In the second half of the period under review, relatively strong earnings reports, particularly from financial companies, supported the increases in stock prices. In Japan, stock prices were broadly unchanged over the period. Market optimism about the prospects for economic growth supported stock prices in the first part of the period. However, towards the end of the period, declines in the stock prices of primarily export-oriented companies erased the overall increase. Furthermore, the underperformance of stock prices in Japan relative to those in the two other areas needs to be interpreted in terms of the sharp increase seen since December 2012 (see Chart 19). Stock prices of companies in emerging markets stabilised after the relatively large declines recorded in June.

Stock market uncertainty in the euro area, as measured by implied volatility, decreased from around 21% to 17% at the end of the period under review. In the United States, it decreased from around 15% to 12%. In both areas, stock market uncertainty is around or below the level observed shortly before the Federal Reserve's initial announcement of early May that it is

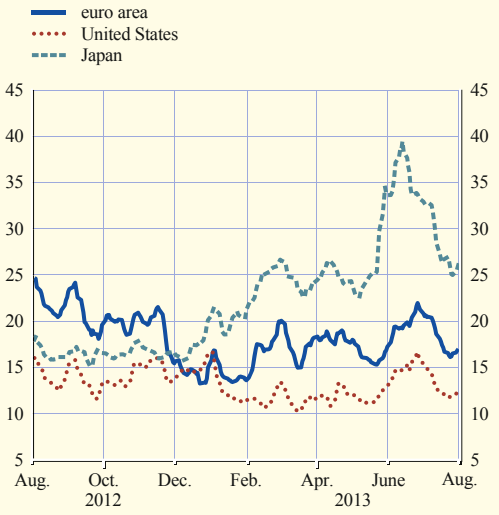
Chart 19 Stock price indices

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

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

Chart 20 Implied stock market volatility

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



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

prepared to alter the pace of its purchases under the quantitative easing programme (see Chart 20). In both economic areas, implied stock market volatility is well below its average over 2012, as well as significantly below the average over the previous three years. Implied volatility in Japan contracted sharply, but remains elevated by historical standards.

Although developments in the sectoral sub-indices of the euro area equity markets varied somewhat, prices increased in all sectors. The most marked increases in prices were registered in the financial sector and in the oil and gas sector, as well as in the industrial sector. The company earnings reports released thus far were mixed, but slightly leaning on the positive side of expectations in the case of financial companies.

Box 4

STOCK MARKET DEVELOPMENTS IN THE LIGHT OF THE CURRENT LOW-YIELD ENVIRONMENT

Stock market developments are important for the formulation of monetary policy for several reasons. First, changes in stock prices can have significant implications for the cost of financing of the corporate sector. Second, they give rise to wealth effects for households. Third, stock markets provide information about future economic developments and the risk outlook as perceived by equity investors, which is useful for cross-checking with survey-based indicators and signals from other financial market segments.

This box analyses recent stock market developments against the background of developments since 2000. It finds no clear link between the increase in stock prices since mid-2012 in the euro area and developments in the same period in expected future earnings. In fact, the increase in stock prices appears to mainly reflect a decline in the compensation for equity risk, which, however, increased in the period 2007-12 and continues to stand above the average level recorded over the last few years.

Equity investments have underperformed bond investments since 2000

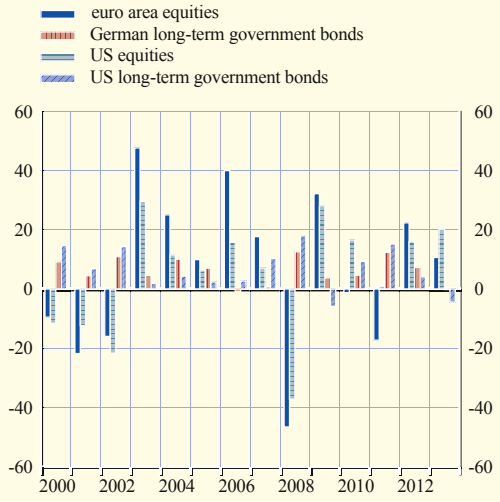
Historically, returns on equity investments have on average exceeded those on bond investments by a large margin, as documented in an extensive literature on the equity risk premium. For instance, in the period 1974-99 the return on equity investments in the countries that today comprise the euro area averaged 15% per annum, while German bonds returned 8%, despite relatively poor returns for stocks in the period 1974-82 amid the effects of the oil crises. The picture is the same for the United States.

However, in the period 2000-12 the total return on equity investments has been meagre, standing at 3% per annum in the euro area and 2% per annum in the United States,[1] compared with 7% per annum for long-term German and US government bonds (see Chart A). The poor performance of stocks resulted in particular from the stock market crashes that followed the bursting of the dot-com bubble in 2000-01 and the collapse of Lehman Brothers in 2008. Since 2009 stock markets have rebounded, especially in the United States. It appears that

1 Based on returns on the broad equity indices compiled by DataStream. These indices consist of around 1,400 stocks for the euro area and 1,000 stocks for the United States. In the case of the EURO STOXX index, the total annual return has been close to zero in the period 2000-12, while the total return on the Standard & Poor's 500 index has been 2% per year.

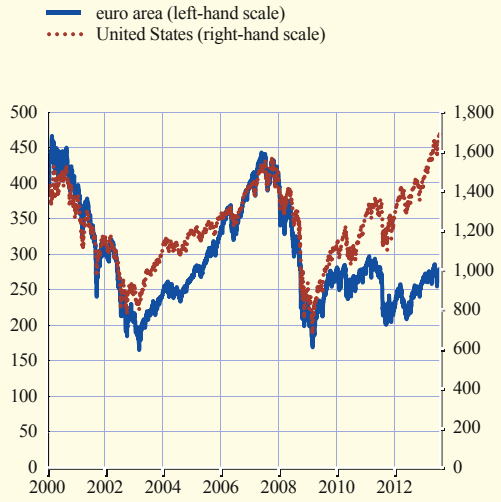
Chart A Returns on stocks and government bonds in the euro area and the United States

(year-on-year percentage changes)



Sources: DataStream and ECB calculations.
Notes: The stock indices used are the DataStream broad indices; stock market returns include dividends. The return on bonds is the total return on the REX index of current ten-year German government bonds and the Bank of America Merrill Lynch 7-10-year Treasury index for the United States. For 2013, the data refer to the period up to 1 August.

Chart B Stock price indices



Source: DataStream.
Note: The indices used are the Dow Jones EURO STOXX broad index for the euro area and the Standard & Poor's 500 index for the United States.

stock market developments in the euro area have decoupled somewhat from those in the United States amid the sovereign debt crisis in Europe. However, in the summer of 2012 stock prices in both economic areas began to increase strongly and this trend has continued in 2013, particularly in the United States (see Chart B) where, in absolute terms, stock price indices have risen to levels exceeding the pre-crisis peak. Recently, amid the discussion of tapering-off of quantitative easing in the United States, the stock markets in both economic areas have entered a phase of higher volatility (see Section 2.6), but overall the effect on stock prices has been modest and transitory. By contrast, developments in bond markets, particularly in the United States, have been characterised by relatively strong increases in yields.

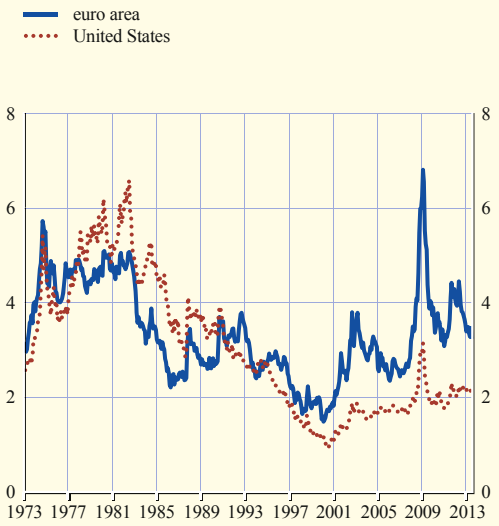
Simple metrics suggest that stock market valuations are in line with historical averages

In order to assess stock market valuations from a historical perspective, Charts C and D show dividend yields and price/earnings ratios from January 1973 to July 2013. The dividend yield on the euro area stock market currently stands around the average level recorded since 1973 (see Chart C). In the United States, the present dividend yield is somewhat below its average level, although it has been drifting upwards since 2000.[2] Turning to the price/earnings ratio (see Chart D), the euro area stock market has been valued in a range from 10 to 20 times earnings (i.e. earnings in the previous year), except when extreme market conditions have prevailed, such as during the economic crises in the 1970s, the dot-com bubble and in the period after the collapse of Lehman Brothers in 2008. The price/earnings ratio has increased from around 11 in mid-2012 to the current level of 15, which is in the middle part of the above-mentioned range.

2 Companies have moved towards distributing cash via share repurchases rather than dividends. This is particularly the case for US-based companies, which have conducted share repurchases of a similar magnitude to the value of dividend payments over the last few years.

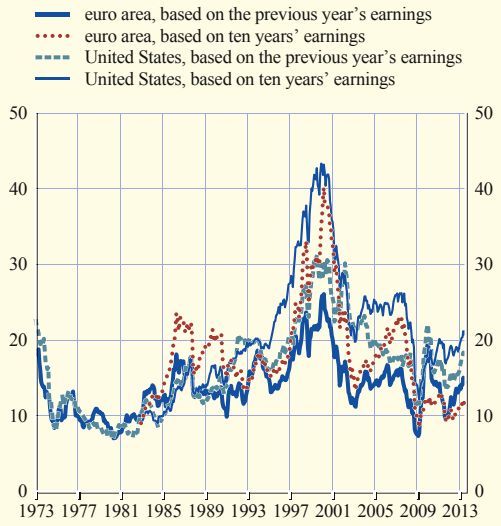
Chart C Dividend yields in the euro area and the United States

(percentages)



Source: DataStream.
Note: The indices used are the DataStream broad indices.

Chart D Price/earnings ratios in the euro area and the United States based on the previous year's earnings and ten-year average real earnings



Sources: DataStream, OECD, Eurostat and ECB calculations.
Notes: The indices used are the DataStream broad indices. Price/earnings ratios based on ten years' earnings are calculated using the average of the last ten years' earnings measured at the current period's price level.

Looking at average earnings over the last ten years to reduce the effect of temporary fluctuations in corporate earnings,[3] the current valuation of euro area stocks still seems low in a historical context, despite the recent increase in prices. The price/earnings ratio for the United States has tended to be slightly higher than the ratio for the euro area, and this is currently the case. Based on the price/earnings ratio calculated using the last ten years' earnings, US stocks appear to be trading at a much higher valuation than euro area stocks.

Expectations of corporate earnings do not seem to explain stock price increases since mid-2012

Chart E shows the development over time of professional stock analysts' forecasts of earnings for the fiscal years 2012-14, for companies based in the euro area and the United States. Earnings forecasts for euro area companies have been continuously revised downwards since late 2011, in line with projections for the macroeconomy. Looking beyond the short horizon of these projections, longer-term earnings growth expectations for euro area companies have remained broadly unchanged since the summer of 2012.[4] This suggests that stock price increases since mid-2012 have not been the result of higher earnings expectations either in the short term or in the longer term. In the United States, short-term earnings forecasts have also been revised downwards, albeit to a lesser extent.

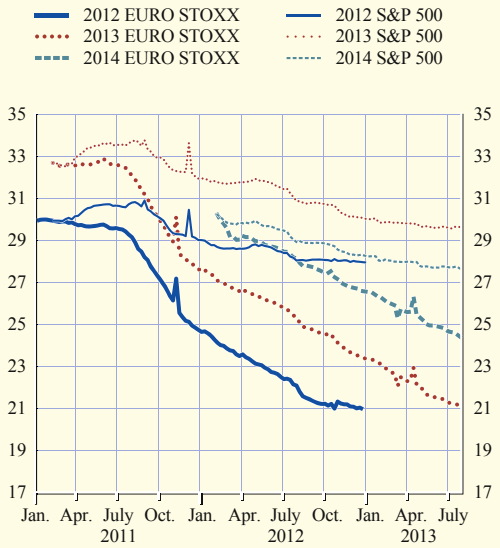
As the increases in stock prices in the euro area apparently did not occur as a result of higher projected earnings, the discounting of future cash flows must have changed. The dividend

3 For a discussion of the predictive power of this measure, see, for example, Campbell, J.Y., and Shiller, R.J. (1998), "Valuation ratios and the long-run stock market outlook", *The Journal of Portfolio Management*, Winter 1998, Vol. 24, No 2, pp. 11-26.
4 See, for example, Section 2.5, *Monthly Bulletin*, ECB, June 2013.

Chart E Revisions over time of stock analysts' short-term forecasts of corporate earnings in the euro area and the United States

(weighted earnings per share)

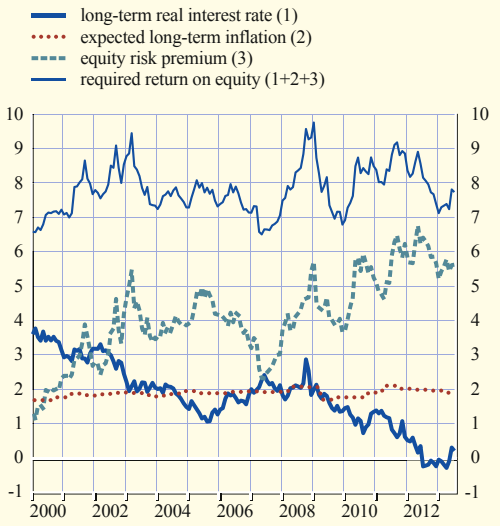
x-axis: time of forecast
y-axis: forecasted weighted earnings per share within a given fiscal year



Sources: DataStream, I/B/E/S and ECB calculations.
Example: The thick red dotted line shows the development in professional analysts' earnings forecasts for the fiscal year 2013 for companies in the EURO STOXX index.
Notes: The indices used are the Dow Jones EURO STOXX broad index for the euro area and the Standard & Poor's 500 index for the United States. For the United States, for each fiscal year the weighted earnings are rebased. Weighted earnings per share represent the total earnings that would accrue to the holder of one unit of the index.

Chart F Decomposition of the required return on euro area equities into expected long-term inflation, real interest rates on long-term government bonds and the equity risk premium

(percentages per annum)



Sources: DataStream, I/B/E/S, Consensus Economics and ECB calculations.
Notes: The long-term real interest rate is the real yield on ten-year euro area government bonds (see also Section 2.4). The figure for expected long-term inflation is from the Consensus forecast.

discount model provides a simple analytical tool to derive a (constant) discount factor for the expected cash flows.[5] It yields an estimate of the additional return required by investors on an equity investment compared with a low-risk investment in long-term government bonds, i.e. the equity risk premium (see Chart F).[6] The equity risk premium increased from 2000 to 2005, albeit from a very low level, during the dot-com bubble. From mid-2005 to mid-2007 it declined amid a general low pricing of risk in all major capital market segments. From the summer of 2007, however, the equity risk premium increased strongly, as equity prices declined in the context of the financial crisis. Thereafter, it continued to increase amid a sharp decline in real interest rates. As a result of the stock price increases observed since mid-2012, the equity

5 The model links current stock prices with the present value of future expected dividends. Dividends are modelled to grow according to available professional stock analysts' estimates and subsequently with a long-term potential GDP growth rate. The discount factor that equates the present value of the projected dividends to current stock prices is the required return on the equity investment. The equity risk premium is the difference between that required return and the sum of the long-term real interest rate on AAA-rated government bonds and long-term expected inflation (using the figure from the Consensus forecast). One source of uncertainty regarding the calculation is the use of medium to long-term forecasted dividend growth; see, for example, the box entitled "What is the information content of stock market earnings expectations held by analysts?", *Monthly Bulletin*, ECB, March 2004.

6 For details on different models for deriving an estimate of the equity risk premium, see the article entitled "Valuing stock markets and the equity risk premium", *Monthly Bulletin*, ECB, November 2008.

risk premium has declined somewhat.[7] The model also shows that despite the current high equity risk premium, the required return on an equity investment (i.e. the sum of expected inflation, the long-term real interest rate and the equity risk premium) is broadly in line with the average level recorded since 2000, owing to the off-setting effect of the low real interest rate.

Evidence of recent inflows into equity investment funds

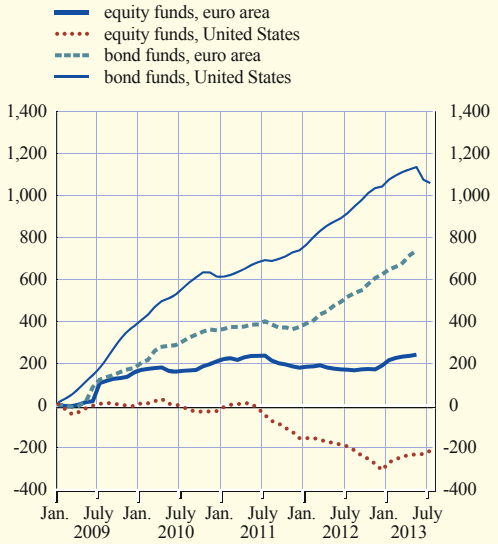
One possible explanation for the decline in the equity risk premium since the summer of 2012 is a shift in investor preferences towards stocks, so as to achieve a higher expected return amid low or even negative real interest rates in this period (see Section 2.6).

In this context, data on net flows in investment funds domiciled in the euro area show that net flows in funds with an equity investment mandate were irregular, while net inflows into bond funds have been almost continuously positive since 2009 (see Chart G). This is likely to be related to a flight to safety and the better return on bonds than stocks generally observed in the previous decade (see Chart A). However, in late autumn 2012 and early 2013[8] net flows in equity funds turned positive, reaching the fastest pace of growth recorded since around the trough in stock prices in the spring of 2009. This could be related to a search for yield as the equity risk premium remains high on a historical scale and also compared with risk premia on other financial assets, such as corporate bonds.[9] However, net flows in bond funds were positive over the same period, thus offering no direct evidence of a shift in investor preferences in that period.[10]

Data for the United States show that net flows in equity-based funds turned positive in January 2013 after a long period of outflows. Furthermore, the data suggest that investors have withdrawn funds from bond funds amid strong increases in bond yields since early May, while slightly increasing their holdings of equity funds.

Chart G Cumulated net flows in investment funds by investment type since January 2009

(euro area: EUR billions; United States: USD billions)



Sources: ECB and the Investment Company Institute.
Notes: The data are based on the domicile of the investment funds and are not limited to specific geographical areas of investment. The last observation for the euro area is for May 2013. The last observation for the United States is for 24 July 2013. The June and July 2013 observations are preliminary and based on weekly cash-flow estimates. For more details, see the Investment Company Institute's website.

7 The decline in the equity risk premium towards its historical average may be explained partly by reduced perceptions of the risk of extreme events following, in particular, the announcement by the ECB of Outright Monetary Transactions. In this context, see, for example, Weitzman, M. (2007), "Subjective Expectations and Asset-Return Puzzles", *American Economic Review*, 2007, 97(4), pp. 1102-30.
8 The pace of inflows to equity funds abated somewhat from March to May 2013 (the last month for which data are currently available).
9 See, for example, the box entitled "Recent developments in spreads on corporate bonds issued by euro area non-financial corporations", *Monthly Bulletin*, ECB, June 2013.
10 See also Section 2.2 in *Monthly Bulletin*, ECB, June 2013.

Box 5

INTEGRATED EURO AREA ACCOUNTS FOR THE FIRST QUARTER OF 2013[1]

The integrated euro area accounts, released on 30 July 2013 and covering data up to the first quarter of 2013, offer comprehensive information on the income, spending, financing and portfolio decisions of institutional sectors in the euro area. The euro area external balance improved further (on a four-quarter sum basis) as a consequence of an increase in the trade balance which reflected growing external demand and declining internal demand – largely driven by a retrenchment in expenditure on the part of non-financial corporations (NFCs) and households. Benefiting from lower inflation and a slight moderation of the fiscal drag, the pace of the decline in households' real income slowed down significantly. The household saving ratio rebounded from record lows, while household investment fell further. NFCs increased their unusual net lending position (instead of traditional net borrowing) through further increases in retained earnings and deeper cuts in fixed investment, which reached historic lows as a share of value added. The reduction in government deficits stalled, owing to lower tax revenue in a recessionary environment and a slight pick-up in expenditure. From a balance sheet perspective, household net wealth declined, while NFC deleveraging continued. Financial corporations' capital ratios stabilised at a high level. The net external position of the euro area (as measured by the international investment position – i.i.p.) further improved.

Euro area income and net lending/net borrowing

Consistent with a slowdown in nominal GDP (with real GDP contracting), the pace of euro area nominal gross disposable income growth declined in the first quarter of 2013 to stand at 0.4%, year on year, reversing a temporary rebound in the fourth quarter of 2012 and mainly affecting government income growth (see Chart A).

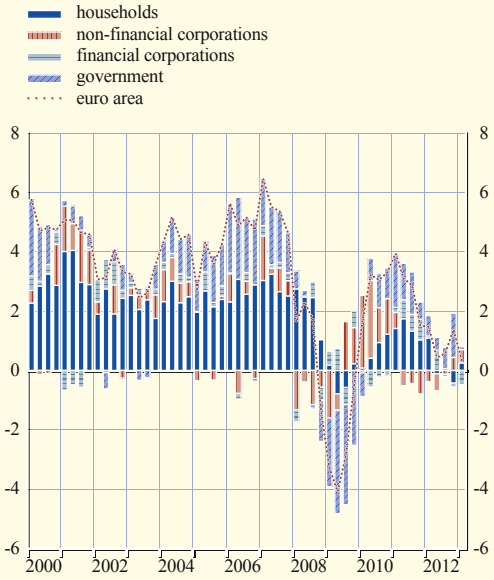
With euro area consumption growing only slowly in the first quarter of 2013 (as an increase in government consumption broadly offset a fall in private consumption), and by less than income, overall euro area gross saving increased slightly, year on year. The household saving ratio rebounded from historical lows and NFCs increased their retained earnings. By contrast, the government sector's reduction of dissaving stalled. The pace of the decline in euro area fixed capital formation accelerated markedly to stand at -6.7%, year on year, in the first quarter of 2013, reflecting a sharper contraction in both NFC and household investment (which stood at -7.8% and -5.5% respectively). As the slight destocking seen in the fourth quarter of 2012 continued at the same pace in the first quarter of 2013, the contribution of changes in inventories to growth was neutral and, accordingly, capital formation fell at broadly the same pace as fixed capital formation.

With capital formation decreasing rapidly and savings increasing slightly, euro area net lending again improved markedly in the first quarter of 2013, to stand at 1.8% of GDP on a four-quarter sum basis, which reflected an increase in the current account surplus (resulting from strong net trade and net property income earned). From a sectoral viewpoint, this improvement

1 Detailed data can be found on the ECB's website (available at http://sdw.ecb.europa.eu).

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

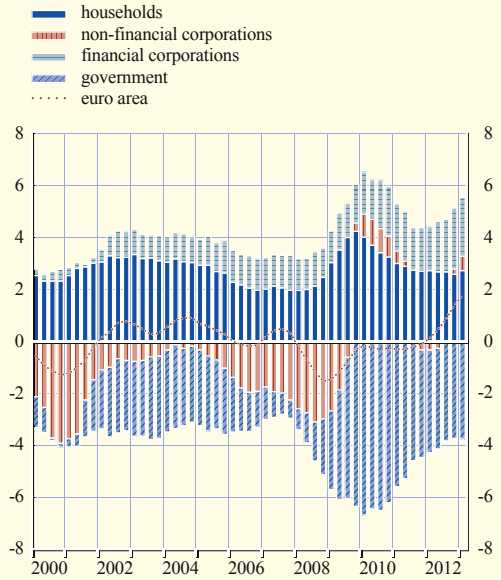
(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB.

Chart B Net lending/net borrowing of the euro area

(percentages of GDP; four-quarter moving sums)



Sources: Eurostat and ECB.

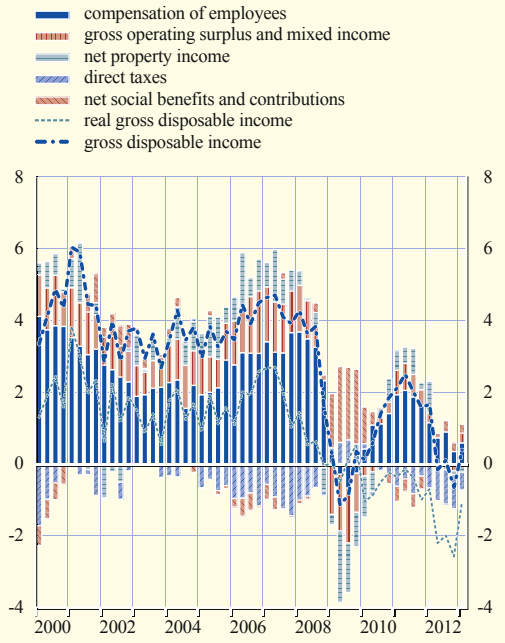
stemmed from a further increase in the net lending position of NFCs and households (exerting contractionary pressures), while there was a slight reduction in the net lending position of financial corporations, albeit from a high level. By contrast, the improvement in government deficits came to a halt (see Chart B). On the financing side, cross-border flows remained subdued in the first quarter of 2013, as non-residents substituted deposits for debt securities issued by residents other than banks. The i.i.p., which measures the assets net of liabilities of euro area residents vis-à-vis non-residents, improved further in the first quarter, to stand at -17.7% of GDP.

Behaviour of institutional sectors

In the first quarter of 2013 *household* nominal disposable income growth rebounded (to stand at 0.4%, year on year, after -0.6% in the fourth quarter of 2012) as a result of a slight attenuation in fiscal drag (i.e. lower household net transfers vis-à-vis government), which subtracted 0.3 percentage point from income growth, compared with 0.7 percentage point in the fourth quarter of 2012. An increase in compensation of employees (notably in the government sector) and a pick-up in the gross operating surplus contributed to the rebound in household income (see Chart C). In combination with falling inflation, the fall in real income slowed sharply to -1%, year on year, in the first quarter of 2013, after -2.5% in the fourth quarter of 2012. As nominal consumption fell, households rebuilt their savings and their saving ratio rebounded to 13.2% in seasonally adjusted terms, from the record low reached in the second half of 2012 (see Chart D). Housing investment contracted markedly, year on year, in the first quarter of 2013. As a result, household net lending increased. Growth in both external financing and financial investment of households continued to be very subdued, with further portfolio shifts into bank deposits, insurance technical reserves and mutual funds, alongside significant disposals

Chart C Households' nominal gross disposable income

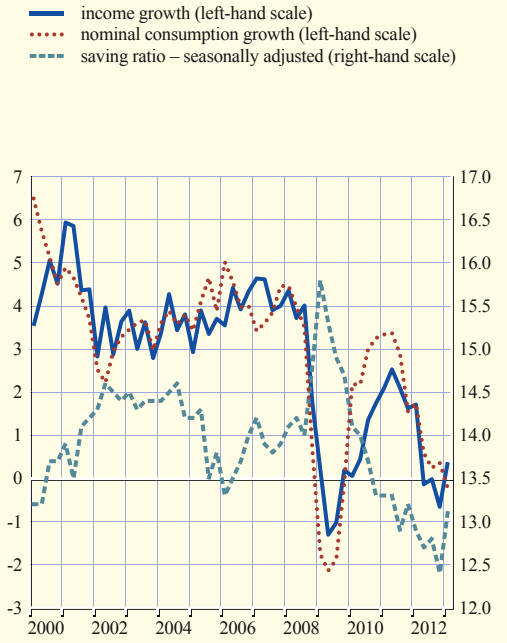
(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB.

Chart D Households' income, consumption and saving ratio

(annual percentage changes; percentage of gross disposable income, seasonally adjusted)



Sources: Eurostat and ECB.

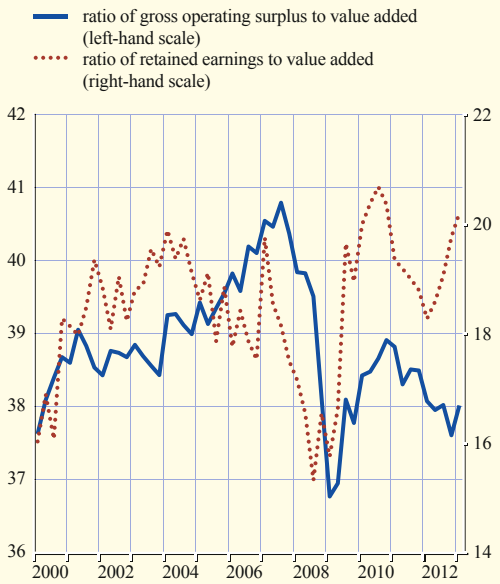
of debt securities. Household net wealth fell, year on year, in the first quarter, as holding losses on housing exceeded net saving and gains on equity held (see Chart G).

The gross operating surplus of *NFCs* fell again, year on year, in the first quarter of 2013, as wages continued to grow and value added decreased. Business margins rebounded only slightly in the first quarter, from the very low level reached in the fourth quarter of 2012 (based on seasonally adjusted data; see Chart E). At the same time, a number of factors contributed to a further increase in NFC savings, which rose to elevated levels, namely a sharp fall in net interest paid, lower taxes paid, a further increase in earnings on foreign direct investment and a decline in net dividends paid. In conjunction with a sharp decline in fixed capital expenditure, which stood at -7.8%, year on year, in the first quarter (reaching a historic low as a share of value added), NFCs increased their unusual net lending position further (see Charts B and F). NFCs continued to tap the bond market (issuing €103 billion over the last four quarters), to compensate for a contraction in bank lending, in the amount of €123 billion over the same period (in part reflecting bank restructuring in Spain). Intra-sector lending, comprising loans granted by other NFCs and trade credits, remained strong, which is particularly important for small and medium-sized enterprises facing bank financing constraints. NFCs slowed the build-up of ample liquidity buffers, while the deleveraging process continued, in part owing to the higher valuation of equity held.

Despite further consolidation measures, the reduction in *government* deficits stalled (to stand at 3.8% on a four-quarter sum basis), owing to an abrupt deceleration in tax revenue growth

Chart E Non-financial corporations margins

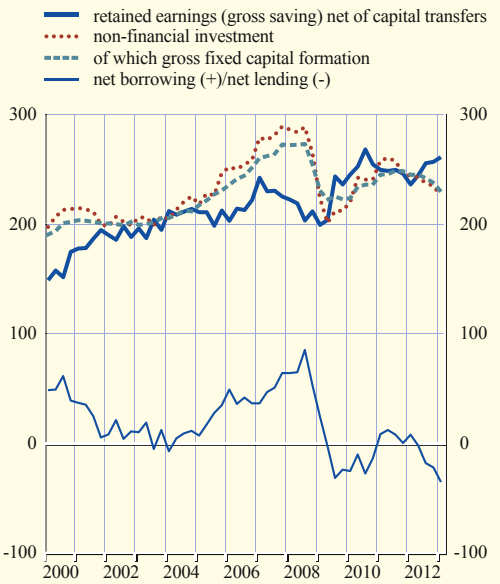
(percentages, seasonally adjusted)



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

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

(EUR billions, seasonally adjusted)



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

against the background of a contracting economy. Growth in current expenditure, notably government consumption, increased, returning to its trend level of close to 1% per annum, following the deep cuts in compensation of employees at the end of 2012 (1% in the first quarter of 2013, after -1.6% in the fourth quarter) . Investment expenditure fell further in the first quarter of 2013 (-7.8%). Debt issuance continued to fund large deficits, as well as significant increases in financial assets, notably reflecting sizeable intergovernmental lending. Debt securities issued were bought by non-residents, banks, and insurance and pension funds.

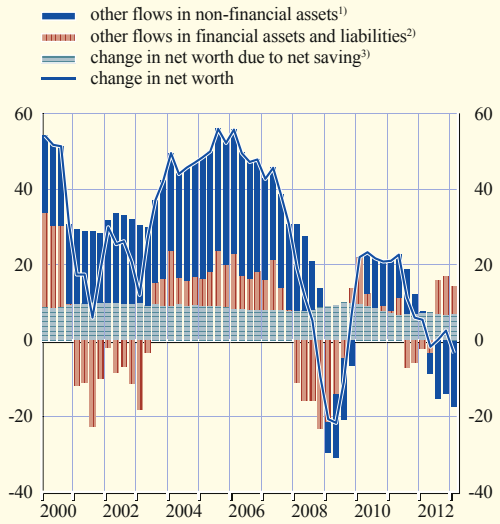
The disposable income of *financial corporations*, though still at high levels, declined markedly in the first quarter of 2013, as value added and net interest earned, taken together, continued to fall, and compensation of employees continued to rise. Despite still sizeable but falling net retained earnings (amounting to €25 billion in the first quarter) and holding gains on financial assets, financial corporations' net assets at market value (an aggregate measure of "capital") rose only moderately, implying a stabilisation of their capital ratios – albeit at high levels – as direct recapitalisations declined compared with previous quarters. Additions to financial corporations' balance sheets remained subdued on a consolidated sector basis.

Balance sheet dynamics

The net wealth of households declined, year on year, in the first quarter of 2013, falling by the equivalent of 3.2% of income. The positive influence of net saving (which stood at 7.2% of annual income in the first quarter) and of holding gains on their financial portfolio (which amounted to 7.1% of annual income) was more than offset by significant holding losses on non-financial assets (namely housing, amounting to 17.4% of annual income) (see Chart G).

Chart G Change in the net worth of households

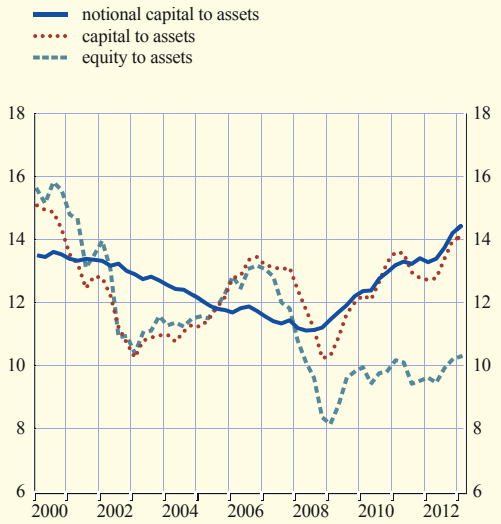
(four-quarter moving sums; percentages of gross disposable income)



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

Chart H Capital ratios of financial institutions excluding mutual funds

(percentage of total assets)



Sources: Eurostat and ECB.

Financial corporations posted significant holding gains on their financial assets held, mainly on equity holdings (as a result of the recovery in stock markets). This contributed to the stabilisation in financial corporations' capital-to-assets ratios, measured in the national accounts as net assets at market value over total assets (see Chart H).

3 PRICES AND COSTS

According to Eurostat's flash estimate, euro area annual HICP inflation was 1.6% in July 2013, unchanged from June. Annual inflation rates are currently expected to temporarily fall over the coming months, owing particularly to base effects relating to energy price developments 12 months earlier. Taking the appropriate medium-term perspective, underlying price pressures are expected to remain subdued, reflecting the broad-based weakness in aggregate demand and a modest pace of recovery. Medium to long-term inflation expectations continue to be firmly anchored in line with price stability. The risks to the outlook for price developments are expected to be still broadly balanced over the medium term.

3.1 CONSUMER PRICES

According to Eurostat's flash estimate, headline HICP inflation was 1.6% in July 2013, unchanged from June. This unchanged inflation rate reflects an increase in food price inflation, which was offset by a lower annual rate of increase in the non-energy industrial goods component.

Euro area annual HICP inflation declined between October 2012 and April 2013. It fell to below 2.0% in February 2013 and to 1.2% in April, its lowest level since February 2010. In June 2013, however, it rose to 1.6%, mainly due to the energy and unprocessed food components. Underlying inflationary pressures, as measured by various HICP exclusion-based measures, have remained subdued. Increases in indirect taxes and administered prices have continued to keep inflation rates elevated in some euro area countries.

Looking at the main components of the HICP in more detail, Eurostat's flash estimate points to a 1.6% increase in energy price inflation in July, unchanged from the previous month. In June, a strong base effect had pushed up the annual rate of change of the energy component to 1.6%, from -0.2% in May. The monthly rate of change from May 2013 was only slightly positive at 0.1% and reflected a small increase in car fuels and unchanged prices for electricity and gas.

Table 7 Price developments

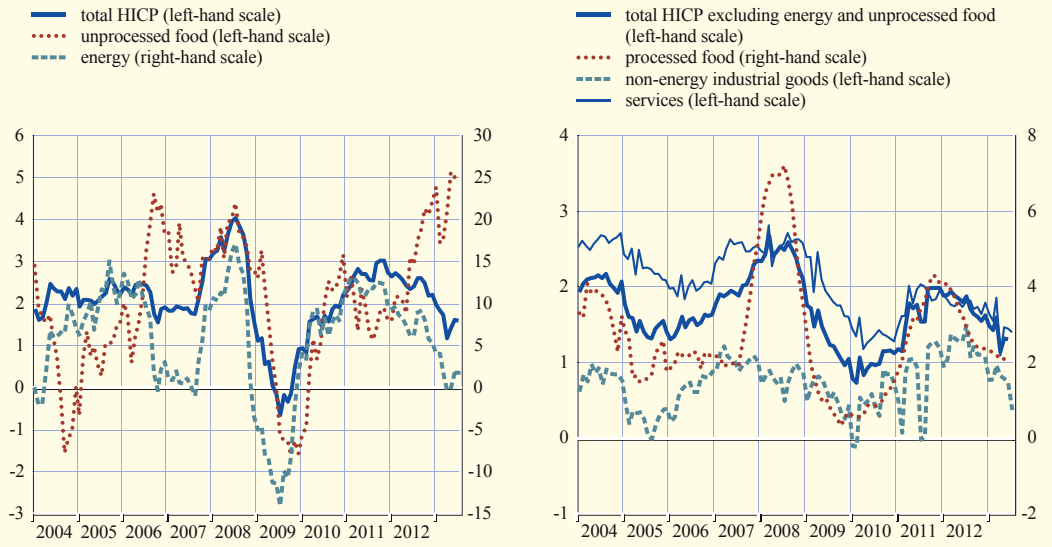
(annual percentage changes, unless otherwise indicated)

	2011	2012	2013 Feb.	2013 Mar.	2013 Apr.	2013 May	2013 June	2013 July
HICP and its components[1]								
Overall index	2.7	2.5	1.8	1.7	1.2	1.4	1.6	*1.6*
Energy	11.9	7.6	3.9	1.7	-0.4	-0.2	1.6	*1.6*
Food	2.7	3.1	2.7	2.7	2.9	3.2	3.2	*3.5*
Unprocessed food	1.8	3.0	3.5	3.5	4.2	5.1	5.0	.
Processed food	3.3	3.1	2.3	2.2	2.1	2.1	2.1	.
Non-energy industrial goods	0.8	1.2	0.8	1.0	0.8	0.8	0.7	*0.4*
Services	1.8	1.8	1.5	1.8	1.1	1.5	1.4	*1.4*
Other price indicators								
Industrial producer prices	5.8	2.9	1.3	0.6	-0.2	-0.1	.	.
Oil prices (EUR per barrel)	79.7	86.6	86.7	84.2	79.3	79.2	78.3	.
Non-energy commodity prices	12.2	0.5	-3.6	-1.6	-3.5	-4.8	-7.3	.

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

Chart 21 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)



Source: Eurostat.

According to Eurostat's flash estimate, total food price inflation, which refers to inflation in both processed and unprocessed food prices, increased to 3.5% in July. No official information is available with regard to the breakdown of the food component for this month. Unprocessed food price inflation fell back slightly from 5.1% in May – the highest rate in more than a decade – to 5.0% in June. This marginal decline masked a further strong increase in the seasonally adjusted monthly rate of change of 0.9%, which was more than offset by a downward base effect. The sharp spike in this component was attributable to the fruit and vegetables components. Conversely, processed food price inflation remained unchanged at 2.1% in June for the third month in a row.

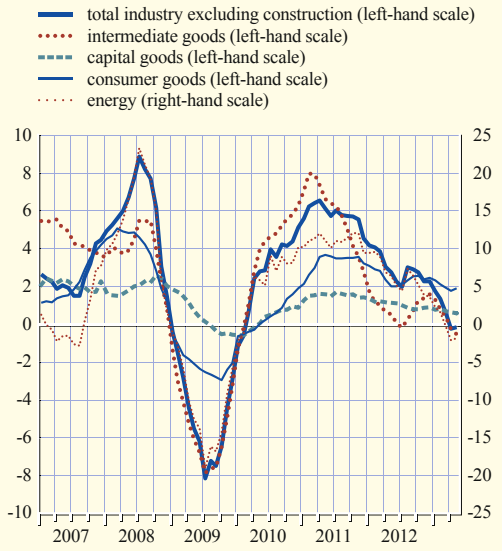
HICP excluding food and energy stood at 1.1% in July, down from 1.2% in June, according to Eurostat's flash estimate. Excluding these two volatile components, HICP inflation consists of two main components, namely non-energy industrial goods and services. According to Eurostat's flash estimate, non-energy industrial goods price inflation decreased to 0.4% in July, down from 0.7% in June, owing mainly to the summer sales, which were stronger than 12 months earlier. Non-energy industrial goods price inflation has been hovering at around 0.8% since the beginning of the year, with the exception of March, when it increased to 1.0%. The decrease in June, from 0.8% in May, was driven by a decline in the annual rate of change of car prices. Services price inflation was estimated at 1.4% in July, unchanged from June, after having decreased from 1.5% in May. The decline in June was largely due to a rounding effect, with an increase in the annual rate for package holidays being offset by small declines in a broad set of other detailed components.

3.2 INDUSTRIAL PRODUCER PRICES

No new data have become available on industrial producer prices at the euro area level since the July issue of the Monthly Bulletin was published. Available country data suggest that the annual rate of change in euro area producer prices (excluding construction) will most likely increase and enter

Chart 22 Breakdown of industrial producer prices

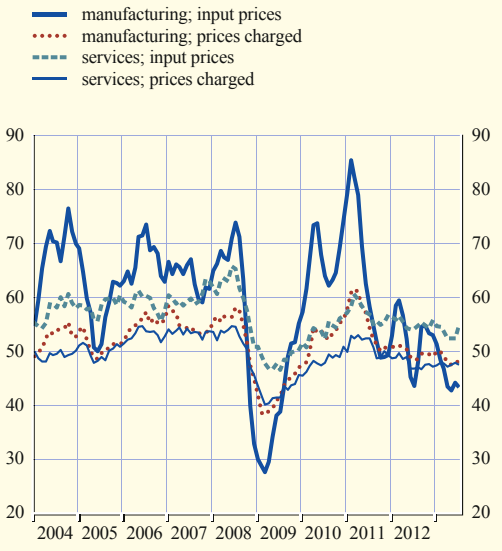
(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

Chart 23 Producer input and output price surveys

(diffusion indices; monthly data)



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

positive territory in June 2013, following negative annual inflation rates in April and May. In May, industrial producer price inflation (excluding construction) was -0.1% year on year, marginally up from April (Table 7 and Chart 23). This small increase reflects increases in the annual inflation rates of the energy and consumer goods components, which more than offset a further decline in the annual rate of change in the intermediate goods component. Producer prices in the capital goods industries remained unchanged. Excluding construction and energy, the annual rate of change in industrial producer prices decreased to 0.5% in May, from 0.6% in the previous month.

The latest information derived from both the PMI and the European Commission surveys indicates further contained pipeline pressures. With regard to the PMI (see Chart 23), the input price index for the manufacturing sector decreased from 44.1 in June to 43.4 in July, while the output price index increased from 47.5 to 48.5. Both indices remain below the threshold value of 50, thus signalling falling prices and levels that are below their long-term averages. Forward-looking European Commission survey data on selling price expectations for total industry increased marginally in July, as selling price expectations rose in all industries.

3.3 LABOUR COST INDICATORS

Domestic price pressures stemming from labour costs remained contained in the first quarter of 2013 (see Table 8 and Chart 24).

Wage growth measured both by hours and per person picked up moderately at the euro area level in the first quarter of 2013. This development was more pronounced in the public sector than in

Table 8 Labour cost indicators

(annual percentage changes, unless otherwise indicated)

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

Sources: Eurostat, national data and ECB calculations.

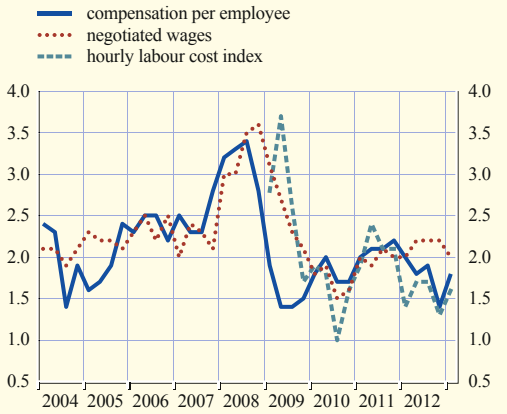
the private sector. At the same time, labour cost indicators exhibited significant divergences at the country level. While nominal wages and unit labour costs are growing very little or even declining in some euro area countries, wage growth remains robust in others. As total hours worked declined considerably further in the first quarter of 2013, hourly labour productivity growth in the euro area increased somewhat. By contrast, annual labour productivity growth per person employed remained unchanged at -0.2% and thus in negative territory.

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

Euro area negotiated wages grew at 2.0% year on year in the first quarter of 2013, down from 2.2% in the previous quarter. Preliminary data on negotiated wages for the second quarter of 2013 suggest a continued moderation. The annual rate of change in hourly labour costs increased, from 1.3% in the fourth quarter of 2012 to 1.6% in the first quarter of 2013, owing to a decline in hours worked. This acceleration reflected, primarily, developments in the non-business economy, which are dominated by changes in the government sector, whereas wage growth in the business economy sector remained stable. Overall, wages and salaries grew at a faster rate than the non-wage component of euro area hourly labour costs, exhibiting a similar pattern to that observed in the previous quarter.

Chart 24 Selected labour cost indicators

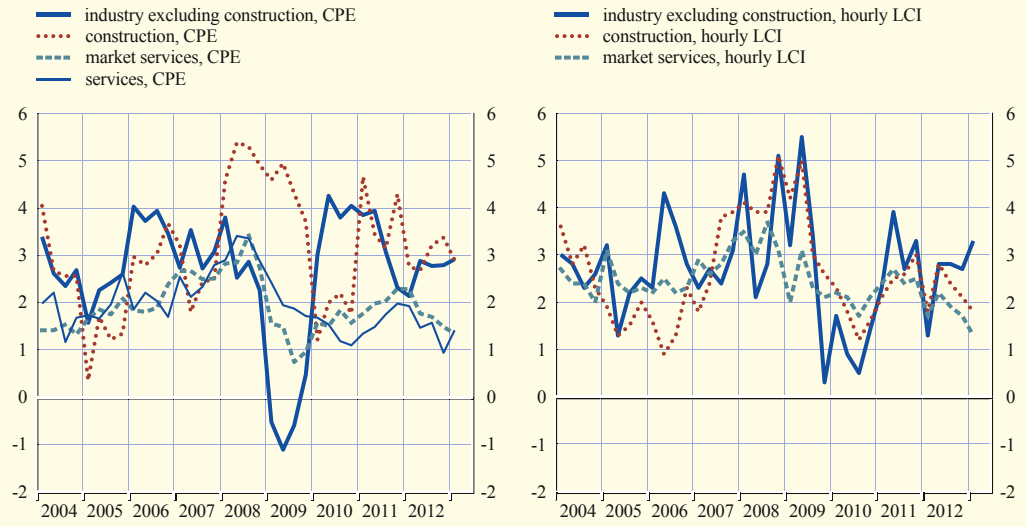
(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.

Chart 25 Sectoral labour cost developments

(annual percentage changes; quarterly data)



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

3.4 THE OUTLOOK FOR INFLATION

Annual inflation rates are currently expected to temporarily fall over the coming months, owing particularly to base effects relating to energy price developments 12 months earlier. Taking the appropriate medium-term perspective, underlying price pressures are expected to remain subdued, reflecting the broad-based weakness in aggregate demand and a modest pace of recovery. Medium to long-term inflation expectations continue to be firmly anchored in line with price stability.

The latest ECB Survey of Professional Forecasters (SPF) shows that inflation expectations stand at 1.5% in 2013 and 2014 and at 1.8% in 2015. Compared with the previous round, forecasters have revised their inflation expectations downwards by 0.2 percentage point for 2013 and by 0.1 percentage point for 2014, whilst expectations for 2015 have remained unchanged (see Box 6). Inflation expectations for 2013 and 2014 are slightly higher than those in the June 2013 Eurosystem staff macroeconomic projections for the euro area. Longer-term inflation expectations (for 2018) have remained unchanged at 2.0%.

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

Box 6

RESULTS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS FOR THE THIRD QUARTER OF 2013

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the third quarter of 2013. The survey was conducted between 16 and 19 July 2013, and 51 responses were received.[1] The results imply lower inflation expectations for 2013 and 2014 compared with the previous survey round, but unchanged expectations for 2015. Real GDP growth expectations were revised downward for all forecast horizons. Unemployment expectations were again revised upward, except those for 2013. With regard to longer-term inflation expectations, the average point forecast remained unchanged at 2.0%.

Lower short-term inflation expectations for 2013 and 2014

The SPF inflation expectations for 2013, 2014 and 2015 stand at 1.5%, 1.5% and 1.8% respectively (see the table). Compared with the previous survey round, this implies a downward revision of 0.2 percentage point for 2013 and 0.1 percentage point for 2014. Respondents attribute these revisions mainly to weaker economic activity and labour markets, lower commodity prices, and smaller contributions to inflation from indirect taxes and administered prices as a result of delayed fiscal consolidation measures.

For 2013 and 2014, the figures are slightly above those reported in the June 2013 Eurosystem staff macroeconomic projections, but for the years 2013 to 2015 are very much in line with

1 The survey collects information on expectations for euro area inflation, real GDP growth and unemployment from experts affiliated with financial or non-financial institutions that are based in the EU. Data are available on the ECB's website at www.ecb.europa.eu/stats/prices/indic/forecast/html/index.en.html

Results of the SPF, Eurosystem staff macroeconomic projections, Consensus Economics and the Euro Zone Barometer

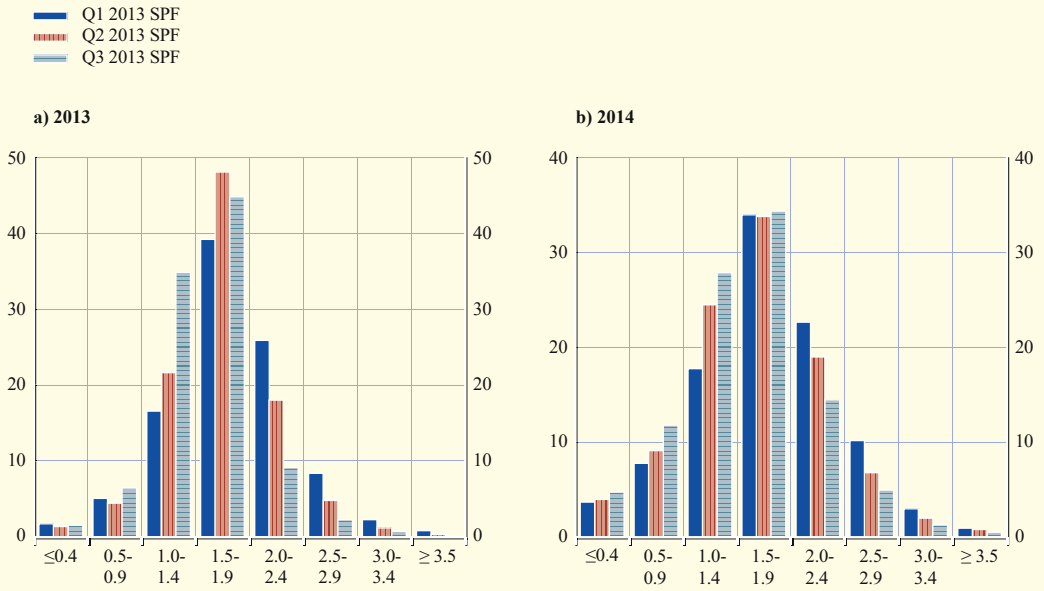
(annual percentage changes, unless otherwise indicated)

	Survey horizon			
HICP inflation	**2013**	**2014**	**2015**	**Long-term[1)]**
SPF Q3 2013	1.5	1.5	1.8	2.0
Previous SPF (Q2 2013)	*1.7*	*1.6*	*1.8*	*2.0*
Eurosystem staff macroeconomic projections (June 2013)	1.4	1.3	-	-
Consensus Economics (July 2013)[2)]	1.5	1.5	1.8	2.0
Euro Zone Barometer (July 2013)	1.5	1.5	1.7	1.8
Real GDP growth	**2013**	**2014**	**2015**	**Long-term[1)]**
SPF Q3 2013	-0.6	0.9	1.5	1.7
Previous SPF (Q2 2013)	*-0.4*	*1.0*	*1.6*	*1.8*
Eurosystem staff macroeconomic projections (June 2013)	-0.6	1.1	-	-
Consensus Economics (July 2013)[2)]	-0.6	0.8	1.5	1.5
Euro Zone Barometer (July 2013)	-0.6	0.9	1.3	1.5
Unemployment rate[3)]	**2013**	**2014**	**2015**	**Long-term[1)]**
SPF Q3 2013	12.3	12.4	11.8	9.7
Previous SPF (Q2 2013)	*12.3*	*12.2*	*11.6*	*9.6*
Consensus Economics (July 2013)[2)]	12.3	12.4	-	-
Euro Zone Barometer (July 2013)	12.2	12.3	12.2	11.4

1) In the SPF for Q3 2013 and the Consensus Economics forecast, long-term expectations refer to 2018. In the SPF for Q2 2013 and the Euro Zone Barometer forecast, they refer to 2017.
2) 2015 and long-term expectations by Consensus Economics were last published in April 2013.
3) As a percentage of the labour force.

Chart A Aggregate probability distribution of average annual inflation expectations for 2013 and 2014 in the latest SPF rounds

(probability in percentages)



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

the forecasts published in July 2013 by the Euro Zone Barometer and Consensus Economics. The aggregate probability distributions for inflation in 2013 and 2014 have shifted towards even lower outcomes compared with the previous survey rounds (see Chart A).

Respondents regard the risks to the baseline outlook for inflation to be broadly balanced or slightly tilted to the downside, with some mentioning increases in commodity prices, indirect taxes and administered prices as upward risks and a further deterioration in euro area economic activity and labour markets as the main downside risk.

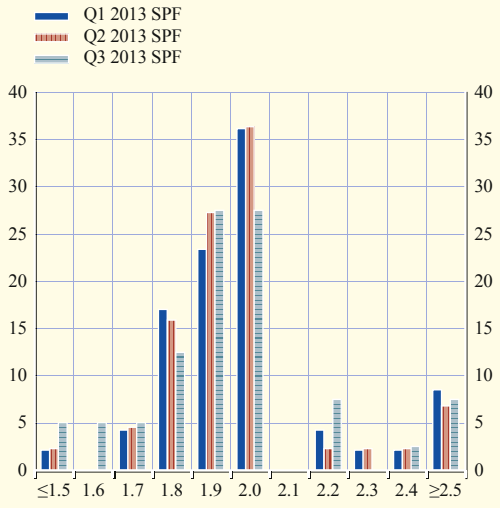
Longer-term inflation expectations remain unchanged at 2.0%

The average point forecast for longer-term inflation (for 2018) remains at 2.0%. Rounded to two decimal places, expectations stand on average at 1.95%, two basis points lower than in the previous survey round. The median of the point forecasts has declined to 1.9% from 2.0% in the previous round, reflecting a decline in the percentage share of respondents providing a point forecast of 2.0%, from 36% to 28% (see Chart B). The SPF inflation expectations for 2018 are in line with those published by Consensus Economics but are somewhat higher than the long-term inflation expectations published in the Euro Zone Barometer (1.8% for 2017).

The aggregate probability distribution has shifted slightly towards lower outcomes compared with the previous survey round, and the probability of inflation being at or above 2.0% has declined from 50% to 46%.

Chart B Cross-sectional distribution of longer-term inflation point forecasts

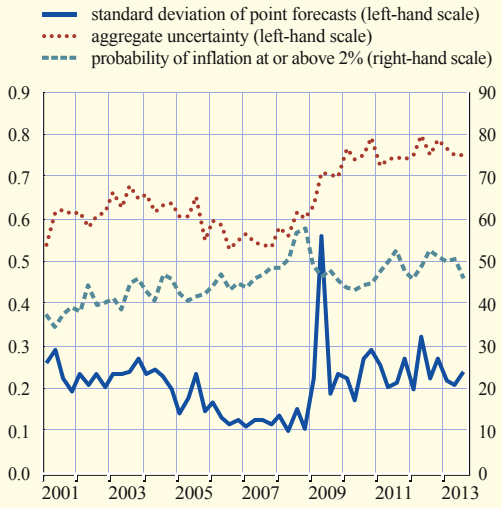
(percentage of respondents)



Source: ECB.

Chart C Disagreement and uncertainty about longer-term inflation expectations

(percentage points; percentages)



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

Disagreement about longer-term inflation expectations, as measured by the standard deviation of the point forecasts, remains unchanged at 0.2 percentage point and within the range observed since 2010. Aggregate uncertainty surrounding longer-term inflation expectations, as measured by the standard deviation of the aggregate probability distribution, has declined marginally compared with the previous survey round, but remains at a high level (see Chart C).[2]

GDP growth expectations revised downwards for all horizons

The average point forecast for GDP growth has been revised further downwards, by 0.2 percentage point to -0.6% for 2013, and by 0.1 percentage point for 2014 and 2015 to reach 0.9% and 1.5% respectively (see the table). Compared with the June 2013 Eurosystem staff macroeconomic projections, these expectations are identical for 2013 (both -0.6%) but slightly more pessimistic for 2014 (0.2 percentage point lower). They are also broadly in line with the latest forecasts by Consensus Economics and the Euro Zone Barometer for the years 2013 to 2015. Respondents cite the weaker than expected euro area domestic demand during the first quarter of 2013 as the main factor behind the downward revisions for 2013. Moreover, disappointing data from key emerging economies such as China and Brazil imply a lowering in the expected contribution of net trade to growth in the near term. The slight downward revisions for 2014 and 2015 are also mainly attributed to lower domestic demand.

The aggregate probability distributions for 2013 to 2015 have shifted towards lower outcomes. The largest shift was for 2013, with respondents now assigning the highest probability, 43%, to the interval between -1.0% and -0.6%, compared with only 27% in the previous SPF round,

2 For more information on uncertainty measures, see the box entitled "Measuring perceptions of macroeconomic uncertainty", *Monthly Bulletin*, ECB, January 2010.

when respondents assigned the highest probability, 39%, to an expected outcome of between -0.5% and -0.1%. For 2014 and 2015 the downward shifts have been modest. Respondents consider that the balance of risks to GDP growth is tilted to the downside, owing mainly to the risks of lower foreign demand from key emerging economies and a lower level of market confidence than assumed in the baseline. The main upside risks relate to a rise in world trade driven by developed economies, a higher level of economic sentiment than anticipated, and the positive impact of structural reforms unfolding earlier than assumed in the baseline.

Longer-term growth expectations (for 2018) stand at 1.7%. The aggregate probability distribution around this average point forecast has narrowed slightly compared with the previous SPF round.

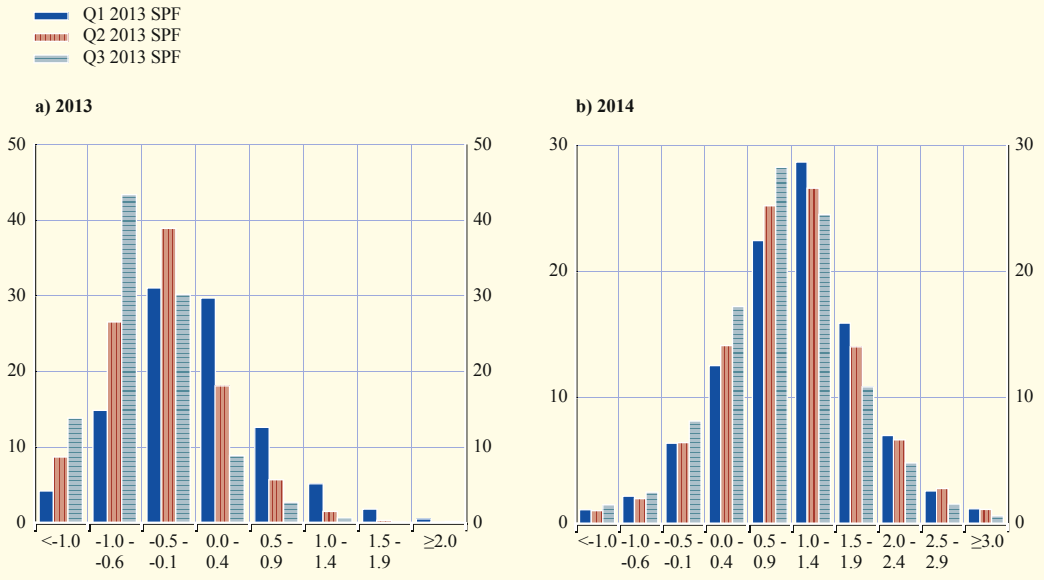
Unemployment rate expectations unchanged for 2013, but increased for 2014 and 2015

The average point forecasts for the unemployment rate currently stand at 12.3% for 2013, 12.4% for 2014 and 11.8% for 2015, with the pattern following, with some lag, that of the expected moderate recovery in economic activity. Compared with the previous SPF round, these figures imply no change to the point forecast for 2013, but upward revisions by 0.2 percentage point for 2014 and 2015 and by 0.1 percentage point for the longer-term horizon (see the table).

Respondents attribute the upward revisions mainly to the weaker forecast for economic activity in 2014, but also mentioned the general postponement of hiring decisions due to low economic confidence, and the slow pay-off of structural labour market reforms in crisis countries. The SPF forecasts for 2013 and 2014 are in line with those published by the Euro Zone Barometer and Consensus Economics, and for 2015 are below those published by the Euro Zone Barometer.

Chart D Aggregate probability distribution of GDP growth expectations for 2013 and 2014 in the latest SPF rounds

(probability in percentages)



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

The risks to the unemployment expectations are considered to be largely on the upside and closely related to the downside risks to economic growth. Downside risks to the unemployment expectations relate primarily to the medium to longer-term horizon and are essentially associated with the potential for greater success of already implemented or intended structural reforms in the crisis countries.

Longer-term unemployment rate expectations (for 2018) rose slightly by 0.1 percentage point, to 9.7%. This was accompanied by a shift in the entire aggregate probability distribution towards higher outcomes.

Other variables and conditioning assumptions

According to other information provided by the respondents, the assumptions for the ECB's main refinancing rate were lowered significantly by around a quarter of a percentage point, standing at 0.4% until the second quarter of 2014, before rising to an average of 0.8% in 2015. The EUR/USD exchange rate has been revised downwards slightly to stand at around 1.29 over the forecast horizon. Oil price assumptions were revised downwards for all horizons by around 1.5%, standing at USD 104.3 per barrel in the third quarter of 2013 and rising to an average of USD 109.1 in 2015. The annual growth in compensation per employee is expected to stand at 1.7% in 2013 and 2014 before rising to 2.0% in 2015, a small downward revision compared with the path envisaged in the previous survey round.

4 OUTPUT, DEMAND AND THE LABOUR MARKET

Following a six-quarter economic contraction in the euro area, recent confidence indicators based on survey data have shown some further improvement from low levels and tentatively confirm the expectation of a stabilisation in economic activity at low levels. At the same time, labour market conditions remain weak. Looking ahead to the remainder of the year and to 2014, euro area export growth should benefit from a gradual recovery in global demand, while domestic demand should be supported by the accommodative monetary policy stance as well as the recent gains in real income owing to generally lower inflation. Furthermore, the overall improvements in financial markets seen since last summer appear to be gradually working their way through to the real economy, as should the progress made in fiscal consolidation. This being said, the remaining necessary balance sheet adjustments in the public and private sectors will continue to weigh on economic activity. Overall, euro area economic activity should stabilise and recover at a slow pace. The risks surrounding the economic outlook for the euro area continue to be on the downside.

4.1 REAL GDP AND DEMAND COMPONENTS

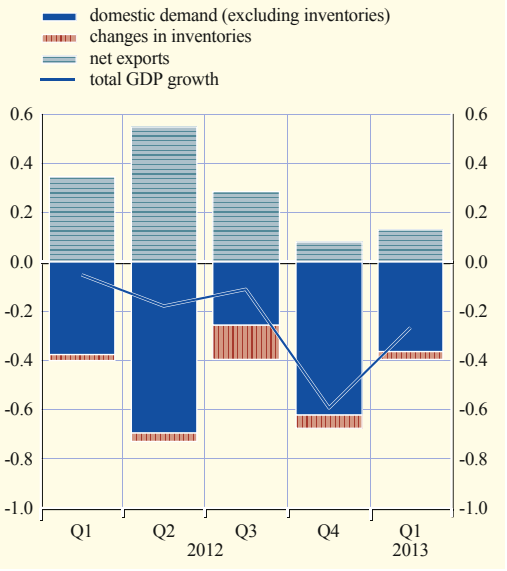
Eurostat's third estimate of national accounts shows that real GDP in the euro area declined by 0.3% quarter on quarter in the first quarter of 2013, following a contraction of 0.6% in the previous quarter (see Chart 26). Domestic demand, more specifically gross fixed capital formation, and exports were the main contributors to the decline in output in the first quarter.

Following five quarters of negative growth, private consumption displayed flat growth in the first quarter of 2013. This outcome was in all likelihood the result of a negative contribution to consumer spending growth from purchases of cars, which was offset by rising consumption of retail goods. Thus, growth in consumption of services was likely close to zero in the first quarter.

As regards the second quarter of 2013, information on private consumption points, on balance, towards continued broadly stable developments in household spending. The volume of retail sales stood on average in April and May 0.1% above the level in the first quarter, when sales rose by 0.3% quarter on quarter. At the same time, new passenger car registrations rose by 3.0% quarter on quarter in the second quarter, following a decline of the same magnitude in the previous quarter. Retail sector survey data improved further in July (see Chart 27). The Purchasing Managers' Index (PMI) for retail trade stood in July close to the theoretical expansion-contraction threshold of 50, suggesting broadly stable retail sales at the start of the third quarter. Euro area consumer confidence improved further between June and July, thereby increasing for eight consecutive months. The index is nonetheless still below its long-term average, signalling some further softness in consumer spending. Finally, the indicator for major purchases also stood below its long-term

Chart 26 Real GDP growth and contributions

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



Sources: Eurostat and ECB calculations.

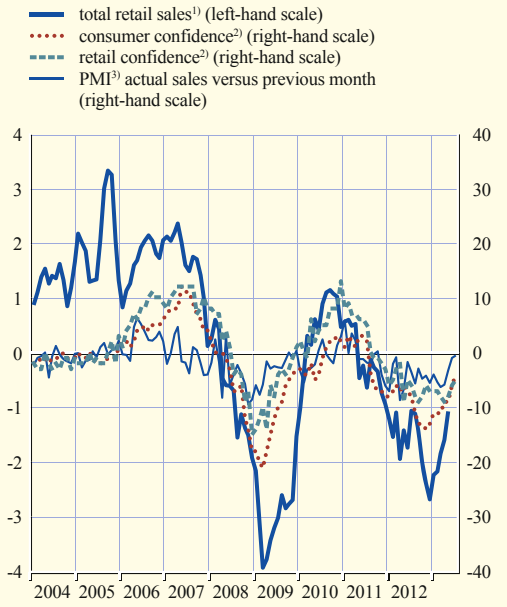
average, pointing towards persistently sluggish consumption of consumer durables.

Gross fixed capital formation fell by 1.9% quarter on quarter in the first quarter of 2013 and has thus declined for eight consecutive quarters. With regard to the breakdown of investment in the first quarter, both construction and non-construction investment contracted in quarter-on-quarter terms by about 2%.

Looking ahead, industrial production of capital goods (an indicator of future non-construction investment) declined by 1.5% month on month in May, following a rise of 2.5% in April. As a result, the average level of capital goods production in April and May stood almost 3% above that in the first quarter, when it declined by 0.2% quarter on quarter. Survey results for the non-construction industrial sector in July, from both the PMI and the European Commission, suggest a further improvement early in the third quarter. At the same time, the Commission surveys indicate that capacity utilisation has increased in the three-month period up to July 2013, after having remained broadly stable since late 2012.

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

(monthly data)



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

Data related to euro area construction investment are consistent with continued weakness in the first half of 2013. Construction production declined by 0.3% month on month in May, thereby standing 0.2% below its level in the first quarter of 2013. The latest developments thus point towards a quarterly contraction in the second quarter of 2013, which is possibly less strong than that observed in the previous quarter, when production in construction declined by 3.7% on a quarterly basis. Survey results support this picture. The PMI for construction in the euro area, despite an improvement in June, remained at a level significantly below 50 in the second quarter, pointing to further negative developments in this period. The European Commission indicator on construction confidence, which is available up to July, shows values lower than its historical average and, in contrast to the other components of the Economic Sentiment Indicator, slightly deteriorated in July. At the same time, financing constraints, low employment expectations and ongoing housing market adjustments in a number of euro area countries are still weighing on construction investment.

Following a contraction in euro area trade for two consecutive quarters, the latest information suggests that euro area trade remained subdued in the second quarter of 2013. The values of trade in goods recorded in April and May were, on average, below those registered in the first quarter of 2013. However, according to short-term indicators, prices may have also declined, indicating that losses in volume terms may have been broadly less pronounced. The PMI new export orders and the European Commission survey indicator for export order levels were in the second quarter of the year, on average, below those of the first quarter. These indicators point to continued weakness in

euro area trade over the second quarter. Overall, euro area trade is expected to remain muted in the second quarter, before improving gradually in line with a moderate strengthening of global activity and euro area domestic demand.

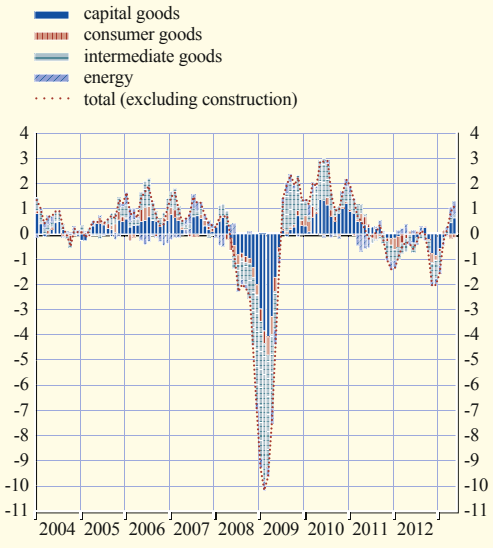
4.2 SECTORAL OUTPUT

Real value added shrank by 0.2% quarter on quarter in the first quarter of 2013. The decline was broadly based, as activity contracted in industry (excluding construction), in construction and also in services, albeit to a lesser extent.

With regard to developments in the second quarter of 2013, industrial production (excluding construction) declined by 0.3% in May, following three months of positive growth. As a result, average industrial production in April and May stood around 1% above its level in the first quarter. This is a relative improvement on the first quarter, when production increased by 0.2% quarter on quarter (see Chart 28). The ECB indicator on euro area industrial new orders (excluding heavy transport equipment) was unchanged in May, after a decline of 0.1% in April, and stood on average in the first two months of the second quarter 0.5% above its average value in the first quarter. More timely survey data confirm this picture. For example, the PMI manufacturing output index improved further in July, reaching a level above 50 (see Chart 29). Moreover, the European Commission survey data indicate that the demand situation improved in the three-month period up to July 2013, although from rather poor levels.

Chart 28 Industrial production growth and contributions

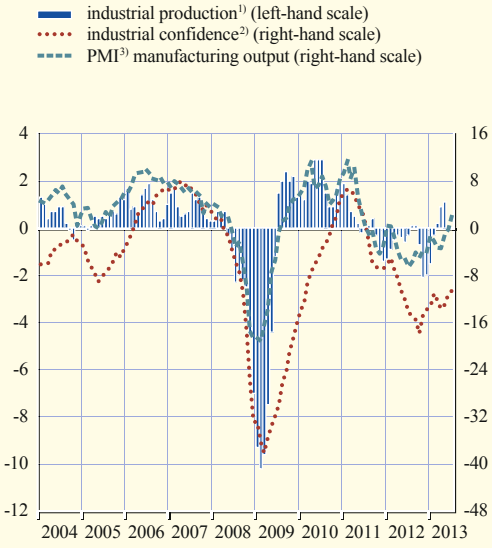
(growth rate and percentage point contributions; monthly data; seasonally adjusted)



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

Chart 29 Industrial production, industrial confidence and PMI manufacturing output

(monthly data; seasonally adjusted)



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

Similar to that for the manufacturing sector, the PMI services business activity index also improved in July, standing at the start of the third quarter close to the growth threshold of 50. Other business surveys, such as those of the European Commission, also improved in July and are broadly in line with developments in the PMI.

4.3 LABOUR MARKET

Euro area labour markets have remained weak, with strong differences persisting across countries. The most recent survey data anticipate further job losses and rising unemployment in the period ahead (see Chart 30). Young and low-skilled workers have been particularly affected by the crisis. Box 7 provides an overview of labour market developments in the euro area and the United States since the beginning of the crisis.

Box 7

LABOUR MARKET DEVELOPMENTS IN THE EURO AREA AND THE UNITED STATES SINCE THE BEGINNING OF THE GLOBAL FINANCIAL CRISIS

This box provides an overview of differences in labour market adjustments in the euro area and the United States since the beginning of the global financial crisis. It presents some stylised facts on a number of key labour market indicators, including the unemployment rate, the labour force participation rate and labour cost developments.

Unemployment and employment trends

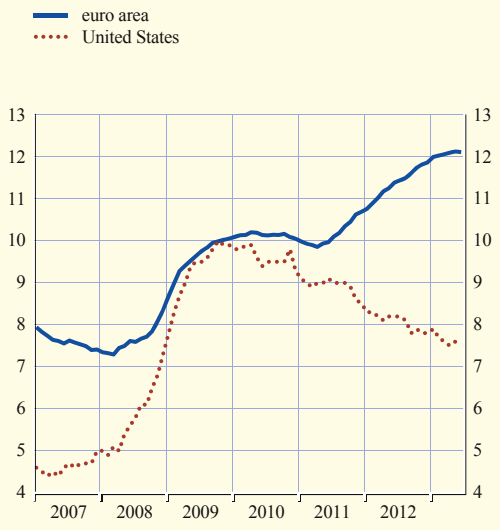
In the two years following the start of the economic crisis in 2007, the labour market in the United States deteriorated very quickly and the pace of adjustment was more substantial than in the euro area (see Chart A). Labour hoarding practices in euro area labour markets during the initial phase of the crisis contributed to mitigating employment adjustment (see Chart B), as firms showed a widespread preference for forms of internal flexibility, such as cutting overtime and making use of short-time working schemes.

Over recent years, however, unemployment rates in the two regions have diverged substantially, reflecting significant differences in real GDP growth. Since mid-2010, employment growth has turned positive and the unemployment rate has decreased markedly in the United States. In the euro area, the opposite has been observed. As a result, the gap between the two unemployment rates has increased continuously. In June 2013 the unemployment rate for the euro area was 12.1% and that for the United States was 7.6%.

In the initial phase of the crisis the statistical relationship between economic growth and the unemployment rate in the euro area deviated significantly from its longer-term trend. This was owing to a strong reliance on short-time working schemes in some euro area countries. However, subsequent aggregate unemployment developments in the euro area started to be more broadly in line with typical patterns, meaning that unemployment became more sensitive to changes in real GDP after the initial period of labour hoarding, and weak

Chart A Unemployment rate

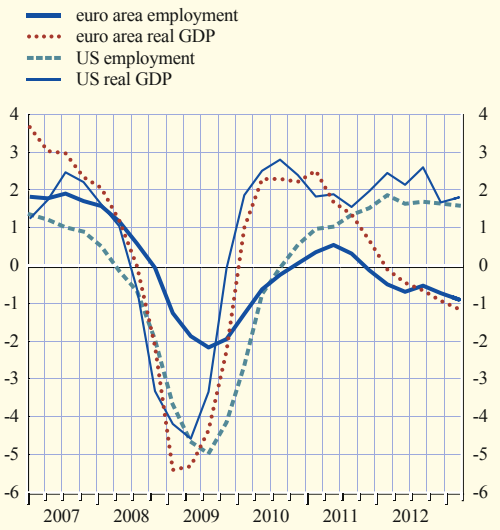
(percentage of the labour force; seasonally adjusted data; monthly data)



Sources: BLS and Eurostat.

Chart B Employment and real GDP growth

(year-on-year percentage changes; quarterly data)



Sources: BLS and Eurostat.

economic activity was increasingly reflected in a higher unemployment rate. By contrast, in the United States, the stronger labour market adjustment in the initial phase of the crisis and the stronger rebound in employment once economic growth resumed were more in line with historical patterns.

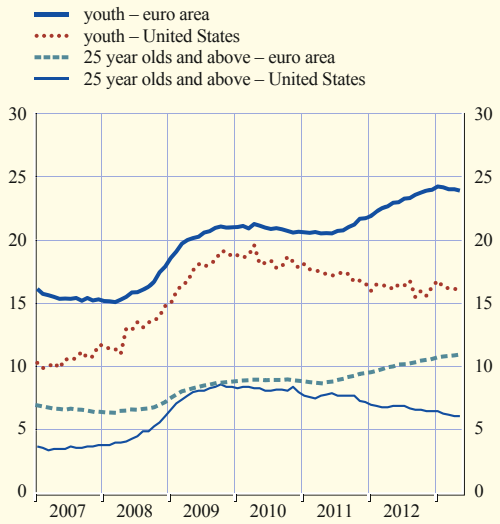
Unemployment breakdown by age and duration

Younger workers have been particularly hit by the crisis in both regions, but in the United States, unlike in the euro area, the youth unemployment rate has been declining (see Chart C). Developments in the unemployment rates in the euro area and the United States classified by age cohorts ("youth" and "above 25 years") follow a broadly similar trend to the total unemployment rate. Overall, the youth unemployment rate in the euro area increased on average from 15.5% in 2007 to 23.9% in June 2013, while in the United States it increased from 10.6% to 16.3%.

In the euro area, the share of those unemployed for more than a year initially decreased, but since 2009 this trend has reversed (see Chart D). The initial fall partly reflected the rise in short-term unemployment at the beginning of the crisis. In the United States, by contrast, the crisis initially resulted in a large increase in the share of long-term unemployed. This rise could be linked to an extension of the duration of unemployment benefit introduced in 2008, which increased incentives for individuals to remain unemployed. According to IMF estimates, structural unemployment (the non-accelerating inflation rate of unemployment – NAIRU) in the euro area stood at 10.1% in 2012, up from 7.4% in 2007. In the United States, the increase in structural unemployment was smaller over the same period (6.1% in 2012, up from 5.0% in 2007). These differences imply that a large part of the rise in euro area unemployment is structural, while in the United States it is interpreted as being mostly cyclical. Based on these

Chart C Unemployment rate breakdown by age

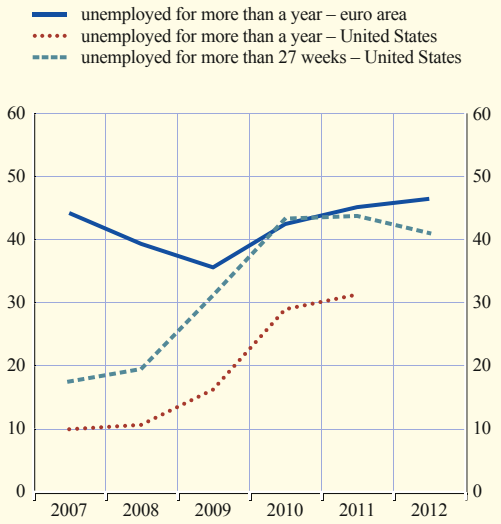
(relative to the labour force; seasonally adjusted data; monthly data)



Sources: BLS and Eurostat.
Note: The youth unemployment rate refers to 15-24 year olds in the euro area and to 16-24 year olds in the United States.

Chart D Share of long-term unemployment

(relative to total unemployment; annual data)



Sources: OECD, Eurostat and BLS.
Note: The share of long-term unemployment is defined in the United States as those that are unemployed for over 27 weeks or more than one year relative to the total unemployed, and in the euro area as those that are unemployed for more than a year relative to the total unemployed.

estimates, since 2007 almost two-thirds of the rise in the unemployment rate is thus considered to be structural in the euro area, compared with one-third in the United States.

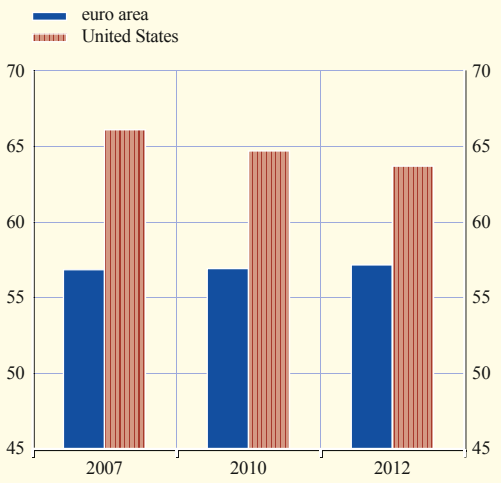
Labour force participation developments

The difference in euro area unemployment developments relative to the United States also reflects very different developments in labour market participation (see Chart E). One of the most notable features of the crisis is that the participation rate increased in the euro area. This reflected the ongoing trend of rising female participation in the euro area (see Chart F). By contrast, in the United States, the participation rate declined significantly between 2007 and 2012.

Over the period 2010-12, the decline in the participation rate contributed significantly to the fall in the unemployment rate in the United States. At the same time, the rising participation rate in the euro area explains part of the rise in the unemployment rate. Assuming that, in both the United States and the euro area, the labour force participation ratios had remained unchanged compared with 2007 and that the difference to the actual ratios had been fully reflected in the number of unemployed, the US unemployment rate in 2012 would have been higher than that of the euro area. The diverging participation rates between the euro area and the United States indicate that there has been a significant amount of labour market slack in the United States that has not been fully captured by unemployment rate developments.

Chart E Total labour force participation rate

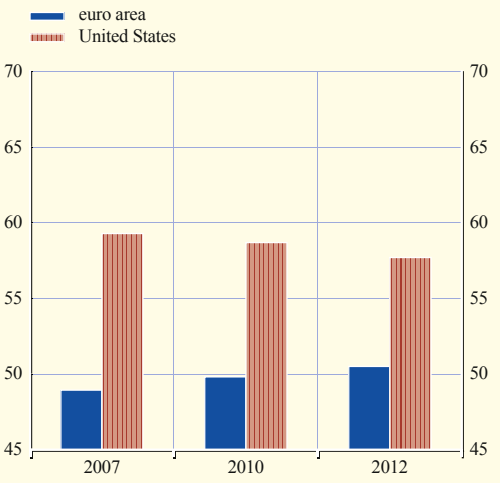
(relative to the "15/16 years and over" populations)



Sources: BLS and Eurostat.
Note: The labour force participation rate was computed for the "15 years and over" population for the euro area and the "16 years and over" population for the United States.

Chart F Female labour force participation rate

(relative to the "15/16 years and over" female populations)



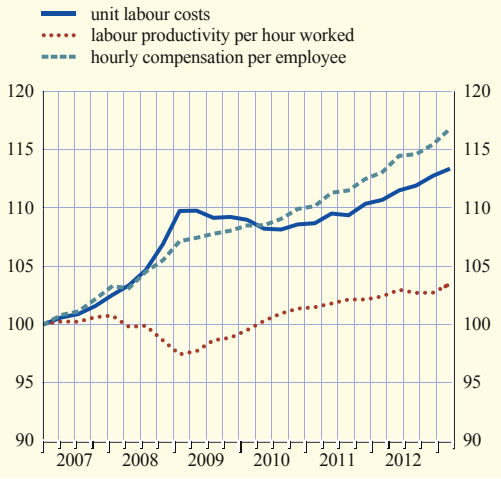
Sources: BLS and Eurostat.

Labour cost developments

Between the first quarter of 2007 and the first quarter of 2013, unit labour costs in business sectors grew significantly more in the euro area than in the United States (see Charts G and H).

Chart G Unit labour cost developments in the euro area business sector

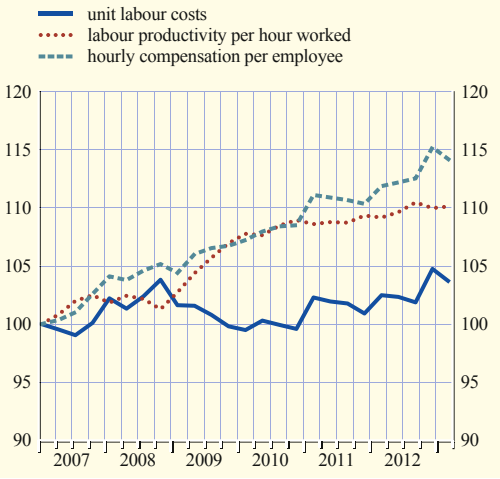
(Q1 2007 = 100; quarterly data)



Sources: Eurostat and ECB calculations.
Note: Business sector in the euro area is defined as the total economy, excluding public administration and defence; compulsory social security; education; human health and social work activities.

Chart H Unit labour cost developments in the US non-farm business sector

(Q1 2007 = 100; quarterly data)



Source: BLS.

These developments mainly reflected lower hourly labour productivity growth in the euro area, but also somewhat higher growth in hourly compensation per employee than in the United States.

Major labour hoarding in the initial phase of the crisis and a lack of adequate restructuring in a context of contracting economic activity, weighed on the labour productivity growth performance of the euro area. At the same time, in the United States, wage developments closely followed labour productivity performance, whereas in the euro area wage growth was decoupled from productivity developments.

To sum up, there are several factors behind the different performances of the labour markets in both regions since the beginning of the crisis. Overall, the more flexible labour market in the United States led to faster and stronger labour market adjustments to the initial downward shocks and was coupled with more moderate unit labour cost developments than in the euro area. This, in turn, may have contributed to facilitating economic adjustment and restructuring and may have been one reason why, since 2010, economic activity has begun to develop significantly more favourably in the United States than in the euro area. Beyond the need for strengthening structural reforms in the euro area to boost competition and productivity, this highlights the need for labour market reforms to ensure that euro area wages respond more flexibly and appropriately to labour productivity and employment developments in the future.

Headcount employment declined by 0.5% quarter on quarter in the first quarter of 2013, its seventh consecutive quarter of decline (see Table 9). At the sectoral level, the latest data show a sharp contraction in employment in industry and a less pronounced reduction in employment in services. Total hours worked diminished by 0.9% quarter on quarter in the first quarter. In year-on-year terms, hours worked have declined by 2.2%, which is more than twice the drop in headcount employment. This difference most likely reflects the fact that firms have more flexibility in reducing working hours than in shedding jobs.

Table 9 Employment growth

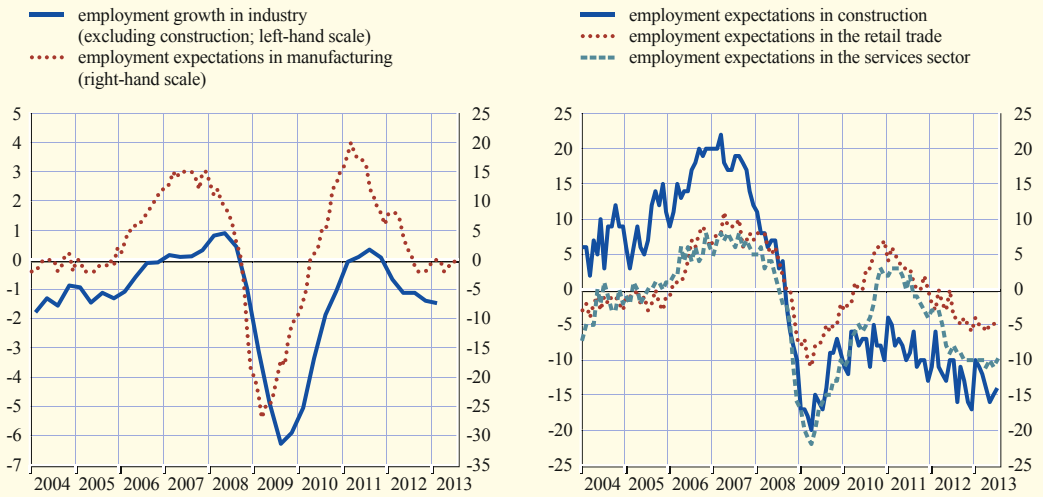
(percentage changes compared with the previous period; seasonally adjusted)

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

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

Chart 30 Employment growth and employment expectations

(annual percentage changes; percentage balances; seasonally adjusted)

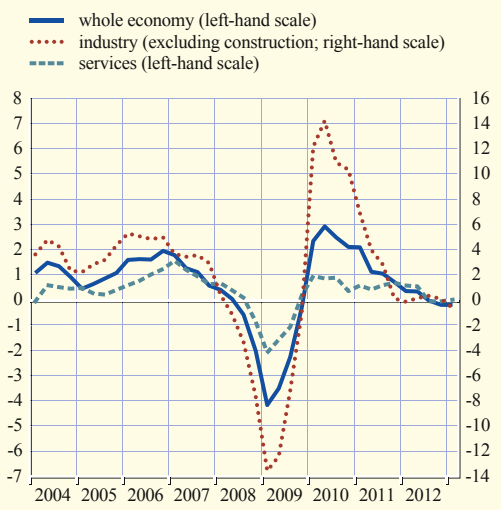


Sources: Eurostat and European Commission Business and Consumer Surveys.
Note: Percentage balances are mean-adjusted.

Labour productivity per person employed decreased by 0.2% in annual terms in the first quarter of 2013, which was the same rate as in the previous quarter (see Chart 31). Over the same period, the annual growth rate of hourly labour productivity picked up from 0.6% to 1.1%. As regards the second quarter of 2013, the latest readings of the PMI productivity index, which encompasses the manufacturing and services sectors, signal ongoing weak developments.

Chart 31 Labour productivity per person employed

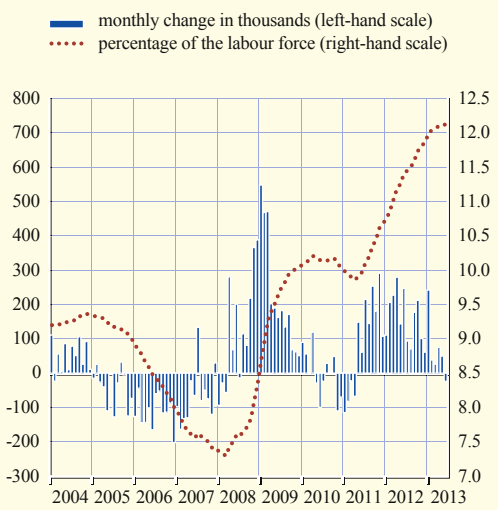
(annual percentage changes)



Sources: Eurostat and ECB calculations.

Chart 32 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

The unemployment rate, which has been on the rise since the first half of 2011, stood at 12.1% in June, the highest level since its recording started in 1995 (see Chart 32). The pace of the rise in the unemployment rate is, however, easing. Survey indicators still anticipate further job losses in both industry and services in the second quarter of 2013 and at the beginning of the third quarter. Compared with the previous survey round, the unemployment rate expected for 2013 has remained unchanged and that for 2014 has been revised upwards in the latest Survey of Professional Forecasters (see Box 6 in Section 3).

4.4 THE OUTLOOK FOR ECONOMIC ACTIVITY

Looking ahead to the remainder of the year and to 2014, euro area export growth should benefit from a gradual recovery in global demand, while domestic demand should be supported by the accommodative monetary policy stance as well as the recent gains in real income owing to generally lower inflation. Furthermore, the overall improvements in financial markets seen since last summer appear to be gradually working their way through to the real economy, as should the progress made in fiscal consolidation. This being said, the remaining necessary balance sheet adjustments in the public and private sectors will continue to weigh on economic activity. Overall, euro area economic activity should stabilise and recover at a slow pace.

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

ARTICLES

ASSESSING THE RETAIL BANK INTEREST RATE PASS-THROUGH IN THE EURO AREA AT TIMES OF FINANCIAL FRAGMENTATION

Despite an accommodative monetary policy stance, bank lending conditions have remained heterogeneous in an environment of persistent sovereign debt tensions, fragile economic activity, weak capital positions and high levels of uncertainty. Consequently, very low policy interest rates have not been passed through to bank lending rates to the same extent as observed in the past in several countries where the effects of such an accommodative monetary policy stance would be particularly welcome.

Furthermore, standard pass-through models (i.e. models where policy interest rates and market interest rates are considered the most important determinants of retail bank lending rates) are ill-equipped to explain the increasing levels of heterogeneity in bank lending rates during the crisis because they do not include risk factors and sovereign debt spreads among the explanatory variables. Against this background, this article provides new empirical evidence on the interest rate pass-through in the four largest euro area economies based on newly developed pass-through models that account for the impact of sovereign tensions and risk factors affecting interest rate-setting behaviour. This evidence is based on harmonised MFI interest rate statistics from 2003. Simulations based on these models confirm that risk factors and sovereign debt spreads have had a strong impact on bank lending rates in Italy and Spain in recent years.

As a response to increasing fragmentation, the ECB has introduced several standard and non-standard measures. These measures have gone a long way towards alleviating financial tensions in the euro area. However, in order to ensure the adequate transmission of monetary policy to financing conditions in euro area countries, it is essential that the fragmentation of euro area credit markets is reduced further and the resilience of banks strengthened where needed.[1]

1 INTRODUCTION

The financial and sovereign debt crisis affected all segments of the financial system and had a particularly strong impact on the banking sector. A well-functioning banking sector is needed in order to guarantee the effectiveness of the monetary policy transmission mechanism, especially in the euro area, where banks play a predominant role in providing external finance for the non-financial private sector.

Bank lending conditions have remained heterogeneous in an environment of persistent sovereign debt tensions, fragile economic activity, vulnerable banks and high levels of uncertainty in some countries. Consequently, very low policy interest rates have not been passed through to bank lending rates in several countries where the effects of such an accommodative monetary policy stance would be particularly welcome. The ECB has responded forcefully to the monetary policy implications of fragmentation by introducing several standard and non-standard measures. These measures have gone a long way towards alleviating financial tensions, but fragmentation in the euro area banking sector and stress in sovereign debt markets remain elevated.

Against this background, the article analyses the bank lending rate pass-through in the euro area in a context of high financial fragmentation. The article is organised as follows. Section 2 presents detailed MFI interest rate statistics to describe developments in interest rates on loans to non-financial corporations, including small and medium-sized enterprises (SMEs), and households in

1 The article is based on information available up to 19 June 2013.

the euro area. Section 3 discusses the potential determinants of bank lending rates and the impact of financial market tensions on fragmentation in bank lending rates across countries in the euro area. The main contribution of the section is to provide new empirical evidence on the interest rate pass-through in the four largest euro area economies. Finally, Section 4 concludes.

2 CROSS-COUNTRY HETEROGENEITY IN BANK LENDING RATES IN THE EURO AREA

In order to assess the effectiveness of the monetary policy pass-through across the euro area countries, it is necessary to use an accurate and comparable measure of the borrowing costs for firms and households in those countries. This section explains how detailed MFI interest rate statistics are used to compute an indicator of the cost of borrowing for non-financial corporations that takes into account the financial structure of firms. This new measure enhances cross-country comparability, which until now has been limited owing to the differing impact of overdrafts on short-term lending rates. The indicator is then used to describe developments in interest rates on loans to non-financial corporations in the four largest euro area economies. The section also describes developments in the cost of borrowing for households for house purchase and in the cost of funds for SMEs.

DEVELOPING AN INDICATOR OF THE COST OF BORROWING FOR EURO AREA NON-FINANCIAL CORPORATIONS

To accurately assess borrowing costs for non-financial corporations, it is important to consider the overall financing structure of firms. In this respect, MFI interest rate statistics on short-term loans to non-financial corporations, which capture bank lending rates on loans with a rate fixation period of up to one year, only offer a partial view of firms' financing costs in some countries. This is because those statistics do not include interest rates on overdrafts, which are a major source of finance for firms in some large euro area economies (e.g. Italy). Consequently, when interest rates on overdrafts (which are generally higher than other short-term bank lending rates) are taken into account, the estimated borrowing costs are higher. An indicator of the cost of borrowing for non-financial corporations in the euro area that includes data on overdrafts is presented in Box 1. The indicator is a weighted average of bank lending rates on loans with a rate fixation period of up to one year and rates on overdrafts, using outstanding amounts as a weighting scheme.

Box 1

DEVELOPING COST-OF-BORROWING INDICATORS FOR THE EURO AREA

The financial crisis has led to an increasing use of country-specific bank lending rate information in the regular assessment of euro area economic conditions and in the analysis of the bank lending rate channel of the monetary policy transmission mechanism. However, current practices in the use, forecasting and reporting of lending rates vary substantially across countries, compromising the accurate assessment of cost-of-borrowing developments in the euro area. For example, the ECB's official publications usually report MFI interest rates applied to new business volumes. Sometimes MFI interest rates are re-weighted using outstanding amounts to compute composite lending rates for countries and for the euro area as a whole.[1] This box details the calculation

1 See, for example, "*Differences in MFI interest rates across euro area countries*", ECB, September 2006, and "The use of harmonised MFI interest rate statistics", *Monthly Bulletin*, ECB, Frankfurt am Main, July 2005.

of cost-of-borrowing indicators based on a common methodology for aggregating lending rates across countries.

A new indicator of the cost of borrowing in the euro area

The construction of the new cost-of-borrowing indicators is based on MFI interest rate statistics, which are considered the most relevant source of information for bank lending rates in the euro area.[2] Four basic categories of lending rates per country are used in the calculations: short-term and long-term lending rates both to non-financial corporations and to households for house purchase. Long-term lending rates to non-financial corporations and short and long-term rates on loans to households for house purchase are obtained directly from the MFI interest rate statistics. The compilation of short-term lending rates to non-financial corporations, by contrast, needs to account for two additional technical factors: the importance of overdrafts as a main source of financing for firms in some large euro area economies (e.g. Italy) and the computation of an estimate of the share of long-term loans issued at floating rates,[3] which are akin to short-term loans. In particular, interest rates on short-term loans to non-financial corporations are aggregated on the basis of interest rates on overdrafts and bank lending rates on loans with a rate fixation period of less than one year, as follows:

$$CLI_{ST}^{NFC} = BLR_{overdraft}^{NFC} \frac{Overdrafts^{NFC}}{Totloans_{ST}^{NFC}} + BLR_{ST}^{NFC} \left[\frac{(Outloans_{ST}^{NFC} - Overdrafts^{NFC}) + \alpha(Outloans_{LT}^{NFC})}{Totloans_{ST}^{NFC}} \right]$$

Where:

- CLI_{ST}^{NFC} is the short-term lending rate to non-financial corporations, which accounts for overdrafts;
- $BLR_{overdraft}^{NFC}$ is the bank lending rate on overdrafts to non-financial corporations;
- BLR_{ST}^{NFC} is the bank lending rate on loans to non-financial corporations with an interest rate fixation period of up to one year;
- $Overdrafts^{NFC}$ is the volume of overdrafts held by non-financial corporations;
- $Outloans_{ST}^{NFC}$ is the volume of outstanding short-term loans to non-financial corporations (of up to one year), including overdrafts;
- $Outloans_{LT}^{NFC}$ is the volume of outstanding long-term loans to non-financial corporations (of more than one year);
- $\alpha = \left(\frac{1}{12}\right) \sum_{i=0}^{11} \left(\frac{Outloans_{LT,flrate}^{NFC}}{Outloans_{LT}^{NFC}} \right)_{t-i}$, where $Outloans_{LT,florate}^{NFC}$ is the volume of outstanding long-term loans issued at floating rates;[4]

2 MFI interest rates are regularly aggregated on the basis of monthly new business volumes and start in 2003.
3 Data on overdrafts refer to outstanding amounts from the MFI balance sheet database.
4 Data on the volume of outstanding long-term loans at floating rates has only been available since June 2010 on a quarterly basis. Hence, the volume is assumed to remain constant in each month within the quarter. Moreover, when data are not available at the end (owing to publication lags) and at the beginning of the sample (between January 2003 and May 2010), the latest and the first observed value are applied respectively.

• $Totloans_{ST}^{NFC}$ is the total outstanding amount of short-term loans to non-financial corporations ($Totloans_{ST}^{NFC} = Outloans_{ST}^{NFC} + \alpha(Outloans_{LT}^{NFC})$).

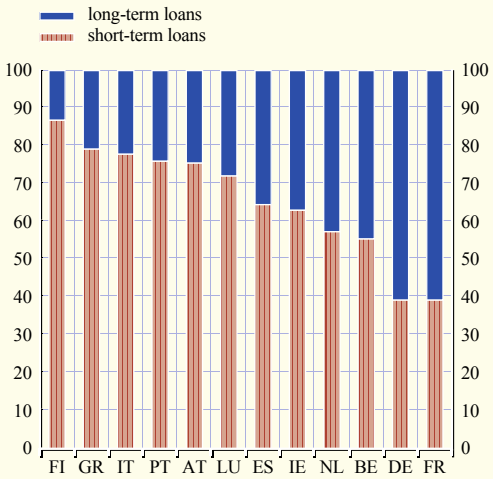
Weighting scheme and compilation of composite indicators

Two weighting schemes can be used to aggregate composite lending rates at the national and the euro area level: one based on volumes of outstanding amounts and the other based on a smoothed measure of new business volumes. Weights based on outstanding amounts capture the financing structure of the economy more accurately. However, methodological differences affect the comparability of the two databases (MFI balance sheet data are based on maturity while MFI interest rate data are based on interest rate fixation periods). Hence, aggregating MFI interest rates on the basis of outstanding amounts only provides an estimate of the cost of borrowing for non-financial corporations (see Chart A). At the same time, while an aggregation based on new business volumes provides a better measure of the impact of the marginal cost of a new loan on the overall financing cost structure, it introduces a bias towards short-term maturity lending (see Chart B) and may be highly volatile on a monthly basis. In turn, this volatility makes it difficult to extract the genuine underlying dynamics in retail lending rates. In order to filter out excessive monthly volatility, a weighting scheme based on the 24-month moving averages of new business volumes has been applied.

At the country level, four composite lending rates by maturity and sector were constructed: total short-term and long-term lending rates, and total lending rates to non-financial corporations and households for house purchase. As an example, Chart C shows the comparison between the cost-of-borrowing indicator for total loans to non-financial corporations based on the smoothed new business volume weights and the corresponding indicator aggregated with outstanding amounts.

Chart A Share of short-term MFI loans to NFCs over total MFI loans to NFCs based on outstanding amounts

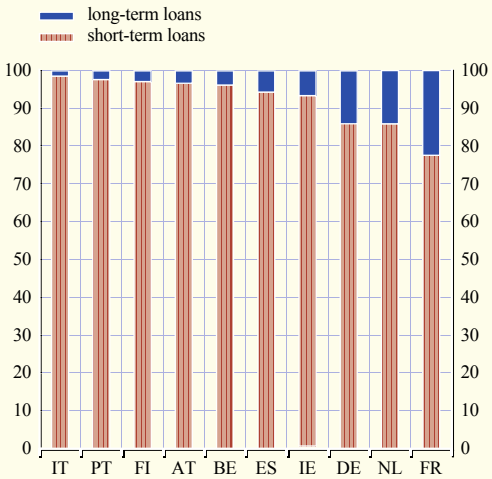
(percentages; April 2013)



Source: ECB.
Notes: Short-term loans are those with a maturity of up to one year, plus overdrafts and those long-term loans issued at a floating rate. NFCs stands for non-financial corporations.

Chart B Share of short-term MFI loans to NFCs over total MFI loans to NFCs based on new business volumes

(percentages; April 2013)



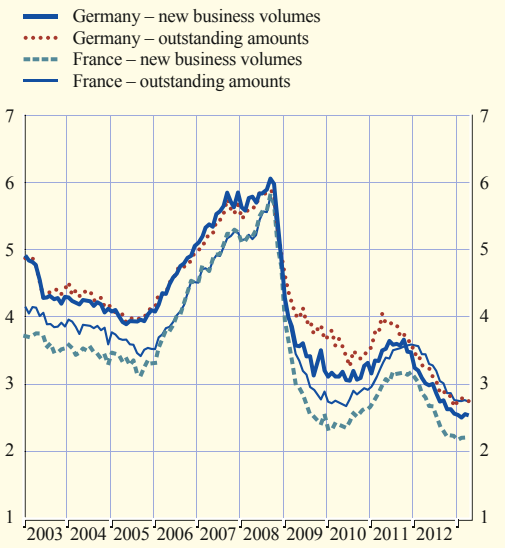
Source: ECB.
Notes: Short-term loans are those with a maturity of up to one year, plus overdrafts and those long-term loans issued at a floating rate. NFCs stands for non-financial corporations.

The latter tends to be more sensitive to variations in long-term interest rates than the former, as the share of long-term loans based on outstanding amounts is higher than that based on new business volumes (see Charts A and B). This greater sensitivity is evident in the periods where lending rates aggregated on the basis of outstanding amounts are higher than those aggregated on the basis of new business volumes.

At the euro area level, eight composite lending rates by maturity and sector were constructed: short-term and long-term lending rates to non-financial corporations and to households for house purchase, total short-term and long-term lending rates, and total lending rates to non-financial corporations and households for house purchase. These composite lending rates also make it possible to compute a total-cost-of-borrowing indicator for the euro area.

Chart C Comparison between cost-of-borrowing indicator for total loans to NFCs aggregated with new business volumes versus outstanding amounts

(percentages per annum)



Source: ECB.

The ECB started the regular compilation of the new harmonised indicators in December 2012 and expects to make them available to external users via the Statistical Data Warehouse by the end of 2013.

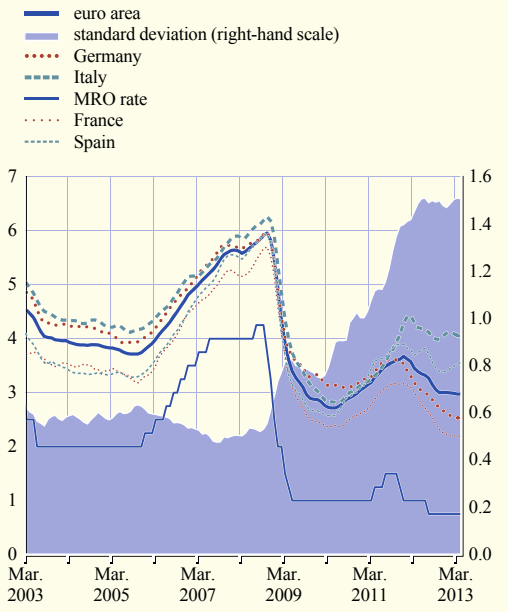
CHANGES IN BANK LENDING RATES TO NON-FINANCIAL CORPORATIONS AND HOUSEHOLDS

Charts 1 and 2 show composite indicators, i.e. weighted averages of short and long-term lending rates, of the cost of borrowing for non-financial corporations and households in the euro area respectively. The charts show that the cost of bank borrowing for non-financial corporations and households has exhibited different dynamics over time since the start of the financial crisis and particularly since the intensification of sovereign debt concerns. In the early stages of the financial crisis in late 2008 and in 2009, bank lending rates to non-financial corporations broadly tracked the ECB's main refinancing rate in the four largest euro area economies (see Chart 1). Thereafter, following the intensification of sovereign debt tensions in 2010 and in response to the increase in policy interest rates in early 2011, bank interest rates on loans to non-financial corporations started to rise more rapidly in Spain and Italy than in France and Germany. While the cuts made to policy interest rates since late 2011 have translated broadly into lower interest rates on loans to non-financial corporations in France and Germany, the pass-through has been much more sluggish in the case of Spain and Italy, where interest rates remain at a higher level than that recorded in the other two large euro area economies.

In the case of loans to households for house purchase, bank lending rates in Spain and Italy reacted particularly strongly to the cuts in policy interest rates made in late 2008 and in 2009 (see Chart 2). This reflects the higher share of mortgage loans with a short-term interest rate fixation period in these two countries than in other large economies in the euro area. After the start of the sovereign debt crisis in early 2010, however, interest rates in these two countries increased more sharply than

Chart 1 Composite indicator of the cost of borrowing for non-financial corporations

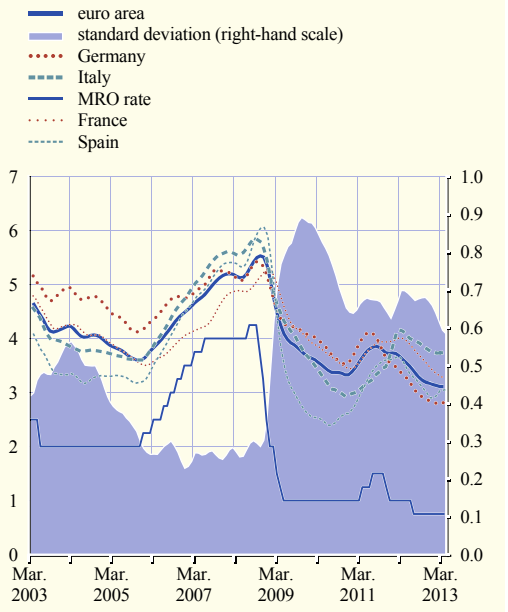
(percentages per annum; three-month moving averages; March 2003 to April 2013)



Source: ECB.
Notes: See Box 1 for a detailed description of the construction of the indicator. The standard deviation is computed for a fixed composition of 12 euro area countries.

Chart 2 Composite indicator of the cost of borrowing for households for house purchase

(percentages per annum; three-month moving averages; March 2003 to April 2013)



Source: ECB.
Notes: See Box 1 for a detailed description of the construction of the indicator. The standard deviation is computed for a fixed composition of 12 euro area countries.

in Germany and France. Following the policy rate cuts implemented since late 2011, mortgage interest rates have contracted across countries, as expected. Nevertheless, mortgage rates in Italy and Spain remain above the levels observed in 2010 in spite of monetary policy rates having reached record low levels.

The heterogeneous developments in the composite indicator of the cost of borrowing for non-financial corporations and households are reflected in measures of dispersion of lending rates across countries (see Charts 1 and 2). In particular, the dispersion of composite lending rates to non-financial corporations and households increased significantly in the early stages of the crisis in late 2008 and in 2009. In the case of non-financial corporations, dispersion stabilised somewhat in 2010, only to start rising again in 2011. More recently, indicators of dispersion for non-financial corporations have pointed to a stabilisation in the course of 2012 and early 2013. In the case of the composite lending rate to households, dispersion has declined substantially from the peak reached in 2009 and 2010, but remains elevated.

HETEROGENEITIES IN BANK LENDING RATES FOR SMALL AND MEDIUM-SIZED ENTERPRISES

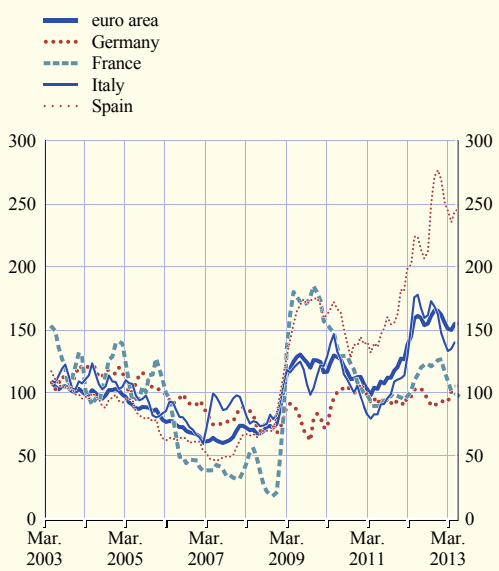
The spread between lending rates on small and large loans to non-financial corporations has also been heterogeneous across countries since the start of the financial crisis. On the basis of the assumption that loans to SMEs are generally smaller than loans to large corporations, a breakdown of lending rates into those applied to small loans and those applied to large loans permits a more detailed

analysis of the borrowing costs of SMEs.[2] A long data series on MFI interest rates distinguishing between lending rates on loans of up to €1 million and those on loans of over €1 million is available in the ECB's Statistical Data Warehouse.[3] Chart 3 shows that the spread between lending rates on these two types of loan is positive for all the countries considered.[4] It also shows that during the crisis, in late 2008 and in 2009, bank financing conditions for SMEs deteriorated sharply in the four largest euro area countries, but particularly in Spain and France. The situation improved across countries during 2010, but has deteriorated again since 2011. The spread reached record high levels in 2012 in Spain and Italy, although it has declined somewhat since the autumn of that year.

The €1 million ceiling used to define small loans may be too high as a proxy for lending to SMEs. Consequently, since June 2010 the ECB has collected more refined data on bank interest rates applied to small loans. The category of loans of up to €1 million is broken down into two sub-categories: loans of up to €0.25 million and loans of over €0.25 million and up to €1 million. This additional breakdown affords a more precise measure of the borrowing costs of SMEs (see Box 2 for a description of improvements in the collection of MFI interest rates over time). As in the case of

Chart 3 Spread between lending rates on small and large loans

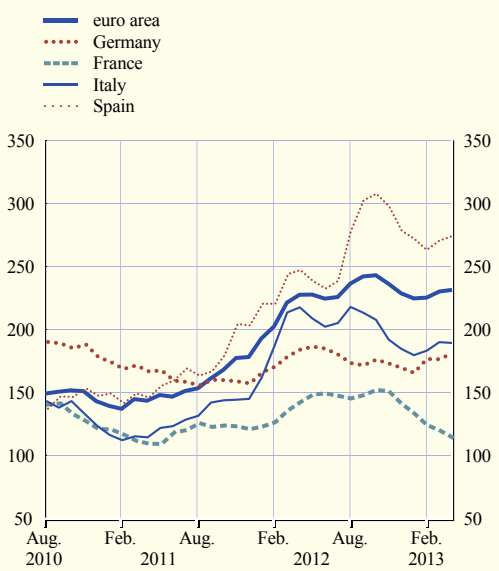
(basis points; three-month moving averages; March 2003 to April 2013)



Source: ECB.
Note: Small loans are loans of up to €1 million, while large loans are loans of above €1 million.

Chart 4 Spread between lending rates on very small and large loans

(basis points; three-month moving averages; August 2010 to April 2013)



Source: ECB.
Note: Very small loans are loans of up to €0.25 million, while large loans are loans of above €1 million.

2 The size of a loan may also be related, to some extent, to its purpose (e.g. inventory financing, working capital, long-term investment) and duration.
3 These data can be downloaded from the Statistical Data Warehouse at http://sdw.ecb.europa.eu/browse.do?node=9484266
4 It is more difficult and more expensive for SMEs and young firms to access external finance owing to their higher transaction costs, weaker bargaining power, higher business risk and low ratio of collateral to liabilities. See Berger, A. N. and Udell, G. F., "Small Business and Debt Finance", *Handbook of Entrepreneurship Research*, Kluwer Academic Publishers, 2005, pp. 299-328; Rauh, J.D., "Investment and Financing Constraints: Evidence from the Funding of Corporate Pension Plans", *Journal of Finance*, Vol. 61, 2006, pp. 33-71; and Fee, C. E., Hadlock, C.J. and Pierce, J.R., "Investment, Financing Constraints, and Internal Capital Markets: Evidence from the Advertising Expenditures of Multinational Firms", *Review of Financial Studies*, Vol. 22, 2009, pp. 2362-92.

the spread between lending rates on loans of up to €1 million and those on loans of over €1 million, the spread between interest rates on very small loans and those on large loans shown in Chart 4 has increased since the summer of 2011, particularly in the case of Spain and Italy. In Germany and France, the spread has also increased since the beginning of 2012, although to a much lesser extent. The spread between bank lending rates for very small loans and those for large loans currently stands above its long-term average.

Box 2

IMPROVEMENTS IN THE COLLECTION OF MFI INTEREST RATE STATISTICS

Monetary and financial statistics must be accurate, timely and reliable in order to enable the effective implementation of monetary policy. Financial innovation calls for a continuous effort to improve the statistical framework of the Eurosystem. In this context, harmonised MFI interest rate statistics have been produced since January 2003 and were further improved in June 2010.[1] This box describes developments in the collection of MFI interest rate statistics since their introduction in 2003.

The use of interest rate statistics in monetary policy analysis

Monitoring developments in interest rates across countries is of pivotal importance for monetary policy decision-making. First, these developments are key for analysing the mechanism through which monetary policy is transmitted to the real economy, given the predominant role of the banking sector in providing financing to the non-financial private sector.[2] Second, they provide information on the degree of integration in the euro area retail banking market.[3] Third, they help to monitor structural developments in the banking system by providing insights into how banks set their margins and how the latter react to external developments, and, fourth, they complement the monetary aggregate statistics by providing information on prices (interest rates).

The introduction of MIR statistics in 2003

In January 2003 the Eurosystem started compiling harmonised statistics on euro-denominated lending and deposits of domestic credit institutions (the largest component of MFIs) vis-à-vis households and non-financial corporations resident in the euro area. Retail interest rate statistics collected previously were not harmonised, which hampered comparison across countries. The new framework introduced in 2003 addressed these drawbacks and therefore represented an important step towards better describing the retail banking system across euro area countries.

1 Regulation ECB/2008/32.
2 See, for instance, Section 4 of the article entitled "Assessing the financing conditions for the euro area private sector during the sovereign debt crisis", *Monthly Bulletin*, ECB, Frankfurt am Main, August 2012.
3 See, for instance, the box entitled "Cross-country heterogeneity in MFI interest rates on loans to non-financial corporations in the euro area", *Monthly Bulletin*, ECB, Frankfurt am Main, November 2012.

The enhancements introduced in 2010

In the light of a changing macroeconomic environment, and as part of the efforts to further improve the quality, reliability and accuracy of interest rate statistics, a number of enhancements were introduced in June 2010.[4] These were:

1. A more detailed breakdown of bank interest rates applied to small loans to non-financial corporations. The threshold of the category of small loans (defined as up to and including €1 million) was considered too high to identify loans granted to SMEs. Therefore two sub-categories have been introduced which capture loans of up to €0.25 million and loans of over €0.25 million and up to €1 million.

2. Separate information on interest rates on guaranteed and collateralised loans. These statistics are of interest when studying the dynamics behind banks' behaviour in setting interest rates.

3. Information on the original maturity of new loans. The new statistics distinguish business volumes within the category of new loans to non-financial corporations with an initial rate fixation period of up to one year and with an original maturity of up to one year from those with an original maturity of over one year.

4. Identification of interest rates on loans to sole proprietors within the household sector. The new statistics bring clarity into the household sector by identifying and separating these micro-firms, which are often run by one person only.

5. A harmonised method of compiling rates on overdrafts and revolving loans, separately from credit card debt.

4 For a more detailed description of all the changes introduced in 2010, see the article entitled "Keeping the ECB's monetary and financial statistics fit for use", *Monthly Bulletin*, ECB, Frankfurt am Main, August 2011.

3 THE RETAIL BANK INTEREST RATE PASS-THROUGH AT TIMES OF FINANCIAL FRAGMENTATION

The previous section showed that heterogeneity in bank lending rates has increased since the financial crisis started in 2008, suggesting that the effectiveness of monetary policy has been hindered by financial fragmentation. A number of factors seem to be at play which explain cross-country divergences in MFI lending rates. Structural factors affecting lending rates include the fact that financial market structures differ across countries. Lending rates tend to be lower in economies where bank competition is stronger and alternative, market-based sources of finance are available through more developed financial sectors. The observed heterogeneity in MFI lending rates may also reflect product heterogeneity, which may be difficult to classify in homogeneous categories in MFI interest rate statistics. Moreover, it may also reflect country-specific institutional factors, such as fiscal and regulatory frameworks, enforcement procedures and collateral practices. Other factors affecting divergence in lending rates might reflect the amplifying effects of increasing credit risk and bank risk aversion in an environment of weak economic growth, potential capital constraints on the part of banks and the impact of bank funding fragmentation. The following sections will focus on those factors which may have a bearing on bank lending rates over and above the traditional pass-through of policy interest rates and which can help explain divergences in lending behaviour

during the financial and sovereign debt crisis. Structural differences in bank lending rate-setting behaviour have been extensively analysed in previous ECB publications.[5]

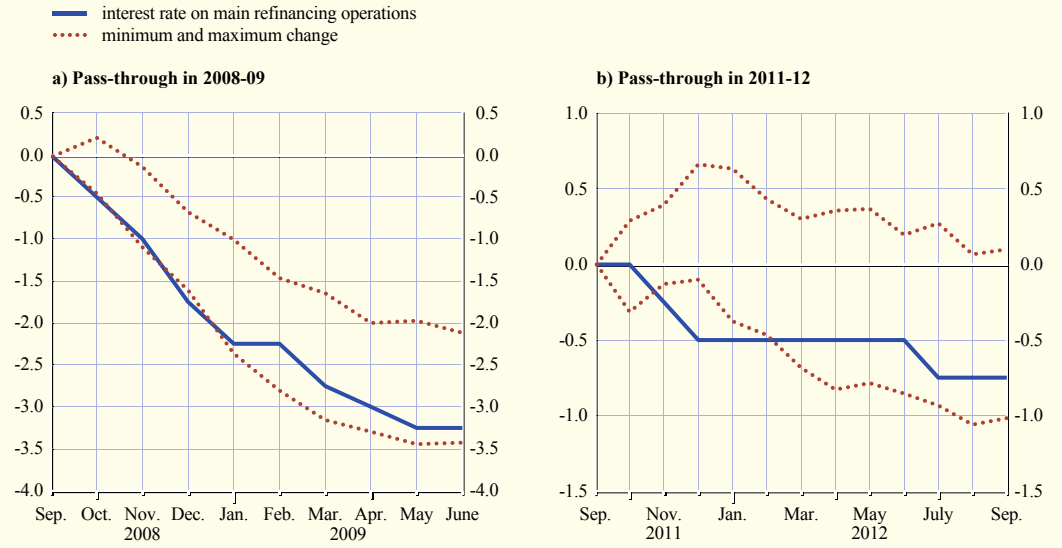
THE BREAKDOWN OF STANDARD PASS-THROUGH RELATIONSHIPS

Standard pass-through models consider policy interest rates and market interest rates to be the most direct determinants of retail bank lending rates. Such models are ill-equipped, however, to explain the increasing levels of heterogeneity in bank lending rates which have been observed during the crisis.[6] Chart 5 (left-hand panel) shows that the composite indicator of the cost of borrowing for non-financial corporations responded rapidly and relatively homogeneously across countries to the 325 basis point cut in key ECB interest rates implemented between October 2008 and May 2009. By contrast, following the 75 basis point cut implemented between November 2011 and July 2012, bank lending rates to non-financial corporations have not responded in the same way across euro area countries. As shown in Chart 5 (right-hand panel), the lower bound of the range of changes in the cost of borrowing for non-financial corporations declined, broadly in line with the change in the policy rate during this period. However, the upper bound of changes increased despite lower key ECB interest rates. This observation points to a weakening in the pass-through of monetary policy in some euro area countries, suggesting that the stance of monetary policy is not being transmitted appropriately across countries.

Model-based evidence tends to confirm that standard pass-through models are ill-equipped to explain increasing levels of heterogeneity in bank lending rates across euro area countries during the crisis.

Chart 5 Cumulated changes in the ECB's interest rate on main refinancing operations and in the composite indicator of the cost of borrowing for non-financial corporations

(changes in percentage points; September 2008 to June 2009) (changes in percentage points; September 2011 to September 2012)



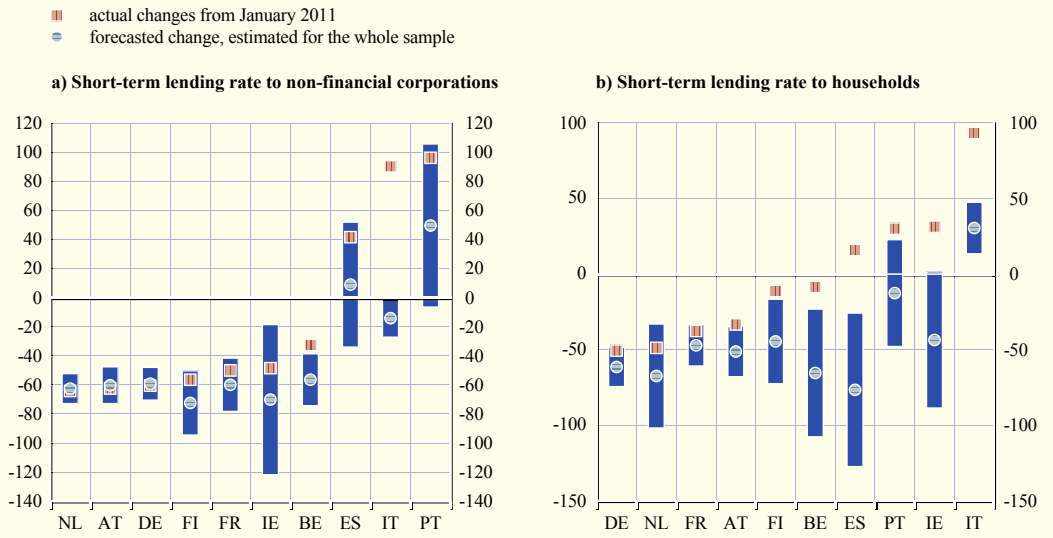
Source: ECB.
Note: See Box 1 for a detailed description of the construction of the indicator.

5 For an analysis of heterogeneities in mortgage interest rates in the euro area, see Kok Sørensen, C. and Lichtenberger, J-D., "Mortgage interest rate dispersion in the euro area", *Working Paper Series*, No 733, ECB, Frankfurt am Main, February 2007. See also "Differences in MFI interest rates across euro area countries", ECB, Frankfurt am Main, September 2006, and "The use of harmonised MFI interest rate statistics", *Monthly Bulletin*, ECB, Frankfurt am Main, July 2005, for a statistical approach to differences in interest rates in the euro area.

6 See the article entitled "Recent developments in the retail bank interest rate pass-through in the euro area", *Monthly Bulletin*, ECB, Frankfurt am Main, August 2009.

Chart 6 Forecasted and actual changes in short-term lending rates between 2011 and 2013

(changes in basis points from January 2011 to April 2013)



Source: ECB.
Notes: The changes were obtained using a simple pass-through model. The bars show the average 95% confidence interval over the forecast period for a model estimated over the full sample. See Box 3 for more details on the models. Countries are ordered from the lowest to the highest actual change in lending rates.

Chart 6 shows actual and projected changes in short-term lending rates for non-financial corporations and households between January 2011 (when the sovereign debt crisis intensified) and April 2013 using standard pass-through models. The estimation sample covers the period from January 2003, when data on harmonised MFI lending rates started to be collected, to April 2013 (see Box 3 for details regarding the econometric models used in the estimations). The chart shows that actual changes in short-term lending rates are systematically higher than those projected by the standard pass-through models, thus highlighting the potential presence of omitted variables in those models.

The next sub-section explores several factors that may help explain this breakdown in traditional pass-through relationships.

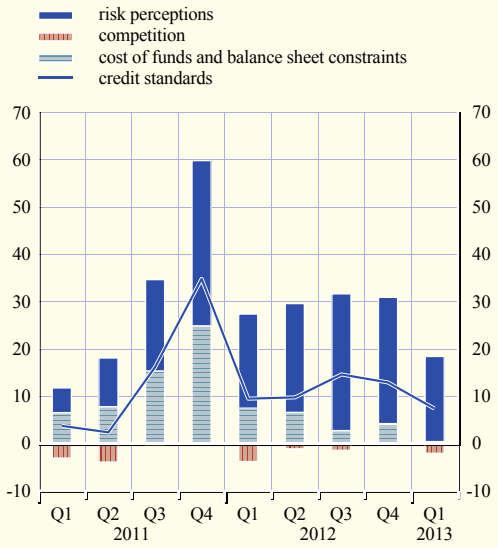
FACTORS AFFECTING THE MONETARY POLICY TRANSMISSION MECHANISM AT TIMES OF FINANCIAL FRAGMENTATION

The analysis of the monetary policy transmission mechanism has typically been based on the assumption that there is a low and stable level of risk, that financial institutions are well capitalised and that there is no fragmentation in bank funding conditions. As such, policy rates and market interest rates were traditionally considered the most direct determinants of retail bank lending rates. For this reason, the literature has focused on how fast and how extensively changes in policy interest rates are passed through to bank lending rates. Other factors such as credit risk, the quality and quantity of bank capital, and access to bank funding were assumed to be less volatile and hence to have less influence on bank lending rates.[7] However, the financial crisis and the euro area sovereign debt crisis have brought to the fore the importance of credit risk and risk perceptions, low levels and poor quality of bank capital and fragmentation in bank funding conditions for bank lending rates and bank lending

7 Although such factors could still explain differences in the pass-through across countries; see Gropp, R., Kok Sørensen, C. and Lichtenberger, J-D, "The dynamics of bank spreads and financial structure", *Working Paper Series*, No 714, ECB, Frankfurt am Main, January 2007.

Chart 7 Factors contributing to a tightening of credit standards for loans to non-financial corporations

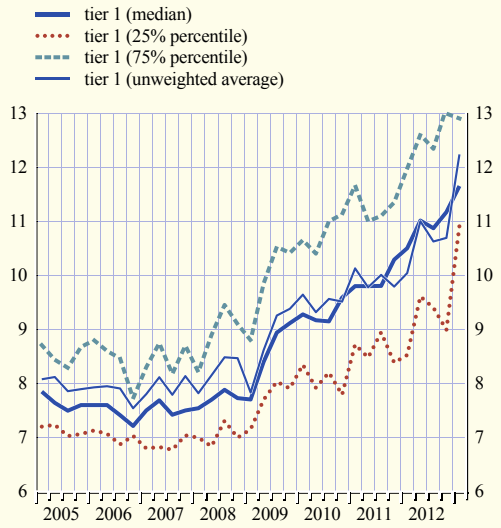
(average net percentages per category)



Source: Eurosystem bank lending survey.
Notes: Cost of funds and balance sheet constraints are calculated as the unweighted average of "capital position", "access to market funding" and "liquidity position"; risk perception as the unweighted average of "expectations regarding general economic activity" and "industry-specific risk"; competition as "bank competition", "non-bank competition" and "competition by market financing".

Chart 8 Tier 1 capital ratio for euro area listed banks

(percentages)



Source: ECB calculations based on Thomson Reuters.
Note: The latest observation is for the first quarter of 2013.

policies more generally. In this respect, evidence from the bank lending survey shows that banks' risk perceptions and the cost of funds and balance sheet constraints have had a strong impact on the credit standards applied to non-financial corporations in the euro area (see Chart 7).

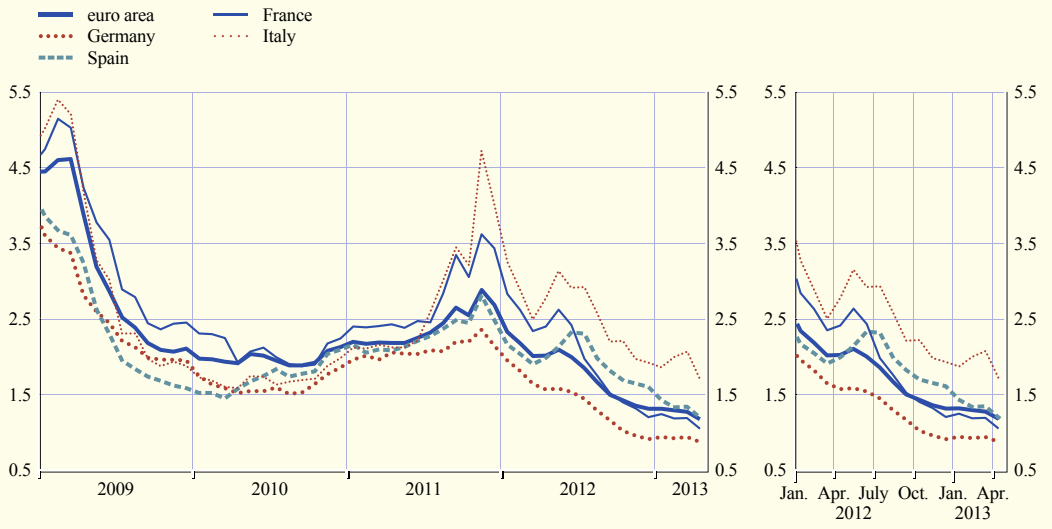
In several countries, bank capital has been depleted during the crisis as a result of valuation losses on securities holdings and, more significantly, loan losses. As a result of tensions in sovereign bond markets and the resulting funding difficulties for banks, the ability of banks to provide credit has been seriously hampered in many countries. Euro area banks have made good progress in strengthening their resilience to adverse economic developments since late 2009. The increase in banks' capital ratios, partly in response to regulatory and market pressures forcing them to hold higher discretionary buffers, resulted mainly from substantial capital-raising efforts by banks and from large injections of capital by euro area governments (see Chart 8). More recently, the progress also reflects the adjustment to the forthcoming CRD IV capital requirements, which are more stringent and rely on a stricter definition of capital.[8]

Fragmentation in banks' funding conditions arising from sovereign debt tensions is another factor explaining the divergence in MFI lending rates and bank lending policies. In setting the remuneration on their deposits and the return on bonds issued in the market, banks "compete" at

8 In addition to the capital raised by banks in private markets, since 2007 many euro area banks have also received capital injections in various forms from their governments. For example, direct capital injected by governments between 2007 and mid-2013 is estimated at around €270 billion. Furthermore, implicit state aid with capital implications for banks has also been provided in the context of asset protection schemes and asset transfers to asset management companies.

Chart 9 Composite bank cost of debt financing

(composite cost of deposit and non-secured market debt funding; annual percentages)



Sources: ECB, Merrill Lynch Global Index and ECB calculations.
Notes: Deposit rates (for both retail and institutional investors) and cost of market-based debt financing, weighted using outstanding amounts taken from MFI balance sheet statistics. An extreme value relating to the collapse of Lehman Brothers in September 2008 has been smoothed out.

the retail level with high yields on bonds and Treasury bills issued by the government. In countries where such yields have increased or have not declined at the same pace and to the same extent as policy rates, this association contributes to increases in banks' funding costs, which may be passed through to bank lending rates.[9] Banks' funding costs increased substantially in the early stages of the financial crisis in 2008 and in 2009, as well as during the sovereign debt crisis in 2011 and the first half of 2012. During the latter period, the increases were particularly high in countries with distressed sovereigns. However, with the announcement of Outright Monetary Transactions (OMTs) in the third quarter of 2012, the gradual normalisation in the funding costs of some governments contributed to a lowering of the cost of bank funding and improved access to funding (see Chart 9). At the same time, evidence from the bank lending survey shows that banks' access to retail and wholesale funding improved across all funding categories and that the impact of the sovereign tensions on their funding has lessened since the second half of 2012 (see Chart 10).

As a result of these developments, banks have been able to reduce their dependence on the Eurosystem. Nonetheless, the funding situation of banks is still significantly heterogeneous across countries.

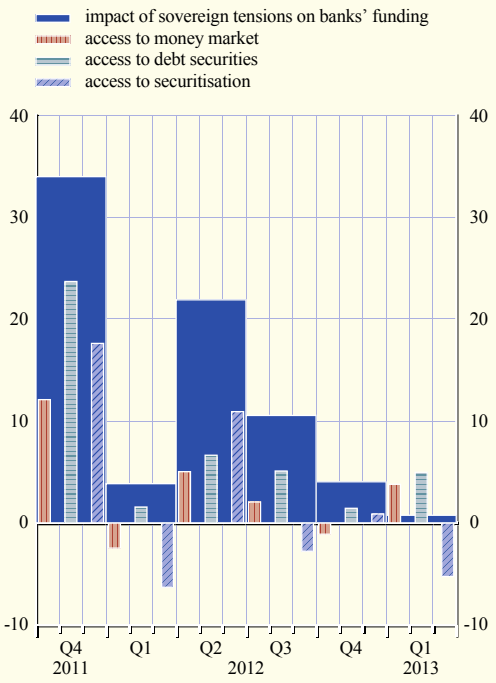
Divergence in lending rates might also be influenced by the amplifying effects of increasing credit risk and bank risk aversion in an environment of weak economic growth. Protracted periods of weak economic conditions and continued uncertainty regarding the duration of the sovereign debt crisis have weighed on the profitability and the financial buffers of non-financial corporations. When

9 Moreover, secured lending among banks in the interbank market is usually conducted using sovereign debt as collateral. Tensions in sovereign debt markets therefore reduce the collateral base of banks and thus their access to liquidity. See the box entitled "Monetary policy measures decided by the Governing Council on 6 September 2012", *Monthly Bulletin*, ECB, Frankfurt am Main, September 2012. See also the article entitled "Assessing the financing conditions of the euro area private sector during the sovereign debt crisis", *Monthly Bulletin*, ECB, Frankfurt am Main, August 2012.

economic activity is weak, the probability that a firm will go bankrupt increases and the debt-servicing capacity of non-financial corporations is impaired. Moreover, the high level of unemployment in some countries makes it risky for the financial sector to lend to households, especially via long-term mortgage contracts. As a result of the higher risk they bear, banks will tend to charge higher lending rates and tighten credit conditions for borrowers, particularly in those countries where economic conditions are weaker.[10] Evidence from the bank lending survey suggests that the effects of the cost of funds and balance sheet constraints have recently eased substantially by comparison with mid-2012, while risk perceptions are now the main factor contributing to tighter credit conditions on loans to non-financial corporations (see Chart 7).

Chart 10 Impact of sovereign debt tensions on funding and access to specific funding markets

(net percentages)



Sources: Eurosystem bank lending survey and ECB.
Notes: Positive/negative figures refer to deterioration/improvement in access to funding.

NEW EMPIRICAL EVIDENCE ON RETAIL BANK INTEREST RATE PASS-THROUGH

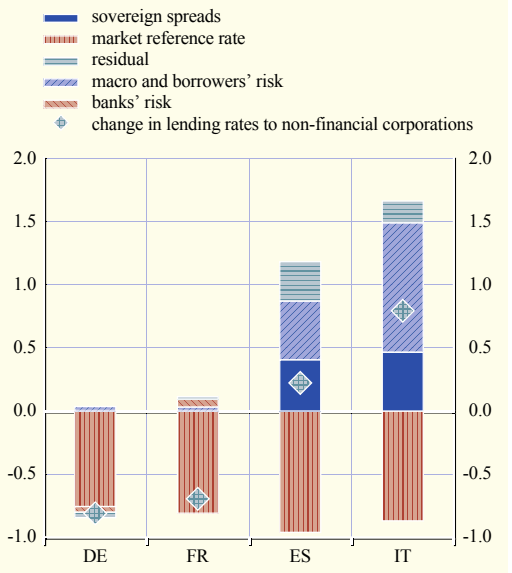
The previous section highlighted the importance of risk factors, bank capital and fragmentation in banks' funding conditions owing to tensions in government bond markets as potential drivers of bank lending rates during the financial crisis. This section provides new empirical evidence on pass-through models that assess the degree of impairment in the monetary policy transmission mechanism in the four largest euro area economies arising from tensions in sovereign debt markets and risk factors (see Box 3 for details regarding the econometric models used in the estimations). In particular, they make it possible to differentiate between the various factors affecting lending rates to non-financial corporations and households for house purchase.

Charts 11 and 12 show the actual change in lending rates to non-financial corporations and households between March 2011 and April 2013 in the four largest euro area economies and the estimated contribution of market reference rates, risk factors (related to banks and borrowers) and sovereign debt spreads. It can be seen that the fall in the composite lending rates to non-financial corporations and households has proceeded in line with historical regularities in France and Germany. This means that downward adjustments in market reference rates have translated into a concomitant reduction in bank lending rates. In the case of Spain and Italy, the fall in market reference rates associated with the drop in policy interest rates over the same time period has also contributed negatively to retail bank lending rates, as expected. However, sovereign market tensions and a deteriorating macroeconomic environment have put upward pressure on composite lending rates to non-financial corporations and households in Spain and Italy.

10 The April 2013 bank lending survey showed that banks' perceptions of high macroeconomic uncertainty and the creditworthiness of borrowers have continued to gain importance, relative to other credit supply factors, as factors explaining developments in the credit standards applied to loans to both households and non-financial corporations.

Chart 11 Breakdown of changes in lending rates to non-financial corporations by explanatory factors

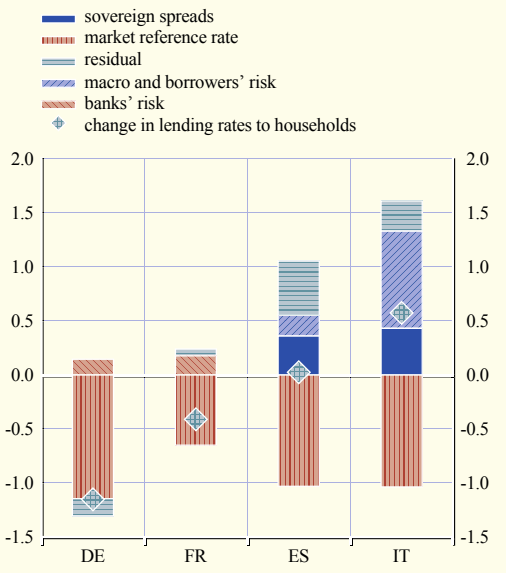
(percentages per annum; March 2011-April 2013)



Source: ECB calculations.
Notes: The chart shows the change in lending rates to non-financial corporations and the contribution of each explanatory variable between March 2011 and April 2013. Composite lending rates for non-financial corporations are compiled from short and long-term rates using a weighting scheme based on smoothed new business volumes. See Box 3 for more details on the models. Countries are ordered from the lowest to the highest change in lending rates.

Chart 12 Breakdown of changes in lending rates to households by explanatory factors

(percentages per annum; March 2011– April 2013)



Source: ECB calculations.
Notes: The chart shows the change in lending rates to households and the contribution of each explanatory variable between March 2011 and April 2013. Composite lending rates for households are compiled from short and long-term rates using a weighting scheme based on smoothed new business volumes. See Box 3 for more details on the models. Countries are ordered from the lowest to the highest change in lending rates.

Box 3

MODELLING THE INTEREST RATE PASS-THROUGH ACROSS EURO AREA COUNTRIES

The divergence observed in bank lending rates since the outbreak of the financial crisis in 2008 and their sluggish response, in some countries, to the policy interest rate reductions to levels close to zero reflect in part asynchronous business cycles and differing perceptions of credit risk across countries over the last few years. Country-specific lending rates not only exhibit a different speed of adjustment to changes in the corresponding market interest rates, they are also affected by different market interest rates and different risk factors.

Standard pass-through models assume the absence of any explanatory variables in the lending rate adjustment mechanism other than market interest rates. This is a simple error correction framework with the following structure:

$$\Delta br_t = \sum_{k=0}^{K} \delta_k \Delta r_{t-k} + \sum_{m=1}^{M} \lambda_k \Delta br_{t-m} + \alpha(br_{t-1} - \beta r_{t-1} - \mu) + u_t \quad (1)$$

where br_t denotes the bank lending rate and r_t is the reference market interest rate, i.e. the rate at which banks can raise funds in the interbank money market. Coefficient α represents the speed

of adjustment to the long-term equilibrium, while coefficient β captures the long-run elasticity of bank lending rates to market reference rates. The coefficients regarding the lags of the first difference of market reference rates capture the short-run pass-through. Finally, Δ represents the first difference operator.[1]

The standard model can be extended to accommodate the impact of other factors affecting the pricing of bank products. In particular, reflecting tensions in sovereign bond markets, models can also be estimated including the spread of sovereign bond yields with respect to a risk-free rate as a factor of risk (denoted by s_t):[2]

$$\Delta br_t = \sum_{k=0}^{K} \delta_k \Delta r_{t-k} + \sum_{j=1}^{J} \lambda_k \Delta br_{t-j} + \sum_{n=1}^{N} \omega_s \Delta s_{t-n} + \alpha(br_{t-1} - \beta r_{t-1} - \beta_s s_{t-1} - \mu) + u_t \quad (2)$$

Different financial and banking structures among euro area countries might result in different risk factors affecting the demand and supply side of the lending process, which should be considered when modelling lending rates. Proxies for supply-side risk factors are banks' expected default frequencies, the capital-to-asset ratio and the liquidity-to-asset ratio. Demand-side risk indicators include the probabilities of default of non-financial corporations and households, approximated by non-financial corporations' expected default frequencies, employment expectations and unemployment rates, and the cost of equity for financial companies and banks.[3] However, the introduction of more than two risk factors on top of sovereign bond yields into a lending rate model might exhaust degrees of freedom, considering the relatively short time span of lending rate statistics. Hence, risk factors are included in econometric models one at a time and the final model is selected on the basis of econometric diagnosis criteria (see below). Equation (2) can then be extended to accommodate the possible impact of time-varying risk factors in a model as follows:

$$\Delta br_t = \sum_{k=0}^{K} \delta_k \Delta r_{t-k} + \sum_{j=1}^{J} \lambda_k \Delta br_{t-j} + \sum_{n=1}^{N} \gamma_k \Delta k_{t-n} + \sum_{m=1}^{M} \sigma_k \Delta p_{t-m} + \sum_{n=1}^{N} \omega_s \Delta s_{t-n} + \alpha(br_{t-1} - \beta r_{t-1} - \beta_2 k_{t-1} - \beta_3 p_{t-1} - \beta_s s_{t-1} - \mu) + u_t \quad (3)$$

where k_t and p_t denote the demand and supply-side risk factors of the lending process.

Moreover, rather than an individual market rate, the market reference rate could itself be a composite time series constructed from several market rates. In this respect, principal component analysis can be used to construct a composite time series out of a long dataset of market rates of different maturities (yield curve). When applying such methodology, it is found that about 70% of the variation in interest rates of different maturities in a yield curve is explained by the first principal component and more than 95% of the variation by the first three principal components.[4] The previous model is thus extended to include the first two principal components of the euro area swap curve (denoted by f_{1t} and f_{2t}) instead of the individual market reference rate:

$$\Delta br_t = \sum_{k=0}^{K} \delta_k \Delta f_{1,t-k} + \sum_{m=0}^{M} \phi_k \Delta f_{2,t-m} + \sum_{j=1}^{J} \lambda_k \Delta br_{t-j} + \sum_{n=1}^{N} \gamma_k \Delta k_{t-n} + \sum_{m=1}^{M} \sigma_k \Delta p_{t-m} + \sum_{n=1}^{N} \omega_s \Delta s_{t-n} + \alpha(br_{t-1} - \beta f_{1,t-1} - \beta_2 f_{2,t-1} - \beta_3 k_{t-1} - \beta_4 p_{t-1} - \beta_s s_{t-1} \mu) + u_t \quad (4)$$

1 For a review of the academic literature, see the article entitled "Recent developments in the retail bank interest rate pass-through in the euro area", *Monthly Bulletin*, ECB, Frankfurt am Main, August 2009.
2 The spread between sovereign bond yields and a risk-free rate captures country-specific sovereign debt tensions, as well as flight-to-quality effects and liquidity premia.
3 Some of the risk factors are available at the country level, while others are only available at the euro area level.
4 The first three principal components of a panel of interest rates of different maturities in a yield curve capture the "level", "slope" and "curvature" of the yield curve. See Litterman, R. and Scheinkman, J., "Common Factors Affecting Bond Returns", *The Journal of Fixed Income*, Vol. 1, 1991, pp. 54-61.

The selection of risk factors and market reference rates, as well as the lag structure in the model, is performed on the basis of econometric diagnosis criteria, including in-sample fit and out-of-sample performance, stability of coefficients in the co-integrating vector, significance of coefficients, the sign of sensitivities to risk in the long-term equilibrium pass-through and impulse responses. Regarding the specific benchmark rates, the three-month and 12-month EURIBOR are used for short-term loans and the market rates of higher maturities (from the 12-month EURIBOR up to ten-year yields) for long-term loans. Finally, to disentangle the impact of policy rates or euro area "risk-free" interest rates of higher maturities from the impact of the country-specific sovereign tensions, only the euro area swap or EURIBOR (and not the country-specific sovereign yields) are used as market reference rates.

4 CONCLUSIONS

The divergence in lending rates observed since the outbreak of the financial crisis in 2008 and their sluggish response in some countries to the policy interest rate reductions to levels close to zero reflect in part asynchronous business cycles and differing perceptions of credit risk across countries over the last few years. At the same time, the effectiveness of monetary policy has been hindered by financial fragmentation, as the monetary stimulus introduced since late 2011 has hardly influenced broad credit conditions in large parts of the euro area. The ECB has sought to resist downside risks to price stability in a context of increasing fragmentation by introducing several standard and non-standard measures, including reductions in the key ECB interest rates, a broadening of the Eurosystem's collateral framework, two three-year longer-term refinancing operations, a reduction in reserve requirements and the announcement of OMTs. As a result, tensions in sovereign debt markets and bank funding constraints have abated and the risk of a disorderly bank deleveraging process has been contained. In order to ensure the adequate transmission of monetary policy to financing conditions in euro area countries, it is essential that the fragmentation of euro area credit markets is reduced further and the resilience of banks strengthened where needed. In this respect, it is essential that countries act simultaneously on various policy fronts, in particular with regard to public finances and structural reforms to boost economic activity and financial stability.[11]

11 See the article entitled "Heterogeneity in euro area financial conditions and policy implications", *Monthly Bulletin*, ECB, Frankfurt am Main, August 2012.

A MACRO STRESS-TESTING FRAMEWORK FOR BANK SOLVENCY ANALYSIS

The financial and sovereign debt crises have highlighted how important it is for banks to have solid capital buffers that enable them to withstand extreme and unexpected shocks to their balance sheets and thus ensure that they can act as effective financial intermediaries even in periods of turbulence. A macro stress-testing framework is often used to assess in a forward-looking manner the resilience of the banking sector to (adverse) macroeconomic and financial developments. In line with its responsibility for safeguarding financial stability in the euro area, the ECB also employs macro stress-testing tools in its regular macro-prudential assessments.

Against this background, this article gives an overview of the main elements of the ECB's (top-down) macro stress-testing framework for solvency assessments and gives examples of how it is used for policy analysis. The framework is applied in forward-looking bank solvency analysis in many different contexts, such as to analyse the impact of pertinent systemic risks on broad financial stability, to challenge the results of bottom-up stress tests carried out at the supervisory level and to calculate bank capital shortfalls in order to assess the impact of conditions in the financial sector on macroeconomic developments. Furthermore, the stress-testing framework can be used for both micro and macro-prudential purposes once the ECB takes up its supervisory powers in the context of the establishment of the Single Supervisory Mechanism (SSM).

1 INTRODUCTION

One of the major implications of the financial and sovereign debt crises has been to put significant downward pressure on the solvency positions of euro area banks. Losses incurred as a result of disruptions in the financial system and the ensuing economic downturn created serious concerns about the level of capitalisation among euro area banks, which amplified the crisis-related funding difficulties of many banks and ultimately hampered their ability to finance the real economy.

A crucial step in resolving a banking crisis is to assess whether banks are appropriately capitalised and able to withstand further adverse shocks. Stress-testing tools are especially useful for gauging potential capital shortfalls in the banking sector when it is faced with severe headwinds. For this reason, macro stress tests have been employed frequently by the competent authorities, including the ECB, during the financial and sovereign debt crisis to calculate bank capital shortfalls against commonly agreed capital ratio benchmarks. In this context, it is important to distinguish between the bottom-up stress tests carried out by the banks, although often under constrained rules set by their micro-prudential supervisors, and top-down stress tests, whereby all calculations are carried out at a central level (without involving the banks).[1] The latter tend to have a more macro-prudential perspective with a focus on assessing system-wide resilience to the materialisation of systemic risks.

The ECB has worked hard to develop a "top-down" stress-testing framework that currently covers the largest 80-90 banking groups in the European Union.[2] There are a number of reasons why forward-looking solvency analysis is pursued by the ECB.

1 With regard to supervisory bottom-up stress tests, in both the United States and the EU, stress tests have become part of the policy toolkit for crisis management. In the United States, the Supervisory Capital Assessment Program (SCAP) was implemented in 2009 while in the EU, the European Banking Authority (EBA) coordinated EU-wide stress-testing exercises in 2010 and 2011. Macro stress tests were used during times of crisis at the individual country level in the context of the EU-IMF financial assistance programmes to selected EU Member States.

2 The ECB has also developed a stress-testing framework for insurance corporations, although this tool is currently somewhat less developed than the tool covering the banking sector.

First and foremost, such analysis is of relevance to the ECB from a broad financial stability perspective, but it can also provide important insights that are useful for monetary policy analysis, crisis-related activities and potentially also for macro-prudential policy purposes. Beyond having prime responsibility for monetary policy, the responsibility for safeguarding financial stability figures prominently in the mandate of the ESCB.[3] This task requires the systematic review of possible sources of risk to the financial system in order to identify risks with a potential systemic nature and assess their potential magnitude. To this end an evaluation needs to be carried out of the impact these risks would have were they to materialise. The monitoring of risks and the assessment of their severity are, thus, complementary for the detection of systemic risk. Systemic risk is defined as the risk that financial instability would become so widespread that the functioning of the financial system would be impaired to the point where economic growth and welfare would suffer materially.

Second, the assessment and analysis of the impact of specific shocks on banking sector resilience is also important from the perspective of monitoring the effectiveness of the monetary policy transmission mechanism. This is particularly the case in the euro area context owing to the predominant role of banks in the financial structures prevailing in the currency union.[4] In other words, if banks are resilient to various adverse shocks, they are more likely to be able to transmit monetary impulses to the real economy even under stressed circumstances.

Third, the ECB's top-down stress-testing framework is employed on a regular basis as a tool for cross-checking the results of bottom-up stress tests, such as the EU-wide stress-testing exercises coordinated by the European Banking Authority (EBA) or the national-level stress tests conducted in various countries in the context of joint EU-IMF adjustment programmes. The top-down stress-testing toolkit has proved an effective means to ensure the quality of bottom-up results, for example by helping to detect outliers in the form of unreasonable results among the stress-tested banks.

Finally, by exploiting the forward-looking nature of the top-down stress-testing tool combined with its granular information set across a large number of banks, the framework is able to capture aspects of both the time-dimension and the cross-section dimension of systemic risk that is relevant for assessing macro-prudential policies.[5] The top-down stress-testing framework could thus complement other modelling approaches that calibrate and assess macro-prudential policy instruments.[6]

These various uses notwithstanding, it is important to recognise that stress-testing tools also have limitations. Importantly, stress-testing frameworks do not capture the general equilibrium effects of the impact of shocks on a banking sector. For example, endogenous adjustment of banks' balance sheets is generally only partially covered, and various types of feedback to markets are often ignored. That such elements are ignored can be considered a virtue of stress tests, as it allows for a

3 In the euro area, this responsibility is conferred on the European System of Central Banks (ESCB) in Article 127(5) of the Treaty on the Functioning of the European Union "The ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system", as well as in Article 25(1) of the Statute of the ESCB and of the ECB.

4 See, in particular, the following articles in recent issues of the ECB's Monthly Bulletin: "The role of banks in the monetary policy transmission mechanism", *Monthly Bulletin*, ECB, August 2008; "The external financing of households and non-financial corporations – a comparison of the euro area and the United States", *Monthly Bulletin*, ECB, April 2009; "Monetary policy and loan supply in the euro area", *Monthly Bulletin*, ECB, October 2009; "Monetary policy transmission in the euro area, a decade after the introduction of the euro", *Monthly Bulletin*, ECB, May 2010.

5 See, for example, "Operationalising the selection and application of macro-prudential instruments", Committee on the Global Financial System, *CGFS Papers*, No 48, Committee on the Global Financial System, December 2012. For a detailed discussion on the concept of systemic risk, see Special Feature B in the December 2009 Financial Stability Review.

6 For a review of the recent literature on models for assessment of macro-prudential policies, see Special Feature A entitled "Exploring the nexus between macro-prudential policies and monetary policy measures", *Financial Stability Review*, ECB, May 2013.

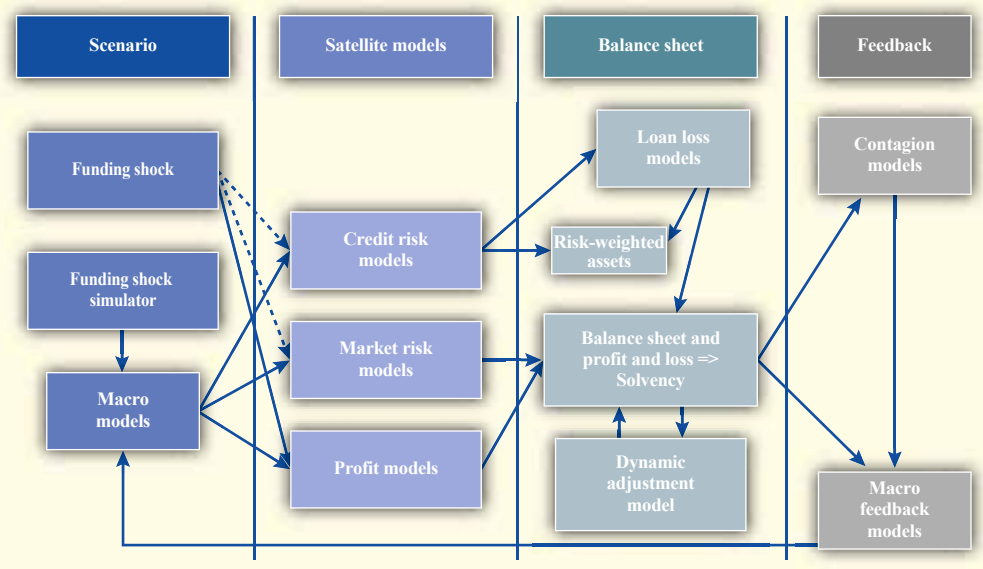
more robust projection of banks' balance sheets based on a number of assumptions. Clearly, a full equilibrium analysis at the level of detail required for stress tests is impossible. On the other hand, the missing (or incomplete) elements are important when it comes to the transmission of monetary policy, macro-financial feedback and macro-prudential analysis. While the ECB's stress-testing framework aims to address some of these analytical challenges, the obvious limitations to these approaches should not be downplayed. Finally, while the ECB's stress-testing framework is primarily attuned to forward-looking solvency assessments, analytical tools for carrying out liquidity/funding risk assessment are also important in order to complete a macro-prudential analysis toolkit. This notwithstanding, even the forward-looking solvency assessment can also be carried out taking into account liquidity and funding shocks and thus to some extent capture the impact of liquidity stresses.

Against this background, this article provides an overview of the ECB's top-down stress-testing framework and presents some examples of how the framework is employed along the four policy dimensions highlighted above: (i) for broad financial stability analysis purposes; (ii) to support monetary policy analysis; (iii) as a cross-check of bottom-up stress test results; and (iv) as a tool for evaluating macro-prudential instruments.

2 SOLVENCY ANALYSIS FRAMEWORK

Forward-looking bank solvency analysis, or top-down macro stress testing, especially when carried out using information at the individual bank level, requires a number of different but intertwined analytical steps. The ECB's solvency analysis framework reflects this approach and can be broadly described as a modular system with a four-pillar structure (see Chart 1).

Chart 1 The four-pillar structure of the ECB's solvency analysis framework



Source: ECB.

The first pillar (scenario design) consists of the design of the macro-financial scenarios to be imposed on the banking sector; in turn, the second pillar (satellite models) expands the macro-financial scenarios into a wider range of financial market and loan impairment variables affecting the valuation of bank balance sheet components, i.e. credit and market risk models, and banks' loss absorption capacity; the third pillar (balance sheet module) takes the projected profit and losses derived from the satellite models to individual bank balance sheets with the aim of calculating the resulting impact on each bank's solvency position. Finally, the fourth pillar (feedback modules) takes the analysis beyond the first-round impact on bank capitalisation to assess what could be the derived second-round effects of the initial bank solvency impact in terms of propagation, or feedback, throughout the financial system and beyond to the real economy. Each of the modules underlying the four-pillar, forward-looking solvency analysis framework in place at the ECB are described below.[7]

MACRO-FINANCIAL SCENARIO DESIGN

The first pillar of the framework is the macro-financial scenario design module, which is the starting point of the analytical chain that ultimately leads to a forward-looking assessment of banking sector capitalisation. The process of designing an appropriate (adverse) macro-financial scenario broadly consists of two steps. First, on the basis of the main systemic risks identified as pertinent at a given juncture, these risks will need to be mapped to scenario building blocks that correspond to the general storyline that the stress test is aimed at capturing. Second, once the scenario building blocks have been defined and expressed as exogenous shocks to specific variables representing the relevant risk factors, the impact of these shocks on the wider macroeconomic and financial environment needs to be quantified using relevant modelling techniques.

When designing the scenarios due consideration needs to be given to ensure that the stress imposed is of an appropriate level of severity (i.e. having a sufficiently strong impact on the banks) and at the same time not too implausible (i.e. it should reflect a material risk).

A variety of approaches is used in the calibration of shock profiles. These include ad hoc calibration based, for example, on developments in a specific variable during previous crisis episodes, but without recourse to any model or historical distribution of risk factors. Another approach is model-free shock size calibration based on historical distributions. This is typically applied in the calibration of shocks to financial asset prices whose dependence structure and high frequency nature are difficult to model. Shock size calibration based on shock distributions, with shocks being inferred from a dynamic model produce fit, and the resulting residuals, i.e. the portion of variation in the model variables that the model cannot explain, are interpreted as shocks. Those shocks can be calibrated using the size and distribution of the corresponding model residuals.

Once the relevant shock profiles reflecting underlying systemic risks have been calibrated, they are input into the relevant dynamic macroeconometric models. Importantly, for the scenario design module of the ECB's stress-testing framework, an eclectic approach has been adopted, whereby the modelling technique to generate the macro-financial scenarios depends on the specific risks the scenarios are supposed to reflect.

For shocks reflecting risks to the EU external environment, scenarios are often based on the NiGEM model, which is a large-scale estimated multi-country/multi-regional macroeconomic model with

7 In this article, the framework is described in relatively non-technical terms. For a more detailed description of the underlying modules, see "An analytical framework for conducting macro stress tests", *Occasional Paper Series*, ECB, 2013 (forthcoming).

global reach. To calibrate international spillover effects (of, for instance, stock price or bond yield shocks), NiGEM can be complemented with a global vector autoregressive (GVAR) model.[8]

On the domestic side, if the shocks to be imposed are meant to reflect risks that mainly come from the broader economic environment (such as investment and consumption, factor prices, external demand), use is typically made of a "stress-testing elasticities" (STE) tool. The STEs are impulse responses produced by models in place at the national central banks of the ESCB, which are embedded in an integrated toolbox for scenario-generating processes. Hence, on the basis of the STEs, exogenous shocks to a wide range of real economic variables and some financial variables (e.g. stock prices, short and long-term interest rates) can be imposed in order to derive projections of a large number of macro-financial indicators for all 28 EU countries, while also taking into account trade links between the countries.

In other instances, scenarios should rather reflect systemic risks that may emerge from within the financial system and that only spill over to the real economy once the shocks are triggered. This could, for example, reflect risks surrounding bank funding that might emerge as sharp rises in funding costs, inability to rollover wholesale funding or deposit outflows. Quantitative funding constraints, in particular, would be expected to lead in turn to asset side adjustments that may entail "fire sale" losses (when banks are forced to sell assets in an illiquid market) and possibly loan supply restrictions. To generate broad macroeconomic scenarios on the basis of such "financial sector" shocks, macro models explicitly embedding real-to-financial interlinkages are usually employed. Models available at the ECB that are appropriate for this purpose include dynamic stochastic general equilibrium (DSGE) models including banking sector specifications,[9] as well as various types of vector autoregressive (VAR) model with estimated interrelations between real economic and banking sector variables.[10]

TRANSLATION OF SCENARIOS VIA SATELLITE MODELS

For scenario translation, satellite models are applied to credit and interest rate risk as well as to other types of market risk (e.g. affecting the trading portfolio). Concretely, satellite equations are used to translate an assumed scenario (baseline or adverse) into a path for the dependent variable that captures some risk pertaining to a bank's balance sheets.

The most prominent economic indicators that the analysis of credit risk is based upon include probabilities of default (PDs), loss given default (LGD) and loss rates (LRs); with the LR being the product of PD and LGD. Additional balance sheet-type indicators that can be used in parallel to assess credit risk are the amounts of non-performing loans (NPLs) and the stock of loan loss reserves (LLRs). Moreover, MFI statistics on country-specific banking sector write-off rates (WRO) can serve as an additional measure of credit risk, although this is likely to reflect a rather delayed credit risk response, as write-offs come at the final stage of the banks' process of recognising credit losses. Finally, default rates (e.g. the number of defaulting loans to total outstanding loans) are another source of information that can be used as a basis for modelling credit risk.[11]

8 For details on the GVAR model, see Dees, S., di Mauro, F., Pesaran, M.H., Smith, L.V., "Exploring the international linkages of the euro area: a global VAR analysis", *Journal of Applied Econometrics, Vol.* 22(1), 2007, pp. 1-38.

9 See, for example, Darracq Pariès, M., Kok, C. and Rodriguez Palenzuela, D., "Macroeconomic propagation under different regulatory regimes: evidence from an estimated DSGE model for the euro area", *International Journal of Central Banking*, December 2011.

10 See, for example, Giannone, D., Lenza, M. and Reichlin, L. "Money, credit, monetary policy and the business cycle in the euro area", *CEPR Discussion Paper,* No 8944, April 2012.

11 Arguably, the various measures of credit risk can have somewhat overlapping definitions, but can be considered to differ in terms of their time perspective with PDs, measuring the probability of borrower default x-days ahead, being the most forward-looking metric and WROs, reflecting the point in time when non-performing loans are ultimately written off, being the least forward-looking metric.

For modelling retail interest rates, interest rate data for loans and deposits are taken from the ECB's MFI interest rate (MIR) statistics. This database contains country and euro area aggregate series of retail interest rates applied by monetary and financial institutions to deposits and loans vis-à-vis households and non-financial corporations.

In total, the modelling framework for market risk covers over 40 market risk parameters across over ten jurisdictions: non-European stock prices, credit spreads, swap rates, volatility parameters and macro-financial variables in the emerging markets. The links to the macro-financial scenario are constructed using the financial variables which are commonly directly stressed under the adverse macro scenarios (for example, stock prices in the United States and the euro area, and money market interest rates). These variables are in turn used as origins of shock for the estimation of the remaining market risk parameters.

Within the ECB's framework, the satellite modelling technique applied to credit, interest rate and market risk parameters is characterised by two key features:

1) autoregressive distributed lag (ADL) models allow for the translation of a macro-financial scenario to the chosen measure of risk, with a risk measure, such as a PD for a certain loan portfolio, being a function of its own lagged history, as well as contemporaneous and lagged indicators that describe the state of the real economy and financial markets, including predictors such as GDP, unemployment, inflation, interest rates, etc.

2) to address model uncertainty, a model averaging approach is chosen. This approach is particularly useful for modelling risk parameters as historical time-series (for example PDs, WROs or NPLs) are typically rather short, which in turn implies that to economise on the "degrees of freedom" the satellite equations are bound to have only a few predictors (e.g. up to four in a single equation). A model averaging approach allows a reasonably large number of predictor variables across equations to be employed.[12]

BALANCE SHEET MODULE – SOLVENCY CALCULATIONS

The balance sheet modelling in the ECB's top-down stress test is based on a dynamic balance sheet tool, which allows either exogenously given or endogenously optimised paths to be applied for key balance sheet items. The module used to endogenously derive dynamic balance sheets is based on a risk-return modelling approach, whereby banks rebalance their asset-liability allocation depending on shocks to asset riskiness and return under a given scenario.[13] The starting point for the projection of the balance sheet evolution is the level of balance sheet items as at the cut-off date for the stress test.[14] Then, external paths for key balance sheet items over a stress-testing horizon are applied, which are based on a set of assumptions and projections from satellite models and/or expert judgement. For certain items, caps or floors are applied, so that the change in the balance sheet composition remains consistent with the macro-financial scenario or anticipated market conditions.

12 Such a theory-free approach, while necessary given the data at hand, also has its drawbacks, such as the fact that specific financial market variables depend heavily on the types of shock considered and average historical links may therefore be misleading.

13 The model underlying the endogenous dynamic balance sheet is based on Hałaj, G., "Optimal asset structure of a bank – bank reactions to stressful market conditions", *Working Paper Series*, ECB, No 1533, April 2013.

14 Information on balance sheet items is either based on: (i) publicly available data for individual banks, as well as bank exposure data disclosed in the 2011 EU-wide stress test and the 2011 EU capital exercise, as coordinated by the European Banking Authority (EBA); or (ii) country-specific supervisory data in the case of countries under EU-IMF financial assistance programmes. The set of banks analysed for EU countries covers at least the sample of banks considered in the EBA's EU-wide stress test in 2011.

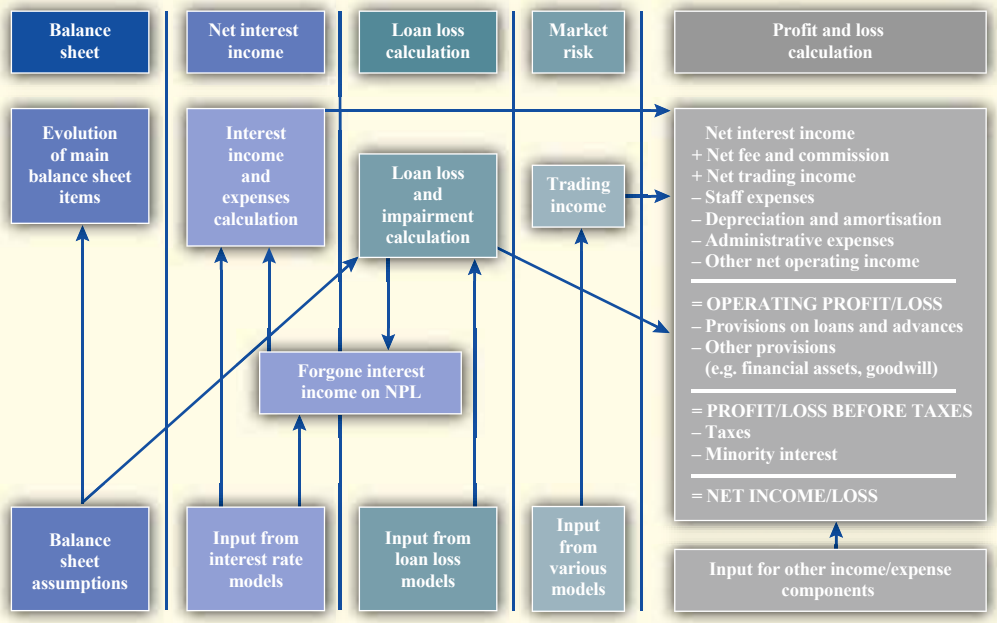
Notably, the third pillar of the framework is based on granular bank-level balance sheet and profit and loss data. In other words, each bank in the system is modelled individually using bank-specific starting points for balance sheet items. The level of precision with which the solvency calculations can be done crucially depends on the level of granularity of the underlying bank data being fed into the tool.[15] The approach also allows for a specific treatment of individual banks if a mandatory restructuring plan set by the competent authorities is in place or in the case of already completed acquisitions or divestments that have not yet been reflected in the initial balance sheet.

Profit and loss calculation

For the profit and loss calculation, the assumptions and projections from the satellite modules are translated into revenues, expenses, losses and provisions. The approach can be divided into four modules: the net interest income calculation, the loan losses and impairment calculation, the market risk calculation and the final profit and loss calculation in accordance with the assumptions for other income components (see Chart 2).

In the net interest income module, interest income and expenses are calculated separately. The main input for the net interest income calculation is the evolution of the relevant balance sheet items (such as loans, deposits and wholesale funding) that can be either exogenously given or derived using the optimising approach mentioned above, as well as the retail interest rate projections derived from the satellite models. The country-specific projections and assumptions are translated

Chart 2 Schematic overview of the profit and loss calculation



Source: ECB.

15 This limitation also relates to the data input for the reduced-form models applied in the second pillar to translate the macro scenarios into impacts on banks.

for each year over the horizon of the stress test via annual changes or factors into balance sheet components of the participating institutions. This computation is done on the basis of a granular balance sheet breakdown by instrument, geography, maturity and counterpart sector. Bank-specific characteristics, such as residual maturities and refinancing needs, are also considered. These calculations result in projected interest income and expenses for each participating institution.[16]

The second module, which consists of the loan loss and impairment calculation, combines the output from the balance sheet assumptions and the projection of asset quality indicators from the satellite models to address the impact of credit risk. The module combines conditional projections of country-level credit risk with bank-specific balance sheet evolutions. The projected changes to the loss rates at the country level are then applied to bank-specific loss rates to calculate the expected losses. Taking into account existing asset protection schemes, the evolution of the exposure and LGDs, in a second stage these results are translated into impairments over the stress-testing horizon.[17] The impact of foregone interest income from non-performing/defaulting loans is subsequently calculated and subtracted from interest income.

The market risk module attempts to capture any profit and loss impact from the investment portfolio of the participating institutions. It applies shocks (e.g. haircuts on the valuation of securities held on the trading book), which are as derived from satellite models, to specific portfolios at a given point in time or over the horizon of the stress testing.

In the final module, net interest income, loan loss impairments and the market risk impact for each of the participating institutions are merged with other income components. The profit and loss impact of these other components is derived from the output of an averaging approach[18] in accordance with overall or bank-specific assumptions, such as minimum contribution to minority interests or constant tax rates.

Solvency ratio calculations

The solvency ratio calculation comprises the existing capital, net operating income and risk-weighted assets (RWAs) (see Chart 3). Over the horizon of the stress test, the output from the profit and loss module and the risk-weighted asset module triggers changes in various capital ratio measures, such as total capital, Tier 1 capital or core Tier 1 (CT1) capital ratios. For example, if an adverse macro scenario results in negative profits for a bank it will be subtracted from the bank's already existing capital base and hence, for unchanged RWAs, imply a decrease of the solvency ratio.

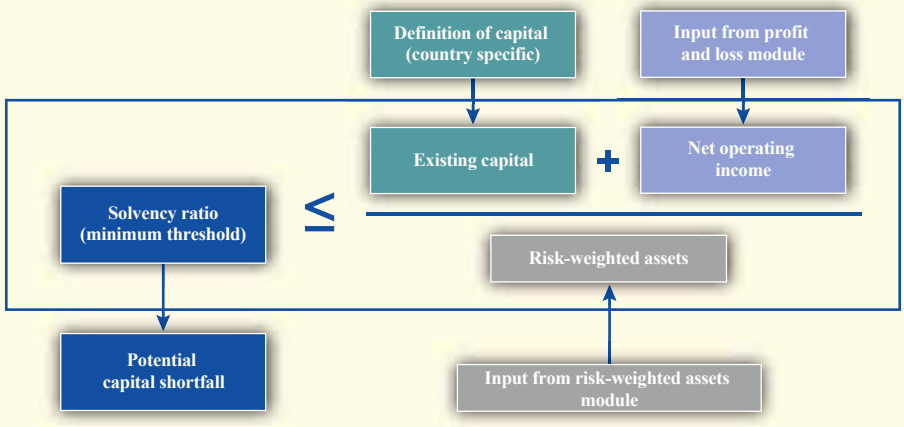
The change in average risk weights for the loan portfolios is estimated on the basis of projected credit loss rates using the Advanced Internal Rating-Based (IRB) formula of Basel II. The calculations are made at the portfolio level for three regulatory portfolios: corporate, residential mortgage and retail loans. Risk weights on assets, which are subject to capital measurement under the Standardised Approach of Basel II, are currently not changed in the ECB's framework.

16 The net interest income module mainly captures changes in interest income and expenses related to banks' retail customer business and their wholesale funding costs. Other interest-related income and expenses are assumed to be constant. In addition, no assumptions are made regarding changes in interest rate hedging over the forecast horizon.

17 In the context of some country-specific stress exercises, the loan loss calculations are also done on the basis of projected non-performing loans and coverage ratios. An application of this approach in an EU-wide context is not feasible, not least because the definitions of non-performing loans are not harmonised across countries.

18 The averaging approach is typically based on the performance of other income or expense components in past years, for exemple, fee and commission income/expenses, staff expenses or depreciation and amortisation. The covered time horizon is mostly depending on the selected scenario and the availability of historical data. In order for a path to be conservative enough under an adverse scenario, a historic reference period over which an average is computed would be set to comprise a past recession period, for example covering the years 2007-09.

Chart 3 Schematic overview of solvency ratio calculations



Source: ECB.

RWAs relating to market and counterparty risk are scaled up by a fixed factor in line with the minimum requirements set in the methodology of the EU-wide stress-testing exercise conducted by the EBA in 2011. If the adverse scenario were to result in an increase in RWAs (e.g. as a result of higher probabilities of borrower default), the solvency ratio would be reduced.

The capital charges for operational and other risks are not stressed.[19] Based on the input from the other modules, the solvency calculation can be done on a consolidated basis, a solo entity basis or for domestic/foreign subsidiaries only.[20]

CONTAGION AND FEEDBACK ANALYSIS

Bottom-up stress tests are traditionally considered final when the first-round impact of the adverse scenario on bank capitalisation has been derived.[21] However, from the perspective of a top-down stress test, the impact assessment should not stop with the first-round effects on bank solvency. Realistically, when banks' solvency positions are hit by shocks, banks would normally be expected to react by adjusting their balance sheets and activities – often with the objective of returning to some pre-defined target balance sheet ratio. Such reactions could, for example, entail restrictions in certain activities (including new business lending), which in turn could have wider implications on real economic activity and, hence, risk amplifying the severity of the original macro-financial adverse scenario with potential "second-round" effects on bank solvency levels.

To account for such macro feedback effects, the ECB combines the top-down stress test output (for example, in the form of capital shortfalls to some pre-defined thresholds) with macroeconometric

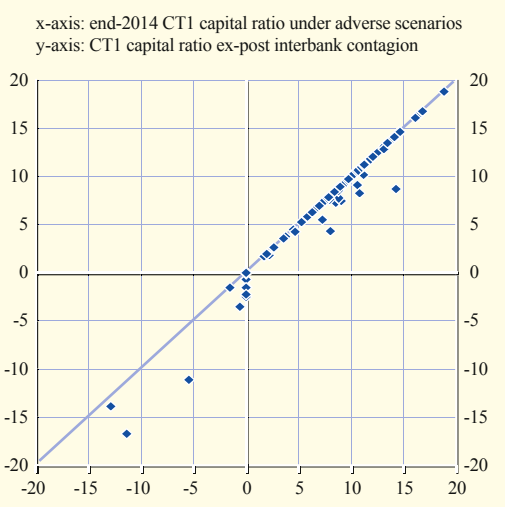
19 If all of the modules that are used for scenario generation and shock translation are technically integrated, a reverse-type stress test can be undertaken to rank a set of adverse scenarios, in particular by means of multiples. Multiples are simple factors applied to the initial shocks, which then feed through macro-financial models and additional satellite models into banks' balance sheets.
20 Granular information on solo entity and subsidiary level is generally not available through public data sources.
21 There are obvious and practical reasons for adopting this approach in bottom-up supervisory stress-testing exercises. Any feedback and contagion effects that might be expected to follow the first-round effects on bank solvency would be highly work intensive and complex to deal with when stress test calculations are carried out at the bank level (with or without the assistance of the micro-prudential supervisors). For example, it would require substantial efforts by supervisors to cross-check the validity of the banks' dynamic reactions to specific stresses imposed in the exercise.

models embedding banking sector variables and estimated real-financial relationships.[22]

Apart from macroeconomic feedback effects, a top-down solvency stress test should also be able to account for contagion effects cascading within the financial sector itself. For example, the deterioration of the solvency situation (or even a failure) of some banks under a stress scenario could give rise to negative contagion effects on other banks in the system either through their direct bilateral linkages or, more indirectly, through confidence effects. If a bank were in a situation of severe stress, it could be assumed that it would not be able to repay its liabilities in the interbank market. If this were to occur, it could lead to a cascade of losses throughout the interbank network and could eventually lead to other banks being in distress, the effects of which would then propagate throughout the system.[23]

Chart 4 Core Tier 1 capital ratio after "first-round" adverse scenario effects and following "second-round" interbank contagion effects

(percentages)



Source: ECB.
Note: The sample includes 80 large and medium-sized EU banks, corresponding to the sample of banks used in the EBA's EU-wide stress test, but adjusted for recent mergers and banks under resolution.

As an illustration, Chart 4 shows the potential capital ratio impact of such "second-round" interbank contagion effects as a response to the initial "first-round" adverse scenario effects on bank solvency. The results of this particular adverse scenario configuration suggest that most banks could expect to see a further erosion of their solvency once interbank contagion effects are incorporated in the analysis.[24] This is reflected in the number of banks falling below the 45 degree line, which indicates banks for which the solvency ratio after taking into account interbank contagion effects is lower than following the first-round impact calculated in the stress test (but before accounting for contagion risk).

3 APPLYING THE ANALYTICAL FRAMEWORK FOR POLICY ANALYSIS

The top-down stress-testing framework is a flexible tool that can be employed for many different policy analysis purposes. A number of examples are provided below of how the tool is used at the ECB.

22 See, for example, Christiano, L., Motto, R. and Rostagno M. "Financial factors in economic fluctuations", *Working Paper Series*, ECB, No 1192, May 2010; Darracq et al., op.cit. Giannone et al., op. cit.; and Angeloni, I. and Faia E. "Capital regulation and monetary policy with fragile banks", *Journal of Monetary Economics*, 2013 (forthcoming). See also Maurin, L. and Toivanen, M., "Risk, capital buffer and bank lending: a granular approach to the adjustment of euro area banks" *Working Paper Series*, ECB, No 1499, November 2012.

23 The literature on interbank contagion can roughly be divided into two broad streams: one being based on counter-factual simulations using balance sheet data and the other on market data-based contagion tools. With respect to the former approach, the main tool developed at the ECB for the purposes of stress testing is based on the paper by Halaj, G. and Kok C., "Assessing interbank contagion using simulated networks", *Computational Management Science,* Vol. 10(2), 2013, pp.157-186 and *Working Paper Series*, ECB, No 1506, January 2013. With regard to some more market data-based approaches, some recently implemented models include Gross, M. and Kok, C., "Measuring contagion potential among sovereigns and banks using a mixed cross-section GVAR", *Working Paper Series*, ECB, 2013 (forthcoming); and Gray, D. Gross, M. Paredes, J. and Sydow, M., "Modelling banking, sovereign and macro risk in a CCA Global VAR", *Working Paper Series*, IMF, 2013 (forthcoming).

24 It has to be underlined, however, that in the majority of available interbank network configurations, contagion effects tend to be rather limited. Certain network structures are more susceptible to loss propagation than others, which emphasises the fragile yet robust nature of many real-time networks.

ASSESSING THE RESILIENCE OF THE BANKING SECTOR FROM A FINANCIAL STABILITY PERSPECTIVE

The top-down stress-testing framework is regularly used in forward-looking bank solvency analysis to assess the resilience of the euro area/EU banking sector to the materialisation of systemic risks identified as being particularly pertinent at a given point in time. This risk assessment work feeds naturally into the ECB's macro-prudential analysis, which is published regularly in its Financial Stability Review.

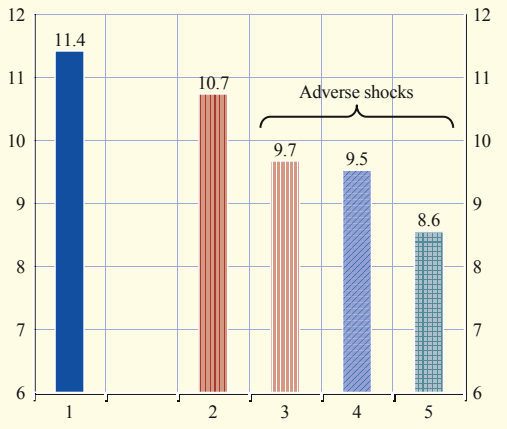
The starting point for the risk assessment analysis is typically a set of key systemic risks. The top-down stress-testing tool can help to understand the impact of these systemic risks on the banking sector and beyond. As the assessment is usually focused on gauging the impact of individual systemic risks on the financial system, scenario building blocks comprising shocks that reflect the materialisation of a specific systemic risk factor are constructed. This allows for the resilience of banks to individual risks to be assessed in a well-structured manner. Once the individual risk factor assessments have been made, joint scenarios incorporating various systemic risks can also be analysed.

For illustrative purposes, two adverse scenarios are considered: (i) a sovereign debt crisis scenario reflecting the risk of renewed tensions in euro area sovereign debt markets owing to low growth and slow implementation of reforms – materialising through an increase in long-term interest rates and declining stock prices; and (ii) an economic growth scenario reflecting bank profitability risk linked to credit losses and a weak macroeconomic environment – materialising through negative shocks to aggregate demand and aggregate supply in a number of EU countries.[25] There are strong interconnections between sovereign debt, economic activity and the banking sector and, therefore, a joint scenario combining the adverse economic growth shocks and the sovereign debt shocks is also considered.

An obvious measure by which to gauge the resilience of the banking sector to such adverse circumstances is the level of capitalisation after having translated the scenarios through the various modules of the framework. The capital ratio after stress provides information on the ability of the banks to withstand adversity without becoming insolvent. In this vein, Chart 5 illustrates the impact, two years ahead, on the EU average CT1 capital ratio under the adverse scenarios described above and under a baseline (based on the European Commission's spring 2013 economic forecast). It is observed that both a reintensification of the sovereign debt crisis and a marked deterioration in economic growth could entail some reduction in average solvency ratios across the EU banking sector with the CT1 ratios dropping around one

Chart 5 EU average core Tier 1 capital ratio under the baseline and adverse scenarios

(percentages)



1 Q4 2012
2 baseline end-2014
3 sovereign debt crisis scenario
4 weak economic growth scenario
5 joint debt crisis and growth scenario

Source: ECB.
Note: The sample includes 80 large and medium-sized EU banks, corresponding to the sample of banks used in the EBA's EU-wide stress test, but adjusted for recent mergers and banks under resolution.

25 For a more detailed description of scenarios reflecting those risks, see, for example, the *Financial Stability Reviews*, ECB, December 2012 and May 2013.

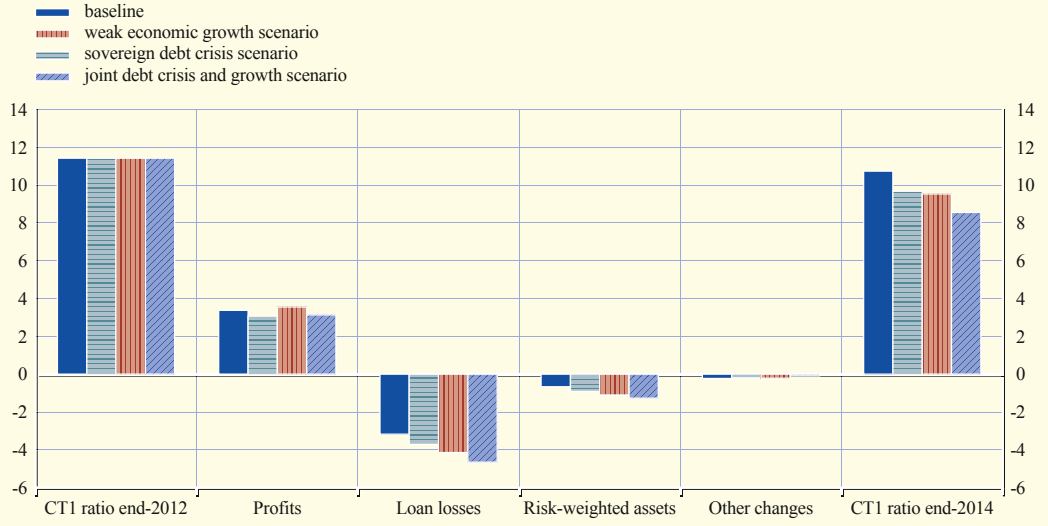
percentage point below the baseline at the end of 2014 in both scenarios. If instead the shocks underlying the two scenarios are combined to form a joint scenario (see the green bar in Chart 5), the adverse impact on average solvency ratios is amplified, with the EU average CT1 ratio falling to 8.6% (i.e. more than two percentage points below the baseline).

Owing to the high starting levels of EU banks' capitalisation (with the EU average CT1 capital ratio at the end of 2012 standing at 11.4%), even after imposing substantial stress, EU banks on average appear to be fairly robust and remain well above regulatory minimums. However, the average development of EU banks' solvency positions may mask substantial variation across individual banks and across EU Member States. From a financial stability (and micro-prudential) perspective, it is necessary to pay particular attention to those banks that appear weakest under stress.

The projection of bank solvency positions using the stress-testing framework is a complex process involving several modelling steps (as described above). Therefore, to better understand what is driving the outcome of the solvency analysis, it is useful to decompose the difference between the starting capital ratios and the end-of-horizon capital ratios into the main contributing factors. This is illustrated in Chart 6, which shows the key factors behind the projected CT1 capital ratio reduction between 2012 and 2014 under the three adverse scenarios, as well as under the baseline. It is observed that pre-provision profit accumulation, which tends to lessen the negative impact on solvency of loan losses and changes in risk-weighted assets, is generally lower under the adverse scenarios compared with the baseline.[26] The sovereign debt crisis scenario, in particular, implies

Chart 6 Main contributing factors to EU average core Tier I capital ratio under the adverse scenarios

(percentages)



Source: ECB.

26 Under the weak economic growth scenario, pre-provision profits are on average higher than under the baseline. This, at first, somewhat surprising finding is owing to the fact that lower taxes and dividends are paid under the economic growth scenario compared with the baseline. In pre-tax terms, profits are, however, lower under the weak economic growth scenario.

lower profit accumulation owing largely to higher funding costs and marked-to-market valuation losses on trading book exposures. At the same time, the weak economic growth scenario results in considerably stronger loan losses owing to the impact of the weakening economic activity under this scenario. Finally, the joint scenario results in even lower profits and higher loan losses than the two separate scenarios.

INPUT INTO MACROECONOMIC AND MONETARY POLICY ANALYSIS

With its forward-looking focus, the solvency assessment tool can also be usefully employed as an input in macroeconomic and monetary policy analysis. Given the predominant role of banks in the euro area financial system and as a result their importance in the transmission of the monetary policy stance to the real economy, forward-looking assessments of bank solvency can provide valuable guidance for monetary policy analysis.[27]

The solvency analysis framework is, for instance, used in the context of the regular staff macroeconomic projection exercises to provide information on potential credit supply restrictions as a result of capital constraints that arise over the forecast horizon. Specifically, a given macroeconomic projection can be fed through the satellite models and balance sheet calculations of the stress-testing framework to derive projections of banks' loss absorption capacity n-years ahead. The resulting capital projections can then be held against a pre-defined capital ratio threshold to derive capital shortfalls that in turn can be used to calculate loan restrictions (or other balance sheet adjustments), which ultimately should have a dampening impact on projected real economic activity.

Furthermore, the stress-testing framework can provide a useful yardstick for the implications of monetary policy measures (standard and non-standard). For example, the solvency impact assessment based on an adverse scenario including constraints on banks' access to funding can inform the policy-maker about the impact on the banking sector and beyond if such quantity constraints were not to be accommodated by monetary policy action.

In a similar vein, the framework is also suitable for analysing the impact of key monetary policy measures. By exploiting the forward-looking nature of the stress-testing tool, if stress test output is linked to a macroeconomic model, the impact on the banking sector and the macroeconomy of, for example, extraordinary central bank liquidity measures and prior assumptions about their use by banks can be assessed. This is particularly useful in a crisis context where unprecedented measures may often be needed, but owing to their extraordinary nature, their impact is generally less well known.

USING THE TOP-DOWN FRAMEWORK TO CROSS-CHECK BOTTOM-UP STRESS TEST RESULTS

Accompanying a bottom-up stress test with a top-down review has become common practice in recent years, and the ECB has recently been involved in several such exercises at both the EU and national levels. The idea behind a cross-check of bottom-up stress test results using top-down tools is that because a top-down cross-check is carried out at a centralised level without involving the banks being stressed, it can provide a more impartial (even though possibly less precise[28]) assessment of the solvency needs of individual banks. From a supervisory point of view, bottom-up stress test results produced by the banks will inevitably have to be viewed through a critical lens

27 See also the article entitled "Assessing the financing conditions of the euro area private sector during the sovereign debt crisis", *Monthly Bulletin*, ECB, August 2012.
28 Owing to the fact that typically less granular bank level data are available to the top-down stress tester.

owing to the misalignment of incentives (i.e. the banks will have a natural tendency to produce stress test results that will have minimal pecuniary implications). The top-down review can help make the supervisory assessment of bottom-up results more objective.[29]

Depending on data availability, the top-down cross-check of bottom-up results can be focused either on the individual drivers of a solvency analysis or on the overall capital shortfall given a pre-defined capital ratio threshold.[30]

In general, data needs for stress-testing exercises exceed those for the standard supervisory monitoring of banks. This is because the modelling of bank-specific balance sheet and profit and loss items in a stress-testing exercise requires a very granular set of data. This level of detail varies depending on the type of stress test conducted, i.e. a bottom-up exercise (modelling, for instance, the default risk of individual consumer loans of a specific bank) requires far more data than a top-down exercise (modelling, for example, the aggregated portfolio of consumer credit loans of an individual bank in a specific country).

In terms of parties involved, it is useful to include all relevant stakeholders from the very beginning of a stress-testing exercise that includes a bottom-up and a top-down component. This allows for a streamlining of the needs of both processes. Typically, the bottom-up stress test involves either: i) individual banks, which receive instructions from their supervisory agency; or ii) in the case of EU-IMF financial assistance programmes, an independent consultancy firm assigned the task of running a bottom-up stress test using bank-internal data, or a national supervisor. The top-down stress test is run either: i) by the supervisor (national or supranational); ii) a non-supervisory international organisation (such as the European Commission, ECB and IMF); or iii) an independent consultancy firm.

The top-down review of bottom-up results usually involves the key milestones set out in Table 1 below.

The process of cross-checking bottom-up and top-down results begins in general after the finalisation of the interim bottom-up results, which are usually shared with all relevant parties in the form of granular data output accompanied by a detailed report explaining all relevant methodological

Table 1 The process of cross-checking bottom-up and top-down stress test results

1. Definition of the general perimeters of the exercise and broad methodological guidance;
2. Definition of data templates, data collection and asset quality review;
3. Interim bottom-up and top-down stress test results;
4. Comparison of interim bottom-up and top-down results as part of a due diligence process;
5. Revision of bottom-up results and production of final results;
6. Endorsement of final results by all relevant stakeholders;
7. Publication of results.

29 Obviously, for the cross-check to be meaningful, bottom-up and top-down stress tests should use the same sample of banks.

30 For banks with very complex business models (e.g. a bank with large trading activities including derivative positions and hedging), it can be difficult to provide a top-down estimate of the overall capital shortfall under a given stress scenario: some of the required data inputs would need to be very granular, leading to an excessively resource-intensive process. In such cases, it is therefore often more meaningful to review individual capital shortfall drivers, such as loan losses or net interest income, instead of the overall capital shortfall outcome.

Table 2 The main analytical steps for cross-checking bottom-up and top-down stress test results

1. Clarification of starting point data discrepancies between bottom-up and top-down data owing to the aggregation/consolidation of bottom-up information;
2. Outlier detection for bottom-up starting point data and baseline/adverse forecasts via statistical analysis using historical data or banking system aggregates as a reference;
3. Comparison of model-driven bottom-up and top-down results;
4. Comparison of non-model-based assumptions (e.g. staff expenses, treatment of operational risk, fee and commission income);
5. Plausibility checks of bank-specific business plans and banking system results.

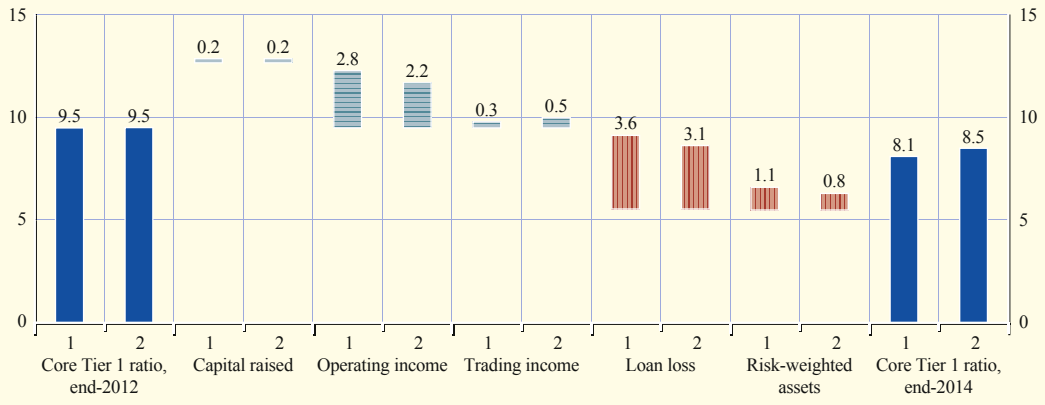
assumptions and models. Practically, the cross-check features a qualitative and quantitative review of the various stress-test components. For each bank in the sample, as well as the aggregate system, the main steps that need to be taken are set out in Table 2 above.

The first step on this list is usually the most time-consuming part of a top-down review of bottom-up stress test results and therefore requires sufficient time buffers to be allocated to it at the planning stage. While steps two to four usually examine individual stress test drivers (e.g. loan losses), step five goes a bit further by combining all stress test drivers to give a broad picture of an individual bank and the national banking systems. This also allows for a plausibility check of bank-specific business plans, which are often provided along with the baseline projections. Plausibility checks should cover the aspect of balance sheet changes in terms of volumes and related prices. Once all of the bottom-up cross-checks have been completed, an endorsement of the results can be brought forward.

Chart 7 provides an illustration of potential discrepancies between bottom-up and top-down stress test results comparing individual risk drivers. It can be observed that, while the overall solvency effects between the two exercises on aggregate do not substantially differ, there are

Chart 7 Cumulative contribution of different risk drivers to the evolution of aggregate core Tier 1 capital under the adverse scenario from the end of 2012 to the end of 2014

(percentages)



Source: ECB.
Note: The light blue and brown bars refer to positive and negative contributions, respectively.

marked differences for certain sub-components (e.g. operating income and loan losses). Such an outcome suggests that further qualitative checks are needed with regard to these sub-components. Furthermore, while the chart illustrates aggregate banking sector results, at bank level the differences between bottom-up and top-down results may be more striking and warrant particular quality checking efforts for specific banks.

ASSESSMENT OF MACRO-PRUDENTIAL POLICIES

The advent of new and largely untested macro-prudential powers in the EU – both at the national level and at the supranational level in the context of the SSM – poses considerable analytical challenges for the formulation, calibration and assessment of relevant macro-prudential policy instruments (MPIs). Assessing both the qualitative and quantitative impact of a specific MPI is essential for a policy-maker attempting to determine the size/strength of the policy response. To this end, tools are needed that can: (i) mimic the functioning of the propagation channels of macro-prudential policy impulses; and (ii) provide information about the relative impact of various MPIs or a combination of those.

With respect to the macro-prudential propagation channels, while some attempts have already been made to model macro-prudential policy in both dynamic general equilibrium models[31] and static general equilibrium frameworks,[32] the importance of different propagation channels and the way they are intertwined has yet to be explored.[33]

The ECB's stress-testing framework is a complementary tool to existing general equilibrium models that could provide valuable information about the relative impact of various MPIs, or a combination of these, on individual banks' capital shortages. Exploring the framework's granular information about banks' balance sheet structures can provide an immediate quantitative assessment of the direct (or "first round") impact of a given MPI on banks in the cross-section. The outcome of such an exercise can be used as an input into other macro models in order to quantify possible risks arising from macro feedback effects or contagion. In particular, the stress-testing framework may act as a platform to calibrate an optimal macro-prudential policy response to a specific shock or a combination of shocks embedded in a scenario, thus providing policy-makers with concrete answers on how to shield the financial system against specific risks, should they materialise. For instance, the optimal level of the capital buffer can be estimated by simulating the banking system's response to a macroeconomic scenario from the perspective of minimising second-round feedback effects.

Moreover, owing to the granular information on banks' exposures, sectoral capital requirements and/or risk weights may be calibrated in order to find an optimal macro-prudential policy response

31 See, for example, Kannan, P., Rabanal, P. and Scott, A., "Monetary and macroprudential policy rules in a model with house price booms", *Working Paper Series*, No WP/09/251, International Monetary Fund, November 2009; Darracq et al., op.cit.; Angelini, P., Neri, S. and Panetta, F., "Monetary and macroprudential rules", *Banca d'Italia Working Papers*, No 801, 2011; Beau, D., Clerc, L. and Mojon, B., "Macroprudential policy and the conduct of monetary policy", *Working Paper Series*, No 390, Banque de France, July 2012; Lambertini, L., Mendicino, C. and Punzi, M.T., "Leaning against boom-bust cycles in credit and housing prices", *Journal of Economic Dynamics and Control*, forthcoming; and Angeloni and Faia, op. cit.

32 See, for example, Goodhart, C.A.E., Kashyap, A.K., Tsomocos, D.P. and Vardoulakis, A.P., "Financial regulation in general equilibrium", *NBER Working Papers*, No 17909, 2012.

33 While some attempts have already been made to include more than one policy instrument in a general equilibrium framework (e.g. Goodhart et al., op. cit.), most research has so far concentrated on analysing the impact of a single macro-prudential instrument. This makes it challenging to assess the impact of a combination of the instruments in a general equilibrium set-up. Moreover, as macro-prudential policy-making is largely uncharted territory and its theoretical underpinnings are relatively less explored than say monetary policy theory, it is, therefore, prudent to apply a range of tools/models when carrying out impact assessments. For a review of the recent literature, see also the special feature A entitled "Exploring the nexus between macro-prudential and monetary policies" in the May 2013 Financial Stability Review.

to a specific sectoral shock, such as a negative house price shock or an increase in probabilities of default of a specific corporate sector. As far as liquidity-based MPIs are concerned, the framework can in principle also provide information on an optimal level for the liquidity coverage and the net stable funding ratio, for example given an adverse scenario involving pervasively tight liquidity conditions in funding markets. Furthermore, different levels of loan-to-value and loan-to-income ratios, the setting of which will remain in the domain of local authorities, can be reflected in the differentiation of LGD and PD parameters within the framework, respectively.

This notwithstanding, the use of the stress-testing framework for macro-prudential purposes poses several analytical challenges. Notably, it is important to keep in mind that the stress-testing tool is only a partial equilibrium framework and therefore needs to be combined with other analytical tools in order to capture the full dynamic effects of a given MPI. However, as the stress-testing tool embeds elements of both the time dimension and cross-section of systemic risks that MPIs are supposed to address, it provides a useful complement to other modelling frameworks employed in macro-prudential policy analysis.

4 CONCLUSION

Top-down macro stress testing has become an important tool for solvency impact assessments. This article has described the current set-up for forward-looking solvency assessments at the ECB and highlighted some of its main uses for policy analysis. Macro stress testing is an effective tool for gauging in a dynamic manner the resilience and soundness of the banking sector, which is crucial for making informed policy decisions from a micro- and macro-prudential perspective, as well as for monetary policy purposes. Nevertheless, it is important to emphasise that stress test results will always be surrounded by uncertainties and should thus be complemented with other tools and expert judgement in order to achieve a comprehensive assessment of the financial sector.

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.

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

Summary of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

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
2011	2.1	2.3	1.5	-	2.2	0.6	1.39	2.65
2012	4.0	3.1	2.9	-	-0.2	1.1	0.58	1.72
2012 Q3	4.6	3.2	3.1	-	-0.6	0.9	0.36	1.94
Q4	6.2	4.2	3.6	-	-0.8	0.8	0.20	1.72
2013 Q1	6.8	4.3	3.2	-	-0.8	1.7	0.21	1.76
Q2	8.1	4.6	2.8	-	-1.1	.	0.21	2.14
2013 Feb.	7.0	4.3	3.1	3.0	-0.8	1.7	0.22	1.88
Mar.	7.1	4.2	2.5	2.9	-0.7	0.8	0.21	1.76
Apr.	8.7	4.9	3.2	2.9	-0.9	0.0	0.21	1.55
May	8.4	4.7	2.9	2.8	-1.1	0.3	0.20	1.84
June	7.5	4.1	2.3	.	-1.6	.	0.21	2.14
July	.	.	.	.	.	.	0.22	1.95

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
2011	2.7	5.8	2.1	1.5	3.2	80.6	0.3	10.2
2012	2.5	2.9	1.5	-0.6	-2.4	78.6	-0.7	11.4
2012 Q4	2.3	2.4	1.3	-0.9	-3.1	77.4	-0.7	11.8
2013 Q1	1.9	1.2	1.6	-1.1	-2.4	77.5	-1.0	12.0
Q2	1.4	.	.	.	.	77.9	.	12.1
2013 Feb.	1.8	1.3	-	-	-3.3	-	-	12.0
Mar.	1.7	0.6	-	-	-1.5	-	-	12.1
Apr.	1.2	-0.2	-	-	-0.6	77.5	-	12.1
May	1.4	-0.1	-	-	-1.3	-	-	12.1
June	1.6	.	-	-	.	-	-	12.1
July	1.6	.	-	-	.	78.3	-	.

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
2011	26.0	6.8	133.9	667.1	-13.9	121.2	103.4	100.6	1.3920
2012	137.5	98.9	26.3	689.4	-13.1	125.9	97.9	95.5	1.2848
2012 Q3	44.9	30.3	-19.7	733.8	-11.9	125.9	95.9	93.7	1.2502
Q4	72.5	36.2	44.9	689.4	-13.1	125.9	97.9	95.5	1.2967
2013 Q1	34.2	32.5	-13.0	687.8	-12.4	127.3	100.8	98.2	1.3206
Q2	.	.	.	564.3	.	.	100.9	98.2	1.3062
2013 Feb.	13.1	11.9	-7.4	671.8	-	-	101.7	99.0	1.3359
Mar.	25.2	22.9	-20.3	687.8	-	-	100.2	97.8	1.2964
Apr.	17.9	16.3	-5.3	640.0	-	-	100.5	97.8	1.3026
May	11.8	17.1	30.1	621.4	-	-	100.6	98.0	1.2982
June	.	.	.	564.3	-	-	101.6	98.9	1.3189
July	.	.	.	.	-	-	101.5	98.7	1.3080

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

	28 June 2013	5 July 2013	12 July 2013	19 July 2013	26 July 2013
Gold and gold receivables	319,968	319,967	319,968	319,968	319,968
Claims on non-euro area residents in foreign currency	247,607	248,016	248,288	247,212	247,668
Claims on euro area residents in foreign currency	27,541	26,422	26,584	26,181	25,890
Claims on non-euro area residents in euro	18,070	20,424	21,623	20,742	20,790
Lending to euro area credit institutions in euro	822,689	811,424	803,340	804,371	800,574
Main refinancing operations	117,310	107,696	102,064	104,427	102,302
Longer-term refinancing operations	705,350	703,290	701,141	699,926	697,544
Fine-tuning reverse operations	0	0	0	0	0
Structural reverse operations	0	0	0	0	0
Marginal lending facility	29	438	135	18	729
Credits related to margin calls	0	0	0	0	0
Other claims on euro area credit institutions in euro	92,068	91,841	87,689	88,336	86,040
Securities of euro area residents in euro	609,453	608,407	606,940	606,564	607,637
Securities held for monetary policy purposes	256,830	256,433	256,115	255,709	255,384
Other securities	352,623	351,974	350,825	350,855	352,253
General government debt in euro	28,408	28,356	28,356	28,356	28,356
Other assets	264,619	265,489	260,547	257,230	259,258
Total assets	2,430,423	2,420,347	2,403,333	2,398,959	2,396,181

2. Liabilities

	28 June 2013	5 July 2013	12 July 2013	19 July 2013	26 July 2013
Banknotes in circulation	911,032	915,769	916,981	916,769	916,657
Liabilities to euro area credit institutions in euro	563,994	570,126	565,472	536,641	530,590
Current accounts (covering the minimum reserve system)	276,329	271,264	275,347	264,662	255,821
Deposit facility	92,180	103,862	94,619	76,431	79,242
Fixed-term deposits	195,000	195,000	195,500	195,500	195,500
Fine-tuning reverse operations	0	0	0	0	0
Deposits related to margin calls	485	1	6	48	27
Other liabilities to euro area credit institutions in euro	7,055	6,195	6,402	6,426	6,693
Debt certificates issued	0	0	0	0	0
Liabilities to other euro area residents in euro	135,334	109,644	105,468	135,414	137,115
Liabilities to non-euro area residents in euro	141,610	145,033	140,875	136,375	136,388
Liabilities to euro area residents in foreign currency	3,986	2,595	2,949	1,746	1,640
Liabilities to non-euro area residents in foreign currency	4,910	5,622	5,535	5,267	5,420
Counterpart of special drawing rights allocated by the IMF	54,240	54,240	54,240	54,240	54,240
Other liabilities	233,189	236,048	230,337	231,006	232,362
Revaluation accounts	284,680	284,680	284,680	284,680	284,680
Capital and reserves	90,392	90,395	90,395	90,396	90,395
Total liabilities	2,430,423	2,420,347	2,403,333	2,398,959	2,396,181

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

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 24 Apr.	110,407	71	110,407	0.75	-	-	-	8
2 May	105,011	70	105,011	0.75	-	-	-	6
8	110,290	65	110,290	0.50	-	-	-	7
15	103,844	64	103,844	0.50	-	-	-	7
22	103,399	62	103,399	0.50	-	-	-	7
29	103,192	63	103,192	0.50	-	-	-	7
5 June	103,020	70	103,020	0.50	-	-	-	7
12	108,332	70	108,332	0.50	-	-	-	7
19	102,040	73	102,040	0.50	-	-	-	7
26	117,310	99	117,310	0.50	-	-	-	7
3 July	107,696	78	107,696	0.50	-	-	-	7
10	102,064	70	102,064	0.50	-	-	-	7
17	104,427	73	104,427	0.50	-	-	-	7
24	102,302	76	102,302	0.50	-	-	-	7
31	109,163	78	109,163	0.50	-	-	-	7
	Longer-term refinancing operations [5)]							
2013 13 Feb.	7,759	16	7,759	0.75	-	-	-	28
28	8,328	36	8,328	0.69	-	-	-	91
13 Mar.	4,208	19	4,208	0.75	-	-	-	28
28	9,113	46	9,113	0.61	-	-	-	91
10 Apr.	5,159	17	5,159	0.75	-	-	-	28
25	2,977	40	2,977	0.53	-	-	-	98
8 May	5,230	17	5,230	0.50	-	-	-	35
30 [6)]	5,830	36	5,830	.	-	-	-	91
12 June	3,591	20	3,591	0.50	-	-	-	28
27 [6)]	9,477	50	9,477	.	-	-	-	91
10 July	3,536	21	3,536	0.50	-	-	-	28
1 Aug. [6)]	2,683	43	2,683	.	-	-	-	91

2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures	Variable rate tender procedures				Running for (...) days
					Fixed rate	Minimum bid rate	Maximum bid rate	Marginal rate [4)]	Weighted average rate	
	1	2	3	4	5	6	7	8	9	10
2013 24 Apr.	Collection of fixed-term deposits	253,820	77	202,500	-	-	0.75	0.14	0.05	8
2 May	Collection of fixed-term deposits	255,806	79	202,500	-	-	0.75	0.10	0.05	6
8	Collection of fixed-term deposits	267,807	95	201,000	-	-	0.50	0.08	0.05	7
15	Collection of fixed-term deposits	249,425	95	201,000	-	-	0.50	0.08	0.05	7
22	Collection of fixed-term deposits	254,150	96	201,000	-	-	0.50	0.08	0.06	7
29	Collection of fixed-term deposits	235,125	89	197,000	-	-	0.50	0.15	0.07	7
5 June	Collection of fixed-term deposits	276,043	106	197,000	-	-	0.50	0.09	0.07	7
12	Collection of fixed-term deposits	278,426	101	195,000	-	-	0.50	0.08	0.07	7
19	Collection of fixed-term deposits	251,866	102	195,000	-	-	0.50	0.08	0.07	7
26	Collection of fixed-term deposits	215,280	83	195,000	-	-	0.50	0.45	0.18	7
3 July	Collection of fixed-term deposits	239,734	91	195,000	-	-	0.50	0.13	0.09	7
10	Collection of fixed-term deposits	250,588	105	195,500	-	-	0.50	0.13	0.09	7
17	Collection of fixed-term deposits	239,283	102	195,500	-	-	0.50	0.12	0.10	7
24	Collection of fixed-term deposits	231,318	106	195,500	-	-	0.50	0.14	0.11	7
31	Collection of fixed-term deposits	229,883	112	195,500	-	-	0.50	0.20	0.13	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
2009	18,318.2	9,808.5	760.4	2,475.7	1,170.1	4,103.5
2010	18,948.1	9,962.6	644.3	2,683.3	1,335.4	4,322.5
2011	18,970.0	9,790.9	687.7	2,781.2	1,303.5	4,406.8
2012	18,564.7	9,971.7	637.5	2,583.9	1,163.1	4,208.4
2013 Jan.	18,558.8	9,900.6	636.4	2,569.8	1,259.2	4,192.8
Feb.	18,689.3	9,899.3	635.7	2,562.3	1,368.4	4,223.7
Mar.	18,689.6	9,951.8	626.1	2,580.0	1,382.3	4,149.5
Apr.	18,676.1	9,928.0	626.5	2,574.1	1,437.0	4,110.5
May	18,639.0	9,884.9	610.0	2,571.8	1,496.7	4,075.6

2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2009	210.2	211.4	1.2	0.0	1.00
2010	211.8	212.5	0.7	0.5	1.00
2011	207.7	212.2	4.5	0.0	1.25
2012	106.4	509.9	403.5	0.0	0.75
2013 12 Mar.	105.6	403.0	297.3	0.0	0.75
9 Apr.	104.9	346.0	241.1	0.0	0.75
7 May	104.9	322.2	217.3	0.0	0.75
11 June	105.3	300.3	195.0	0.0	0.50
9 July	105.1	286.5	181.4	0.0	0.50
6 Aug.	104.5	.	.	.	.

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 [2]	Deposit facility	Other liquidity-absorbing operations [3]	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
	1	2	3	4	5	6	7	8	9	10	11	12
2009	407.6	55.8	593.4	0.7	24.6	65.7	9.9	775.2	150.1	-130.2	211.4	1,052.3
2010	511.1	179.5	336.3	1.9	130.4	44.7	70.8	815.9	94.4	-79.1	212.5	1,073.1
2011	622.1	238.0	389.0	4.4	260.3	253.7	200.5	869.4	63.8	-85.9	212.2	1,335.3
2012	708.0	74.0	1,044.1	1.6	277.3	231.8	208.5	889.3	121.1	144.5	509.9	1,631.0
2013 12 Feb.	656.5	127.5	960.3	0.3	273.4	184.3	207.8	883.5	90.8	185.5	466.3	1,534.1
12 Mar.	655.7	130.5	843.2	0.9	269.9	145.3	205.5	880.5	78.8	187.1	403.0	1,428.8
9 Apr.	656.8	123.7	782.9	0.5	269.1	133.8	205.5	889.2	89.7	168.7	346.0	1,369.1
7 May	657.3	113.0	749.9	0.9	265.7	114.5	204.3	897.1	82.5	166.2	322.2	1,333.8
11 June	656.0	104.7	728.4	0.5	259.9	90.5	199.4	904.1	83.1	172.3	300.3	1,294.9
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

Source: ECB.

1) A coefficient of 1% is applied as of the maintenance period beginning on 18 January 2012. A coefficient of 2% is applied to all previous maintenance periods.
2) Includes liquidity provided under the Eurosystem's covered bond purchase programmes and the Eurosystem's Securities Markets Programme.
3) Includes liquidity absorbed as a result of the Eurosystem's foreign exchange swap operations.
For more information, please see: http://www.ecb.europa.eu/mopo/liq/html/index.en.html

2 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	556.9	10.1	150.2	-	20.3	779.2	8.1	395.0
2012	5,287.6	3,351.2	16.9	1.0	3,333.3	723.1	568.3	10.5	144.3	-	23.4	799.9	8.3	381.8
2013 Q1	4,675.5	2,727.4	16.9	1.2	2,709.4	747.5	590.6	24.6	132.4	-	23.9	791.7	8.2	376.7
Q2 [p]	4,399.4	2,572.6	15.1	1.2	2,556.3	741.7	588.8	25.3	127.5	-	23.6	664.3	8.1	389.2
2013 Mar.	4,675.5	2,727.4	16.9	1.2	2,709.4	747.5	590.6	24.6	132.4	-	23.9	791.7	8.2	376.7
Apr.	4,648.1	2,749.4	15.9	1.2	2,732.3	744.3	588.8	25.3	130.1	-	24.2	744.2	8.2	377.8
May	4,489.5	2,612.9	15.9	1.2	2,595.8	741.4	587.1	25.5	128.7	-	24.3	723.2	8.2	379.5
June [p]	4,399.4	2,572.6	15.1	1.2	2,556.3	741.7	588.8	25.3	127.5	-	23.6	664.3	8.1	389.2
	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	32,694.1	17,995.3	1,153.4	11,044.9	5,796.9	4,901.6	1,627.0	1,423.3	1,851.4	66.8	1,227.8	4,044.3	214.6	4,243.7
2013 Q1	32,760.9	17,781.1	1,124.3	11,045.8	5,611.1	4,936.0	1,704.1	1,406.9	1,825.0	64.0	1,234.1	4,051.5	210.1	4,484.1
Q2 [p]	31,996.3	17,524.7	1,101.9	10,981.7	5,441.1	4,954.8	1,782.9	1,406.6	1,765.4	51.3	1,246.3	3,998.8	209.5	4,010.7
2013 Mar.	32,760.9	17,781.1	1,124.3	11,045.8	5,611.1	4,936.0	1,704.1	1,406.9	1,825.0	64.0	1,234.1	4,051.5	210.1	4,484.1
Apr.	32,912.9	17,745.2	1,135.0	11,012.4	5,597.7	4,951.4	1,721.6	1,414.5	1,815.4	56.5	1,260.2	4,074.7	210.0	4,614.8
May	32,479.1	17,587.8	1,109.5	10,993.5	5,484.8	4,982.2	1,765.5	1,421.1	1,795.7	59.2	1,269.3	4,073.3	208.9	4,298.5
June [p]	31,996.3	17,524.7	1,101.9	10,981.7	5,441.1	4,954.8	1,782.9	1,406.6	1,765.4	51.3	1,246.3	3,998.8	209.5	4,010.7

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 Q1	4,675.5	921.9	2,500.3	93.4	38.0	2,368.9	-	0.0	539.6	268.2	445.5
Q2 [p]	4,399.4	936.8	2,350.1	107.9	45.1	2,197.1	-	0.0	421.4	241.8	449.3
2013 Mar.	4,675.5	921.9	2,500.3	93.4	38.0	2,368.9	-	0.0	539.6	268.2	445.5
Apr.	4,648.1	927.1	2,510.1	71.8	66.5	2,371.8	-	0.0	500.6	264.9	445.4
May	4,489.5	931.0	2,378.0	97.4	57.7	2,222.8	-	0.0	483.9	251.8	444.9
June [p]	4,399.4	936.8	2,350.1	107.9	45.1	2,197.1	-	0.0	421.4	241.8	449.3
	MFIs excluding the Eurosystem										
2011	33,533.5	-	17,312.0	195.5	10,752.1	6,364.4	570.6	5,008.2	2,230.8	3,803.4	4,608.3
2012	32,694.1	-	17,204.1	170.8	10,871.5	6,161.9	534.7	4,849.2	2,346.4	3,489.6	4,270.0
2013 Q1	32,760.9	-	17,119.8	209.0	11,017.5	5,893.3	523.8	4,733.3	2,349.8	3,525.1	4,509.1
Q2 [p]	31,996.3	-	17,074.3	238.7	11,082.4	5,753.2	483.3	4,592.9	2,390.7	3,396.5	4,058.6
2013 Mar.	32,760.9	-	17,119.8	209.0	11,017.5	5,893.3	523.8	4,733.3	2,349.8	3,525.1	4,509.1
Apr.	32,912.9	-	17,102.4	180.0	11,008.2	5,914.2	512.6	4,695.2	2,360.1	3,563.7	4,678.8
May	32,479.1	-	17,061.2	216.8	11,037.2	5,807.2	513.0	4,646.1	2,378.8	3,500.0	4,379.9
June [p]	31,996.3	-	17,074.3	238.7	11,082.4	5,753.2	483.3	4,592.9	2,390.7	3,396.5	4,058.6

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	26,243.4	12,216.2	1,170.3	11,045.9	3,629.0	2,195.3	1,433.7	767.0	4,844.2	222.9	4,564.1
2013 Q1	26,566.9	12,188.1	1,141.2	11,047.0	3,726.2	2,294.7	1,431.4	784.7	4,843.2	218.2	4,806.5
Q2 (p)	25,925.7	12,099.8	1,117.0	10,982.9	3,803.6	2,371.7	1,431.9	792.4	4,663.2	217.6	4,349.0
2013 Mar.	26,566.9	12,188.1	1,141.2	11,047.0	3,726.2	2,294.7	1,431.4	784.7	4,843.2	218.2	4,806.5
Apr.	26,707.5	12,164.5	1,151.0	11,013.6	3,750.2	2,310.4	1,439.8	815.4	4,819.0	218.2	4,940.2
May	26,369.7	12,120.1	1,125.4	10,994.7	3,799.2	2,352.6	1,446.7	810.2	4,796.5	217.1	4,626.6
June (p)	25,925.7	12,099.8	1,117.0	10,982.9	3,803.6	2,371.7	1,431.9	792.4	4,663.2	217.6	4,349.0
	Transactions										
2011	993.1	60.3	-55.6	115.9	127.7	151.8	-24.1	-29.9	-37.2	7.8	864.3
2012	79.9	-36.9	-4.7	-32.2	113.0	183.6	-70.5	38.6	-153.3	-14.0	132.4
2013 Q1	-70.4	-8.2	-29.6	21.3	97.7	99.9	-2.2	18.3	7.4	-3.5	-182.1
Q2 (p)	-446.2	-67.5	-23.5	-44.0	78.2	77.3	1.0	7.8	-2.7	-0.5	-461.6
2013 Mar.	-5.0	12.9	5.5	7.3	41.6	29.6	12.0	10.0	-42.1	-1.4	-25.9
Apr.	206.5	-13.8	9.9	-23.7	0.0	-7.7	7.7	27.0	60.0	0.0	133.3
May	-307.4	-41.1	-25.5	-15.7	57.1	49.8	7.3	-5.7	-2.1	-1.0	-314.5
June (p)	-345.3	-12.5	-7.9	-4.6	21.1	35.1	-14.0	-13.5	-60.6	0.5	-280.3

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	3,006.1	2,220.8	4,087.7	5,020.5	-17.9
2012	26,243.4	876.8	252.1	10,936.0	467.9	2,853.5	2,398.3	3,788.3	4,722.5	-52.0
2013 Q1	26,566.9	867.5	302.4	11,055.6	459.9	2,775.9	2,416.1	3,793.3	4,954.6	-58.3
Q2 (p)	25,925.7	885.9	346.6	11,127.5	432.0	2,700.0	2,334.6	3,638.3	4,507.8	-47.2
2013 Mar.	26,566.9	867.5	302.4	11,055.6	459.9	2,775.9	2,416.1	3,793.3	4,954.6	-58.3
Apr.	26,707.5	874.7	251.8	11,074.7	456.1	2,749.8	2,391.6	3,828.6	5,124.3	-44.1
May	26,369.7	879.6	314.3	11,094.9	453.8	2,721.8	2,379.3	3,751.8	4,824.8	-50.6
June (p)	25,925.7	885.9	346.6	11,127.5	432.0	2,700.0	2,334.6	3,638.3	4,507.8	-47.2
	Transactions									
2011	993.1	49.1	-0.8	168.1	-29.0	49.9	141.4	-200.0	860.6	-46.1
2012	79.9	19.5	-5.1	187.3	-18.2	-124.6	156.1	-253.6	140.9	-22.4
2013 Q1	-70.4	-9.3	50.3	114.0	7.5	-67.1	32.2	-26.1	-167.6	-4.4
Q2 (p)	-446.2	18.4	44.2	79.9	-27.6	-63.7	50.3	-115.8	-435.2	3.3
2013 Mar.	-5.0	11.7	10.8	85.1	-6.0	-39.0	19.7	-54.0	-23.6	-9.7
Apr.	206.5	7.2	-50.7	25.1	-3.7	-13.0	3.6	64.6	160.6	12.8
May	-307.4	4.9	62.5	19.5	-2.2	-28.9	12.2	-77.0	-290.5	-8.0
June (p)	-345.3	6.3	32.4	35.3	-21.7	-21.8	34.5	-103.4	-305.3	-1.6

Source: ECB.

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

2.3 Monetary statistics [1]

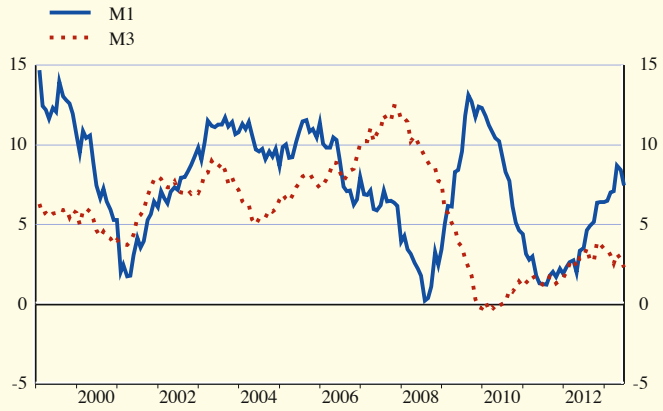
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

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	4,803.1	3,802.6	8,605.6	894.1	9,499.8	-	7,680.6	3,165.2	13,283.4	11,016.6	-	929.1
2012	5,105.4	3,884.9	8,990.3	792.5	9,782.9	-	7,571.6	3,406.1	13,058.2	10,858.9	-	1,038.6
2013 Q1	5,204.1	3,885.8	9,089.8	719.0	9,808.8	-	7,563.3	3,430.7	13,049.3	10,833.2	-	1,062.9
Q2 (p)	5,252.5	3,868.1	9,120.6	688.3	9,808.8	-	7,384.7	3,453.1	12,936.6	10,705.8	-	1,013.8
2013 Mar.	5,204.1	3,885.8	9,089.8	719.0	9,808.8	-	7,563.3	3,430.7	13,049.3	10,833.2	-	1,062.9
Apr.	5,233.1	3,878.2	9,111.3	709.0	9,820.2	-	7,501.7	3,451.6	13,008.6	10,795.5	-	1,021.5
May	5,283.5	3,863.1	9,146.6	699.9	9,846.5	-	7,477.4	3,465.7	12,989.1	10,759.1	-	1,065.6
June (p)	5,252.5	3,868.1	9,120.6	688.3	9,808.8	-	7,384.7	3,453.1	12,936.6	10,705.8	-	1,013.8
	Transactions											
2011	89.5	70.3	159.8	-7.5	152.3	-	211.6	95.8	48.9	103.7	130.3	162.3
2012	307.6	78.7	386.3	-55.3	330.9	-	-116.3	184.5	-102.2	-69.9	-15.9	98.9
2013 Q1	95.3	0.5	95.8	-44.9	50.8	-	2.5	24.6	12.1	-5.4	0.5	63.8
Q2 (p)	53.5	-18.2	35.4	-30.6	4.7	-	-31.3	23.2	-91.9	-107.4	-99.5	89.1
2013 Mar.	26.5	-3.9	22.6	-27.7	-5.1	-	4.9	27.6	31.2	4.9	4.1	37.0
Apr.	32.5	-6.5	26.0	-9.2	16.8	-	-19.8	-2.2	-35.2	-28.1	-28.0	13.6
May	50.9	-15.3	35.6	-9.9	25.7	-	-0.5	21.8	-16.4	-33.2	-27.1	64.7
June (p)	-29.9	3.6	-26.3	-11.5	-37.8	-	-11.0	3.7	-40.3	-46.1	-44.4	10.9
	Growth rates											
2011	1.9	1.9	1.9	-0.9	1.6	1.7	2.9	3.2	0.4	0.9	1.2	162.3
2012	6.4	2.1	4.5	-6.5	3.5	3.6	-1.5	5.8	-0.8	-0.6	-0.1	98.9
2013 Q1	7.1	0.5	4.2	-13.9	2.5	2.9	-1.2	3.5	-0.9	-0.7	-0.3	180.0
Q2 (p)	7.5	-0.1	4.1	-16.4	2.3	2.8	-0.9	2.7	-1.1	-1.6	-1.0	287.8
2013 Mar.	7.1	0.5	4.2	-13.9	2.5	2.9	-1.2	3.5	-0.9	-0.7	-0.3	180.0
Apr.	8.7	0.1	4.9	-14.0	3.2	2.9	-1.4	3.5	-0.9	-0.9	-0.5	205.6
May	8.4	0.0	4.7	-15.8	2.9	2.8	-0.9	3.2	-1.0	-1.1	-0.7	266.8
June (p)	7.5	-0.1	4.1	-16.4	2.3	.	-0.9	2.7	-1.1	-1.6	-1.0	287.8

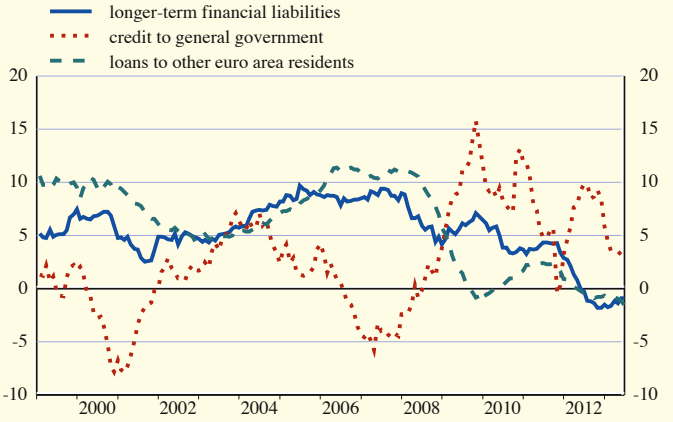
C1 Monetary aggregates [1]

(annual growth rates; seasonally adjusted)



C2 Counterparts [1]

(annual growth rates; seasonally adjusted)



Source: ECB.

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

2.3 Monetary statistics [1]

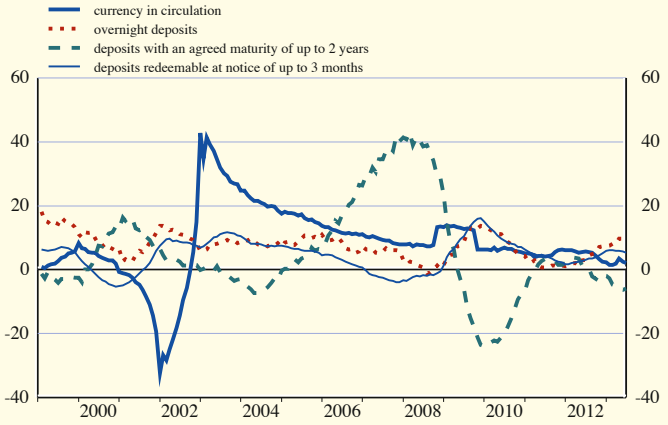
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

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	844.2	3,958.9	1,841.6	1,961.0	147.4	536.8	209.9	2,815.7	115.3	2,543.5	2,206.1
2012	864.0	4,241.4	1,805.4	2,079.5	124.8	482.2	185.5	2,688.2	106.0	2,394.5	2,382.8
2013 Q1	869.1	4,334.9	1,784.3	2,101.5	122.2	458.9	137.9	2,632.1	100.8	2,407.9	2,422.5
Q2 (p)	879.3	4,373.2	1,745.3	2,122.8	116.5	434.1	137.6	2,555.7	96.6	2,405.4	2,327.0
2013 Mar.	869.1	4,334.9	1,784.3	2,101.5	122.2	458.9	137.9	2,632.1	100.8	2,407.9	2,422.5
Apr.	880.0	4,353.0	1,767.5	2,110.7	121.6	448.7	138.6	2,599.0	99.5	2,395.3	2,407.8
May	879.6	4,403.9	1,744.3	2,118.8	122.1	444.4	133.4	2,580.5	97.6	2,406.9	2,392.4
June (p)	879.3	4,373.2	1,745.3	2,122.8	116.5	434.1	137.6	2,555.7	96.6	2,405.4	2,327.0
	Transactions										
2011	49.2	40.4	36.9	33.4	-16.7	-29.7	38.9	18.0	-2.5	55.9	140.2
2012	20.0	287.6	-35.8	114.5	-17.0	-20.0	-18.3	-105.3	-10.2	-156.1	155.3
2013 Q1	5.1	90.2	-21.5	22.0	-2.8	-7.7	-34.5	-58.0	-5.2	11.7	54.0
Q2 (p)	10.2	43.4	-39.5	21.3	-5.5	-24.6	-0.6	-64.0	-4.2	0.5	36.4
2013 Mar.	3.5	23.0	-8.1	4.2	-4.0	-7.9	-15.7	-37.1	-1.5	18.5	25.0
Apr.	10.9	21.6	-15.8	9.3	-0.4	-10.1	1.3	-20.6	-1.3	-11.5	13.6
May	-0.4	51.3	-23.3	8.0	0.5	-4.2	-6.2	-18.5	-1.9	10.6	9.3
June (p)	-0.3	-29.6	-0.4	4.0	-5.5	-10.2	4.3	-24.9	-1.0	1.4	13.5
	Growth rates										
2011	6.2	1.0	2.1	1.7	-9.7	-5.1	29.0	0.7	-2.1	2.3	6.9
2012	2.4	7.3	-1.9	5.8	-11.6	-4.0	-9.5	-3.8	-8.8	-6.1	6.9
2013 Q1	1.9	8.2	-5.2	5.9	-7.8	-6.7	-33.9	-4.2	-11.7	-5.0	7.3
Q2 (p)	2.1	8.6	-5.9	5.4	-9.6	-12.1	-31.1	-5.1	-14.8	-2.9	6.9
2013 Mar.	1.9	8.2	-5.2	5.9	-7.8	-6.7	-33.9	-4.2	-11.7	-5.0	7.3
Apr.	3.4	9.8	-6.1	5.9	-6.8	-9.2	-30.1	-4.6	-13.3	-5.1	7.2
May	2.6	9.7	-6.2	5.7	-6.2	-11.7	-32.3	-4.5	-14.5	-3.6	7.0
June (p)	2.1	8.6	-5.9	5.4	-9.6	-12.1	-31.1	-5.1	-14.8	-2.9	6.9

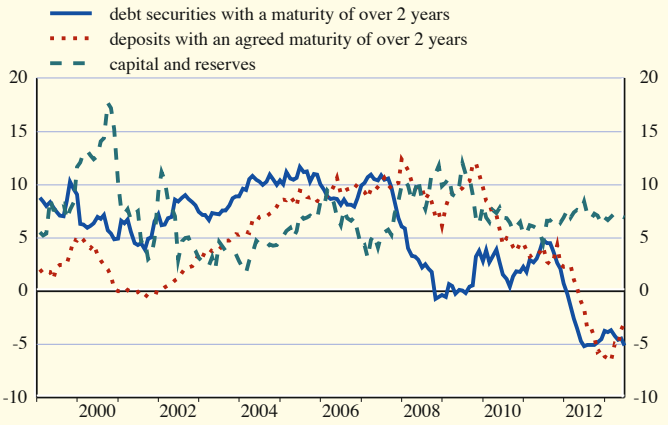
C3 Components of monetary aggregates [1]

(annual growth rates; seasonally adjusted)



C4 Components of longer-term financial liabilities [1]

(annual growth rates; seasonally adjusted)



Source: ECB.

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

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

2.3 Monetary statistics [1]

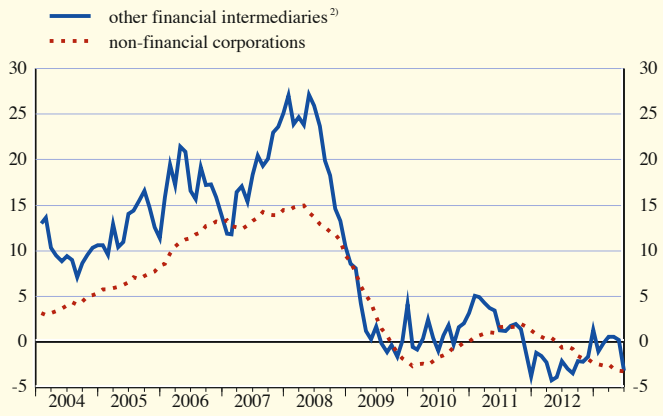
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

3. Loans as counterpart to M3

	Insurance corporations and pension funds	Other financial inter-mediaries [2]	Non-financial corporations					Households [3]				
	Total	Total	Total	Loans adjusted for sales and securitisation [4]	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Loans adjusted for sales and securitisation [4]	Consumer credit	Loans for house purchase	Other loans
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts											
2011	91.0	969.6	4,723.7	-	1,147.7	860.7	2,715.2	5,232.3	-	626.2	3,777.2	828.9
2012	88.9	981.7	4,545.6	-	1,134.8	795.9	2,614.9	5,242.7	-	602.0	3,824.1	816.5
2013 Q1	92.5	978.5	4,511.7	-	1,137.7	778.5	2,595.5	5,250.5	-	593.2	3,843.1	814.1
Q2 (p)	93.2	927.1	4,451.0	-	1,108.6	768.6	2,573.9	5,234.5	-	586.7	3,838.3	809.5
2013 Mar.	92.5	978.5	4,511.7	-	1,137.7	778.5	2,595.5	5,250.5	-	593.2	3,843.1	814.1
Apr.	95.4	961.8	4,489.4	-	1,130.2	772.5	2,586.8	5,248.9	-	592.5	3,842.5	813.9
May	93.1	955.8	4,469.3	-	1,116.2	774.5	2,578.6	5,240.9	-	591.2	3,838.2	811.6
June (p)	93.2	927.1	4,451.0	-	1,108.6	768.6	2,573.9	5,234.5	-	586.7	3,838.3	809.5
	Transactions											
2011	1.3	-37.1	58.0	63.9	24.0	-22.9	56.8	81.6	102.3	-11.6	85.7	7.4
2012	-2.0	13.2	-106.8	-61.3	7.1	-51.3	-62.6	25.7	34.3	-17.8	48.2	-4.8
2013 Q1	3.6	-3.4	-15.2	-5.7	7.3	-13.7	-8.8	9.7	4.3	-6.7	17.3	-0.9
Q2 (p)	0.7	-49.2	-47.4	-47.8	-27.8	-7.4	-12.3	-11.4	-3.0	-5.4	-3.0	-3.1
2013 Mar.	0.0	3.4	0.3	-2.3	5.5	-5.4	0.2	1.2	2.1	-3.0	3.4	0.7
Apr.	2.9	-15.1	-17.3	-17.9	-8.2	-4.5	-4.5	1.4	2.2	0.3	0.5	0.6
May	-2.3	-5.7	-17.4	-17.9	-13.4	2.1	-6.1	-7.7	-1.1	-1.7	-3.3	-2.7
June (p)	0.2	-28.4	-12.8	-12.1	-6.2	-4.9	-1.7	-5.1	-4.0	-3.9	-0.2	-1.0
	Growth rates											
2011	1.5	-3.8	1.2	1.4	2.1	-2.6	2.1	1.6	2.0	-1.8	2.3	0.9
2012	-2.2	1.3	-2.3	-1.3	0.6	-6.0	-2.3	0.5	0.7	-2.9	1.3	-0.6
2013 Q1	6.2	0.6	-2.4	-1.3	1.7	-6.3	-2.9	0.4	0.3	-3.5	1.3	-0.9
Q2 (p)	11.1	-3.2	-3.2	-2.3	-2.1	-6.4	-2.7	0.0	0.3	-3.6	0.8	-1.0
2013 Mar.	6.2	0.6	-2.4	-1.3	1.7	-6.3	-2.9	0.4	0.3	-3.5	1.3	-0.9
Apr.	16.0	0.6	-3.0	-1.9	-0.6	-6.7	-2.8	0.4	0.3	-3.2	1.2	-0.8
May	12.0	0.3	-3.1	-2.1	-1.4	-6.3	-2.9	0.2	0.3	-3.5	1.0	-1.0
June (p)	11.1	-3.2	-3.2	-2.3	-2.1	-6.4	-2.7	0.0	0.3	-3.6	0.8	-1.0

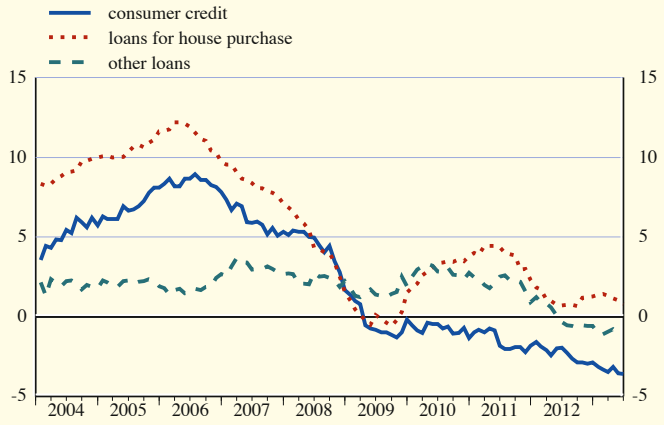
C5 Loans to other financial intermediaries and non-financial corporations [1]

(annual growth rates; seasonally adjusted)



C6 Loans to households [1]

(annual growth rates; seasonally adjusted)



Source: ECB.

1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
2) Excludes reverse repos to central counterparties as of June 2010; transactions and growth rates are adjusted for this effect.
3) Including non-profit institutions serving households.
4) Adjusted for the derecognition of loans on the MFI balance sheet on account of their sale or securitisation.

2.4 MFI loans: breakdown [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	1,169.7	196.2	599.7	229.5	340.5	4,541.1	1,126.4	794.7	2,620.0
2013 Q1	91.5	75.4	3.9	12.2	1,203.9	234.9	630.6	219.6	353.7	4,510.0	1,138.7	778.9	2,592.4
Q2 (p)	94.5	78.4	3.8	12.2	1,186.0	252.6	628.3	216.4	341.2	4,459.9	1,118.1	769.5	2,572.3
2013 Apr.	94.5	78.3	4.1	12.1	1,192.6	227.9	623.9	220.8	347.9	4,487.6	1,132.7	773.1	2,581.8
May	94.8	78.8	3.8	12.1	1,195.9	238.1	629.6	219.4	346.9	4,471.2	1,120.2	776.2	2,574.8
June (p)	94.5	78.4	3.8	12.2	1,186.0	252.6	628.3	216.4	341.2	4,459.9	1,118.1	769.5	2,572.3
	Transactions												
2012	-1.7	0.6	-1.8	-0.5	52.0	38.7	21.2	13.1	17.7	-107.7	6.4	-51.4	-62.7
2013 Q1	9.9	11.2	-0.6	-0.7	33.9	38.6	30.8	-4.8	7.9	-12.4	16.7	-12.2	-17.0
Q2 (p)	3.1	3.0	0.0	0.1	-15.8	17.8	-1.1	-2.8	-11.8	-36.8	-19.3	-6.8	-10.8
2013 Apr.	3.1	2.9	0.2	-0.1	-9.7	-7.0	-5.9	1.5	-5.3	-17.4	-6.7	-4.3	-6.4
May	0.3	0.5	-0.2	0.1	3.6	10.2	6.0	-1.4	-1.0	-13.7	-11.9	3.2	-4.9
June (p)	-0.3	-0.4	0.0	0.1	-9.6	14.5	-1.2	-2.9	-5.6	-5.7	-0.6	-5.7	0.6
	Growth rates												
2012	-2.0	0.9	-28.6	-3.5	4.6	24.7	3.6	6.1	5.5	-2.3	0.6	-6.0	-2.3
2013 Q1	6.1	11.7	-27.3	-8.8	4.6	25.7	6.6	0.3	4.1	-2.4	1.7	-6.3	-2.9
Q2 (p)	10.8	16.3	-28.5	-2.2	3.9	42.7	8.8	-0.7	-1.4	-3.2	-2.1	-6.5	-2.7
2013 Apr.	15.7	24.5	-24.2	-9.4	5.2	29.8	8.6	1.5	1.7	-3.0	-0.6	-6.7	-2.8
May	11.9	19.5	-29.8	-8.6	5.2	31.6	9.1	1.8	0.6	-3.1	-1.3	-6.3	-2.9
June (p)	10.8	16.3	-28.5	-2.2	3.9	42.7	8.8	-0.7	-1.4	-3.2	-2.1	-6.5	-2.7

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	5,252.6	604.3	136.4	175.2	292.7	3,830.9	14.4	56.6	3,759.9	817.4	419.4	139.8	80.7	596.9
2013 Q1	5,240.4	590.9	130.0	172.2	288.7	3,837.9	13.5	56.0	3,768.4	811.5	415.1	139.2	78.5	593.8
Q2 (p)	5,241.3	589.7	130.8	171.5	287.4	3,836.8	13.6	55.7	3,767.4	814.9	413.8	144.5	78.3	592.0
2013 Apr.	5,237.8	591.1	130.2	172.4	288.6	3,836.2	13.6	56.0	3,766.6	810.4	413.9	140.1	78.3	592.0
May	5,231.6	590.3	129.3	173.0	288.0	3,831.3	13.6	55.9	3,761.9	810.1	414.6	137.6	79.1	593.3
June (p)	5,241.3	589.7	130.8	171.5	287.4	3,836.8	13.6	55.7	3,767.4	814.9	413.8	144.5	78.3	592.0
	Transactions													
2012	25.1	-17.8	-3.2	-6.2	-8.4	47.8	0.2	0.2	47.4	-4.9	-5.7	-0.3	-6.9	2.3
2013 Q1	-10.1	-11.2	-5.0	-3.5	-2.7	5.5	-0.6	-0.9	6.9	-4.4	-4.2	-0.8	-1.9	-1.6
Q2 (p)	5.5	0.0	1.5	-0.8	-0.7	0.7	0.1	-0.3	0.9	4.8	-2.2	3.4	-0.1	1.5
2013 Apr.	0.4	1.2	0.6	0.4	0.2	-0.5	0.1	0.0	-0.6	-0.3	-1.2	-0.7	-0.1	0.5
May	-5.9	-1.3	-0.8	0.0	-0.5	-3.9	0.0	-0.1	-3.8	-0.7	-0.2	-2.3	0.1	1.5
June (p)	11.0	0.1	1.7	-1.1	-0.4	5.2	0.0	-0.2	5.3	5.8	-0.7	6.4	-0.1	-0.5
	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 Q1	0.4	-3.5	-2.7	-4.2	-3.4	1.3	0.0	-1.4	1.4	-0.9	-1.8	-0.7	-8.4	0.1
Q2 (p)	0.0	-3.6	-2.4	-4.9	-3.3	0.8	-0.4	-2.0	0.8	-1.0	-1.7	-1.3	-7.4	0.0
2013 Apr.	0.4	-3.2	-2.6	-3.9	-3.0	1.2	0.5	-1.9	1.2	-0.8	-1.8	-0.7	-8.3	0.3
May	0.2	-3.5	-3.5	-4.0	-3.2	1.0	0.1	-2.0	1.1	-1.0	-1.6	-2.2	-7.9	0.3
June (p)	0.0	-3.6	-2.4	-4.9	-3.3	0.8	-0.4	-2.0	0.8	-1.0	-1.7	-1.3	-7.4	0.0

Source: ECB.

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

2.4 MFI loans: breakdown [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

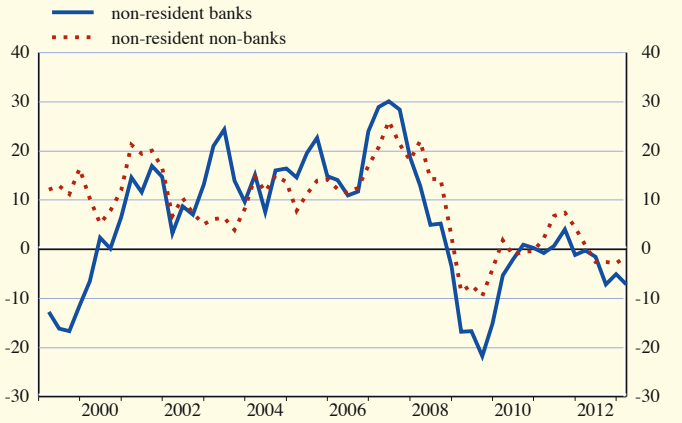
	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks [3)]	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2011	1,159.6	348.9	221.7	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	2,866.9	1,908.0	958.8	60.7	898.1
2012 Q2	1,169.9	339.6	240.1	565.1	25.1	3,087.0	2,064.0	1,023.0	58.0	964.9
Q3	1,163.0	341.4	231.5	564.0	26.2	3,006.3	1,988.5	1,017.8	59.7	958.1
Q4	1,153.4	341.8	221.6	565.9	24.1	2,866.9	1,908.0	958.8	60.7	898.1
2013 Q1 [(p)]	1,124.3	312.4	217.0	568.8	25.7	2,890.1	1,892.3	997.8	60.1	937.7
	Transactions									
2011	-54.9	-45.9	-0.4	14.6	-23.3	15.6	-26.2	41.6	13.0	28.7
2012	-3.6	-4.1	-4.9	2.9	2.4	-130.4	-102.3	-28.0	-1.0	-27.0
2012 Q2	34.9	19.5	16.1	-1.8	1.1	-14.1	-3.3	-10.8	-3.0	-7.7
Q3	-7.7	1.8	-9.3	-1.3	1.1	-54.9	-59.9	5.0	2.3	2.7
Q4	-9.5	0.6	-9.9	1.9	-2.1	-103.4	-57.5	-45.9	1.9	-47.8
2013 Q1 [(p)]	-29.5	-29.5	-4.5	2.5	1.5	11.1	-25.4	36.6	-1.0	37.6
	Growth rates									
2011	-4.5	-11.6	-0.2	2.7	-51.6	0.6	-1.1	4.4	26.7	3.2
2012	-0.3	-1.1	-2.2	0.5	11.2	-4.2	-5.0	-2.8	-1.8	-2.9
2012 Q2	1.8	-1.5	7.2	2.0	-6.6	-1.9	-1.6	-2.5	-8.5	-2.2
Q3	1.7	0.0	2.7	2.1	6.9	-5.6	-7.1	-2.6	-7.0	-2.3
Q4	-0.3	-1.1	-2.2	0.5	11.2	-4.2	-5.0	-2.8	-1.8	-2.9
2013 Q1 [(p)]	-1.1	-2.4	-3.4	0.2	7.0	-5.2	-7.1	-1.4	0.2	-1.6

C7 Loans to government [2)]

(annual growth rates; not seasonally adjusted)

C8 Loans to non-euro area residents [2)]

(annual growth rates; not seasonally adjusted)



Source: ECB.

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

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

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

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

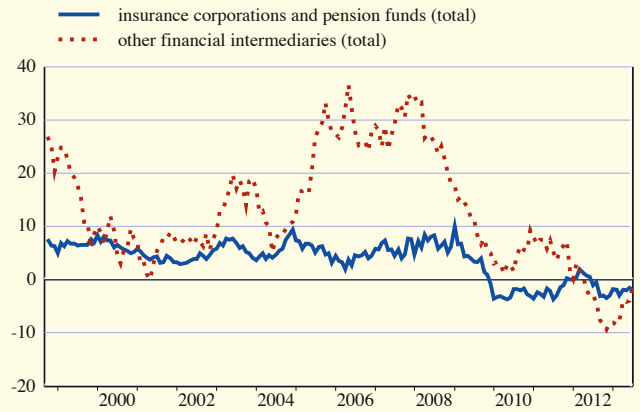
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

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	692.0	107.1	81.4	484.4	6.4	0.2	12.5	2,015.7	410.3	236.6	1,020.7	13.6	0.3	334.4	256.7
2013 Q1	697.5	114.3	83.3	480.3	7.9	0.3	11.4	2,108.7	442.3	237.8	1,014.1	15.0	0.2	399.2	314.1
Q2 (p)	678.6	104.1	79.4	477.9	7.9	0.3	8.9	2,123.3	455.2	230.7	994.4	16.9	0.2	426.0	343.4
2013 Mar.	697.5	114.3	83.3	480.3	7.9	0.3	11.4	2,108.7	442.3	237.8	1,014.1	15.0	0.2	399.2	314.1
Apr.	702.7	119.2	82.8	478.7	8.1	0.3	13.5	2,083.2	447.5	231.1	1,003.1	15.8	0.2	385.4	299.8
May	696.6	112.7	82.5	481.3	8.3	0.3	11.5	2,084.9	443.9	231.8	996.6	15.4	0.2	397.0	310.2
June (p)	678.6	104.1	79.4	477.9	7.9	0.3	8.9	2,123.3	455.2	230.7	994.4	16.9	0.2	426.0	343.4
	Transactions														
2011	0.0	11.5	4.2	-14.2	1.1	-0.1	-2.6	2.4	28.8	-29.2	5.7	-2.6	0.1	-0.4	5.5
2012	-12.0	15.7	2.6	-27.6	2.0	0.0	-4.7	-177.2	23.4	-49.5	-166.0	-2.0	-0.3	17.2	13.3
2013 Q1	6.8	8.1	1.9	-4.3	1.5	0.1	-0.5	88.1	29.1	0.8	-7.2	1.5	-0.1	64.0	57.3
Q2 (p)	-18.3	-10.1	-4.2	-2.0	0.0	0.0	-2.0	17.3	14.4	-7.0	-19.0	1.8	0.0	26.9	29.4
2013 Mar.	-1.8	-0.4	1.1	-1.8	0.7	-0.1	-1.3	49.8	9.5	1.7	10.7	0.4	0.0	27.6	26.0
Apr.	5.3	5.0	-0.4	-1.6	0.2	0.0	2.1	-23.4	5.9	-6.3	-10.0	0.7	0.0	-13.7	-14.2
May	-5.4	-6.5	-0.3	2.6	0.1	0.0	-1.3	0.8	-3.2	0.3	-7.6	-0.4	0.0	11.7	10.4
June (p)	-18.2	-8.6	-3.4	-3.0	-0.3	0.0	-2.9	39.8	11.8	-1.0	-1.4	1.5	0.0	29.0	33.2
	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	-1.7	17.1	3.4	-5.4	50.8	-	-32.1	-8.1	6.0	-17.4	-14.0	-14.0	-	4.3	4.2
2013 Q1	-1.8	17.7	-2.4	-4.9	65.3	-	-40.4	-3.8	5.1	-11.4	-11.6	-9.6	-	17.2	20.3
Q2 (p)	-1.9	6.5	1.4	-4.4	27.2	-	-5.8	-1.2	12.0	-9.0	-9.0	12.4	-	11.5	16.3
2013 Mar.	-1.8	17.7	-2.4	-4.9	65.3	-	-40.4	-3.8	5.1	-11.4	-11.6	-9.6	-	17.2	20.3
Apr.	-2.0	14.2	-3.2	-5.1	62.2	-	-28.0	-4.2	10.6	-14.9	-11.8	-4.0	-	11.3	14.0
May	-1.5	10.1	-2.1	-4.2	43.0	-	-9.0	-3.9	7.9	-12.7	-9.8	-0.9	-	6.3	7.4
June (p)	-1.9	6.5	1.4	-4.4	27.2	-	-5.8	-1.2	12.0	-9.0	-9.0	12.4	-	11.5	16.3

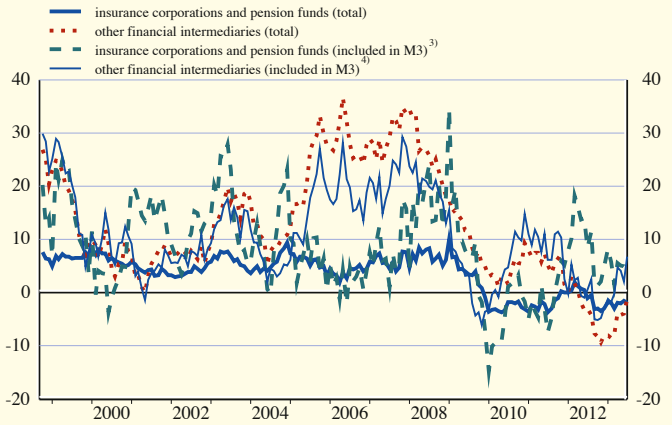
C9 Total deposits by sector [2)]

(annual growth rates)



C10 Total deposits and deposits included in M3 by sector [2)]

(annual growth rates)



Source: ECB.

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

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

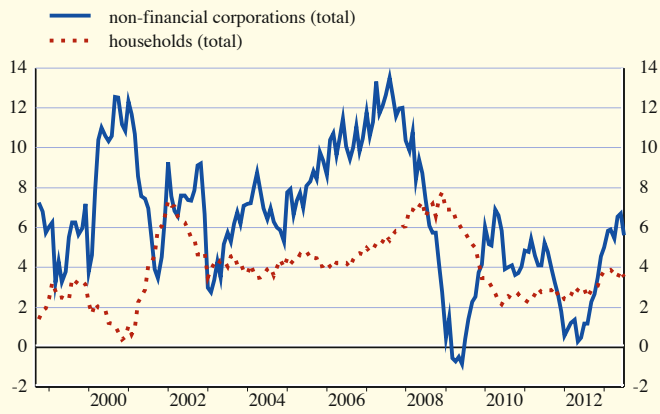
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

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	1,766.4	1,153.1	408.2	106.8	85.4	2.0	10.9	6,119.2	2,346.5	979.1	747.8	1,937.3	98.0	10.4
2013 Q1	1,753.2	1,128.1	409.7	110.8	91.8	1.7	11.1	6,166.4	2,377.3	966.0	758.1	1,963.5	93.1	8.5
Q2 [p]	1,763.1	1,152.8	384.7	121.1	92.4	1.6	10.5	6,208.9	2,445.4	929.3	769.9	1,970.0	88.2	6.2
2013 Mar.	1,753.2	1,128.1	409.7	110.8	91.8	1.7	11.1	6,166.4	2,377.3	966.0	758.1	1,963.5	93.1	8.5
Apr.	1,754.3	1,131.7	404.8	112.9	92.2	1.5	11.1	6,176.2	2,395.2	952.1	762.4	1,967.9	91.5	7.2
May	1,764.2	1,149.1	392.2	115.6	92.6	1.6	13.1	6,187.7	2,409.7	942.7	768.4	1,970.7	89.4	6.9
June [p]	1,763.1	1,152.8	384.7	121.1	92.4	1.6	10.5	6,208.9	2,445.4	929.3	769.9	1,970.0	88.2	6.2
	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	84.5	101.9	-35.5	12.9	9.5	0.0	-4.3	224.9	90.4	33.8	21.8	100.7	-9.6	-12.3
2013 Q1	-13.6	-25.6	1.6	4.2	6.4	-0.3	0.1	46.8	30.7	-12.6	9.5	26.0	-4.9	-1.9
Q2 [p]	13.3	27.3	-25.5	11.4	0.6	0.0	-0.5	44.2	68.7	-36.4	12.5	6.5	-4.9	-2.3
2013 Mar.	29.5	24.0	6.1	1.0	1.3	-0.1	-2.9	14.7	18.9	-11.2	4.8	3.5	-1.2	-0.2
Apr.	3.6	5.8	-4.7	2.2	0.5	-0.2	0.1	10.7	18.4	-13.6	4.4	4.5	-1.6	-1.4
May	10.2	17.4	-12.2	2.6	0.4	0.1	2.0	11.5	14.5	-9.4	6.0	2.8	-2.1	-0.3
June [p]	-0.5	4.2	-8.5	6.6	-0.2	0.0	-2.6	22.0	35.8	-13.4	2.1	-0.7	-1.2	-0.7
	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	9.7	-8.0	13.4	13.0	-1.4	-26.5	3.8	4.0	3.6	3.0	5.5	-8.9	-54.2
2013 Q1	5.4	9.8	-7.5	12.9	16.4	-22.8	-12.6	3.7	6.9	-2.6	2.4	5.2	-11.7	-57.3
Q2 [p]	5.6	8.7	-6.4	20.7	10.5	-5.2	-13.7	3.5	6.9	-3.9	3.1	4.9	-15.4	-56.7
2013 Mar.	5.4	9.8	-7.5	12.9	16.4	-22.8	-12.6	3.7	6.9	-2.6	2.4	5.2	-11.7	-57.3
Apr.	6.5	11.0	-6.5	13.3	15.8	-15.8	-12.8	3.5	6.7	-3.4	2.4	5.3	-13.4	-59.2
May	6.7	10.8	-6.1	15.3	12.5	-6.1	-4.2	3.8	7.4	-3.3	2.9	5.2	-15.0	-57.4
June [p]	5.6	8.7	-6.4	20.7	10.5	-5.2	-13.7	3.5	6.9	-3.9	3.1	4.9	-15.4	-56.7

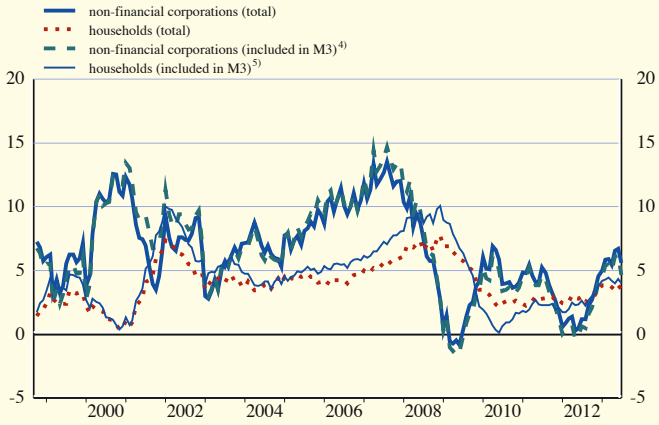
C11 Total deposits by sector [2)]

(annual growth rates)



C12 Total deposits and deposits included in M3 by sector [2)]

(annual growth rates)



Source: ECB.

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

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

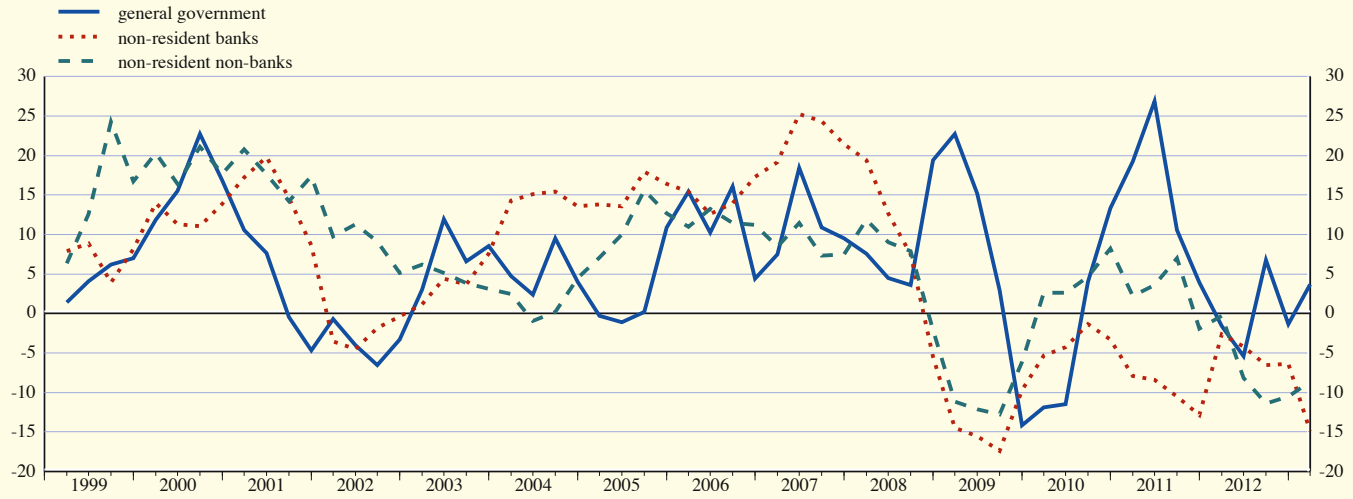
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

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	449.0	170.8	62.8	111.7	103.8	2,892.3	2,013.9	878.3	38.7	839.6
2012 Q2	507.3	190.9	98.4	112.3	105.7	3,243.5	2,290.3	953.2	41.6	911.6
Q3	510.1	202.6	93.1	111.3	103.1	3,131.0	2,176.6	954.4	42.5	912.0
Q4	449.0	170.8	62.8	111.7	103.8	2,892.3	2,013.9	878.3	38.7	839.6
2013 Q1 [p]	500.7	209.0	67.2	111.9	112.6	2,901.9	1,988.4	914.9	36.5	878.4
	Transactions									
2011	17.1	3.3	0.6	2.3	10.8	-334.9	-314.6	-20.3	-2.1	-18.2
2012	-7.9	-22.6	-0.3	-0.4	15.5	-242.1	-138.5	-103.6	-5.1	-98.5
2012 Q2	25.0	0.8	18.9	-1.3	6.7	-133.6	-76.4	-57.3	-13.9	-43.3
Q3	2.8	11.8	-5.5	-0.9	-2.7	-93.1	-101.2	8.0	1.1	6.9
Q4	-61.5	-32.3	-30.2	0.4	0.6	-208.8	-141.6	-67.2	-3.4	-63.8
2013 Q1 [p]	50.6	38.3	4.1	0.2	8.0	-2.6	-31.4	30.2	-2.4	32.7
	Growth rates									
2011	3.9	1.3	1.3	2.1	14.6	-9.8	-12.8	-1.9	-4.4	-1.8
2012	-1.4	-11.7	10.3	-0.4	18.2	-7.6	-6.4	-10.6	-11.9	-10.5
2012 Q2	-5.4	-27.4	51.5	0.8	17.7	-5.3	-4.2	-8.2	-16.3	-7.8
Q3	6.7	-2.9	45.5	1.1	14.0	-7.9	-6.5	-11.4	-16.4	-11.2
Q4	-1.4	-11.7	10.3	-0.4	18.2	-7.6	-6.4	-10.6	-11.9	-10.5
2013 Q1 [p]	3.7	9.7	-12.3	-1.4	12.9	-13.0	-14.9	-8.7	-33.9	-7.2

C13 Deposits by government and non-euro area residents [2)]

(annual growth rates)



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

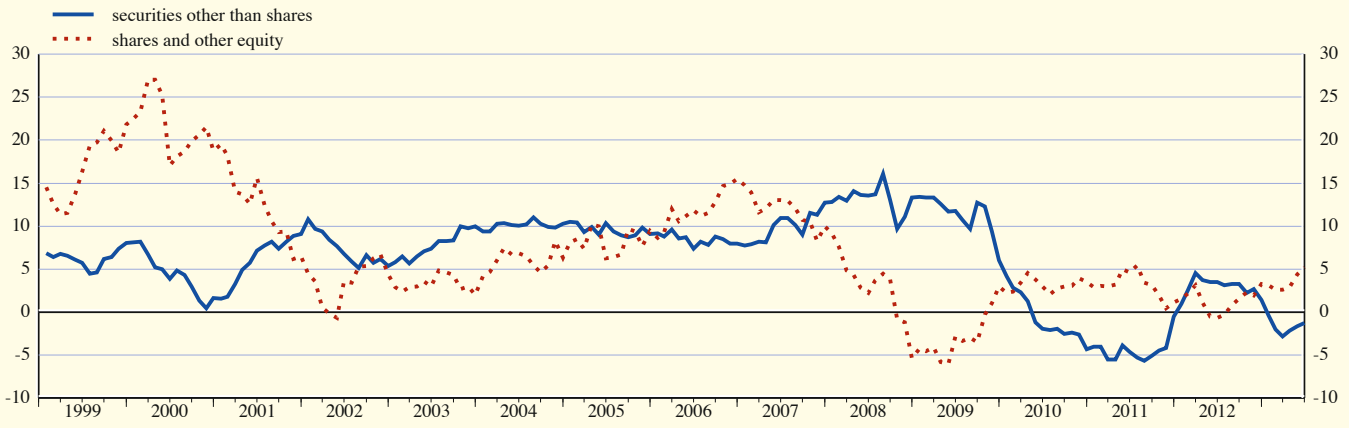
2.6 MFI holdings of securities: breakdown [1), 2)]

(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	1,748.5	102.9	1,594.2	32.8	1,399.6	23.6	872.8	1,528.5	475.7	752.1	300.7
2013 Q1	5,783.6	1,704.2	120.8	1,672.4	31.7	1,379.8	27.1	847.6	1,544.0	464.8	769.3	309.9
Q2 (p)	5,768.0	1,649.9	115.4	1,753.5	29.4	1,380.0	26.5	813.1	1,554.7	469.0	777.3	308.4
2013 Mar.	5,783.6	1,704.2	120.8	1,672.4	31.7	1,379.8	27.1	847.6	1,544.0	464.8	769.3	309.9
Apr.	5,784.3	1,698.9	116.5	1,690.8	30.8	1,385.9	28.5	832.9	1,570.7	460.5	799.7	310.5
May	5,817.2	1,680.4	115.2	1,734.9	30.5	1,392.6	28.5	834.9	1,583.4	474.9	794.5	314.1
June (p)	5,768.0	1,649.9	115.4	1,753.5	29.4	1,380.0	26.5	813.1	1,554.7	469.0	777.3	308.4
	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	-67.6	-3.9	-46.3	49.9	6.6	37.9	5.3
2013 Q1	6.5	-59.3	17.8	78.6	-1.4	-19.6	3.4	-13.0	21.4	-9.9	17.9	13.5
Q2 (p)	2.9	-48.8	-6.6	81.0	-1.7	0.3	-0.1	-21.1	18.1	9.9	7.9	0.3
2013 Mar.	-4.6	-32.7	-0.2	30.5	-0.7	-2.9	2.4	-1.0	19.1	-2.3	9.9	11.5
Apr.	-11.0	-7.1	-3.3	1.2	-0.5	5.2	1.7	-8.2	24.5	-2.8	27.0	0.4
May	42.8	-17.4	-0.4	49.9	-0.2	7.1	-0.1	3.9	13.7	15.3	-5.6	4.0
June (p)	-28.9	-24.2	-2.9	30.0	-1.1	-12.1	-1.8	-16.8	-20.1	-2.5	-13.4	-4.1
	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 Q1	-2.8	-7.5	20.9	8.7	-4.3	-6.3	4.8	-9.3	2.6	-3.3	5.0	6.5
Q2 (p)	-1.3	-7.6	18.2	10.2	-8.8	-3.6	6.9	-7.4	5.2	-1.3	7.9	9.6
2013 Mar.	-2.8	-7.5	20.9	8.7	-4.3	-6.3	4.8	-9.3	2.6	-3.3	5.0	6.5
Apr.	-2.2	-6.7	18.4	8.5	-7.0	-5.7	17.9	-7.7	2.9	-4.0	5.7	6.9
May	-1.6	-7.1	18.3	9.6	-6.1	-5.2	18.9	-6.9	4.4	-1.2	6.4	8.7
June (p)	-1.3	-7.6	18.2	10.2	-8.8	-3.6	6.9	-7.4	5.2	-1.3	7.9	9.6

C14 MFI holdings of securities [2)]

(annual growth rates)



Source: ECB.

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

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

2.7 Currency breakdown of selected MFI balance sheet items [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					All currencies (outstanding amount)	Euro [4)]	Non-euro currencies				
			Total	USD	JPY	CHF	GBP			Total	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	5,796.9	-	-	-	-	-	-	12,198.3	96.4	3.6	1.7	0.2	0.9	0.5
2012 Q4	5,796.9	-	-	-	-	-	-	12,198.3	96.4	3.6	1.7	0.2	0.9	0.5
2013 Q1 [p)]	5,611.1	-	-	-	-	-	-	12,170.0	96.4	3.6	1.8	0.2	0.9	0.5
	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	1,908.0	47.3	52.7	31.8	1.9	3.5	10.3	958.8	40.2	59.8	38.3	2.0	2.9	9.7
2012 Q4	1,908.0	47.3	52.7	31.8	1.9	3.5	10.3	958.8	40.2	59.8	38.3	2.0	2.9	9.7
2013 Q1 [p)]	1,892.3	45.7	54.3	33.1	2.2	3.1	9.8	997.8	39.4	60.6	39.5	2.6	2.6	8.8
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	1,851.4	94.4	5.6	2.7	0.1	0.4	2.0	3,050.2	98.1	1.9	1.2	0.1	0.1	0.4
2012 Q4	1,851.4	94.4	5.6	2.7	0.1	0.4	2.0	3,050.2	98.1	1.9	1.2	0.1	0.1	0.4
2013 Q1 [p)]	1,825.0	93.4	6.6	3.1	0.1	0.3	2.7	3,111.0	98.1	1.9	1.1	0.1	0.1	0.5
	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
2012 Q4	434.0	54.9	45.1	19.8	0.3	0.3	19.1	438.8	34.1	65.9	39.1	5.4	0.9	11.8
2013 Q1 [p)]	419.0	55.4	44.6	22.2	0.2	0.3	15.9	428.7	32.8	67.2	41.8	4.6	1.0	10.6
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	6,161.9	93.8	6.2	3.9	0.2	1.0	0.6	11,042.3	97.0	3.0	2.0	0.1	0.1	0.4
2012 Q4	6,161.9	93.8	6.2	3.9	0.2	1.0	0.6	11,042.3	97.0	3.0	2.0	0.1	0.1	0.4
2013 Q1 [p)]	5,893.3	93.3	6.7	4.2	0.2	1.1	0.6	11,226.5	96.9	3.1	2.1	0.1	0.1	0.4
	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	2,013.9	58.3	41.7	27.7	1.6	1.0	7.3	878.3	52.3	47.7	31.3	1.9	1.2	6.3
2012 Q4	2,013.9	58.3	41.7	27.7	1.6	1.0	7.3	878.3	52.3	47.7	31.3	1.9	1.2	6.3
2013 Q1 [p)]	1,988.4	56.5	43.5	29.4	1.9	1.0	6.6	914.9	51.2	48.8	32.7	1.9	1.0	5.7

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	5,068.3	81.8	18.2	9.6	1.6	1.9	2.5
2012 Q4	5,068.3	81.8	18.2	9.6	1.6	1.9	2.5
2013 Q1 [p)]	4,969.7	81.0	19.0	10.6	1.4	1.8	2.5

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

2.8 Aggregated balance sheet of euro area investment funds [1)]

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

1. Assets

	Total	Deposits and loan claims	Securities other than shares	Shares and other equity (excl. investment fund/ money market fund shares)	Investment fund/ money market fund shares	Non-financial assets	Other assets (incl. financial derivatives)
	1	2	3	4	5	6	7
	Outstanding amounts						
2012 Nov.	7,145.0	495.7	2,940.2	1,939.7	945.8	245.9	577.7
Dec.	7,180.7	476.0	2,968.2	1,986.0	962.8	247.2	540.5
2013 Jan.	7,289.9	494.0	2,952.5	2,035.6	975.3	247.8	584.7
Feb.	7,462.0	511.1	3,005.4	2,083.2	995.6	248.3	618.3
Mar.	7,604.0	503.5	3,068.5	2,140.9	1,025.6	247.9	617.6
Apr.	7,737.5	516.5	3,129.4	2,152.9	1,035.3	247.9	655.5
May [p]	7,794.1	516.7	3,126.1	2,184.2	1,045.9	248.2	672.9
	Transactions						
2012 Q3	129.1	23.8	66.0	0.1	15.2	0.9	23.1
Q4	42.7	-23.4	82.9	21.6	29.2	2.9	-70.4
2013 Q1	226.3	25.3	81.8	33.8	32.1	0.4	52.9

2. Liabilities

	Total	Loans and deposits received	Investment fund shares issued				Other liabilities (incl. financial derivatives)
			Total	Held by euro area residents		Held by non-euro area residents	
					Investment funds		
	1	2	3	4	5	6	7
	Outstanding amounts						
2012 Nov.	7,145.0	154.6	6,465.4	4,736.2	739.9	1,729.1	525.0
Dec.	7,180.7	148.6	6,560.8	4,797.7	757.5	1,763.1	471.3
2013 Jan.	7,289.9	152.7	6,624.9	4,849.6	770.4	1,775.2	512.3
Feb.	7,462.0	157.2	6,740.8	4,913.6	785.3	1,827.3	564.0
Mar.	7,604.0	157.9	6,887.5	4,999.5	813.9	1,888.0	558.6
Apr.	7,737.5	163.0	6,991.4	5,070.8	824.3	1,920.6	583.1
May [p]	7,794.1	167.4	7,020.5	5,084.0	830.1	1,936.4	606.2
	Transactions						
2012 Q3	129.1	22.5	81.6	29.8	29.3	51.8	25.0
Q4	42.7	-5.8	124.9	64.4	32.9	60.6	-76.4
2013 Q1	226.3	9.2	159.1	96.1	31.1	62.9	58.1

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									
2012 Oct.	6,391.8	2,323.7	1,645.6	1,556.8	318.5	137.8	409.4	6,308.9	82.9	947.6
Nov.	6,465.4	2,354.0	1,665.7	1,574.4	319.8	136.6	414.9	6,382.2	83.2	947.5
Dec.	6,560.8	2,378.2	1,705.1	1,597.7	320.4	141.2	418.2	6,477.2	83.5	912.9
2013 Jan.	6,624.9	2,371.1	1,750.4	1,620.0	322.8	139.9	420.5	6,539.3	85.5	896.9
Feb.	6,740.8	2,406.8	1,792.1	1,645.5	325.5	143.6	427.4	6,655.3	85.6	901.2
Mar.	6,887.5	2,447.0	1,840.9	1,685.2	327.6	150.2	436.6	6,801.4	86.1	910.6
Apr.	6,991.4	2,499.7	1,852.8	1,715.3	329.3	150.6	443.6	6,905.6	85.8	898.0
May [p]	7,020.5	2,494.0	1,873.1	1,721.7	330.5	153.8	447.5	6,932.1	88.4	893.1
	Transactions									
2012 Nov.	33.4	27.9	-1.6	6.5	0.3	-1.8	2.2	33.3	0.2	1.3
Dec.	53.6	17.9	18.2	11.4	0.7	3.9	1.5	52.8	0.8	-29.5
2013 Jan.	60.2	22.5	25.7	13.2	1.9	-1.3	-1.8	59.3	0.9	-2.9
Feb.	45.9	13.8	10.7	15.8	0.9	-0.1	4.8	45.9	0.0	-0.9
Mar.	53.0	18.6	6.6	19.6	0.7	2.8	4.6	52.4	0.6	1.2
Apr.	58.2	35.1	3.2	15.4	0.6	-0.6	4.4	58.1	0.1	-3.0
May [p]	39.0	23.7	5.7	5.7	0.1	0.8	3.0	39.1	0.0	-4.1

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 Q2	2,731.1	1,507.6	412.5	697.2	208.0	5.0	184.8	1,223.6	315.1	467.5	17.8
Q3	2,857.7	1,568.9	414.5	713.9	232.7	6.0	201.8	1,288.7	323.8	493.8	18.3
Q4	2,968.2	1,623.6	416.1	747.1	241.6	7.7	211.0	1,344.6	332.2	510.2	16.2
2013 Q1 [p]	3,068.5	1,631.7	407.2	752.6	245.2	8.2	218.3	1,436.8	332.7	563.4	16.0
	Transactions										
2012 Q3	66.0	19.3	-7.2	-4.4	18.4	0.5	12.0	46.8	0.3	28.8	-0.4
Q4	82.9	30.4	-3.1	22.1	3.5	1.2	6.6	52.5	7.8	16.5	-1.3
2013 Q1 [p]	81.8	18.3	-10.0	7.8	7.5	0.5	12.5	63.5	-0.8	32.8	-0.4

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 Q2	1,818.1	639.6	45.5	-	39.1	21.9	533.1	1,178.5	163.7	392.3	78.2
Q3	1,920.3	685.5	52.8	-	45.1	24.1	563.4	1,234.8	172.0	412.5	72.1
Q4	1,986.0	721.7	60.8	-	50.9	27.6	582.3	1,264.3	175.6	407.8	78.1
2013 Q1 [p]	2,140.9	737.7	56.4	-	49.8	27.0	604.6	1,403.2	187.7	478.9	95.0
	Transactions										
2012 Q3	0.1	-3.2	0.6	-	3.5	-0.5	-6.6	3.3	-0.7	4.6	-3.9
Q4	21.6	1.0	2.0	-	4.0	0.5	-5.6	20.6	0.7	6.4	4.5
2013 Q1 [p]	33.8	-4.7	-0.5	-	-1.7	-1.2	-1.2	38.5	3.7	16.8	5.8

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 Q2	881.9	744.4	79.6	-	664.8	-	-	137.5	24.9	43.6	0.6
Q3	926.2	792.5	75.1	-	717.4	-	-	133.7	27.4	41.3	0.6
Q4	962.8	829.6	72.1	-	757.5	-	-	133.2	28.9	41.3	0.6
2013 Q1 [p]	1,025.6	888.2	74.3	-	813.9	-	-	137.4	32.5	43.5	0.6
	Transactions										
2012 Q3	15.2	22.4	-6.9	-	29.3	-	-	-7.2	1.0	-2.7	0.1
Q4	29.2	29.5	-3.4	-	32.9	-	-	-0.3	1.2	0.6	0.0
2013 Q1 [p]	32.1	33.0	1.9	-	31.1	-	-	-0.9	2.1	0.9	0.0

Source: ECB.

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

2) Investment fund shares (other than money market fund shares) are issued by other financial intermediaries. Money market fund shares are issued by MFIs.

2.10 Aggregated balance sheet of euro area financial vehicle corporations

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

1. Assets

	Total	Deposits and loan claims	Securitised loans						Securities other than shares	Other securitised assets	Shares and other equity	Other assets
			Total	Originated in euro area				Originated outside euro area				
				MFIs		Other financial intermediaries, insurance corporations and pension funds	Non-financial corporations	General government					
					Remaining on the MFI balance sheet [1]								
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Outstanding amounts												
2012 Q1	2,234.0	321.8	1,506.1	1,198.5	551.6	150.4	23.6	4.8	128.8	210.4	86.4	38.1	71.1
Q2	2,159.2	306.7	1,459.6	1,150.9	513.2	154.0	22.9	4.4	127.4	208.8	85.2	33.0	65.8
Q3	2,082.0	302.8	1,398.8	1,087.6	476.1	158.3	23.4	4.4	125.1	195.2	86.3	31.1	67.9
Q4	2,047.6	284.6	1,379.5	1,065.6	469.8	162.9	24.3	4.0	122.6	199.1	88.4	30.2	65.7
2013 Q1	2,018.7	293.4	1,348.5	1,038.4	462.7	162.0	24.4	4.0	119.7	194.6	87.0	30.7	64.6
	Transactions												
2012 Q1	-52.9	-6.5	-27.1	-19.1	-	-4.9	0.3	0.0	-3.3	-13.2	-2.2	-1.0	-3.0
Q2	-81.9	-14.8	-49.4	-50.4	-	4.0	-0.7	-0.4	-1.9	-2.0	-1.3	-5.3	-9.1
Q3	-80.9	-3.8	-61.6	-64.2	-	4.2	0.5	0.0	-2.0	-14.9	1.3	-2.0	0.1
Q4	-38.6	-17.8	-17.9	-21.1	-	4.5	1.1	-0.4	-2.0	2.2	2.4	-0.8	-6.7
2013 Q1	-31.1	7.7	-30.5	-28.9	-	1.4	0.2	0.0	-3.2	-1.9	-1.3	0.1	-5.3

2. Liabilities

	Total	Loans and deposits received	Debt securities issued			Capital and reserves	Other liabilities
			Total	Up to 2 years	Over 2 years		
	1	2	3	4	5	6	7
	Outstanding amounts						
2012 Q1	2,234.0	155.7	1,821.6	59.0	1,762.6	34.8	221.9
Q2	2,159.2	150.6	1,753.3	54.3	1,699.0	28.6	226.7
Q3	2,082.0	145.2	1,683.4	52.2	1,631.2	27.3	226.2
Q4	2,047.6	139.8	1,658.2	53.1	1,605.1	27.4	222.1
2013 Q1	2,018.7	141.6	1,622.1	55.5	1,566.6	27.0	228.1
	Transactions						
2012 Q1	-52.9	1.1	-55.4	-8.0	-47.4	-0.9	2.2
Q2	-81.9	-5.3	-71.1	-4.6	-66.5	-5.8	0.4
Q3	-80.9	-5.7	-71.4	-2.4	-68.9	-1.3	-2.6
Q4	-38.6	-5.4	-25.4	0.0	-25.4	0.0	-7.7
2013 Q1	-31.1	1.7	-34.2	2.4	-36.6	-0.9	2.3

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

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

Source: ECB.

1) Loans securitised using euro area financial vehicle corporations which remain on the balance sheet of the relevant MFI - i.e. which have not been derecognised. Whether or not loans are derecognised from the balance sheet of the MFI depends on the relevant accounting rules. For further information, see the General Notes.

2) Excludes securitisations of inter-MFI loans.

2.11 Aggregated balance sheet of euro area insurance corporations and pension funds

(EUR billions; outstanding amounts at end of period)

1. Assets

	Total	Currency and deposits	Loans	Securities other than shares	Shares and other equity	Investment fund shares	Money market fund shares	Prepayments of insurance premiums and reserves for outstanding claims	Other accounts receivable/ payable and financial derivatives	Non-financial assets
	1	2	3	4	5	6	7	8	9	10
2010 Q2	6,885.8	781.8	439.0	2,645.8	776.8	1,515.0	88.3	251.0	241.9	146.2
Q3	7,061.0	780.2	447.4	2,734.7	792.6	1,555.5	86.1	253.1	264.9	146.5
Q4	7,034.7	768.3	453.1	2,672.9	825.7	1,611.4	76.9	253.8	223.6	149.0
2011 Q1	7,137.3	769.2	454.7	2,733.7	842.7	1,623.2	76.2	261.7	225.2	150.8
Q2	7,153.6	772.1	462.4	2,744.6	840.7	1,626.9	79.3	254.1	223.9	149.5
Q3	7,153.7	789.2	461.8	2,770.0	785.9	1,583.1	88.5	255.5	270.7	149.1
Q4	7,162.9	781.8	471.2	2,730.8	794.9	1,614.6	91.3	253.4	274.2	150.7
2012 Q1	7,449.6	793.1	468.4	2,873.5	809.0	1,716.8	98.3	255.1	284.8	150.6
Q2	7,477.0	782.4	468.3	2,884.7	805.5	1,717.3	102.9	258.1	306.4	151.5
Q3	7,696.2	782.5	478.8	3,000.2	825.7	1,792.7	106.5	259.9	298.1	151.9
Q4	7,787.8	786.2	481.1	3,042.4	828.2	1,837.3	105.7	258.7	294.9	153.4
2013 Q1 (p)	7,996.9	790.3	483.9	3,130.1	859.4	1,911.7	111.5	261.4	294.2	154.4

2. Holdings of securities other than shares

	Total	Issued by euro area residents						Issued by non-euro area residents
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds	Non-financial corporations	
	1	2	3	4	5	6	7	8
2010 Q2	2,645.8	2,223.6	583.2	1,227.2	245.5	16.2	151.5	422.2
Q3	2,734.7	2,307.9	601.5	1,279.8	254.5	18.6	153.5	426.9
Q4	2,672.9	2,249.3	599.0	1,242.6	234.2	17.5	155.9	423.6
2011 Q1	2,733.7	2,317.2	624.0	1,285.8	236.6	17.2	153.6	416.4
Q2	2,744.6	2,328.4	629.1	1,290.0	235.5	16.8	157.1	416.2
Q3	2,770.0	2,349.1	640.1	1,305.2	227.1	16.9	159.8	420.9
Q4	2,730.8	2,307.0	635.5	1,266.7	223.9	16.5	164.3	423.8
2012 Q1	2,873.5	2,423.5	665.6	1,329.1	231.5	17.0	180.3	450.0
Q2	2,884.7	2,420.7	666.9	1,315.7	234.5	16.8	186.7	464.0
Q3	3,000.2	2,506.0	696.8	1,347.0	243.6	17.4	201.2	494.3
Q4	3,042.4	2,534.0	676.0	1,384.3	246.8	17.9	208.9	508.4
2013 Q1 (p)	3,130.1	2,614.2	698.4	1,430.7	251.9	17.6	215.7	515.9

3. Liabilities and net worth

	Liabilities									Net worth
	Total	Loans received	Securities other than shares	Shares and other equity	Insurance technical reserves				Other accounts receivable/ payable and financial derivatives	
					Total	Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims		
	1	2	3	4	5	6	7	8	9	10
2010 Q2	6,710.7	251.1	39.5	431.7	5,796.2	3,156.9	1,826.1	813.2	192.2	175.2
Q3	6,873.6	276.2	38.6	441.4	5,938.5	3,220.7	1,908.4	809.4	178.9	187.4
Q4	6,867.6	250.3	39.6	451.7	5,957.4	3,257.8	1,889.6	809.9	168.6	167.1
2011 Q1	6,914.0	262.7	39.4	466.2	5,970.6	3,283.7	1,861.0	825.9	175.2	223.3
Q2	6,935.8	262.1	42.0	455.0	6,000.7	3,304.6	1,874.1	822.0	176.0	217.8
Q3	7,044.7	269.5	41.0	410.4	6,134.4	3,286.5	2,026.6	821.3	189.3	109.1
Q4	7,065.9	263.8	40.9	409.2	6,164.0	3,297.9	2,050.4	815.7	188.1	96.9
2012 Q1	7,228.9	271.8	45.0	438.9	6,281.7	3,339.7	2,108.6	833.4	191.5	220.6
Q2	7,296.3	279.1	43.7	420.9	6,346.4	3,340.9	2,172.1	833.4	206.2	180.7
Q3	7,373.4	290.3	45.3	452.7	6,388.2	3,388.8	2,163.6	835.8	196.9	322.9
Q4	7,478.9	267.3	49.7	481.0	6,459.4	3,422.4	2,200.7	836.3	221.5	309.0
2013 Q1 (p)	7,588.5	280.7	49.6	495.0	6,535.6	3,472.0	2,201.4	862.2	227.6	408.4

Source: ECB.

EURO AREA ACCOUNTS

3.1 Integrated economic and financial accounts by institutional sector

(EUR billions)

Uses 2013 Q1	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Exports of goods and services						608
Trade balance [1]						-47
Generation of income account						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,116	110	707	57	242	
Other taxes less subsidies on production	21	8	5	5	4	
Consumption of fixed capital	377	100	215	11	51	
Net operating surplus and mixed income [1]	558	274	254	31	0	
Allocation of primary income account						
Net operating surplus and mixed income						
Compensation of employees						7
Taxes less subsidies on production						
Property income	627	32	249	281	65	114
Interest	336	30	58	183	65	48
Other property income	291	2	191	98	0	67
Net national income [1]	1,960	1,596	109	33	222	
Secondary distribution of income account						
Net national income						
Current taxes on income, wealth, etc.	258	219	31	8	0	1
Social contributions	437	437				1
Social benefits other than social transfers in kind	469	1	18	37	413	1
Other current transfers	205	70	24	49	62	10
Net non-life insurance premiums	46	35	10	1	1	2
Non-life insurance claims	47			47		1
Other	113	35	14	1	62	8
Net disposable income [1]	1,919	1,423	67	40	388	
Use of income account						
Net disposable income						
Final consumption expenditure	1,852	1,358			495	
Individual consumption expenditure	1,669	1,358			312	
Collective consumption expenditure	183				183	
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]	67	81	67	25	-107	-26
Capital account						
Net saving/current external account						
Gross capital formation	418	129	234	13	42	
Gross fixed capital formation	402	125	222	13	42	
Changes in inventories and acquisitions less disposals of valuables	16	4	12	0	0	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	2	-1	7	0	-3	-2
Capital transfers	35	8	0	2	25	4
Capital taxes	6	6	0	0		0
Other capital transfers	28	2	-1	2	25	4
Net lending (+)/net borrowing (-) (from capital account) [1]	25	55	56	28	-114	-25
Statistical discrepancy	0	36	-36	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 Q1	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Imports of goods and services						561
Trade balance						
Generation of income account						
Gross value added (basic prices)	2,073	491	1,182	104	297	
Taxes less subsidies on products	243					
Gross domestic product (market prices)[2]	2,317					
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	558	274	254	31	0	
Compensation of employees	1,121	1,121				2
Taxes less subsidies on production	264				264	1
Property income	645	234	103	284	24	97
Interest	330	54	33	234	8	54
Other property income	315	179	70	50	15	43
Net national income						
Secondary distribution of income account						
Net national income	1,960	1,596	109	33	222	
Current taxes on income, wealth, etc.	259				259	1
Social contributions	436	1	18	52	365	2
Social benefits other than social transfers in kind	467	467				3
Other current transfers	166	86	13	48	18	50
Net non-life insurance premiums	47			47		1
Non-life insurance claims	45	35	8	1	0	3
Other	74	51	5	0	18	46
Net disposable income						
Use of income account						
Net disposable income	1,919	1,423	67	40	388	
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	67	81	67	25	-107	-26
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	377	100	215	11	51	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	36	10	14	7	5	3
Capital taxes	6				6	0
Other capital transfers	29	10	14	7	-1	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.

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

(EUR billions)

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

Source: ECB.

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

(EUR billions)

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

Source: ECB.

3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

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

Sources: ECB and Eurostat.

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

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

(EUR billions; four-quarter cumulated flows)

Resources	2009	2010	2011	2011 Q2-2012 Q1	2011 Q3-2012 Q2	2011 Q4-2012 Q3	2012 Q1-2012 Q4	2012 Q2-2013 Q1
Generation of income account								
Gross value added (basic prices)	8,019	8,212	8,433	8,463	8,477	8,485	8,485	8,486
Taxes less subsidies on products	894	943	974	976	974	973	978	976
Gross domestic product (market prices)[2]	8,914	9,154	9,407	9,439	9,450	9,458	9,463	9,462
Compensation of employees								
Other taxes less subsidies on production								
Consumption of fixed capital								
Net operating surplus and mixed income								
Allocation of primary income account								
Net operating surplus and mixed income	2,099	2,203	2,250	2,246	2,232	2,214	2,193	2,180
Compensation of employees	4,459	4,520	4,634	4,651	4,663	4,677	4,682	4,691
Taxes less subsidies on production	997	1,038	1,080	1,089	1,093	1,098	1,112	1,112
Property income	2,950	2,819	3,023	3,040	3,029	3,004	2,965	2,926
Interest	1,551	1,337	1,504	1,521	1,513	1,490	1,447	1,404
Other property income	1,399	1,482	1,519	1,519	1,516	1,514	1,518	1,522
Net national income								
Secondary distribution of income account								
Net national income	7,540	7,761	7,968	7,993	7,998	8,003	8,026	8,032
Current taxes on income, wealth, etc.	1,033	1,059	1,117	1,129	1,144	1,158	1,179	1,184
Social contributions	1,675	1,702	1,752	1,761	1,770	1,775	1,784	1,793
Social benefits other than social transfers in kind	1,762	1,807	1,834	1,844	1,855	1,867	1,878	1,890
Other current transfers	668	669	678	680	682	685	684	682
Net non-life insurance premiums	182	182	186	187	188	189	189	188
Non-life insurance claims	178	178	180	181	182	182	181	180
Other	308	309	312	312	312	313	314	314
Net disposable income								
Use of income account								
Net disposable income	7,432	7,650	7,859	7,882	7,884	7,889	7,916	7,919
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in the net equity of households in pension fund reserves	61	56	59	60	60	59	58	58
Net saving								
Capital account								
Net saving	281	333	382	376	367	365	388	389
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,387	1,419	1,467	1,477	1,485	1,493	1,500	1,505
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	193	232	187	181	189	197	210	217
Capital taxes	34	25	31	30	29	29	26	26
Other capital transfers	159	207	155	151	160	168	184	191
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 Q2-2012 Q1	2011 Q3-2012 Q2	2011 Q4-2012 Q3	2012 Q1-2012 Q4	2012 Q2-2013 Q1
Income, saving and changes in net worth								
Compensation of employees (+)	4,459	4,520	4,634	4,651	4,663	4,677	4,682	4,691
Gross operating surplus and mixed income (+)	1,441	1,440	1,477	1,482	1,481	1,481	1,478	1,482
Interest receivable (+)	233	201	229	232	231	228	223	219
Interest payable (-)	146	124	146	146	142	137	130	125
Other property income receivable (+)	726	724	747	758	754	750	747	741
Other property income payable (-)	10	10	10	10	10	10	10	10
Current taxes on income and wealth (-)	842	848	881	891	906	920	935	943
Net social contributions (-)	1,672	1,699	1,749	1,757	1,767	1,773	1,782	1,790
Net social benefits (+)	1,757	1,801	1,829	1,839	1,850	1,862	1,873	1,885
Net current transfers receivable (+)	72	71	70	69	70	68	70	70
= Gross disposable income	6,016	6,076	6,201	6,226	6,223	6,225	6,215	6,221
Final consumption expenditure (-)	5,156	5,293	5,439	5,463	5,471	5,474	5,479	5,476
Changes in net worth in pension funds (+)	60	55	58	60	60	58	58	57
= Gross saving	921	839	820	823	813	809	793	802
Consumption of fixed capital (-)	379	386	396	397	399	400	401	401
Net capital transfers receivable (+)	10	13	9	7	7	5	5	3
Other changes in net worth (+)	-126	805	-54	-88	-520	-397	-233	-609
= Changes in net worth	426	1,271	380	345	-99	17	164	-204
Investment, financing and changes in net worth								
Net acquisition of non-financial assets (+)	554	555	576	573	567	561	555	548
Consumption of fixed capital (-)	379	386	396	397	399	400	401	401
Main items of financial investment (+)								
Short-term assets	6	38	124	156	167	170	189	165
Currency and deposits	121	118	118	155	164	175	224	226
Money market fund shares	-40	-60	-21	-15	-13	-28	-33	-49
Debt securities [1]	-75	-20	28	16	15	23	-3	-11
Long-term assets	471	410	210	220	189	175	131	133
Deposits	81	58	55	53	45	29	12	9
Debt securities	0	-7	53	39	-7	-13	-94	-133
Shares and other equity	160	110	-11	29	53	58	92	114
Quoted and unquoted shares and other equity	118	101	38	67	88	59	55	35
Mutual fund shares	42	9	-50	-38	-35	-1	37	79
Life insurance and pension fund reserves	230	249	113	99	97	101	122	143
Main items of financing (-)								
Loans	107	114	86	69	40	19	15	3
of which: From euro area MFIs	65	147	81	34	13	1	25	21
Other changes in assets (+)								
Non-financial assets	-410	707	306	13	-344	-967	-884	-1,090
Financial assets	250	138	-415	-169	-223	514	595	412
Shares and other equity	82	45	-347	-267	-286	324	368	314
Life insurance and pension fund reserves	186	124	12	97	96	180	173	150
Remaining net flows (+)	40	-77	60	17	-17	-17	-4	32
= Changes in net worth	426	1,271	380	345	-99	17	164	-204
Balance sheet								
Non-financial assets (+)	25,291	26,167	26,654	26,472	26,404	26,117	25,923	25,528
Financial assets (+)								
Short-term assets	5,771	5,813	5,951	5,978	6,029	6,031	6,116	6,132
Currency and deposits	5,474	5,596	5,727	5,755	5,821	5,838	5,948	5,980
Money market fund shares	247	189	172	166	155	136	120	113
Debt securities [1]	51	28	52	57	54	57	47	40
Long-term assets	11,596	12,121	11,924	12,272	12,187	12,436	12,684	12,832
Deposits	972	1,029	1,079	1,089	1,101	1,096	1,093	1,096
Debt securities	1,376	1,318	1,309	1,371	1,309	1,289	1,282	1,200
Shares and other equity	4,131	4,284	3,920	4,098	4,034	4,222	4,399	4,530
Quoted and unquoted shares and other equity	2,988	3,062	2,811	2,923	2,868	2,988	3,121	3,196
Mutual fund shares	1,143	1,222	1,110	1,175	1,166	1,234	1,278	1,333
Life insurance and pension fund reserves	5,117	5,490	5,615	5,713	5,742	5,830	5,911	6,007
Remaining net assets (+)	294	297	330	294	306	330	290	298
Liabilities (-)								
Loans	5,939	6,115	6,195	6,180	6,193	6,183	6,186	6,161
of which: From euro area MFIs	4,976	5,220	5,281	5,269	5,294	5,283	5,291	5,279
= Net worth	37,012	38,283	38,663	38,835	38,733	38,731	38,827	38,630

Sources: ECB and Eurostat.

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 Q2-2012 Q1	2011 Q3-2012 Q2	2011 Q4-2012 Q3	2012 Q1-2012 Q4	2012 Q2-2013 Q1
Income and saving								
Gross value added (basic prices) (+)	4,519	4,669	4,829	4,848	4,857	4,863	4,867	4,863
Compensation of employees (-)	2,787	2,827	2,923	2,938	2,950	2,962	2,970	2,975
Other taxes less subsidies on production (-)	40	34	42	44	47	48	51	51
= Gross operating surplus (+)	1,691	1,808	1,863	1,866	1,860	1,854	1,846	1,837
Consumption of fixed capital (-)	782	800	830	837	842	847	852	856
= Net operating surplus (+)	910	1,008	1,033	1,029	1,018	1,006	994	981
Property income receivable (+)	528	560	576	574	573	570	563	562
Interest receivable	168	160	169	169	166	159	151	145
Other property income receivable	360	400	407	405	408	411	412	417
Interest and rents payable (-)	299	259	295	298	292	285	273	263
= Net entrepreneurial income (+)	1,139	1,309	1,314	1,306	1,299	1,292	1,284	1,280
Distributed income (-)	927	933	980	984	995	994	975	968
Taxes on income and wealth payable (-)	151	168	188	190	192	193	199	196
Social contributions receivable (+)	71	69	73	73	73	73	73	73
Social benefits payable (-)	68	69	69	69	70	70	70	70
Other net transfers (-)	47	45	49	49	48	49	48	48
= Net saving	16	163	101	86	67	59	65	71
Investment, financing and saving								
Net acquisition of non-financial assets (+)	70	155	202	185	162	136	113	91
Gross fixed capital formation (+)	901	933	989	991	988	980	969	950
Consumption of fixed capital (-)	782	800	830	837	842	847	852	856
Net acquisition of other non-financial assets (+)	-50	22	43	31	16	3	-3	-3
Main items of financial investment (+)								
Short-term assets	95	34	-28	4	7	32	68	50
Currency and deposits	88	68	6	16	16	39	77	85
Money market fund shares	38	-32	-46	-29	-24	-12	-2	-5
Debt securities [1]	-31	-1	12	16	14	5	-7	-30
Long-term assets	130	415	480	445	357	288	197	180
Deposits	0	20	87	80	52	1	15	-16
Debt securities	24	4	-5	-16	0	-4	-8	-8
Shares and other equity	96	236	265	258	161	144	96	146
Other (mainly intercompany loans)	11	156	133	124	144	148	94	58
Remaining net assets (+)	61	2	-22	-36	-12	40	65	66
Main items of financing (-)								
Debt	15	160	236	213	165	183	137	100
of which: Loans from euro area MFIs	-108	-17	73	-2	-43	-89	-143	-123
of which: Debt securities	90	66	49	73	90	105	115	103
Shares and other equity	240	217	226	232	213	181	168	139
Quoted shares	59	31	27	19	15	16	27	11
Unquoted shares and other equity	181	185	199	213	198	166	142	128
Net capital transfers receivable (-)	82	66	69	67	68	69	68	71
= Net saving	16	163	101	86	67	59	65	71
Financial balance sheet								
Financial assets								
Short-term assets	1,932	1,957	1,931	1,919	1,923	1,933	1,994	1,962
Currency and deposits	1,632	1,695	1,706	1,681	1,697	1,717	1,782	1,766
Money market fund shares	213	182	134	140	134	130	132	130
Debt securities [1]	87	80	91	98	91	86	81	66
Long-term assets	10,239	10,703	10,679	11,079	10,979	11,311	11,440	11,750
Deposits	239	249	319	369	367	365	376	369
Debt securities	228	240	249	253	259	262	257	258
Shares and other equity	7,145	7,462	7,221	7,556	7,381	7,683	7,841	8,157
Other (mainly intercompany loans)	2,628	2,753	2,890	2,901	2,972	3,001	2,966	2,967
Remaining net assets	312	147	165	228	171	226	192	255
Liabilities								
Debt	9,213	9,482	9,632	9,670	9,745	9,792	9,729	9,724
of which: Loans from euro area MFIs	4,708	4,682	4,718	4,684	4,689	4,630	4,496	4,476
of which: Debt securities	815	883	886	943	969	1,025	1,047	1,068
Shares and other equity	12,425	12,977	12,299	12,830	12,442	12,892	13,292	13,717
Quoted shares	3,502	3,799	3,281	3,569	3,331	3,550	3,747	3,891
Unquoted shares and other equity	8,922	9,179	9,018	9,261	9,111	9,342	9,545	9,827

Sources: ECB and Eurostat.

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 Q2-2012 Q1	2011 Q3-2012 Q2	2011 Q4-2012 Q3	2012 Q1-2012 Q4	2012 Q2-2013 Q1
Financial account, financial transactions								
Main items of financial investment (+)								
Short-term assets	-47	-6	52	79	67	52	44	25
Currency and deposits	-33	-9	14	29	15	3	16	12
Money market fund shares	0	-8	14	39	39	39	34	15
Debt securities [1]	-14	11	24	12	13	10	-6	-1
Long-term assets	297	287	140	105	100	109	191	192
Deposits	14	-4	9	-4	-5	-15	-16	-18
Debt securities	105	183	47	31	41	75	129	104
Loans	8	32	11	8	3	16	13	19
Quoted shares	-50	-2	-11	-14	-11	-14	-3	1
Unquoted shares and other equity	-14	11	14	10	13	4	2	4
Mutual fund shares	234	68	70	74	60	44	65	82
Remaining net assets (+)	18	9	-43	-51	-10	-5	-41	-25
Main items of financing (-)								
Debt securities	5	1	3	5	1	3	7	6
Loans	-4	7	11	3	7	9	-12	4
Shares and other equity	5	7	3	2	4	3	1	1
Insurance technical reserves	246	281	115	104	109	124	152	178
Net equity of households in life insurance and pension fund reserves	240	262	110	102	100	112	130	151
Prepayments of insurance premiums and reserves for outstanding claims	6	19	5	2	9	12	22	27
= Changes in net financial worth due to transactions	16	-4	18	20	36	18	46	2
Other changes account								
Other changes in financial assets (+)								
Shares and other equity	199	117	-105	4	-11	216	171	124
Other net assets	38	-1	25	146	113	153	225	128
Other changes in liabilities (-)								
Shares and other equity	13	-1	-46	-30	-36	40	66	48
Insurance technical reserves	165	141	13	101	102	187	178	147
Net equity of households in life insurance and pension fund reserves	192	130	12	98	103	190	183	153
Prepayments of insurance premiums and reserves for outstanding claims	-28	11	1	3	0	-3	-5	-5
= Other changes in net financial worth	60	-24	-48	79	36	141	153	57
Financial balance sheet								
Financial assets (+)								
Short-term assets	324	323	363	385	376	394	399	405
Currency and deposits	195	190	193	208	195	200	209	219
Money market fund shares	90	84	96	110	113	121	121	120
Debt securities [1]	39	49	74	66	68	74	68	66
Long-term assets	5,669	6,059	6,065	6,349	6,347	6,556	6,633	6,783
Deposits	613	607	612	611	609	605	595	592
Debt securities	2,467	2,637	2,658	2,812	2,821	2,930	2,984	3,032
Loans	434	467	478	478	477	488	492	496
Quoted shares	399	423	377	387	375	393	408	413
Unquoted shares and other equity	413	417	420	434	438	440	410	416
Mutual fund shares	1,342	1,508	1,519	1,626	1,627	1,699	1,744	1,834
Remaining net assets (+)	222	245	266	257	269	266	254	245
Liabilities (-)								
Debt securities	42	43	46	49	48	50	55	56
Loans	275	286	295	293	299	309	282	296
Shares and other equity	437	442	400	431	413	442	466	480
Insurance technical reserves	5,574	5,995	6,122	6,241	6,274	6,369	6,452	6,566
Net equity of households in life insurance and pension fund reserves	4,795	5,186	5,308	5,413	5,446	5,539	5,621	5,717
Prepayments of insurance premiums and reserves for outstanding claims	778	808	814	828	828	829	831	850
= Net financial wealth	-112	-139	-169	-24	-42	46	30	35

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 FINANCIAL MARKETS

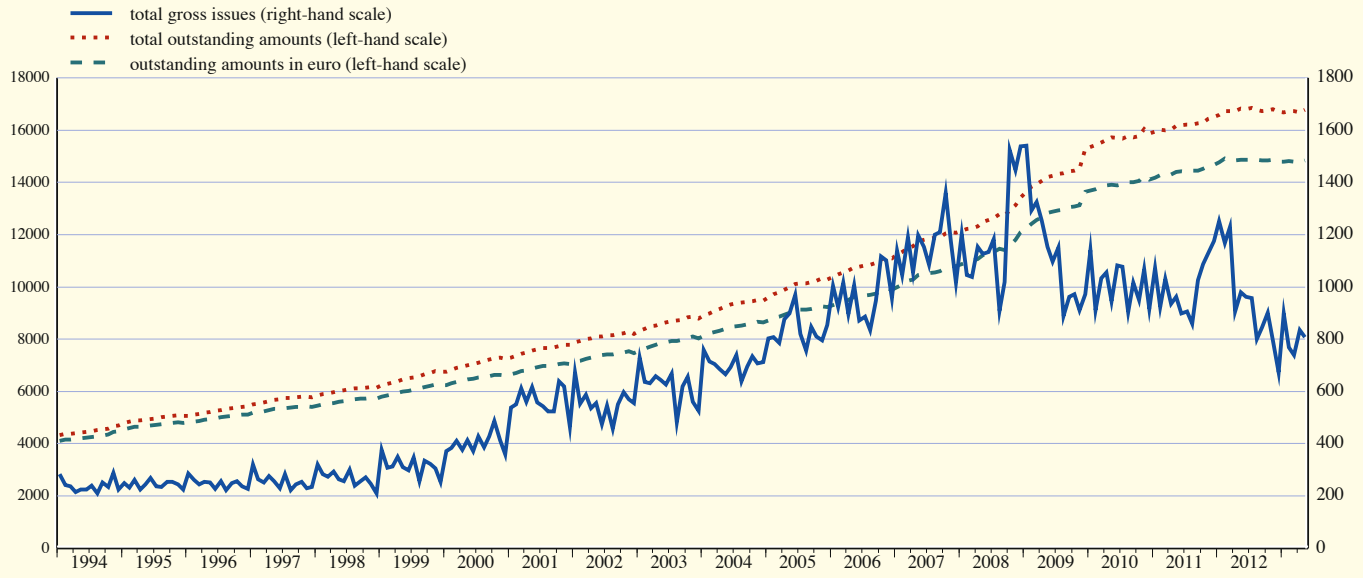
4.1 Securities other than shares by original maturity, residency of the issuer and currency

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

	Total in euro [1]			By euro area residents								
				In euro			In all currencies					
	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally adjusted [2]	
											Net issues	6-month growth rates
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2012 May	17,167.9	919.4	42.8	14,876.2	867.1	42.6	16,821.8	980.5	59.6	4.0	-2.0	4.6
June	17,173.9	933.2	6.5	14,874.2	871.9	-1.2	16,790.4	961.9	-18.3	3.7	13.6	3.0
July	17,169.2	891.3	-4.4	14,865.8	834.1	-8.0	16,842.5	958.4	29.2	3.9	56.7	2.9
Aug.	17,151.3	752.8	-20.2	14,855.4	708.8	-12.7	16,789.3	800.8	-35.9	3.6	-5.5	1.6
Sep.	17,135.0	810.5	-7.1	14,834.3	758.6	-12.0	16,739.4	844.1	-25.5	3.4	30.6	1.0
Oct.	17,131.9	817.9	-1.6	14,841.2	778.8	8.5	16,759.2	901.9	28.6	3.1	18.0	1.3
Nov.	17,163.3	720.7	28.1	14,872.3	681.1	27.8	16,806.6	796.0	47.5	2.8	-25.3	1.1
Dec.	17,083.8	631.5	-113.7	14,789.7	591.7	-116.8	16,692.4	673.3	-134.2	1.7	-43.9	0.4
2013 Jan.	17,074.9	816.5	-8.3	14,786.4	768.3	-2.9	16,668.5	898.2	5.9	1.2	-12.8	-0.5
Feb.	17,099.0	680.8	9.4	14,819.8	640.5	18.6	16,733.3	768.9	32.0	0.4	-32.1	-0.8
Mar.	17,035.0	660.0	-61.5	14,802.2	611.0	-15.2	16,729.2	740.1	-19.3	-0.2	-20.2	-1.4
Apr.	.	.	.	14,775.1	697.8	-27.3	16,689.1	835.2	-25.1	-0.3	-30.9	-2.0
May	.	.	.	14,852.5	665.1	80.3	16,789.1	807.9	105.0	-0.1	45.6	-1.1
	Long-term											
2012 May	15,675.8	233.0	50.4	13,478.1	208.6	49.4	15,180.8	244.3	68.2	4.0	15.3	4.7
June	15,710.1	278.6	35.3	13,515.8	246.2	39.0	15,189.5	261.9	20.6	3.8	13.8	3.4
July	15,689.9	264.9	-20.2	13,487.4	233.1	-28.3	15,210.0	271.7	-0.1	3.9	38.2	3.0
Aug.	15,681.4	147.0	-10.3	13,480.5	126.8	-8.6	15,173.3	142.0	-21.2	3.8	20.6	2.1
Sep.	15,697.5	256.7	24.2	13,496.4	225.3	23.9	15,173.9	251.2	21.9	4.0	79.5	2.1
Oct.	15,724.1	237.3	26.9	13,519.4	212.5	23.3	15,205.5	249.8	38.6	3.8	35.8	2.7
Nov.	15,778.5	219.8	53.6	13,566.1	195.0	46.0	15,262.6	223.2	59.7	3.5	-8.3	2.4
Dec.	15,739.5	197.2	-60.9	13,525.1	173.3	-63.0	15,196.7	193.0	-75.0	2.6	-27.6	1.8
2013 Jan.	15,735.3	257.0	-3.8	13,522.1	226.9	-2.7	15,163.2	259.7	-6.8	2.2	8.0	1.4
Feb.	15,770.5	221.8	23.6	13,563.1	196.5	29.2	15,224.2	221.0	33.2	1.4	-26.3	0.8
Mar.	15,694.9	223.7	-72.9	13,542.5	193.6	-17.7	15,213.8	225.3	-22.8	0.8	-24.7	-0.6
Apr.	.	.	.	13,514.1	206.2	-28.7	15,179.4	237.1	-21.0	0.6	-29.1	-1.4
May	.	.	.	13,592.4	223.6	81.3	15,273.1	265.2	98.8	0.8	47.5	-0.7

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

(EUR billions)



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

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

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

1. Outstanding amounts and gross issues

	Outstanding amounts						Gross issues [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	16,511	5,526	3,262	881	6,217	625	1,000	609	99	62	191	39
2012	16,692	5,428	3,314	998	6,268	684	956	587	82	67	187	32
2012 Q2	16,790	5,591	3,270	946	6,285	698	949	584	81	71	183	30
Q3	16,739	5,560	3,203	978	6,299	699	868	538	64	63	177	26
Q4	16,692	5,428	3,314	998	6,268	684	790	463	74	64	164	25
2013 Q1	16,729	5,286	3,303	1,026	6,425	690	802	439	58	61	212	32
2013 Feb.	16,733	5,355	3,312	1,014	6,373	679	769	434	49	49	214	23
Mar.	16,729	5,286	3,303	1,026	6,425	690	740	367	70	69	197	36
Apr.	16,689	5,245	3,305	1,039	6,410	691	835	469	53	69	202	43
May	16,789	5,205	3,323	1,043	6,532	685	808	405	78	61	230	33
	Short-term											
2011	1,599	702	106	79	634	77	748	511	48	53	107	29
2012	1,496	601	139	81	610	64	702	489	37	52	104	21
2012 Q2	1,601	678	120	97	624	83	712	498	33	58	102	20
Q3	1,565	667	106	89	626	77	646	455	25	48	100	17
Q4	1,496	601	139	81	610	64	568	392	27	46	88	16
2013 Q1	1,515	582	150	90	624	68	567	361	24	47	112	23
2013 Feb.	1,509	592	146	90	621	60	548	357	26	42	106	18
Mar.	1,515	582	150	90	624	68	515	307	24	51	105	29
Apr.	1,510	581	156	93	613	66	598	398	27	51	97	25
May	1,516	575	157	98	625	61	543	329	24	50	113	27
	Long-term [2]											
2011	14,912	4,823	3,156	802	5,583	548	253	98	51	9	84	10
2012	15,197	4,826	3,175	916	5,658	621	254	99	45	15	83	12
2012 Q2	15,189	4,913	3,151	850	5,661	615	238	86	48	13	81	10
Q3	15,174	4,893	3,097	889	5,673	622	222	82	38	16	77	8
Q4	15,197	4,826	3,175	916	5,658	621	222	71	47	18	77	9
2013 Q1	15,214	4,704	3,152	935	5,801	621	235	78	34	14	100	9
2013 Feb.	15,224	4,763	3,165	924	5,752	620	221	77	24	7	108	5
Mar.	15,214	4,704	3,152	935	5,801	621	225	61	47	18	92	7
Apr.	15,179	4,663	3,149	945	5,797	624	237	71	26	18	105	18
May	15,273	4,631	3,166	945	5,906	624	265	76	54	12	118	6
	of which: Long-term fixed rate											
2011	10,014	2,764	1,142	705	4,994	408	150	54	12	8	70	7
2012	10,568	2,838	1,319	819	5,149	444	164	54	18	15	71	7
2012 Q2	10,406	2,877	1,236	754	5,101	438	148	42	21	12	68	6
Q3	10,495	2,860	1,269	792	5,132	442	139	37	14	15	68	4
Q4	10,568	2,838	1,319	819	5,149	444	142	36	21	17	64	6
2013 Q1	10,686	2,790	1,353	836	5,257	450	159	41	19	12	80	7
2013 Feb.	10,645	2,815	1,346	825	5,209	449	130	33	12	6	76	4
Mar.	10,686	2,790	1,353	836	5,257	450	154	28	25	16	83	2
Apr.	10,704	2,778	1,374	845	5,254	453	157	33	16	16	78	14
May	10,789	2,757	1,395	845	5,338	455	173	37	30	10	91	5
	of which: Long-term variable rate											
2011	4,395	1,790	1,860	93	513	139	85	37	32	1	11	3
2012	4,197	1,735	1,757	94	437	175	77	38	24	1	8	5
2012 Q2	4,325	1,769	1,803	91	486	175	77	38	24	1	9	4
Q3	4,231	1,768	1,724	93	467	179	72	41	23	1	4	4
Q4	4,197	1,735	1,757	94	437	175	69	30	25	1	10	4
2013 Q1	4,080	1,662	1,700	96	453	170	60	30	13	1	13	3
2013 Feb.	4,139	1,698	1,720	95	457	169	80	39	10	1	29	1
Mar.	4,080	1,662	1,700	96	453	170	53	22	20	2	4	5
Apr.	4,046	1,641	1,677	97	461	171	69	32	7	2	24	4
May	4,052	1,631	1,673	97	483	168	78	33	20	2	22	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

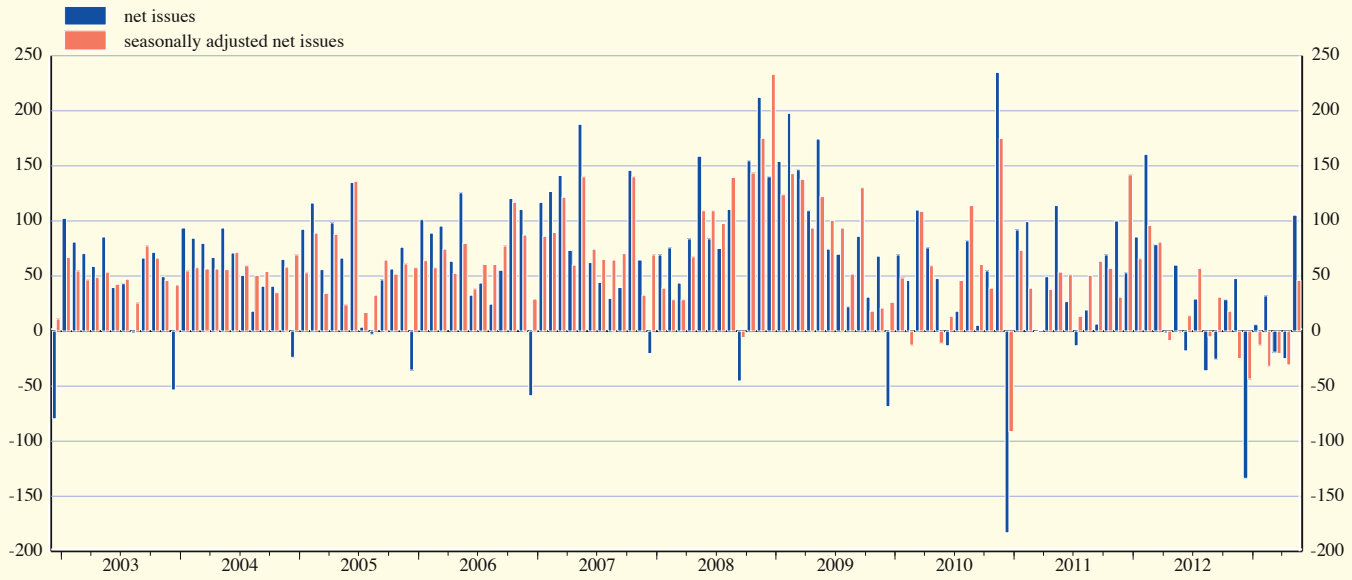
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

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	51.2	22.3	-3.6	3.7	23.2	5.6	-	-	-	-	-	-
2012	22.8	-6.5	3.0	10.1	13.1	3.1	-	-	-	-	-	-
2012 Q2	13.1	-19.7	-5.9	10.1	27.8	0.7	1.0	-14.2	-8.5	7.7	13.4	2.7
Q3	-10.7	-4.6	-21.7	10.5	4.3	0.8	27.3	0.2	-7.8	11.8	20.7	2.3
Q4	-19.4	-39.7	26.7	8.1	-9.5	-4.9	-17.1	-28.8	6.1	11.9	2.0	-8.3
2013 Q1	6.2	-47.1	-9.1	9.1	51.9	1.5	-21.7	-67.7	0.1	6.5	38.0	1.4
2013 Feb.	32.0	-46.1	0.0	9.8	73.5	-5.1	-32.1	-85.6	8.0	6.3	47.1	-7.8
Mar.	-19.3	-75.2	-11.9	9.0	50.0	8.9	-20.2	-83.2	-7.9	8.4	58.8	3.7
Apr.	-25.1	-33.6	4.8	14.9	-13.3	2.2	-30.9	-32.8	-0.8	8.0	-10.0	4.8
May	105.0	-36.4	20.3	4.3	122.3	-5.5	45.6	-47.1	14.8	-2.8	86.7	-6.0
	Long-term											
2011	47.1	11.6	-2.2	2.8	31.0	3.9	-	-	-	-	-	-
2012	32.5	2.1	1.2	9.9	15.1	4.2	-	-	-	-	-	-
2012 Q2	30.1	-7.5	-5.4	5.7	33.6	3.8	6.9	-13.1	-7.3	3.2	21.5	2.7
Q3	0.2	-1.8	-17.2	13.1	3.4	2.7	46.1	4.9	-5.5	14.9	26.3	5.5
Q4	7.8	-17.3	19.3	10.5	-4.1	-0.7	0.0	-3.8	-0.6	11.9	-6.7	-1.0
2013 Q1	1.2	-40.2	-11.3	6.1	46.7	0.0	-14.3	-55.0	-1.2	5.3	38.2	-1.6
2013 Feb.	33.2	-36.5	-4.6	3.7	75.0	-4.3	-26.3	-70.0	0.4	1.1	49.4	-7.2
Mar.	-22.8	-63.3	-16.0	8.5	47.6	0.4	-24.7	-72.1	-8.0	7.6	52.1	-4.3
Apr.	-21.0	-33.7	-0.6	12.0	-2.6	3.9	-29.1	-36.0	-5.5	7.8	1.5	3.3
May	98.8	-29.4	19.2	-0.4	109.5	-0.2	47.5	-40.5	16.3	-3.6	75.6	-0.2

C16 Net issues of securities other than shares: seasonally adjusted and non-seasonally adjusted

(EUR billions; transactions during the month; nominal values)



Source: ECB.

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

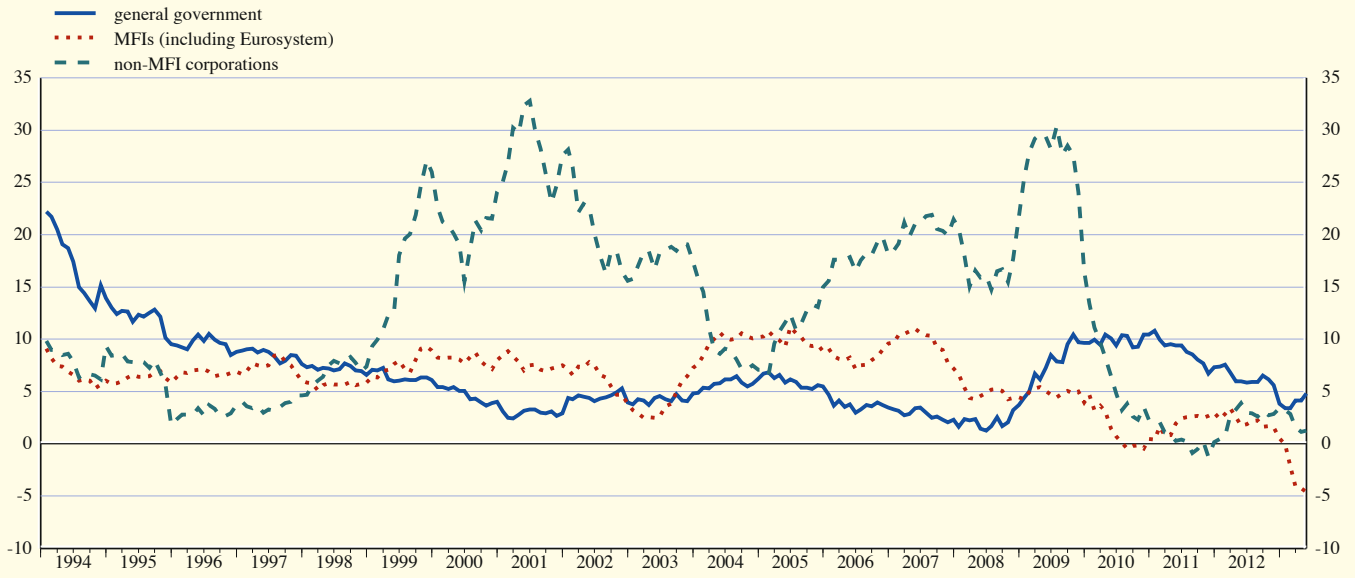
4.3 Growth rates of securities other than shares issued by euro area residents [1)]

(percentage changes)

	Annual growth rates (non-seasonally adjusted)						6-month seasonally adjusted growth rates					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2012 May	4.0	2.9	3.2	9.0	3.8	12.6	4.6	2.3	6.3	11.2	4.0	14.1
June	3.7	3.3	1.4	10.4	3.5	11.7	3.0	0.2	2.7	11.9	2.8	19.2
July	3.9	4.1	1.1	10.2	3.4	14.7	2.9	1.7	1.4	11.1	2.3	15.4
Aug.	3.6	3.6	0.6	10.7	3.3	12.4	1.6	0.5	-1.6	12.2	2.1	9.0
Sep.	3.4	2.4	0.4	12.3	3.9	10.9	1.0	-1.5	-2.9	13.1	3.3	4.4
Oct.	3.1	2.0	-0.1	12.4	3.8	10.8	1.3	-0.6	-4.4	13.3	4.2	3.6
Nov.	2.8	1.1	0.1	12.2	3.9	8.0	1.1	0.0	-5.7	13.3	3.8	2.2
Dec.	1.7	-1.4	1.1	13.8	2.5	6.1	0.4	-3.1	-0.3	15.6	2.2	-5.1
2013 Jan.	1.2	-2.1	0.9	13.2	2.2	4.6	-0.5	-5.6	0.4	15.5	2.0	-4.8
Feb.	0.4	-4.2	0.5	13.1	2.6	0.3	-0.8	-8.6	2.8	14.0	3.1	-7.4
Mar.	-0.2	-5.9	-0.9	12.4	3.6	-0.8	-1.4	-10.2	1.2	11.6	3.8	-5.8
Apr.	-0.3	-6.0	-1.6	12.2	3.5	0.4	-2.0	-11.1	1.2	11.0	2.9	-2.8
May	-0.1	-6.3	-1.3	11.2	4.5	-0.4	-1.1	-12.0	3.2	9.2	5.2	-3.1
	Long-term											
2012 May	4.0	1.7	3.1	7.0	5.5	10.6	4.7	1.5	5.5	9.1	5.9	11.9
June	3.8	1.9	1.5	8.6	5.4	10.7	3.4	0.9	2.2	10.0	4.4	14.2
July	3.9	2.2	1.2	9.5	5.3	12.1	3.0	1.3	0.8	10.1	3.6	13.8
Aug.	3.8	2.2	0.6	10.5	5.3	11.4	2.1	0.3	-1.4	11.5	3.6	8.6
Sep.	4.0	1.6	0.6	13.3	6.0	11.8	2.1	-1.0	-2.4	13.4	5.2	8.5
Oct.	3.8	1.7	-0.1	13.7	5.7	10.7	2.7	0.5	-3.6	16.7	5.9	7.0
Nov.	3.5	1.6	0.0	13.7	5.2	9.5	2.4	1.7	-5.2	18.6	4.6	7.2
Dec.	2.6	0.5	0.4	14.9	3.3	9.2	1.8	0.1	-1.2	20.0	2.1	4.5
2013 Jan.	2.2	-0.1	0.3	14.5	2.8	8.6	1.4	-1.4	-0.2	19.2	2.0	3.8
Feb.	1.4	-2.2	0.0	13.8	3.3	4.5	0.8	-4.6	1.5	16.2	2.9	0.5
Mar.	0.8	-4.1	-1.4	12.8	4.3	2.9	-0.6	-7.1	-0.3	12.0	3.3	-2.5
Apr.	0.6	-4.2	-2.1	13.8	4.3	3.2	-1.4	-8.7	-0.7	10.7	2.7	-0.4
May	0.8	-4.6	-1.9	13.1	5.0	2.9	-0.7	-10.5	1.7	7.9	5.5	-1.3

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

(annual percentage changes)



Source: ECB.

1) For details of the calculation of the growth rates, see the Technical Notes. The six-month growth rates have been annualised.

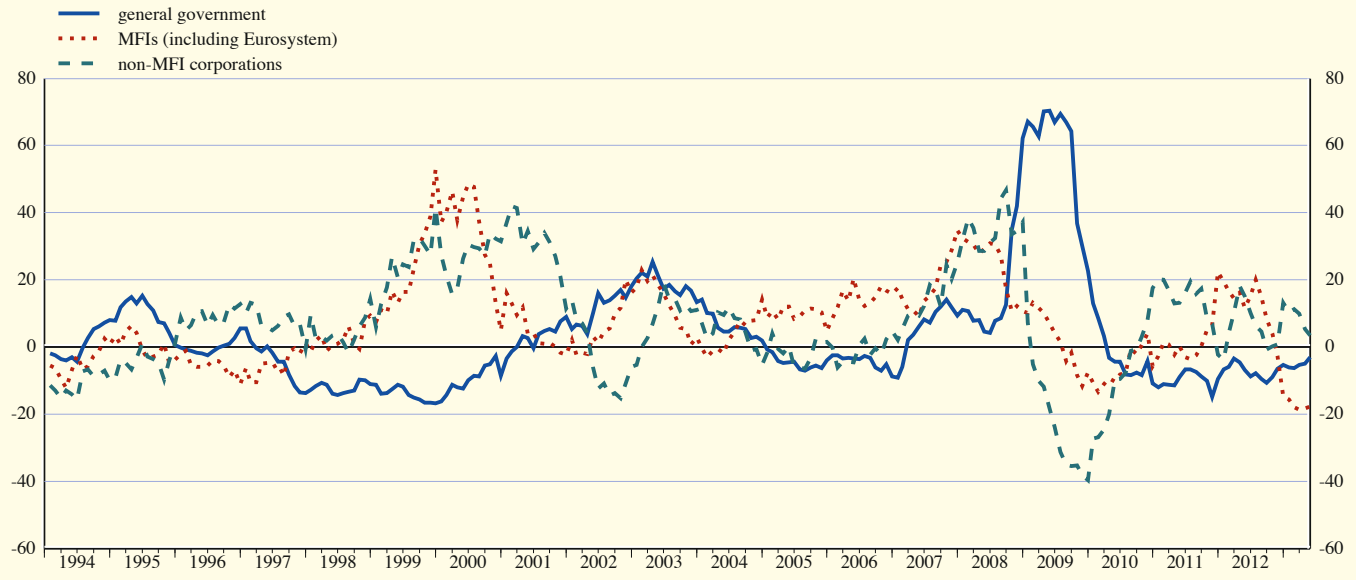
4.3 Growth rates of securities other than shares issued by euro area residents [1] (cont'd)

(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	6.4	7.8	7.7	-0.8	-1.4	-5.8	-2.1	22.3	16.1
2012	5.4	4.4	2.2	10.2	5.8	7.3	-0.8	-0.2	-4.8	-1.1	6.6	23.3
2012 Q2	5.2	4.9	1.8	8.1	5.6	6.7	0.4	-0.4	-2.4	-1.8	8.1	25.9
Q3	5.0	4.0	1.2	11.0	5.5	6.9	-0.1	-0.2	-3.5	0.0	6.6	25.5
Q4	5.7	3.5	3.9	15.1	5.9	6.8	-3.3	-0.7	-7.9	-1.4	-2.4	20.3
2013 Q1	4.4	0.8	5.6	15.5	4.3	6.0	-6.4	-4.1	-9.7	-1.4	-7.6	7.8
2012 Dec.	5.2	3.3	5.2	16.3	4.6	6.6	-5.3	-2.8	-8.7	-2.1	-8.6	16.7
2013 Jan.	4.8	2.3	5.8	16.0	4.2	7.5	-6.1	-3.0	-9.5	-1.7	-10.4	11.6
Feb.	3.9	-0.1	5.3	15.1	4.0	5.1	-6.7	-4.7	-9.9	-1.1	-5.7	3.9
Mar.	3.6	-2.6	6.1	14.3	5.0	4.1	-7.6	-6.3	-10.7	-1.0	-5.0	0.7
Apr.	3.7	-2.6	6.5	15.2	4.8	4.6	-7.8	-6.4	-11.4	0.6	-3.9	0.5
May	3.6	-3.1	6.0	14.0	5.2	5.0	-7.8	-6.4	-12.4	1.7	1.3	-1.6
	In euro											
2011	6.5	4.0	3.6	6.7	8.1	7.3	-0.4	0.1	-6.6	-3.0	22.2	15.3
2012	5.7	5.0	2.0	10.8	5.9	7.2	-0.5	2.1	-6.5	-1.9	6.3	22.9
2012 Q2	5.5	5.4	1.5	8.5	5.7	6.5	0.7	2.0	-4.2	-3.0	7.9	25.3
Q3	5.3	4.9	0.7	11.4	5.5	6.4	0.2	2.6	-5.8	-0.1	6.3	25.5
Q4	5.8	3.9	3.3	16.4	5.9	6.3	-3.3	1.5	-10.0	-1.7	-2.9	20.5
2013 Q1	4.3	0.6	4.4	17.6	4.3	5.3	-6.5	-2.8	-11.0	-1.2	-8.4	7.9
2012 Dec.	5.2	3.4	4.3	18.0	4.6	5.9	-5.3	-1.0	-10.2	-2.1	-9.2	16.9
2013 Jan.	4.7	2.3	4.6	18.3	4.2	6.4	-6.3	-1.7	-11.0	-1.6	-11.2	11.4
Feb.	3.7	-0.6	4.1	17.3	4.0	4.7	-6.9	-3.7	-11.4	-1.1	-6.4	4.2
Mar.	3.5	-3.3	4.9	16.6	4.9	3.6	-7.4	-5.1	-11.2	0.3	-5.7	0.4
Apr.	3.7	-3.0	5.1	17.5	4.8	4.6	-7.6	-5.3	-11.9	2.7	-4.6	-0.3
May	3.5	-3.8	4.2	15.8	5.1	4.9	-7.4	-5.8	-12.3	3.5	0.8	-1.9

C18 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined

(annual percentage changes)



Source: ECB.

1) Annual percentage changes for monthly data refer to the end of the month, whereas those for quarterly and yearly data refer to the annual change in the period average. See the Technical Notes for details.

4.4 Quoted shares issued by euro area residents [1)]

(EUR billions, unless otherwise indicated; market values)

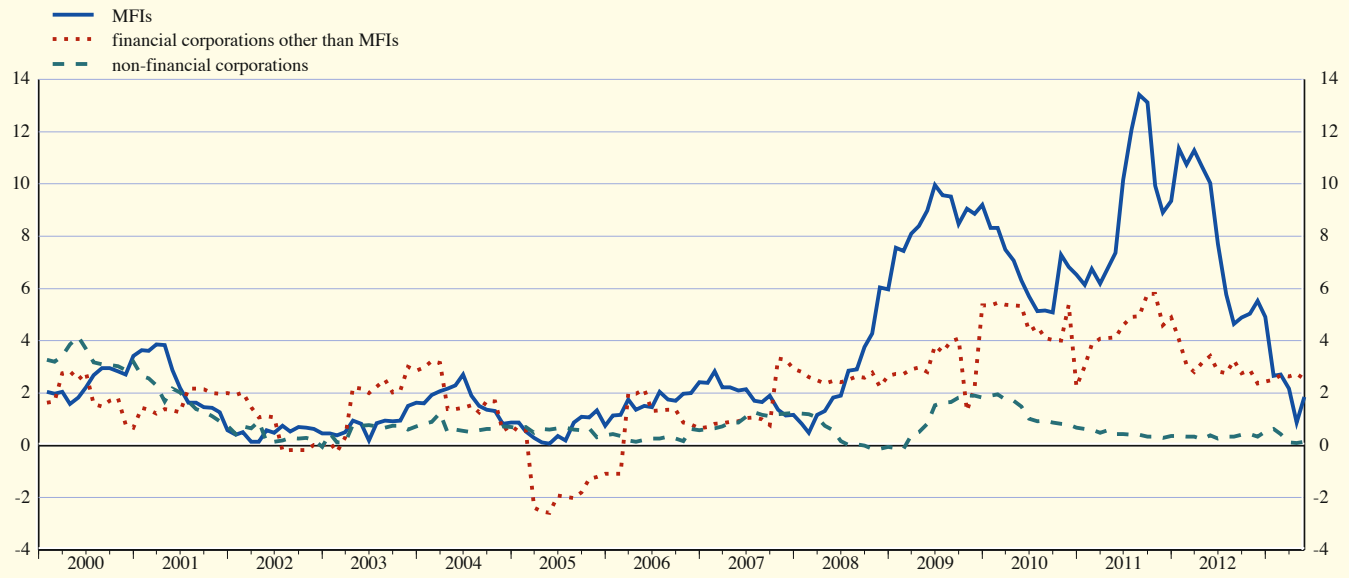
1. Outstanding amounts and annual growth rates

(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 May	4,758.4	105.0	1.5	475.8	7.4	356.2	4.1	3,926.5	0.4
June	4,703.3	105.5	1.7	491.5	10.2	350.5	4.6	3,861.3	0.4
July	4,485.9	105.7	1.9	458.6	12.1	325.5	4.9	3,701.7	0.4
Aug.	3,958.3	105.9	2.1	382.9	13.4	281.6	4.9	3,293.9	0.4
Sep.	3,724.7	105.9	2.0	350.5	13.1	264.1	5.8	3,110.1	0.3
Oct.	4,017.0	105.9	1.7	360.5	9.9	287.6	5.8	3,369.0	0.3
Nov.	3,866.3	106.0	1.5	329.8	8.9	271.2	4.6	3,265.3	0.3
Dec.	3,878.2	106.1	1.6	339.3	9.3	270.4	4.9	3,268.5	0.4
2012 Jan.	4,091.3	106.3	1.7	375.5	11.4	297.7	4.0	3,418.2	0.4
Feb.	4,257.4	106.3	1.5	394.7	10.7	310.9	3.1	3,551.9	0.3
Mar.	4,241.3	106.4	1.5	373.1	11.3	310.7	2.8	3,557.5	0.3
Apr.	4,068.4	106.5	1.4	327.3	10.7	291.6	3.1	3,449.5	0.2
May	3,762.9	106.5	1.5	280.9	10.0	259.8	3.4	3,222.1	0.4
June	3,925.6	106.6	1.1	317.6	7.7	279.9	2.8	3,328.0	0.3
July	4,051.7	106.8	1.0	309.9	5.8	287.1	2.8	3,454.7	0.3
Aug.	4,176.4	106.8	0.9	349.7	4.6	304.3	3.3	3,522.5	0.3
Sep.	4,242.3	106.9	0.9	365.0	4.9	319.2	2.8	3,558.1	0.4
Oct.	4,309.6	107.0	1.0	383.6	5.0	329.5	2.9	3,596.5	0.4
Nov.	4,397.5	106.9	0.9	395.7	5.5	337.8	2.4	3,664.0	0.3
Dec.	4,497.8	107.2	1.0	402.4	4.9	352.9	2.4	3,742.5	0.5
2013 Jan.	4,644.2	107.3	0.9	441.6	2.7	365.5	2.5	3,837.1	0.6
Feb.	4,629.2	107.1	0.8	416.1	2.7	359.1	2.7	3,854.0	0.4
Mar.	4,632.6	106.9	0.5	381.0	2.2	363.4	2.6	3,888.3	0.1
Apr.	4,732.0	106.8	0.3	411.4	0.9	383.7	2.7	3,936.9	0.1
May	4,853.2	107.0	0.5	443.6	1.9	396.5	2.5	4,013.1	0.1

C19 Annual growth rates for quoted shares issued by euro area residents

(annual percentage changes)



Source: ECB.

1) For details of the calculation of the index and the growth rates, see the Technical Notes.

4.4 Quoted shares issued by euro area residents

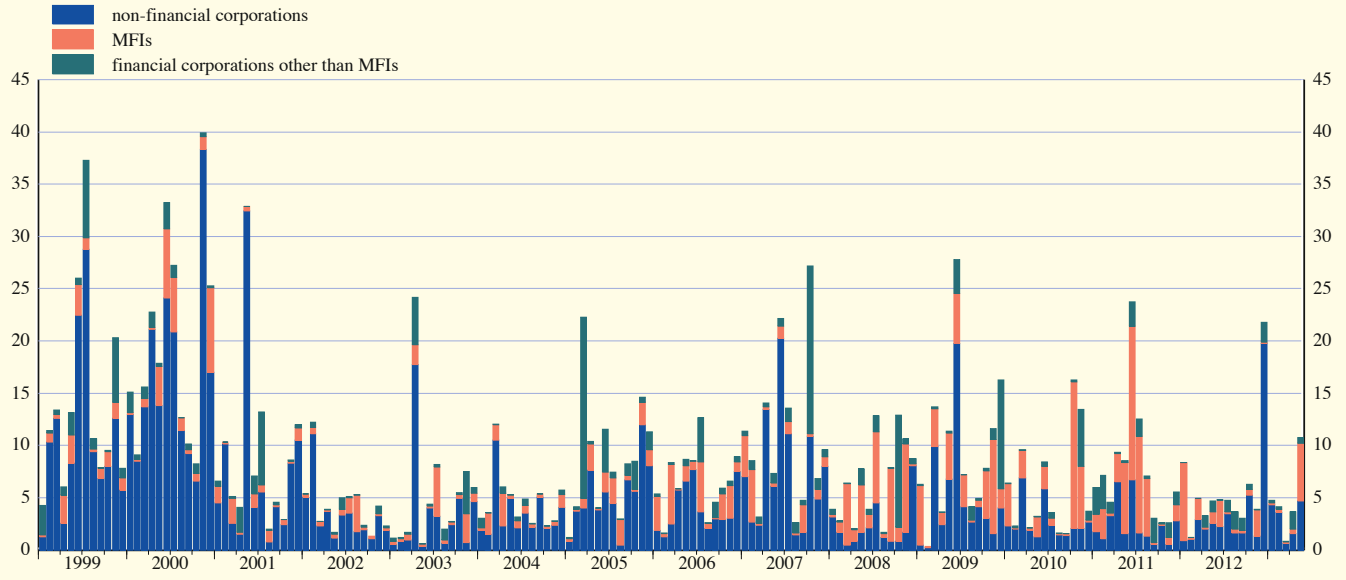
(EUR billions; market values)

2. Transactions during the month

	Total			MFIs			Financial corporations other than MFIs			Non-financial corporations		
	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
2011 May	8.6	8.8	-0.2	6.8	2.1	4.6	0.2	0.0	0.2	1.6	6.6	-5.0
June	23.7	1.3	22.5	14.7	0.0	14.7	2.3	0.3	2.0	6.7	1.0	5.7
July	12.5	0.7	11.8	9.3	0.0	9.3	1.6	0.0	1.6	1.6	0.7	0.9
Aug.	7.1	1.0	6.1	5.5	0.0	5.5	0.3	0.2	0.1	1.3	0.8	0.5
Sep.	2.9	2.9	0.0	0.0	0.9	-0.9	2.3	0.0	2.3	0.5	2.0	-1.4
Oct.	2.4	0.4	2.0	0.0	0.0	0.0	0.1	0.0	0.1	2.3	0.4	1.9
Nov.	2.6	1.5	1.1	0.7	0.0	0.7	1.4	0.0	1.4	0.6	1.5	-1.0
Dec.	5.5	1.1	4.4	1.5	0.0	1.5	1.2	0.0	1.2	2.8	1.1	1.7
2012 Jan.	8.4	0.4	7.9	7.5	0.0	7.5	0.0	0.1	-0.1	0.9	0.3	0.6
Feb.	1.1	1.4	-0.3	0.0	0.0	0.0	0.0	0.2	-0.2	1.0	1.2	-0.1
Mar.	4.9	0.7	4.3	2.0	0.0	2.0	0.0	0.1	-0.1	2.9	0.6	2.3
Apr.	3.1	0.3	2.8	0.0	0.0	0.0	1.1	0.0	1.1	2.0	0.3	1.7
May	4.7	1.8	2.9	1.1	0.0	1.1	1.0	0.1	1.0	2.5	1.7	0.8
June	4.8	1.2	3.6	2.6	0.0	2.6	0.0	0.1	-0.1	2.2	1.1	1.1
July	4.7	0.3	4.4	0.2	0.0	0.2	1.1	0.0	1.1	3.5	0.3	3.2
Aug.	3.7	1.8	1.8	0.4	0.0	0.4	1.6	0.1	1.5	1.6	1.7	-0.1
Sep.	2.9	0.5	2.3	0.1	0.0	0.1	1.2	0.1	1.0	1.7	0.4	1.3
Oct.	6.3	1.8	4.5	0.5	0.0	0.5	0.5	0.1	0.4	5.3	1.7	3.6
Nov.	3.9	5.9	-2.0	2.5	0.0	2.5	0.1	0.1	0.0	1.3	5.8	-4.5
Dec.	21.6	11.4	10.2	0.0	0.5	-0.5	1.8	0.0	1.8	19.7	10.8	8.9
2013 Jan.	4.6	0.3	4.3	0.0	0.0	0.0	0.2	0.1	0.1	4.3	0.2	4.1
Feb.	4.2	11.4	-7.2	0.3	0.0	0.3	0.3	0.0	0.3	3.6	11.4	-7.8
Mar.	0.7	10.6	-9.9	0.0	0.1	-0.1	0.0	0.3	-0.3	0.6	10.1	-9.4
Apr.	3.6	5.9	-2.3	0.4	5.2	-4.8	1.7	0.0	1.6	1.6	0.7	0.9
May	10.8	1.8	8.9	5.5	0.0	5.5	0.6	0.0	0.5	4.7	1.8	2.9

C20 Gross issues of quoted shares by sector of the issuer

(EUR billions; transactions during the month; market values)



Source: ECB.

4.5 MFI interest rates on euro-denominated deposits from and loans to euro area residents [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 July	0.45	2.80	2.89	2.62	1.70	1.86	0.47	1.14	2.01	2.53	1.26
Aug.	0.44	2.66	2.76	2.51	1.68	1.82	0.46	1.10	2.12	2.42	1.01
Sep.	0.42	2.80	2.83	2.43	1.65	1.78	0.46	1.11	2.37	2.53	1.41
Oct.	0.41	2.74	2.56	2.50	1.62	1.73	0.45	1.05	2.18	2.21	1.50
Nov.	0.40	2.73	2.46	2.35	1.61	1.65	0.43	1.03	2.03	2.21	1.12
Dec.	0.39	2.73	2.59	2.25	1.59	1.59	0.42	1.08	1.92	2.16	1.53
2013 Jan.	0.37	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	1.48	0.40	1.05	1.99	2.08	0.63
Mar.	0.36	2.29	2.17	2.28	1.37	1.43	0.40	0.93	1.85	1.99	1.00
Apr.	0.34	2.33	2.10	2.25	1.36	1.36	0.38	0.96	1.70	1.90	0.68
May	0.33	2.04	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	0.88	1.65	1.77	0.72

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 July	8.15	17.01	5.76	6.26	7.82	7.37	3.09	3.40	3.31	3.62	3.58	3.64	4.45	3.49
Aug.	8.12	16.96	5.79	6.28	7.67	7.37	2.94	3.33	3.21	3.52	3.48	3.43	4.45	3.32
Sep.	8.14	16.96	5.78	6.18	7.62	7.25	2.92	3.27	3.21	3.49	3.45	3.23	4.48	3.31
Oct.	8.04	16.97	5.62	6.13	7.67	7.15	2.88	3.24	3.15	3.49	3.42	3.24	4.25	3.33
Nov.	7.96	16.95	5.62	6.09	7.67	7.13	2.87	3.18	3.14	3.40	3.35	3.33	4.23	3.23
Dec.	7.94	16.93	5.35	6.05	7.55	6.94	2.87	3.25	3.25	3.45	3.41	3.15	4.12	3.01
2013 Jan.	7.97	17.06	5.76	6.11	7.88	7.26	2.87	3.17	3.03	3.35	3.34	3.19	4.06	3.08
Feb.	7.97	17.04	5.89	6.03	7.83	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	5.73	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	17.05	5.84	6.02	7.57	7.07	2.82	2.99	2.87	3.16	3.28	3.10	4.08	3.01

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 July	4.29	4.86	5.17	4.58	4.56	4.13	4.12	2.23	3.31	3.62	3.13	3.19	3.50
Aug.	4.20	4.84	4.95	4.31	4.50	3.92	3.88	2.05	2.96	3.08	3.21	3.16	3.01
Sep.	4.18	4.69	4.75	4.26	4.45	3.88	3.93	2.15	2.57	2.93	2.73	2.95	3.06
Oct.	4.21	4.74	4.89	4.29	4.31	3.79	3.94	2.12	2.91	3.30	3.01	2.93	3.20
Nov.	4.17	4.65	4.82	4.16	4.31	3.79	3.78	2.11	2.68	3.76	3.26	2.90	2.91
Dec.	4.18	4.62	4.55	4.24	4.24	3.68	3.51	2.17	2.79	2.84	3.32	2.79	3.01
2013 Jan.	4.21	4.68	4.70	4.03	4.16	3.62	3.68	2.09	2.88	3.32	4.29	2.92	3.02
Feb.	4.20	4.70	4.69	4.05	4.25	3.70	3.66	2.02	2.85	3.13	4.42	2.93	3.14
Mar.	4.16	4.56	4.71	4.11	4.25	3.75	3.61	2.00	2.91	3.07	4.06	2.85	2.85
Apr.	4.15	4.78	4.73	4.16	4.07	3.62	3.58	2.14	2.77	3.21	4.16	3.00	2.94
May	4.10	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	4.60	4.56	4.04	4.24	3.57	3.41	2.05	2.60	3.00	2.96	2.71	3.12

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)

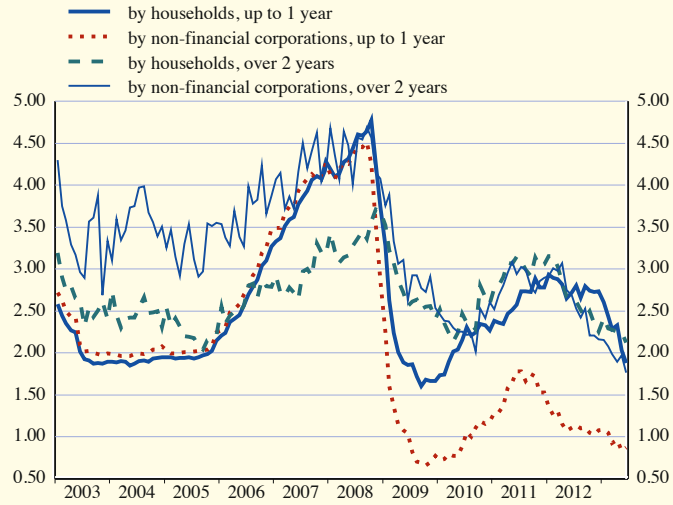
	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight [2]	With an agreed maturity of:		Redeemable at notice of: [2],[3]		Overnight [2]	With an agreed maturity of:		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2012 July	0.45	2.72	2.78	1.70	1.86	0.47	1.89	3.04	2.47
Aug.	0.44	2.70	2.78	1.68	1.82	0.46	1.84	3.01	2.46
Sep.	0.42	2.69	2.79	1.65	1.78	0.46	1.82	3.02	2.61
Oct.	0.41	2.67	2.74	1.62	1.73	0.45	1.78	2.95	2.55
Nov.	0.40	2.66	2.75	1.61	1.65	0.43	1.79	2.96	2.54
Dec.	0.39	2.64	2.73	1.59	1.59	0.42	1.80	2.91	2.65
2013 Jan.	0.37	2.58	2.71	1.53	1.53	0.39	1.75	2.88	2.32
Feb.	0.36	2.58	2.75	1.39	1.48	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	2.75	1.74

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 July	3.77	3.55	3.72	7.78	6.26	5.08	3.89	3.47	3.40
Aug.	3.73	3.52	3.67	7.77	6.23	5.05	3.81	3.41	3.36
Sep.	3.71	3.51	3.67	7.80	6.30	5.03	3.78	3.40	3.34
Oct.	3.64	3.45	3.61	7.75	6.25	4.97	3.76	3.29	3.26
Nov.	3.53	3.42	3.60	7.59	6.23	4.95	3.72	3.30	3.25
Dec.	3.49	3.39	3.56	7.75	6.18	4.92	3.71	3.28	3.22
2013 Jan.	3.46	3.36	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	7.73	6.19	4.88	3.66	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	3.61	3.24	3.14

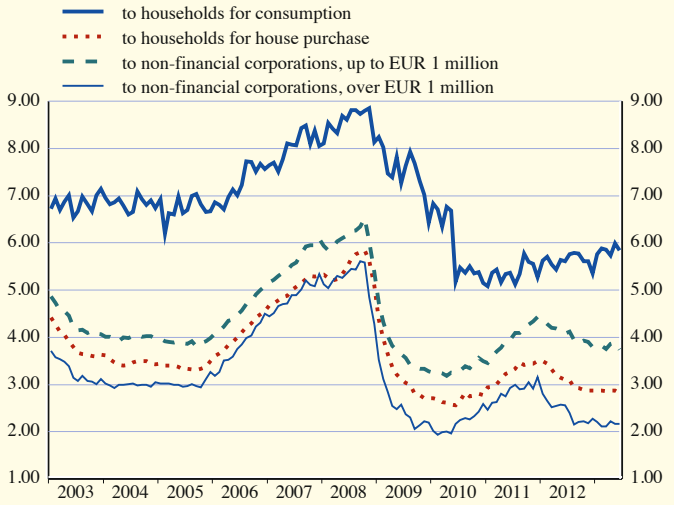
C21 New deposits with an agreed maturity

(percentages per annum excluding charges; period averages)



C22 New loans with a floating rate and up to 1 year's initial rate fixation

(percentages per annum excluding charges; period averages)



Source: ECB.

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

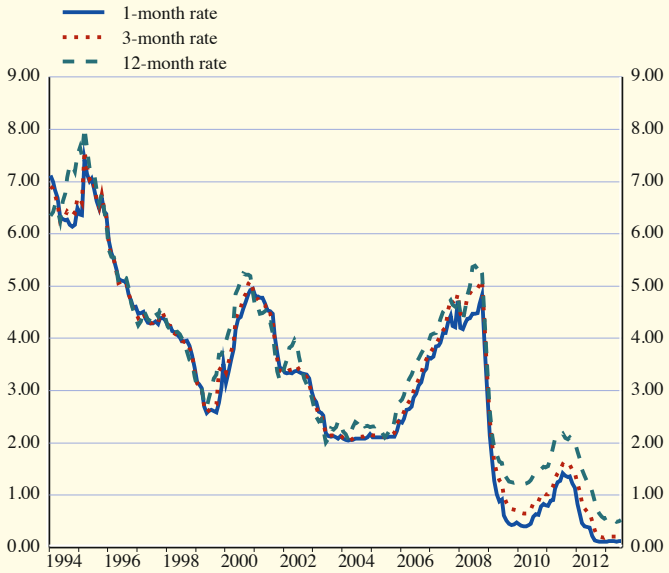
4.6 Money market interest rates

(percentages per annum; period averages)

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

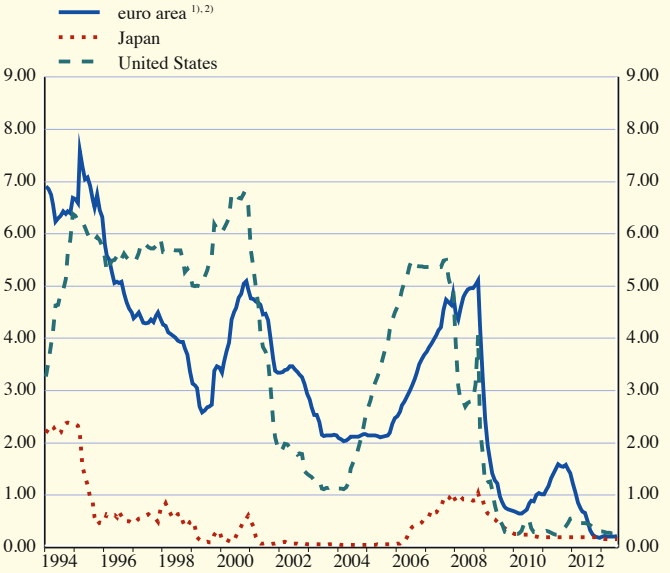
C23 Euro area money market rates [1), 2)]

(monthly averages; percentages per annum)



C24 3-month money market rates

(monthly averages; percentages per annum)



Source: ECB.

1) Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP. For further information, see the General Notes.

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

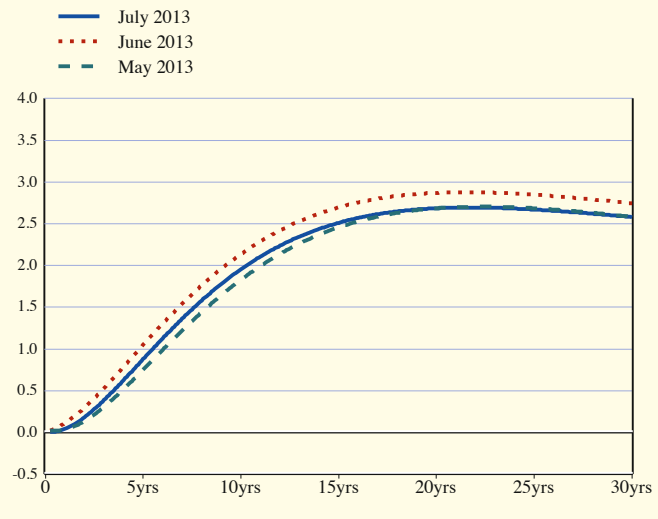
4.7 Euro area yield curves [1)]

(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
2010	0.49	0.60	0.93	2.15	2.78	3.36	2.87	2.43	0.85	1.70	3.99	4.69
2011	0.00	0.09	0.41	1.56	2.13	2.65	2.65	2.24	0.32	1.15	3.24	3.84
2012	0.06	-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2012 Q2	0.04	0.08	0.27	1.17	1.73	2.32	2.27	2.05	0.20	0.76	2.69	3.82
Q3	0.02	-0.01	0.07	0.76	1.29	1.94	1.92	1.87	0.00	0.36	2.10	3.75
Q4	0.06	-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2013 Q1	0.04	0.00	0.07	0.65	1.12	1.76	1.72	1.69	0.01	0.29	1.83	3.60
Q2	0.03	0.11	0.30	1.05	1.54	2.14	2.11	1.84	0.27	0.73	2.35	3.78
2012 July	0.00	-0.09	-0.02	0.71	1.25	1.87	1.87	1.89	-0.11	0.26	2.12	3.52
Aug.	0.03	-0.05	0.01	0.75	1.29	1.91	1.88	1.90	-0.08	0.30	2.17	3.55
Sep.	0.02	-0.01	0.07	0.76	1.29	1.94	1.92	1.87	0.00	0.36	2.10	3.75
Oct.	0.01	-0.01	0.09	0.78	1.31	1.95	1.94	1.86	0.02	0.39	2.13	3.72
Nov.	0.04	-0.02	0.04	0.65	1.15	1.80	1.76	1.76	-0.03	0.27	1.91	3.60
Dec.	0.06	-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2013 Jan.	0.07	0.15	0.32	0.99	1.45	2.02	1.95	1.71	0.28	0.70	2.18	3.62
Feb.	0.03	0.01	0.10	0.74	1.24	1.88	1.86	1.78	0.05	0.38	1.99	3.72
Mar.	0.04	0.00	0.07	0.65	1.12	1.76	1.72	1.69	0.01	0.29	1.83	3.60
Apr.	0.03	-0.01	0.04	0.54	0.96	1.55	1.52	1.51	-0.01	0.23	1.58	3.28
May	0.02	0.03	0.13	0.75	1.22	1.84	1.82	1.71	0.08	0.41	1.95	3.62
June	0.03	0.11	0.30	1.05	1.54	2.14	2.11	1.84	0.27	0.73	2.35	3.78
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

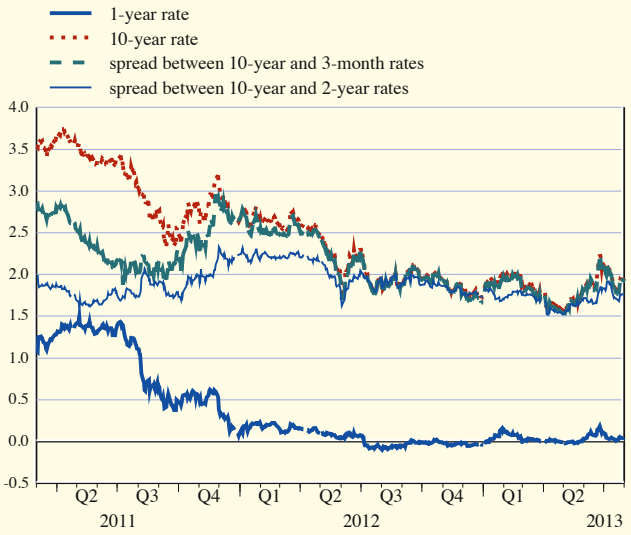
C25 Euro area spot yield curves [2)]

(percentages per annum; end of period)



C26 Euro area spot rates and spreads [2)]

(daily data; rates in percentages per annum; spreads in percentage points)



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

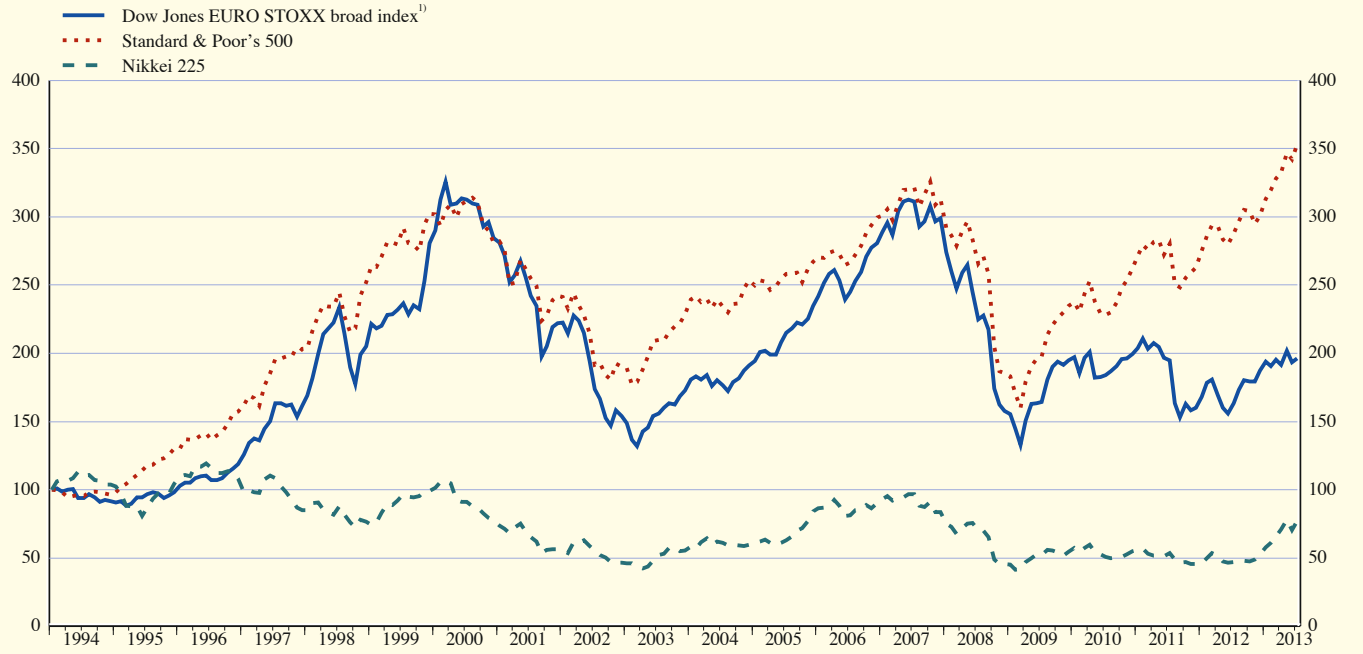
4.8 Stock market indices

(index levels in points; period averages)

	Dow Jones EURO STOXX indices [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
2010	265.5	2,779.3	463.1	166.2	323.4	307.2	182.8	337.6	224.1	344.9	389.6	408.4	1,140.0	10,006.5
2011	256.0	2,611.0	493.4	158.1	351.2	311.6	152.6	349.4	222.5	301.7	358.4	432.7	1,267.6	9,425.4
2012	239.7	2,411.9	503.7	151.9	385.7	307.2	122.1	330.2	219.2	235.9	268.5	523.3	1,379.4	9,102.6
2012 Q2	224.0	2,226.2	472.5	140.8	370.7	285.3	108.2	311.6	207.4	223.4	261.9	493.2	1,349.7	9,026.5
Q3	238.7	2,400.9	505.9	152.7	392.3	307.8	117.2	327.7	215.9	234.0	265.6	548.5	1,400.9	8,886.4
Q4	252.0	2,543.3	536.8	163.6	407.4	310.5	133.0	347.7	231.6	232.0	245.4	570.7	1,418.1	9,208.6
2013 Q1	268.2	2,676.6	568.7	181.2	443.1	309.8	144.1	378.1	257.2	222.9	241.3	600.1	1,514.0	11,457.6
Q2	271.8	2,696.1	574.6	188.6	458.8	303.7	141.5	383.0	259.3	226.1	239.3	653.6	1,609.5	13,629.3
2012 July	226.5	2,258.4	479.1	145.8	379.4	290.4	106.5	313.9	204.4	224.3	257.3	534.2	1,359.8	8,760.7
Aug.	240.5	2,424.5	509.4	154.6	399.7	313.0	116.8	330.3	220.8	231.8	265.7	552.5	1,403.4	8,949.9
Sep.	250.1	2,530.7	531.4	158.2	398.1	321.0	129.5	339.8	223.0	247.2	274.6	559.7	1,443.4	8,948.6
Oct.	248.7	2,503.5	528.4	159.1	398.3	311.7	130.2	340.2	219.9	241.9	255.9	567.6	1,437.8	8,827.4
Nov.	248.7	2,514.0	526.1	162.8	403.8	308.0	131.2	343.7	230.6	226.9	239.0	563.3	1,394.5	9,059.9
Dec.	259.7	2,625.6	559.5	170.0	422.7	312.0	138.5	361.5	246.8	225.8	240.2	583.1	1,422.3	9,814.4
2013 Jan.	269.1	2,715.3	568.4	176.4	434.1	319.7	148.6	373.9	255.3	228.5	251.7	588.6	1,480.4	10,750.9
Feb.	264.7	2,630.4	561.0	180.7	439.1	301.4	143.2	372.7	256.0	218.5	231.1	586.7	1,512.3	11,336.4
Mar.	270.8	2,680.2	576.6	187.2	457.1	307.4	140.1	388.2	260.6	221.0	240.2	626.1	1,550.8	12,244.0
Apr.	265.9	2,636.3	560.9	187.0	449.8	299.6	136.0	374.1	250.5	225.2	238.6	650.8	1,570.7	13,224.1
May	280.2	2,785.8	590.1	192.5	472.0	315.0	147.5	392.7	267.1	232.0	248.7	668.7	1,639.8	14,532.4
June	268.3	2,655.8	571.1	185.9	453.0	294.9	140.4	381.3	259.5	220.4	229.2	639.2	1,618.8	13,106.6
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

C27 Dow Jones EURO STOXX broad index, Standard & Poor's 500 and Nikkei 225

(January 1994 = 100; monthly averages)



Source: ECB.

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

PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

1. Harmonised Index of Consumer Prices [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	87.9	12.3
	1	2	3	4	5	6	7	8	9	10	11	12	13
2009	108.1	0.3	1.3	-0.9	2.0	-	-	-	-	-	-	0.1	1.7
2010	109.8	1.6	1.0	1.8	1.4	-	-	-	-	-	-	1.6	1.7
2011	112.8	2.7	1.7	3.3	1.8	-	-	-	-	-	-	2.6	3.6
2012	115.6	2.5	1.8	3.0	1.8	-	-	-	-	-	-	2.3	3.8
2012 Q2	115.9	2.5	1.8	3.0	1.8	0.5	0.6	0.7	0.3	1.0	0.5	2.3	3.5
Q3	115.7	2.5	1.7	3.1	1.8	0.5	0.4	1.1	0.1	1.2	0.5	2.3	4.0
Q4	116.7	2.3	1.6	2.7	1.7	0.4	0.7	1.5	0.3	-0.1	0.3	2.0	4.1
2013 Q1	116.4	1.9	1.5	2.0	1.7	0.4	0.6	0.5	0.1	1.0	0.4	1.7	3.1
Q2	117.5	1.4	1.3	1.5	1.3	0.1	0.5	1.5	0.1	-1.8	0.2	1.3	2.2
2013 Feb.	116.1	1.8	1.4	2.1	1.5	0.2	0.2	-0.3	0.1	1.2	0.1	1.7	3.1
Mar.	117.5	1.7	1.6	1.7	1.8	0.1	0.2	0.3	0.1	-0.6	0.3	1.5	3.1
Apr.	117.4	1.2	1.1	1.2	1.1	-0.3	0.1	0.5	0.0	-1.0	-0.5	1.0	2.3
May	117.5	1.4	1.3	1.4	1.5	0.2	0.2	0.8	0.0	-1.2	0.5	1.3	2.2
June	117.6	1.6	1.3	1.7	1.4	0.2	0.2	0.9	0.0	0.1	0.2	1.5	2.1
July [3]	117.0	1.6	.	.	1.4	.	.	.	.	0.9	.	.	.

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

Sources: Eurostat and ECB calculations.

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

2) These experimental statistics can only provide an approximate measure of price administration, since changes in administered prices cannot be fully isolated from other influences. Please refer to Eurostat's website (http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/introduction) for a note explaining the methodology used in the compilation of this indicator.

3) Estimate based on provisional national releases, which usually cover around 95% of the euro area, as well as on early information on energy prices.

5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

2. Industry, construction and residential property prices

	Industrial producer prices excluding construction										Construction [1]	Residential property prices [2]
	Total (index: 2010 = 100)	Total		Industry excluding construction and energy						Energy		
			Manufacturing	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	-3.4
2010	100.0	2.7	3.3	1.7	3.6	0.3	0.4	0.7	0.4	5.5	2.0	1.2
2011	105.8	5.8	5.4	3.9	5.9	1.5	3.3	1.9	3.4	11.0	3.3	1.3
2012	108.9	2.9	2.1	1.4	0.8	1.0	2.5	1.6	2.6	6.4	1.6	-1.7
2012 Q1	108.3	4.0	3.0	1.8	1.3	1.2	2.9	2.1	3.0	9.3	2.0	-0.5
Q2	108.7	2.7	1.7	1.2	0.4	1.1	2.1	1.7	2.2	6.1	1.8	-1.2
Q3	109.3	2.6	1.9	1.1	0.3	0.9	2.3	1.5	2.4	6.0	1.4	-2.8
Q4	109.4	2.4	2.0	1.6	1.4	0.8	2.5	1.1	2.6	4.2	1.3	-2.2
2013 Q1	109.7	1.2	0.8	1.2	0.8	0.8	2.1	0.7	2.3	1.2	1.0	-2.9
2012 Dec.	109.2	2.3	1.7	1.7	1.6	0.9	2.4	1.0	2.6	3.6	-	-
2013 Jan.	109.6	1.7	1.2	1.5	1.3	0.8	2.3	0.8	2.5	2.2	-	-
Feb.	109.8	1.3	1.0	1.3	0.8	0.8	2.1	0.6	2.3	1.6	-	-
Mar.	109.6	0.6	0.2	1.0	0.4	0.7	1.9	0.6	2.1	-0.3	-	-
Apr.	108.8	-0.2	-0.5	0.6	-0.3	0.6	1.8	0.7	1.9	-2.1	-	-
May	108.6	-0.1	-0.2	0.5	-0.5	0.6	1.9	0.7	2.0	-1.8	-	-

3. Commodity prices and gross domestic product deflators

	Oil prices [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
2009	44.6	-18.5	-8.9	-23.1	-18.0	-11.4	-22.8	107.2	0.9	-0.1	-0.4	2.1	-0.3	-3.5	-6.3
2010	60.7	44.6	21.4	57.9	42.1	27.1	54.5	108.0	0.8	1.5	1.7	0.7	0.9	3.1	5.0
2011	79.7	12.2	22.4	7.7	12.8	20.7	7.5	109.3	1.2	2.1	2.5	0.8	2.1	3.6	5.7
2012	86.6	0.5	1.1	0.3	2.6	6.4	-0.3	110.8	1.3	1.7	2.1	1.0	1.1	1.5	2.4
2012 Q2	84.6	-1.1	-3.4	0.1	1.1	4.1	-1.2	110.6	1.3	1.7	2.1	1.2	1.1	1.4	2.3
Q3	87.3	5.3	10.4	2.7	7.8	16.0	1.6	111.0	1.3	1.7	2.1	1.3	0.9	1.6	2.4
Q4	84.4	4.4	6.0	3.7	7.0	10.2	4.5	111.3	1.3	1.5	1.8	0.4	0.7	1.2	1.6
2013 Q1	85.0	-3.0	-2.4	-3.3	-1.6	0.0	-2.8	112.0	1.6	1.4	1.3	1.5	0.5	0.1	-0.4
Q2	79.0	-5.2	-4.0	-5.8	-4.3	-2.0	-6.2	.	.	.	.	.	.	.	.
2013 Jan.	84.2	-3.7	-3.4	-3.9	-1.6	0.2	-3.1	-	-	-	-	-	-	-	-
Feb.	86.7	-3.6	-3.4	-3.7	-2.4	-1.3	-3.2	-	-	-	-	-	-	-	-
Mar.	84.2	-1.6	-0.4	-2.2	-0.7	1.2	-2.2	-	-	-	-	-	-	-	-
Apr.	79.3	-3.5	-3.1	-3.7	-2.0	0.3	-3.8	-	-	-	-	-	-	-	-
May	79.2	-4.8	-3.3	-5.5	-4.0	-1.5	-6.0	-	-	-	-	-	-	-	-
June	78.3	-7.3	-5.7	-8.2	-6.9	-4.8	-8.6	-	-	-	-	-	-	-	-

Sources: Eurostat, ECB calculations based on Eurostat data (columns 8-15 in Table 3 in Section 5.1), ECB calculations based on Thomson Reuters data (column 1 in Table 3 in Section 5.1) and ECB calculations (column 12 in Table 2 in Section 5.1 and columns 2-7 in Table 3 in Section 5.1).

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

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

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

	Total (index: 2005 = 100)	Total	By economic activity									
			Agriculture, forestry and fishing	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	0.9	-2.9	0.0	0.9	0.8	2.1	0.6	4.2	2.9	0.4	1.3
2012	112.3	1.6	2.1	2.6	2.5	1.6	2.9	1.1	0.6	1.9	0.5	2.2
2012 Q2	112.1	1.5	1.5	2.7	1.7	1.0	2.1	0.7	1.2	1.5	0.7	1.5
Q3	112.4	1.9	3.1	2.4	2.2	1.9	2.8	1.0	0.7	2.7	1.1	2.5
Q4	113.0	1.6	3.5	2.7	3.9	2.0	4.3	1.0	-0.9	2.0	-0.5	2.9
2013 Q1	113.9	2.0	0.7	3.6	2.2	1.4	3.2	0.8	-1.0	2.3	1.2	1.5
	Compensation per employee											
2011	114.3	2.1	2.0	3.3	3.9	1.6	2.6	1.3	2.3	2.9	1.1	1.7
2012	116.2	1.7	1.3	2.6	2.9	1.5	2.1	1.3	1.1	2.1	0.9	1.8
2012 Q2	116.1	1.8	1.3	2.9	2.7	1.6	2.1	0.9	0.7	2.3	1.0	1.7
Q3	116.5	1.9	1.1	2.8	3.2	1.7	2.1	1.1	0.5	2.2	1.4	1.4
Q4	116.8	1.4	1.1	2.8	3.4	1.4	1.9	1.5	1.4	1.5	0.1	1.7
2013 Q1	117.8	1.8	1.9	2.9	2.9	1.1	1.3	1.9	0.8	1.9	1.5	0.7
	Labour productivity per person employed [2]											
2011	103.4	1.2	5.0	3.3	3.0	0.9	0.5	0.7	-1.8	0.1	0.7	0.4
2012	103.5	0.1	-0.8	-0.1	0.5	0.0	-0.8	0.2	0.5	0.2	0.4	-0.4
2012 Q2	103.6	0.3	-0.1	0.2	1.0	0.6	0.0	0.2	-0.5	0.8	0.3	0.2
Q3	103.6	0.0	-1.9	0.3	1.0	-0.2	-0.7	0.1	-0.2	-0.5	0.3	-1.1
Q4	103.3	-0.2	-2.3	0.1	-0.5	-0.6	-2.3	0.5	2.3	-0.4	0.6	-1.2
2013 Q1	103.5	-0.2	1.2	-0.6	0.7	-0.3	-1.9	1.1	1.7	-0.4	0.3	-0.8
	Compensation per hour worked											
2011	115.8	1.9	0.5	2.4	4.4	1.8	2.5	1.1	1.6	2.7	1.0	1.7
2012	118.6	2.4	3.1	3.6	4.7	2.2	2.1	1.4	1.6	2.2	1.0	2.5
2012 Q2	118.8	2.6	2.4	4.1	4.9	2.4	1.8	0.9	0.3	2.2	1.3	2.5
Q3	118.9	2.6	2.4	4.0	5.1	2.5	1.9	1.1	0.5	2.2	1.7	1.9
Q4	119.5	2.1	3.6	3.9	4.9	2.1	2.1	2.1	3.9	1.9	0.0	2.7
2013 Q1	121.1	3.1	3.8	4.8	5.8	2.3	1.9	3.3	3.8	2.6	2.3	2.0
	Hourly labour productivity [2]											
2011	105.4	1.2	5.8	2.5	3.1	1.0	0.4	0.6	-2.5	-0.1	0.6	0.4
2012	106.1	0.7	-0.2	0.9	1.8	0.6	-0.7	0.2	1.2	0.4	0.6	0.3
2012 Q2	106.5	1.1	0.2	1.3	2.8	1.3	0.0	0.2	-0.2	0.9	0.6	1.0
Q3	106.2	0.5	-1.7	1.5	2.5	0.2	-1.0	0.0	0.5	-0.5	0.5	-0.5
Q4	106.3	0.6	-1.6	1.2	0.7	0.2	-1.8	1.0	4.1	0.2	0.6	-0.1
2013 Q1	107.0	1.1	1.1	1.3	3.3	0.6	-1.1	2.3	3.8	0.7	1.2	0.7

5. Labour cost indices [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	106.5	2.1	2.0	2.8	3.1	2.6	2.5	2.0
2012	108.2	1.5	1.7	1.2	2.4	2.3	1.9	2.1
2012 Q2	112.0	1.7	1.9	1.3	2.8	2.8	2.2	2.2
Q3	105.7	1.7	1.9	1.2	2.8	2.4	1.9	2.2
Q4	114.4	1.3	1.4	0.9	2.7	2.1	1.7	2.2
2013 Q1	102.1	1.6	1.7	1.4	3.3	1.8	1.3	2.0

Sources: Eurostat, ECB calculations based on Eurostat data (Table 4 in Section 5.1) and ECB calculations (column 8 in Table 5 in Section 5.1).
1) Compensation (at current prices) per employee divided by labour productivity per person employed.
2) Total GDP and value added by economic activity (volumes) per labour input (persons employed and hours worked).
3) Hourly labour cost indices for the whole economy, excluding agriculture, forestry and fishing. Owing to differences in coverage, the estimates for the components may not be consistent with the total.
4) Experimental data (see http://www.ecb.europa.eu/stats/intro/html/experiment.en.html for further details).

5.2 Output and demand

(quarterly data seasonally adjusted; annual data unadjusted)

1. GDP and expenditure components

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

Sources: Eurostat and ECB calculations.

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

	Gross value added (basic prices)											Taxes less subsidies on products
	Total	Agriculture, forestry and fishing	Manufacturing, energy and utilities	Construction	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services	
	1	2	3	4	5	6	7	8	9	10	11	12
	Current prices (EUR billions)											
2009	8,028.4	124.0	1,461.4	531.7	1,537.8	369.8	421.3	902.0	803.9	1,581.6	295.0	893.9
2010	8,232.7	135.9	1,568.6	499.5	1,579.5	369.2	438.8	912.3	819.1	1,610.0	299.8	941.9
2011	8,451.4	144.8	1,642.0	505.7	1,627.8	368.7	436.8	942.9	847.4	1,629.5	305.7	973.6
2012	8,511.8	150.3	1,647.7	493.2	1,641.5	364.9	431.7	959.3	865.9	1,645.5	311.8	977.9
2012 Q1	2,125.9	36.9	410.8	125.4	409.2	92.3	109.8	237.5	215.6	410.8	77.5	242.9
Q2	2,128.3	37.0	412.0	124.0	409.0	91.6	108.9	239.6	216.2	412.6	77.4	244.6
Q3	2,132.8	37.6	414.6	122.7	410.5	91.1	107.1	240.6	217.3	412.9	78.4	245.4
Q4	2,125.9	38.6	411.1	121.1	412.7	90.1	106.0	241.6	216.9	409.3	78.6	245.2
2013 Q1	2,138.3	38.8	411.8	120.3	412.4	89.2	109.6	242.8	218.0	416.5	78.9	240.9
	percentage of value added											
2012	100.0	1.8	19.4	5.8	19.3	4.3	5.1	11.3	10.2	19.3	3.7	-
	Chain-linked volumes (prices for the previous year)											
	quarter-on-quarter percentage changes											
2012 Q1	-0.1	-1.6	0.4	-1.5	-0.1	0.0	-0.5	0.2	0.4	-0.2	0.1	0.1
Q2	-0.1	-0.5	-0.2	-1.3	-0.2	0.1	-0.2	0.2	-0.1	0.3	-0.4	-0.7
Q3	-0.1	-1.4	0.2	-1.2	-0.4	0.0	-0.2	0.2	0.2	-0.1	0.3	-0.2
Q4	-0.5	-0.3	-1.7	-1.6	-0.8	-0.5	0.1	0.3	-0.5	0.4	0.2	-1.1
2013 Q1	-0.2	0.8	-0.4	-0.9	0.2	-0.5	0.1	-0.4	0.2	-0.5	-0.4	-0.6
	annual percentage changes											
2009	-4.4	1.2	-13.4	-8.1	-4.5	2.9	0.4	0.4	-7.9	1.5	-0.6	-4.2
2010	2.1	-3.1	8.9	-5.6	2.2	2.0	0.4	-0.6	1.5	1.2	0.1	1.5
2011	1.7	2.8	3.4	-1.0	1.7	1.8	0.3	1.3	2.7	0.9	0.4	0.2
2012	-0.5	-2.4	-1.1	-4.3	-0.8	0.7	-0.6	0.8	0.9	0.1	0.2	-1.7
2012 Q1	0.0	-0.1	-0.8	-3.8	0.1	1.3	-0.2	1.0	1.9	0.2	0.5	-1.4
Q2	-0.3	-1.7	-1.0	-3.7	-0.4	1.3	-0.3	0.7	1.0	0.0	0.2	-2.0
Q3	-0.6	-3.4	-0.8	-4.1	-1.1	0.8	-1.0	0.7	0.7	-0.2	0.3	-1.5
Q4	-0.8	-3.7	-1.3	-5.4	-1.6	-0.3	-0.7	0.9	0.0	0.3	0.2	-2.0
2013 Q1	-1.0	-1.3	-2.1	-4.9	-1.2	-0.8	-0.2	0.4	-0.2	0.0	-0.4	-2.6
	contributions to quarter-on-quarter percentage changes in value added; percentage points											
2012 Q1	-0.1	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Q2	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Q3	-0.1	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-
Q4	-0.5	0.0	-0.3	-0.1	-0.2	0.0	0.0	0.0	0.0	0.1	0.0	-
2013 Q1	-0.2	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-
	contributions to annual percentage changes in value added; percentage points											
2009	-4.4	0.0	-2.6	-0.5	-0.9	0.1	0.0	0.0	-0.8	0.3	0.0	-
2010	2.1	0.0	1.6	-0.4	0.4	0.1	0.0	-0.1	0.2	0.2	0.0	-
2011	1.7	0.0	0.7	-0.1	0.3	0.1	0.0	0.1	0.3	0.2	0.0	-
2012	-0.5	0.0	-0.2	-0.3	-0.2	0.0	0.0	0.1	0.1	0.0	0.0	-
2012 Q1	0.0	0.0	-0.2	-0.2	0.0	0.1	0.0	0.1	0.2	0.0	0.0	-
Q2	-0.3	0.0	-0.2	-0.2	-0.1	0.1	0.0	0.1	0.1	0.0	0.0	-
Q3	-0.6	-0.1	-0.2	-0.2	-0.2	0.0	-0.1	0.1	0.1	0.0	0.0	-
Q4	-0.8	-0.1	-0.3	-0.3	-0.3	0.0	0.0	0.1	0.0	0.1	0.0	-
2013 Q1	-1.0	0.0	-0.4	-0.3	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	-

Sources: Eurostat and ECB calculations.

5.2 Output and demand

(annual percentage changes, unless otherwise indicated)

3. Industrial production

	Total	Industry excluding construction										Construction
		Total (s.a.; index: 2010 = 100)	Total		Industry excluding construction and energy						Energy	
				Manufacturing	Total	Intermediate goods	Capital goods	Consumer goods				
								Total	Durable	Non-durable		
% of total in 2010	100.0	79.4	79.4	68.3	67.7	26.7	23.2	17.8	2.3	15.5	11.7	20.6
	1	2	3	4	5	6	7	8	9	10	11	12
2010	4.0	100.0	7.3	7.7	7.7	10.0	8.9	2.8	2.7	2.9	3.9	-7.8
2011	2.1	103.2	3.2	4.4	4.5	3.8	8.2	0.8	0.6	0.8	-4.7	-2.1
2012	-3.0	100.8	-2.4	-2.6	-2.7	-4.3	-1.1	-2.4	-4.5	-2.1	-0.2	-5.4
2012 Q2	-3.0	101.1	-2.3	-2.7	-2.9	-4.4	-1.2	-2.8	-4.4	-2.5	2.1	-6.2
Q3	-2.7	101.2	-2.2	-2.3	-2.5	-4.2	-0.8	-2.2	-5.3	-1.8	0.0	-4.7
Q4	-3.3	99.2	-3.1	-3.4	-3.6	-4.8	-3.3	-2.0	-5.0	-1.6	-0.3	-4.3
2013 Q1	-2.9	99.3	-2.4	-2.8	-3.0	-3.7	-3.7	-0.9	-4.6	-0.5	0.0	-5.6
2013 Jan.	-3.8	98.9	-2.5	-2.8	-2.8	-3.9	-3.9	0.2	-7.3	1.3	-1.0	-10.1
Feb.	-2.4	99.1	-3.3	-2.5	-2.7	-2.9	-3.9	-0.6	-5.0	-0.1	-6.7	2.2
Mar.	-2.5	100.0	-1.5	-3.0	-3.3	-4.1	-3.2	-2.3	-1.9	-2.5	8.7	-7.6
Apr.	-1.8	100.5	-0.6	-0.5	-0.7	-2.5	1.4	-0.4	-4.8	0.4	-0.6	-6.8
May	-1.8	100.2	-1.3	-1.5	-1.6	-2.6	-0.9	-0.7	-6.2	0.1	0.2	-5.1
	month-on-month percentage changes (s.a.)											
2013 Jan.	-0.9	-	-0.5	-0.7	-0.5	0.1	-1.8	-0.3	-2.0	-0.3	0.1	-3.1
Feb.	0.4	-	0.3	0.1	-0.1	-0.2	0.9	-1.4	0.9	-1.5	1.7	0.6
Mar.	0.2	-	0.9	0.3	0.4	0.1	1.1	0.2	1.6	0.0	3.8	-1.8
Apr.	0.6	-	0.5	1.0	0.8	0.1	2.5	0.2	-1.9	0.7	-1.4	1.0
May	-0.4	-	-0.3	-0.4	-0.2	0.4	-1.5	0.3	-2.3	0.6	0.1	-0.3

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
									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	10.3	2.1	100.0	0.6	0.3	1.4	2.2	0.2	-3.0	843	-8.5
2011	108.6	8.6	109.2	9.1	1.8	99.7	-0.3	-1.0	0.5	1.3	-0.2	-3.3	838	-1.1
2012	104.5	-3.7	108.7	-0.5	0.5	98.0	-1.8	-1.3	-1.7	-4.2	-2.6	-5.1	744	-11.0
2012 Q3	104.7	-2.9	109.2	-0.7	0.8	98.2	-1.4	-0.8	-1.5	-2.7	-2.0	-4.4	721	-12.7
Q4	103.3	-2.2	107.2	-1.7	-0.8	96.8	-2.7	-2.0	-2.8	-4.7	-4.4	-5.4	709	-14.2
2013 Q1	103.0	-2.2	106.8	-2.6	-1.1	97.1	-1.8	-1.6	-2.0	-3.9	-4.4	-3.4	688	-11.3
Q2	.	.	.	.	.	.	.	.	.	.	.	.	708	-7.2
2013 Feb.	102.6	-2.2	106.5	-2.9	-0.9	97.1	-1.7	-2.5	-1.7	0.1	-3.6	-2.5	698	-8.8
Mar.	103.9	-2.2	107.3	-2.7	-1.5	96.9	-2.0	-0.5	-3.2	-9.8	-5.5	-1.9	700	-10.9
Apr.	102.4	-2.5	107.2	-1.7	-0.6	96.7	-1.0	-2.5	0.3	2.8	-3.8	0.3	710	-6.5
May	103.6	-1.8	.	.	0.5	97.7	-0.1	-1.5	0.8	.	.	-1.9	704	-8.0
June	.	.	.	.	.	.	.	.	.	.	.	.	711	-7.2
	month-on-month percentage changes (s.a.)													
2013 Feb.	-	0.1	-	-0.1	-0.2	-	-0.3	-0.3	-0.7	0.3	-1.1	-0.9	-	4.8
Mar.	-	1.2	-	0.7	-0.1	-	-0.2	0.8	-0.8	-4.5	-0.9	1.0	-	0.3
Apr.	-	-1.4	-	-0.1	-0.3	-	-0.2	-1.3	0.8	2.4	-0.1	0.4	-	1.5
May	-	1.1	-	.	1.1	-	1.0	0.9	0.9	.	.	-1.9	-	-1.0
June	-	.	-	.	.	-	.	.	.	.	.	.	-	1.0

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

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
2009	80.7	-28.7	-56.6	14.8	-14.9	71.0	-24.8	-7.0	-26.1	55.3	-10.7
2010	101.1	-4.5	-24.2	1.0	11.6	77.1	-14.2	-5.3	-12.3	31.2	-8.0
2011	101.8	0.2	-6.4	2.3	9.4	80.6	-14.5	-7.4	-18.1	23.2	-9.1
2012	90.4	-11.7	-24.3	6.8	-4.0	78.6	-22.3	-11.2	-27.6	38.4	-12.0
2012 Q2	92.3	-10.5	-21.9	6.5	-3.0	79.1	-19.5	-10.3	-24.2	32.3	-10.9
Q3	87.4	-14.9	-28.6	8.1	-8.1	77.7	-23.8	-11.8	-30.4	40.7	-12.4
Q4	86.8	-15.4	-32.0	6.8	-7.4	77.4	-26.2	-12.9	-31.7	46.3	-13.7
2013 Q1	90.1	-12.2	-29.6	5.4	-1.6	77.5	-23.7	-11.4	-27.3	42.6	-13.3
Q2	89.8	-12.6	-30.9	6.1	-0.9	77.9	-20.9	-10.2	-24.9	35.9	-12.8
2013 Feb.	90.5	-11.1	-27.7	5.1	-0.4	-	-23.6	-11.2	-26.4	43.1	-13.6
Mar.	90.1	-12.2	-30.2	6.0	-0.4	-	-23.5	-11.3	-26.6	42.0	-14.0
Apr.	88.6	-13.7	-33.5	6.3	-1.4	77.5	-22.2	-10.9	-26.4	37.9	-13.7
May	89.5	-13.0	-30.9	6.2	-1.9	-	-21.8	-10.3	-26.8	36.5	-13.7
June	91.3	-11.2	-28.4	5.9	0.7	-	-18.8	-9.5	-21.5	33.3	-11.0
July	92.5	-10.6	-27.8	5.6	1.5	78.3	-17.4	-8.9	-20.9	30.4	-9.4

	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 Q2	-26.9	-32.0	-21.7	-14.4	-18.1	14.8	-10.4	-4.5	-10.1	-4.8	1.3
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
2013 Feb.	-29.2	-37.3	-21.2	-16.1	-24.9	10.2	-13.3	-8.5	-14.4	-9.7	-1.5
Mar.	-29.9	-37.9	-21.9	-17.1	-25.2	10.5	-15.6	-7.1	-11.2	-7.9	-2.1
Apr.	-31.1	-38.7	-23.5	-18.4	-26.4	12.1	-16.8	-11.1	-16.0	-14.8	-2.7
May	-33.0	-39.8	-26.2	-16.7	-25.9	11.0	-13.2	-9.3	-13.2	-12.9	-1.7
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	-13.7	-20.6	10.5	-10.1	-7.8	-11.6	-10.6	-1.2

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

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

2) The economic sentiment indicator is composed of the industrial, services, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator a weight of 30%, the consumer confidence indicator a weight of 20% and the two other indicators a weight of 5% each. Values for the economic sentiment indicator of above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period since 1990.

3) Data are collected in January, April, July and October each year. The quarterly figures shown are averages of two successive surveys. Annual data are derived from quarterly averages.

4) The confidence indicators are calculated as simple averages of the components shown; the assessments of stocks (columns 4 and 17) and unemployment (column 10) are used with inverted signs for the calculation of confidence indicators.

5.3 Labour markets [1)]

(quarterly data seasonally adjusted; annual data unadjusted)

1. Employment

		By employment status		By economic activity									
	Total	Employees	Self-employed	Agriculture, forestry and fishing	Manufacturing, energy and utilities	Construction	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12	13
Persons employed													
	levels (thousands)												
2012	146,197	125,044	21,153	4,991	22,922	9,489	35,931	4,076	4,053	1,322	18,225	34,365	10,822
	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	-3.8	-0.6	-1.4	-0.9	-0.1	1.6	1.0	0.8
2011	0.3	0.4	-0.4	-2.1	0.1	-3.8	0.8	1.3	-0.4	3.1	2.7	0.3	0.0
2012	-0.7	-0.7	-0.3	-1.6	-1.1	-4.8	-0.8	1.5	-0.7	0.4	0.7	-0.3	0.6
2012 Q2	-0.8	-0.8	-0.6	-1.5	-1.1	-4.7	-1.0	1.3	-0.5	1.2	0.2	-0.3	0.1
Q3	-0.6	-0.8	0.2	-1.5	-1.1	-5.1	-0.9	1.5	-1.1	0.9	1.2	-0.5	1.3
Q4	-0.7	-0.8	-0.3	-1.4	-1.4	-5.0	-1.0	2.1	-1.2	-1.3	0.5	-0.3	1.4
2013 Q1	-1.0	-1.0	-0.9	-2.5	-1.5	-5.5	-1.0	1.1	-1.2	-1.4	0.2	-0.3	0.4
	quarter-on-quarter percentage changes												
2012 Q2	-0.1	0.0	-0.5	0.3	-0.4	-0.8	-0.1	0.5	-0.7	0.6	0.3	0.0	-0.2
Q3	-0.1	-0.1	0.1	-0.6	0.0	-1.7	-0.1	-0.3	-0.8	-1.2	0.8	-0.1	0.7
Q4	-0.3	-0.3	-0.4	-0.7	-0.6	-1.6	-0.4	1.1	0.2	0.6	-0.2	-0.1	-0.1
2013 Q1	-0.5	-0.5	-0.1	-1.5	-0.5	-1.6	-0.3	-0.2	0.0	-1.4	-0.7	-0.2	0.0
Hours worked													
	levels (millions)												
2012	230,222	185,189	45,033	10,036	36,090	16,552	59,918	6,562	6,416	2,029	28,410	49,005	15,204
	percentage of total hours worked												
2012	100.0	80.4	19.6	4.4	15.7	7.2	26.0	2.9	2.8	0.9	12.3	21.3	6.6
	annual percentage changes												
2010	0.0	0.1	-0.4	-1.2	-0.4	-3.9	-0.3	-0.8	-0.4	0.9	2.5	1.0	0.5
2011	0.3	0.6	-0.7	-2.8	0.9	-3.9	0.6	1.4	-0.3	3.8	2.8	0.4	0.0
2012	-1.3	-1.3	-1.0	-2.2	-2.0	-6.1	-1.4	1.4	-0.8	-0.4	0.5	-0.5	-0.1
2012 Q2	-1.5	-1.5	-1.3	-1.9	-2.3	-6.4	-1.6	1.3	-0.6	1.0	0.1	-0.6	-0.8
Q3	-1.2	-1.4	-0.1	-1.7	-2.3	-6.4	-1.3	1.8	-1.0	0.2	1.2	-0.7	0.7
Q4	-1.5	-1.5	-1.5	-2.1	-2.5	-6.1	-1.8	1.6	-1.7	-3.0	-0.2	-0.3	0.3
2013 Q1	-2.2	-2.2	-2.0	-2.4	-3.3	-8.0	-1.8	0.3	-2.4	-3.3	-0.8	-1.1	-1.1
	quarter-on-quarter percentage changes												
2012 Q2	-0.8	-0.8	-0.5	-0.6	-1.5	-2.5	-0.4	-0.1	-1.2	0.3	-0.2	-0.5	-1.0
Q3	0.1	0.0	0.5	-0.7	0.0	-1.6	0.2	0.6	-0.1	-0.2	0.8	0.1	1.2
Q4	-0.7	-0.5	-1.3	-0.5	-0.7	-2.0	-1.0	0.2	-0.6	-1.8	-0.6	0.1	-0.7
2013 Q1	-0.9	-1.0	-0.6	-0.7	-1.2	-2.2	-0.6	-0.3	-0.6	-1.7	-0.9	-0.9	-0.7
Hours worked per person employed													
	levels (thousands)												
2012	1,575	1,481	2,129	2,011	1,574	1,744	1,668	1,610	1,583	1,535	1,559	1,426	1,405
	annual percentage changes												
2010	0.5	0.6	0.0	-0.2	2.5	-0.1	0.2	0.6	0.5	1.1	0.8	0.1	-0.3
2011	0.0	0.2	-0.2	-0.7	0.7	-0.1	-0.2	0.1	0.1	0.7	0.2	0.1	0.0
2012	-0.6	-0.6	-0.7	-0.6	-1.0	-1.3	-0.7	-0.1	-0.1	-0.8	-0.2	-0.2	-0.7
2012 Q2	-0.7	-0.7	-0.7	-0.4	-1.2	-1.8	-0.7	0.0	0.0	-0.3	-0.1	-0.4	-0.9
Q3	-0.6	-0.7	-0.3	-0.2	-1.2	-1.4	-0.4	0.3	0.1	-0.6	0.0	-0.2	-0.6
Q4	-0.8	-0.7	-1.2	-0.8	-1.1	-1.2	-0.8	-0.5	-0.5	-1.7	-0.7	0.0	-1.1
2013 Q1	-1.2	-1.3	-1.0	0.1	-1.9	-2.6	-0.8	-0.8	-1.2	-2.0	-1.0	-0.8	-1.5
	quarter-on-quarter percentage changes												
2012 Q2	-0.7	-0.8	0.0	-0.9	-1.1	-1.7	-0.3	-0.6	-0.5	-0.4	-0.5	-0.5	-0.8
Q3	0.2	0.2	0.4	0.0	0.0	0.1	0.4	0.9	0.7	1.0	0.1	0.2	0.5
Q4	-0.3	-0.2	-0.9	0.2	-0.2	-0.4	-0.6	-0.9	-0.8	-2.4	-0.4	0.2	-0.6
2013 Q1	-0.5	-0.5	-0.6	0.8	-0.6	-0.6	-0.3	-0.1	-0.6	-0.3	-0.2	-0.7	-0.6

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

5.3 Labour markets

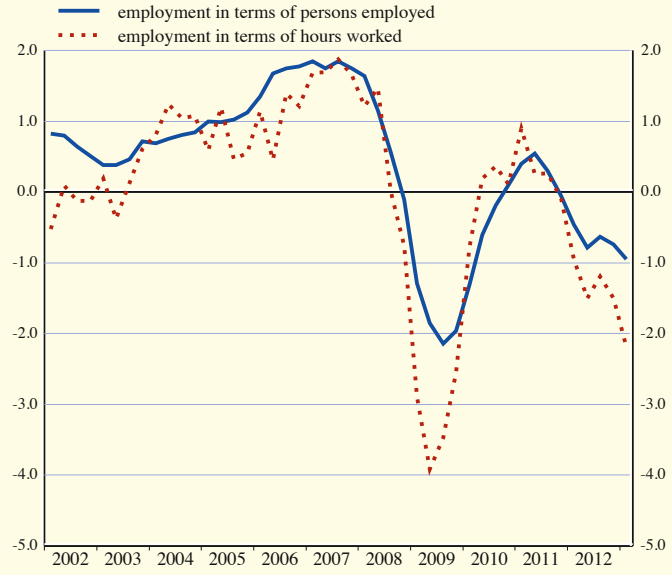
(seasonally adjusted, unless otherwise indicated)

2. Unemployment and job vacancies [1]

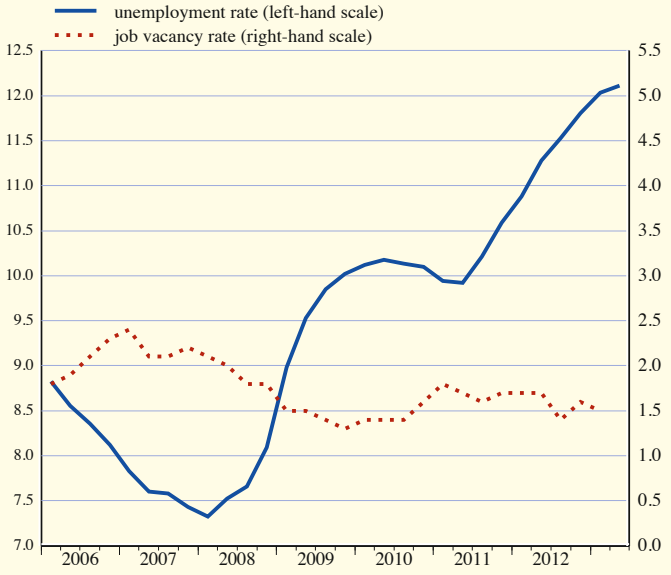
	Unemployment										Job vacancy rate [2]
	Total		By age [3]				By gender [4]				
	Millions	% of labour force	Adult		Youth		Male		Female		
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	% of total posts
% of total in 2010	100.0		79.4		20.6		54.0		46.0		
	1	2	3	4	5	6	7	8	9	10	11
2009	15.054	9.6	11.767	8.4	3.287	20.3	8.146	9.4	6.908	9.8	1.4
2010	15.933	10.1	12.652	8.9	3.281	20.9	8.605	10.0	7.328	10.3	1.5
2011	16.036	10.2	12.823	9.0	3.213	20.9	8.546	9.9	7.489	10.5	1.7
2012	18.072	11.4	14.583	10.1	3.489	23.1	9.706	11.2	8.366	11.6	1.6
2012 Q2	17.924	11.3	14.461	10.1	3.464	22.9	9.652	11.1	8.273	11.4	1.7
Q3	18.338	11.5	14.810	10.3	3.529	23.4	9.857	11.4	8.482	11.7	1.4
Q4	18.780	11.8	15.193	10.5	3.587	23.8	10.077	11.7	8.703	12.0	1.6
2013 Q1	19.133	12.0	15.540	10.8	3.593	24.0	10.271	11.9	8.861	12.2	1.5
Q2	19.265	12.1	15.734	10.9	3.531	23.8	10.326	12.0	8.939	12.3	.
2013 Jan.	19.098	12.0	15.473	10.7	3.626	24.2	10.255	11.9	8.843	12.2	-
Feb.	19.137	12.0	15.536	10.8	3.602	24.1	10.282	11.9	8.856	12.2	-
Mar.	19.163	12.1	15.611	10.8	3.551	23.9	10.277	11.9	8.885	12.2	-
Apr.	19.240	12.1	15.697	10.9	3.544	23.9	10.302	11.9	8.938	12.3	-
May	19.290	12.1	15.766	10.9	3.524	23.8	10.338	12.0	8.951	12.3	-
June	19.266	12.1	15.740	10.9	3.526	23.9	10.337	12.0	8.929	12.3	-

C28 Employment - persons employed and hours worked

(annual percentage changes)



C29 Unemployment and job vacancy [2] rates



Source: Eurostat.

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

GOVERNMENT FINANCE

6.1 Revenue, expenditure and deficit/surplus [1]

(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue										Capital revenue		Memo item: Fiscal burden [2]
			Direct taxes			Indirect taxes		Social contributions			Sales		Capital taxes	
				Households	Corporations		Received by EU institutions		Employers	Employees				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2004	44.5	44.0	11.5	8.5	2.9	13.2	0.3	15.5	8.1	4.5	2.2	0.5	0.4	40.6
2005	44.8	44.3	11.7	8.6	3.0	13.3	0.3	15.4	8.1	4.5	2.3	0.5	0.3	40.7
2006	45.3	45.0	12.3	8.7	3.4	13.4	0.3	15.3	8.0	4.5	2.3	0.3	0.3	41.3
2007	45.3	45.1	12.7	8.9	3.6	13.3	0.3	15.1	8.0	4.4	2.3	0.3	0.3	41.3
2008	45.1	44.9	12.5	9.1	3.2	12.9	0.3	15.3	8.1	4.5	2.3	0.2	0.3	40.9
2009	44.9	44.6	11.6	9.2	2.3	12.8	0.3	15.8	8.3	4.5	2.5	0.3	0.4	40.6
2010	44.8	44.5	11.5	8.9	2.5	12.9	0.3	15.7	8.2	4.5	2.6	0.3	0.3	40.4
2011	45.3	45.0	11.9	9.1	2.7	13.0	0.3	15.7	8.2	4.5	2.6	0.3	0.3	40.9
2012	46.2	46.0	12.4	9.6	2.7	13.3	0.3	15.9	8.3	4.7	2.6	0.2	0.3	41.8

2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure				Memo item: Primary expenditure [3]
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments	Subsidies	Paid by EU institutions		Investment	Capital transfers	Paid by EU institutions	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2004	47.4	43.5	10.5	5.0	3.1	24.9	22.1	1.7	0.5	3.9	2.5	1.5	0.1	44.3
2005	47.3	43.4	10.5	5.0	3.0	24.9	22.1	1.7	0.5	3.9	2.5	1.4	0.0	44.3
2006	46.7	42.8	10.3	5.0	2.9	24.6	21.8	1.6	0.5	3.9	2.5	1.4	0.0	43.8
2007	46.0	42.2	10.1	5.0	3.0	24.2	21.4	1.6	0.4	3.8	2.6	1.2	0.0	43.1
2008	47.3	43.3	10.3	5.2	3.0	24.8	21.9	1.6	0.4	3.9	2.6	1.3	0.0	44.2
2009	51.3	47.0	11.1	5.7	2.9	27.4	24.3	1.8	0.4	4.3	2.8	1.4	0.0	48.4
2010	51.0	46.6	10.9	5.7	2.8	27.2	24.2	1.8	0.4	4.4	2.6	1.8	0.0	48.1
2011	49.5	46.0	10.6	5.5	3.0	26.9	23.9	1.7	0.4	3.5	2.3	1.2	0.0	46.5
2012	49.9	46.2	10.5	5.5	3.1	27.1	24.3	1.6	0.4	3.7	2.1	1.6	0.1	46.9

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

	Deficit (-)/surplus (+)					Primary deficit (-)/ surplus (+)	Government consumption [4]							
	Total	Central gov.	State gov.	Local gov.	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Collective consumption	Individual consumption
	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	13.7
2010	-6.2	-5.1	-0.7	-0.3	-0.1	-3.4	22.1	10.9	5.7	5.9	2.1	2.6	8.4	13.6
2011	-4.1	-3.3	-0.7	-0.2	0.0	-1.1	21.6	10.6	5.5	5.8	2.1	2.6	8.2	13.4
2012	-3.7	-3.4	-0.3	0.0	0.0	-0.6	21.6	10.5	5.5	5.9	2.1	2.6	8.2	13.4

4. Euro area countries – deficit (-)/surplus (+) [5]

	BE	DE	EE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2009	-5.6	-3.1	-2.0	-13.9	-15.6	-11.2	-7.5	-5.5	-6.1	-0.8	-3.7	-5.6	-4.1	-10.2	-6.2	-8.0	-2.5
2010	-3.8	-4.1	0.2	-30.8	-10.7	-9.7	-7.1	-4.5	-5.3	-0.9	-3.6	-5.1	-4.5	-9.8	-5.9	-7.7	-2.5
2011	-3.7	-0.8	1.2	-13.4	-9.5	-9.4	-5.3	-3.8	-6.3	-0.2	-2.8	-4.5	-2.5	-4.4	-6.4	-5.1	-0.8
2012	-3.9	0.2	-0.3	-7.6	-10.0	-10.6	-4.8	-3.0	-6.3	-0.8	-3.3	-4.1	-2.5	-6.4	-4.0	-4.3	-1.9

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

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

6.2 Debt [1]

(as a percentage of GDP)

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

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

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

	Total	Issued by: [4]				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	61.9	4.7	14.7	26.3	28.6	68.7	1.0
2005	70.5	57.2	6.7	5.2	1.4	7.8	62.8	4.6	14.8	25.8	29.9	69.4	1.1
2006	68.7	55.4	6.5	5.3	1.4	7.3	61.4	4.3	14.3	24.2	30.1	67.9	0.7
2007	66.4	53.5	6.3	5.3	1.4	7.1	59.2	4.2	14.5	23.6	28.2	65.8	0.5
2008	70.2	56.9	6.7	5.3	1.3	10.0	60.2	4.9	17.7	23.5	29.1	69.3	1.0
2009	80.0	64.8	7.7	5.8	1.7	12.0	68.0	5.0	19.5	27.3	33.2	78.8	1.2
2010	85.4	69.2	8.3	5.9	1.9	13.0	72.3	5.1	21.2	29.3	34.9	84.2	1.2
2011	87.3	70.7	8.5	5.9	2.2	12.6	74.7	6.0	20.8	30.4	36.1	85.6	1.7
2012	90.7	73.6	8.9	6.0	2.3	11.7	78.9	7.0	20.6	32.1	37.9	88.7	2.0

3. Euro area countries

	BE	DE	EE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2009	95.7	74.5	7.2	64.8	129.7	53.9	79.2	116.4	58.5	15.3	66.4	60.8	69.2	83.7	35.0	35.6	43.5
2010	95.5	82.4	6.7	92.1	148.3	61.5	82.4	119.3	61.3	19.2	67.4	63.1	72.0	94.0	38.6	41.0	48.6
2011	97.8	80.4	6.2	106.4	170.3	69.3	85.8	120.8	71.1	18.3	70.3	65.5	72.5	108.3	46.9	43.3	49.0
2012	99.6	81.9	10.1	117.6	156.9	84.2	90.2	127.0	85.8	20.8	72.1	71.2	73.4	123.6	54.1	52.1	53.0

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

1) Gross general government debt at nominal value and consolidated between sub-sectors of government. Holdings by non-resident governments are not consolidated. Intergovernmental lending in the context of the financial crisis is consolidated. Data are partially estimated.
2) Holders resident in the country whose government has issued the debt.
3) Includes residents of euro area countries other than the country whose government has issued the debt.
4) Excludes debt held by general government in the country whose government has issued it.

6.3 Change in debt [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	3.5	1.6	3.4
2011	4.2	4.0	0.1	0.0	0.0	0.4	0.2	3.5	3.4	1.0	1.0	0.8
2012	4.0	5.4	-1.4	0.0	0.2	2.1	-0.5	2.2	4.1	2.0	1.2	-0.2

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+)	Deficit-debt adjustment [7]											
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	Other [8]
				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	3.0	0.8	0.7	0.7	0.9	-0.1	0.7	0.1	0.0	0.0	0.0
2009	7.3	-6.4	0.9	1.0	0.3	0.0	0.3	0.4	-0.3	0.5	-0.2	0.0	0.0	0.1
2010	7.6	-6.2	1.4	1.8	0.0	0.5	1.0	0.2	0.0	0.2	-0.1	0.0	0.0	-0.3
2011	4.2	-4.1	0.0	-0.3	0.2	-0.2	-0.2	-0.1	-0.1	0.2	0.1	0.0	0.0	0.2
2012	4.0	-3.7	0.2	1.4	0.3	0.6	-0.1	0.6	-0.1	0.3	-1.4	0.0	0.0	0.3

Source: ECB.

1) Data are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e. [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 Q1	42.2	41.9	10.4	12.8	14.7	2.2	0.9	0.4	0.3	38.3
Q2	45.8	45.4	13.0	13.0	15.0	2.2	1.4	0.4	0.3	41.2
Q3	43.6	43.2	12.3	12.4	14.8	2.2	0.7	0.5	0.3	39.7
Q4	49.2	48.7	14.8	13.8	15.7	2.5	1.0	0.6	0.3	44.6
2008 Q1	42.4	42.1	10.9	12.3	14.8	2.2	1.1	0.3	0.2	38.2
Q2	45.3	45.0	12.9	12.4	15.1	2.3	1.5	0.4	0.3	40.6
Q3	43.4	43.0	12.2	12.0	15.0	2.3	0.8	0.4	0.3	39.5
Q4	48.8	48.3	13.9	13.4	16.4	2.6	1.1	0.5	0.3	43.9
2009 Q1	42.5	42.3	10.4	12.0	15.6	2.4	1.1	0.1	0.2	38.2
Q2	45.4	44.8	11.8	12.5	15.7	2.5	1.4	0.6	0.5	40.5
Q3	42.8	42.5	10.9	12.0	15.5	2.5	0.7	0.3	0.3	38.7
Q4	48.7	47.8	13.0	13.6	16.4	2.7	1.0	0.8	0.5	43.5
2010 Q1	42.2	42.0	10.1	12.2	15.5	2.4	0.9	0.2	0.3	38.1
Q2	45.1	44.7	11.9	12.6	15.4	2.6	1.3	0.5	0.3	40.2
Q3	43.0	42.6	10.9	12.5	15.2	2.5	0.7	0.3	0.3	38.9
Q4	48.5	47.8	13.2	13.4	16.4	2.8	1.0	0.7	0.3	43.3
2011 Q1	42.9	42.7	10.6	12.5	15.3	2.5	1.0	0.3	0.3	38.7
Q2	45.3	45.0	12.1	12.7	15.4	2.5	1.5	0.3	0.3	40.4
Q3	43.7	43.4	11.4	12.5	15.3	2.5	0.8	0.3	0.3	39.5
Q4	49.2	48.2	13.3	13.4	16.7	2.8	1.0	1.0	0.4	43.8
2012 Q1	43.3	43.2	10.9	12.6	15.4	2.4	1.0	0.2	0.2	39.1
Q2	46.2	45.8	12.6	12.8	15.6	2.5	1.4	0.3	0.3	41.3
Q3	44.7	44.3	11.9	12.6	15.5	2.6	0.8	0.4	0.3	40.4
Q4	50.6	49.9	14.2	13.9	16.9	2.8	1.0	0.7	0.3	45.3
2013 Q1	43.9	43.7	11.2	12.6	15.7	2.5	1.0	0.2	0.3	39.7

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 Q1	44.9	41.4	9.9	4.5	2.9	24.1	20.7	1.1	3.5	2.3	1.2	-2.6	0.3
Q2	45.0	41.6	10.0	4.8	3.2	23.6	20.6	1.1	3.4	2.5	0.9	0.8	4.0
Q3	44.6	41.0	9.6	4.8	2.9	23.8	20.6	1.2	3.6	2.6	0.9	-1.0	1.9
Q4	49.3	44.7	10.8	5.9	2.9	25.1	21.2	1.5	4.5	2.8	1.7	0.0	2.9
2008 Q1	45.4	41.8	9.9	4.5	3.0	24.4	20.8	1.2	3.6	2.3	1.2	-3.0	0.0
Q2	46.0	42.4	10.2	5.0	3.3	23.9	20.8	1.1	3.6	2.6	1.0	-0.6	2.7
Q3	45.7	42.1	9.8	5.0	3.0	24.4	21.2	1.2	3.7	2.7	1.0	-2.4	0.6
Q4	51.4	46.7	11.2	6.3	2.9	26.3	22.3	1.4	4.6	2.9	1.7	-2.5	0.4
2009 Q1	49.3	45.5	10.7	5.1	2.8	26.9	22.9	1.3	3.8	2.6	1.2	-6.9	-4.1
Q2	50.7	46.5	11.1	5.5	3.0	26.9	23.3	1.3	4.2	2.8	1.3	-5.3	-2.3
Q3	50.1	46.0	10.6	5.5	2.8	27.1	23.5	1.3	4.1	2.9	1.1	-7.2	-4.4
Q4	54.7	49.8	11.8	6.7	2.8	28.4	24.0	1.5	4.9	3.0	1.9	-6.0	-3.2
2010 Q1	50.4	46.5	10.8	5.1	2.7	27.9	23.6	1.4	3.9	2.4	1.5	-8.2	-5.5
Q2	49.6	46.1	11.0	5.5	3.0	26.7	23.2	1.3	3.5	2.5	1.1	-4.5	-1.5
Q3	50.4	45.2	10.3	5.4	2.7	26.8	23.1	1.3	5.2	2.6	2.6	-7.4	-4.7
Q4	53.4	48.7	11.4	6.6	2.9	27.7	23.6	1.5	4.7	2.7	2.0	-4.9	-2.0
2011 Q1	48.5	45.4	10.4	5.0	2.9	27.2	23.1	1.3	3.1	2.1	1.0	-5.6	-2.7
Q2	48.5	45.3	10.6	5.3	3.2	26.2	22.8	1.2	3.3	2.3	0.9	-3.3	0.0
Q3	48.0	44.6	10.1	5.2	2.9	26.4	22.9	1.2	3.5	2.3	1.1	-4.4	-1.5
Q4	52.6	48.7	11.2	6.5	3.2	27.7	23.6	1.5	3.9	2.5	1.7	-3.4	-0.2
2012 Q1	48.1	45.5	10.3	4.9	3.0	27.3	23.3	1.2	2.7	1.9	0.8	-4.8	-1.8
Q2	49.1	45.8	10.5	5.3	3.3	26.7	23.2	1.2	3.3	2.1	1.2	-3.0	0.3
Q3	48.5	44.9	10.0	5.3	2.9	26.7	23.4	1.2	3.6	2.2	1.4	-3.9	-1.0
Q4	53.9	48.8	11.0	6.5	3.2	28.1	24.1	1.4	5.0	2.3	2.8	-3.3	-0.1
2013 Q1	48.8	46.1	10.4	4.9	2.8	27.9	23.8	1.2	2.7	1.8	1.1	-4.9	-2.1

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

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

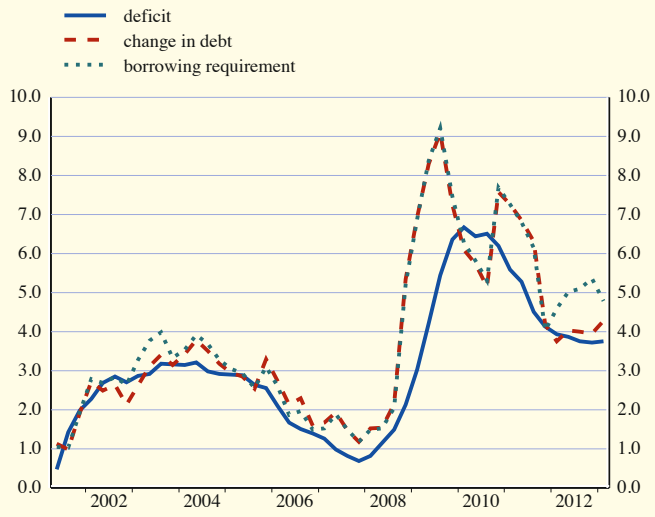
1. Euro area – Maastricht debt by financial instrument

	Total	Financial instruments			
		Currency and deposits	Loans	Short-term securities	Long-term securities
	1	2	3	4	5
2010 Q2	82.9	2.4	13.5	7.8	59.2
Q3	83.0	2.4	13.4	7.9	59.3
Q4	85.4	2.4	15.4	7.3	60.2
2011 Q1	86.3	2.4	15.2	7.4	61.2
Q2	87.2	2.4	15.0	7.5	62.3
Q3	86.8	2.4	15.1	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	62.3
Q2	89.9	2.5	16.7	7.3	63.4
Q3	89.9	2.5	16.5	7.2	63.6
Q4	90.7	2.6	17.4	6.8	63.9
2013 Q1	92.3	2.6	16.9	7.0	65.7

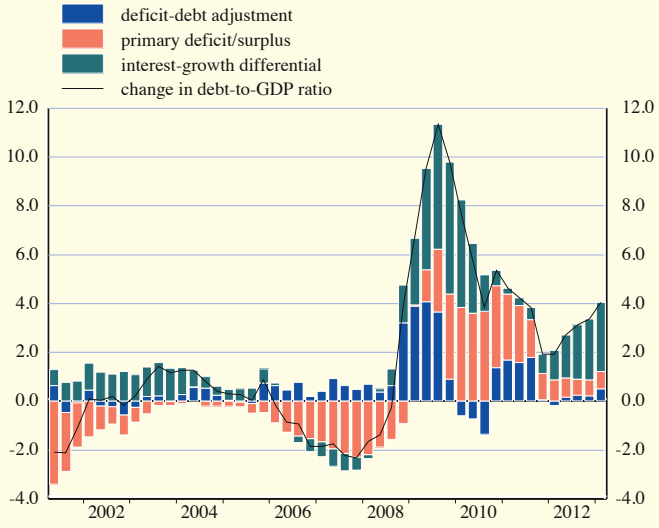
2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-)/ surplus (+)	Deficit-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 Q2	7.7	-4.5	3.2	3.3	2.0	1.1	-0.2	0.4	-0.1	0.0	7.7
Q3	2.7	-7.4	-4.7	-2.9	-2.3	-0.6	-0.1	0.1	0.0	-1.8	2.8
Q4	11.6	-4.9	6.7	5.6	-0.4	1.6	4.4	0.0	0.0	1.1	11.6
2011 Q1	6.9	-5.6	1.3	0.7	2.1	-0.8	-0.6	-0.1	0.2	0.4	6.7
Q2	6.0	-3.3	2.8	2.6	2.8	0.6	-0.3	-0.5	0.1	0.1	5.9
Q3	0.7	-4.4	-3.6	-3.7	-3.7	-0.4	0.2	0.2	0.5	-0.4	0.3
Q4	3.2	-3.4	-0.2	-0.6	-0.3	-0.2	-0.1	0.1	-0.1	0.5	3.3
2012 Q1	5.1	-4.8	0.3	3.8	4.2	0.0	-0.4	0.0	-3.9	0.4	8.9
Q2	7.1	-3.0	4.1	3.8	1.6	1.1	0.4	0.7	-0.5	0.8	7.6
Q3	0.6	-3.9	-3.3	-1.3	-1.7	0.6	-0.4	0.1	0.0	-2.0	0.6
Q4	3.0	-3.3	-0.2	-0.7	-2.9	0.5	0.1	1.6	-1.3	1.8	4.4
2013 Q1	6.4	-4.9	1.5	1.6	1.7	-0.2	-0.3	0.4	-0.2	0.1	6.6

C30 Deficit, borrowing requirement and change in debt
(four-quarter moving sum as a percentage of GDP)



C31 Maastricht debt
(annual change in the debt-to-GDP ratio and underlying factors)



Sources: ECB calculations based on Eurostat and national data.
1) Intergovernmental lending in the context of the financial crisis is consolidated.

7 EXTERNAL TRANSACTIONS AND POSITIONS

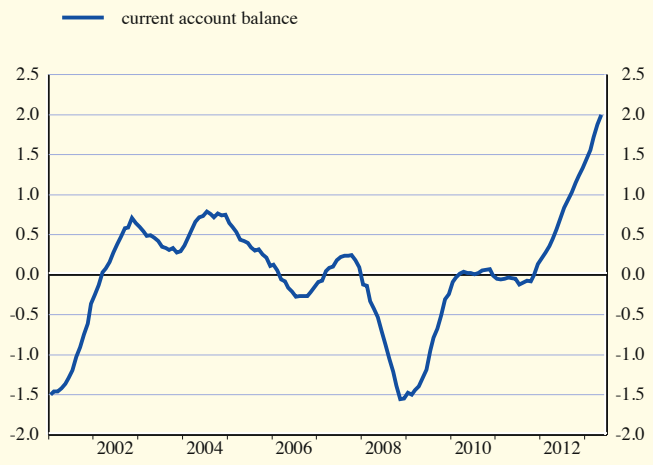
7.1 Summary balance of payments [1]

(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	3.5	17.2	56.5	38.9	-109.2	5.7	9.2	9.1	-88.8	119.5	18.4	-29.5	-10.5	-18.3
2011	14.9	6.8	73.2	42.1	-107.2	11.2	26.0	-42.7	-118.7	252.5	-5.3	-161.0	-10.2	16.6
2012	122.4	98.9	92.2	38.5	-107.2	15.1	137.5	-146.8	-64.1	90.4	17.8	-176.8	-14.1	9.3
2012 Q1	-2.8	6.8	16.6	12.5	-38.7	3.2	0.4	2.0	-3.6	-76.8	-5.3	89.8	-2.1	-2.4
Q2	18.3	25.7	26.3	-8.6	-25.1	1.4	19.8	-19.5	-15.2	96.7	-8.0	-84.0	-9.0	-0.3
Q3	40.8	30.3	27.0	13.0	-29.4	4.0	44.9	-41.6	-4.9	-14.8	2.8	-24.6	-0.1	-3.2
Q4	66.1	36.2	22.3	21.6	-14.0	6.4	72.5	-87.8	-40.4	85.3	28.3	-158.0	-3.0	15.3
2013 Q1	32.5	32.5	18.9	22.7	-41.6	1.7	34.2	-37.8	-23.6	10.7	9.3	-34.1	0.0	3.5
2012 May	-2.8	7.4	8.9	-10.8	-8.2	1.4	-1.4	-0.4	3.5	30.1	-7.5	-25.0	-1.5	1.7
June	18.2	13.9	9.9	2.1	-7.7	-0.2	18.0	-16.7	-16.1	63.2	-2.2	-57.0	-4.5	-1.3
July	21.8	14.5	9.9	5.2	-7.9	0.7	22.4	-17.5	2.5	4.8	-1.7	-23.6	0.5	-5.0
Aug.	8.8	5.6	7.9	5.9	-10.6	1.6	10.5	-7.7	12.6	-19.1	6.2	-5.9	-1.6	-2.8
Sep.	10.2	10.2	9.1	1.9	-11.0	1.7	11.9	-16.4	-20.0	-0.5	-1.7	4.9	1.0	4.5
Oct.	15.0	10.5	7.0	6.4	-8.8	2.4	17.4	-19.0	-7.7	60.4	10.3	-79.3	-2.6	1.5
Nov.	22.4	14.0	5.7	7.5	-4.8	2.3	24.7	-34.3	11.1	18.3	7.4	-70.0	-1.0	9.6
Dec.	28.6	11.8	9.5	7.6	-0.3	1.7	30.4	-34.5	-43.8	6.6	10.6	-8.7	0.7	4.1
2013 Jan.	-4.2	-2.3	4.7	6.7	-13.2	0.1	-4.0	-3.9	-10.0	24.7	5.0	-18.8	-4.8	7.9
Feb.	11.9	11.9	6.4	9.2	-15.6	1.2	13.1	-9.0	11.0	-18.4	3.0	-7.2	2.6	-4.1
Mar.	24.8	22.9	7.8	6.8	-12.7	0.4	25.2	-24.9	-24.6	4.4	1.2	-8.1	2.2	-0.3
Apr.	16.6	16.3	7.5	2.4	-9.5	1.3	17.9	-18.5	-6.9	1.5	-3.4	-9.7	-0.1	0.6
May	9.5	17.1	8.0	-7.0	-8.6	2.3	11.8	-17.0	0.4	29.8	-7.1	-39.5	-0.6	5.2
	12-month cumulated transactions													
2013 May	183.7	146.3	93.6	54.7	-110.9	15.6	199.3	-219.3	-91.6	175.7	27.7	-322.9	-8.2	20.1
	12-month cumulated transactions as a percentage of GDP													
2013 May	1.9	1.5	1.0	0.6	-1.2	0.2	2.1	-2.3	-1.0	1.9	0.3	-3.4	-0.1	0.2

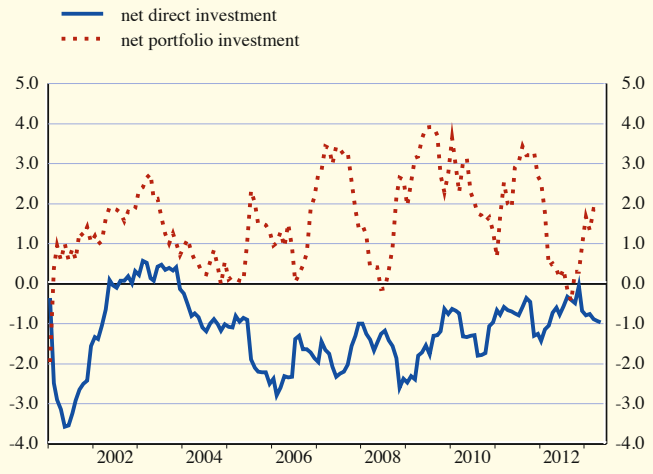
C32 Euro area b.o.p.: current account

(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)



C33 Euro area b.o.p.: direct and portfolio investment

(12-month cumulated transactions as a percentage of GDP)



Source: ECB.

1) The sign convention is explained in the General Notes.

7.2 Current and capital accounts

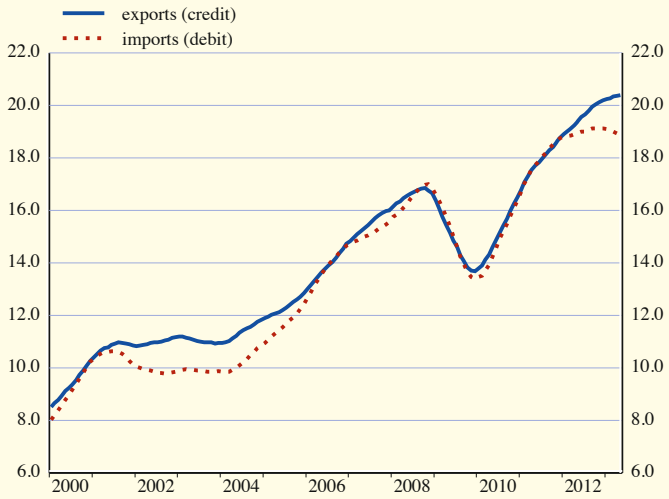
(EUR billions; transactions)

1. Summary current and capital accounts

	Current account													Capital account	
	Total			Goods		Services		Income		Current transfers					
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit		Debit		Credit	Debit
											Workers' remittances		Workers' remittances		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2010	2,710.8	2,707.3	3.5	1,576.9	1,559.6	543.9	487.5	502.8	463.9	87.1	6.3	196.3	27.1	20.3	14.7
2011	2,985.1	2,970.2	14.9	1,787.9	1,781.1	581.5	508.4	521.2	479.1	94.5	6.6	201.7	27.8	25.4	14.2
2012	3,150.0	3,027.6	122.4	1,918.3	1,819.4	626.0	533.8	507.6	469.1	98.1	6.8	205.3	26.2	29.0	13.9
2012 Q1	756.4	759.3	-2.8	468.1	461.4	140.6	124.0	121.6	109.0	26.1	1.6	64.8	6.3	5.4	2.2
Q2	791.5	773.1	18.3	480.5	454.8	156.8	130.4	133.0	141.6	21.2	1.6	46.3	6.6	5.8	4.3
Q3	789.7	748.9	40.8	480.1	449.8	167.2	140.2	125.1	112.2	17.3	1.9	46.7	6.6	7.0	2.9
Q4	812.4	746.3	66.1	489.5	453.3	161.5	139.2	127.9	106.3	33.5	1.7	47.5	6.7	10.8	4.4
2013 Q1	764.3	731.8	32.5	471.0	438.5	145.0	126.1	120.4	97.6	28.0	1.6	69.6	5.9	5.8	4.2
2013 Mar.	269.2	244.4	24.8	167.5	144.6	51.3	43.5	44.1	37.3	6.3	-	19.0	-	2.1	1.8
Apr.	265.1	248.5	16.6	165.4	149.1	50.9	43.4	42.2	39.9	6.5	-	16.1	-	2.3	0.9
May	266.5	257.0	9.5	162.8	145.7	52.3	44.3	44.4	51.4	6.9	-	15.6	-	3.1	0.8
	Seasonally adjusted														
2012 Q3	794.8	759.5	35.3	484.7	455.7	157.4	135.0	127.7	117.2	24.9	-	51.7	-	-	-
Q4	794.1	750.6	43.5	483.7	451.5	158.6	135.3	126.2	112.5	25.6	-	51.3	-	-	-
2013 Q1	792.8	735.6	57.2	483.5	440.2	158.7	132.9	125.5	108.0	25.0	-	54.5	-	-	-
2013 Mar.	267.9	244.8	23.1	162.3	144.1	54.6	44.8	42.5	37.1	8.5	-	18.8	-	-	-
Apr.	268.2	244.5	23.8	163.3	145.4	53.1	44.9	43.6	38.4	8.2	-	15.7	-	-	-
May	264.9	245.3	19.6	162.9	144.8	52.7	46.3	42.1	37.1	7.3	-	17.1	-	-	-
	12-month cumulated transactions														
2013 May	3,179.7	2,990.2	189.5	1,938.7	1,790.0	633.7	540.0	508.2	452.7	99.1	-	207.5	-	-	-
	12-month cumulated transactions as a percentage of GDP														
2013 May	33.5	31.5	2.0	20.4	18.8	6.7	5.7	5.3	4.8	1.0	-	2.2	-	-	-

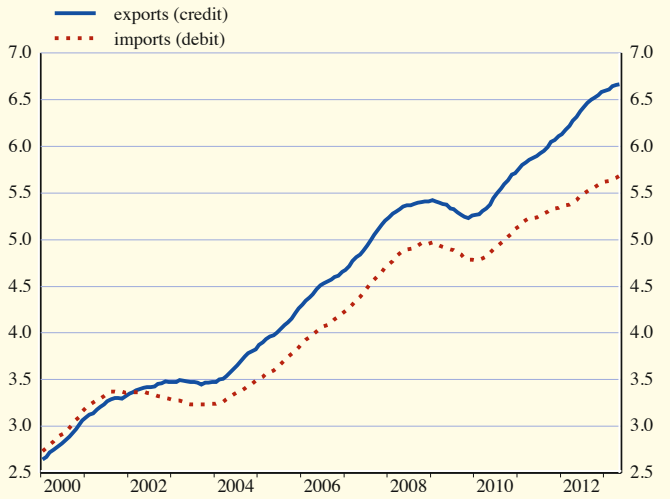
C34 Euro area b.o.p.: goods

(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)



C35 Euro area b.o.p.: services

(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)



Source: ECB.

7.2 Current and capital accounts
(EUR billions)

2. Income account
(transactions)

	Compensation of employees		Investment income													
	Credit	Debit	Total		Direct investment						Portfolio investment				Other investment	
			Credit	Debit	Equity				Debt		Equity		Debt		Credit	Debit
					Credit		Debit		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	477.7	451.5	245.8	48.6	154.7	45.2	23.4	24.3	28.8	84.0	102.1	123.8	77.6	64.7
2011	27.1	13.0	494.1	466.1	248.9	25.6	154.0	53.2	24.7	23.0	35.3	97.6	103.3	127.0	81.9	64.6
2012	28.6	13.2	478.9	455.9	233.4	51.1	153.7	24.1	25.5	24.0	42.4	104.1	98.5	118.8	79.2	55.3
2012 Q1	6.9	2.5	114.7	106.5	55.4	23.1	36.8	17.5	5.7	5.4	8.9	16.8	24.2	32.3	20.6	15.3
Q2	7.2	3.5	125.8	138.1	59.1	-0.4	44.2	8.0	6.3	5.8	15.6	45.4	24.7	28.7	20.1	14.1
Q3	7.1	3.9	118.0	108.2	56.9	15.7	38.7	13.9	6.7	5.5	9.9	21.2	24.9	29.8	19.5	13.0
Q4	7.5	3.3	120.4	103.0	61.9	12.7	34.1	-15.3	6.9	7.3	8.0	20.7	24.7	27.9	18.9	12.9
2013 Q1	7.1	2.4	113.3	95.2	57.3	24.5	32.4	15.5	6.2	5.3	7.5	17.6	24.6	28.2	17.6	11.7

3. Geographical breakdown
(cumulated transactions)

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

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	170.6	-16.7	4,412.8	3,532.5	4,340.9	6,863.8	-1.3	4,527.2	4,829.3	459.6
2010	15,216.8	16,479.1	-1,262.3	165.9	179.6	-13.8	4,946.7	3,908.6	4,907.3	7,470.9	-32.6	4,807.6	5,099.5	587.8
2011	15,843.0	17,152.6	-1,309.6	168.1	182.0	-13.9	5,564.7	4,392.0	4,762.6	7,628.4	-24.3	4,876.7	5,132.3	663.4
2012 Q3	16,469.2	17,596.5	-1,127.3	173.7	185.6	-11.9	5,645.1	4,254.9	5,187.8	8,122.4	-21.2	4,923.7	5,219.2	733.8
Q4	16,587.8	17,827.3	-1,239.6	174.8	187.9	-13.1	5,830.0	4,421.6	5,266.7	8,316.4	-19.5	4,821.2	5,089.3	689.4
2013 Q1	16,993.9	18,171.3	-1,177.4	179.1	191.6	-12.4	5,919.9	4,457.6	5,523.6	8,558.5	-31.4	4,894.0	5,155.2	687.8
	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	1,477.7	1,253.5	224.2	16.1	13.7	2.4	533.9	376.1	566.4	607.1	-31.2	280.4	270.2	128.2
2011	626.2	673.6	-47.3	6.6	7.1	-0.5	618.0	483.3	-144.7	157.5	8.3	69.1	32.8	75.6
2012	744.7	674.7	70.1	7.8	7.1	0.7	265.4	29.7	504.1	688.0	4.8	-55.5	-43.0	26.0
2012 Q4	118.5	230.8	-112.3	4.9	9.5	-4.6	185.0	166.7	78.8	194.0	1.7	-102.5	-130.0	-44.4
2013 Q1	406.1	344.0	62.1	17.5	14.8	2.7	89.8	36.0	256.9	242.1	-11.9	72.8	65.9	-1.5
	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	657.7	666.8	-9.1	7.2	7.3	-0.1	362.4	273.6	134.2	253.7	-18.4	169.0	139.5	10.5
2011	583.2	540.6	42.7	6.2	5.7	0.5	447.0	328.4	-55.9	196.6	5.3	176.6	15.6	10.2
2012	429.9	283.0	146.8	4.5	3.0	1.5	268.4	204.3	184.1	274.5	-17.8	-19.0	-195.8	14.1
2012 Q3	68.8	27.2	41.6	2.9	1.2	1.8	52.6	47.7	40.0	25.2	-2.8	-21.0	-45.7	0.1
Q4	-3.5	-91.3	87.8	-0.1	-3.8	3.6	70.0	29.6	79.7	165.0	-28.3	-127.9	-285.9	3.0
2013 Q1	227.0	189.2	37.8	9.8	8.1	1.6	65.9	42.3	105.6	116.3	-9.3	64.7	30.6	0.0
2013 Jan.	118.0	114.1	3.9	-	-	-	16.2	6.2	30.5	55.3	-5.0	71.5	52.7	4.8
Feb.	100.7	91.7	9.0	-	-	-	24.8	35.8	43.8	25.3	-3.0	37.7	30.5	-2.6
Mar.	8.2	-16.7	24.9	-	-	-	24.9	0.3	31.3	35.7	-1.2	-44.5	-52.6	-2.2
Apr.	139.4	120.9	18.5	-	-	-	12.9	6.1	41.9	43.4	3.4	81.2	71.4	0.1
May	-15.3	-32.3	17.0	-	-	-	0.1	0.5	17.9	47.6	7.1	-41.0	-80.5	0.6
	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	819.9	586.7	233.3	8.9	6.4	2.5	171.5	102.5	432.2	353.5	-12.8	111.4	130.7	117.7
2011	43.0	133.0	-90.0	0.5	1.4	-1.0	170.9	154.9	-88.8	-39.2	3.0	-107.5	17.2	65.4
2012	314.9	391.6	-76.7	3.3	4.1	-0.8	-3.0	-174.6	320.0	413.5	22.6	-36.5	152.8	11.8
	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	537.3	325.5	211.8	5.9	3.5	2.3	165.6	50.1	199.0	115.1	.	159.8	160.3	12.9
2011	221.9	172.3	49.6	2.4	1.8	0.5	64.0	23.0	87.9	60.1	.	62.4	89.1	7.6
2012	-	-	188.7	.	.	2.0	-	-	-	-	.	-	-	16.7
	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	153.8	147.0	3.3	1.7	1.6	47.0	2.1	165.1	151.8	-12.8	.	.	101.5
2011	-442.5	-250.9	-191.6	-4.7	-2.7	-2.0	-95.5	0.0	-409.2	-250.9	3.0	.	.	59.3
2012	-	-	568.0	.	.	6.0	-	-	-	-	22.6	.	.	30.0
	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	-18.2	107.4	-125.6	-0.2	1.2	-1.4	-41.2	50.3	68.1	86.6	.	-48.4	-29.5	3.3
2011	263.6	211.6	52.0	2.8	2.2	0.6	202.4	131.9	232.5	151.5	.	-169.9	-71.9	-1.5
2012	-820.6	-407.8	-412.8	-8.6	-4.3	-4.3	-201.3	-217.9	-391.2	182.3	.	-215.0	-372.2	-13.1
	Growth rates of outstanding amounts													
2008	3.0	3.6	-	.	.	.	9.2	3.7	-0.2	3.9	.	-0.2	3.3	1.0
2009	-0.7	-0.5	-	.	.	.	8.9	8.8	2.4	5.6	.	-10.1	-12.5	-1.3
2010	4.6	4.3	-	.	.	.	7.9	7.5	3.0	3.6	.	3.7	2.8	2.0
2011	3.9	3.3	-	.	.	.	9.1	8.5	-1.2	2.6	.	3.8	0.4	1.6
2012 Q3	2.5	1.7	-	.	.	.	6.4	7.3	1.2	0.2	.	-0.8	-0.6	2.7
Q4	2.7	1.7	-	.	.	.	4.8	4.7	3.8	3.5	.	-0.4	-3.8	2.1
2013 Q1	2.2	1.0	-	.	.	.	4.5	3.8	3.1	4.3	.	-0.8	-6.5	1.8

Source: ECB.

1) Net financial derivatives are included in assets.

7.3 Financial account

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

2. Direct investment

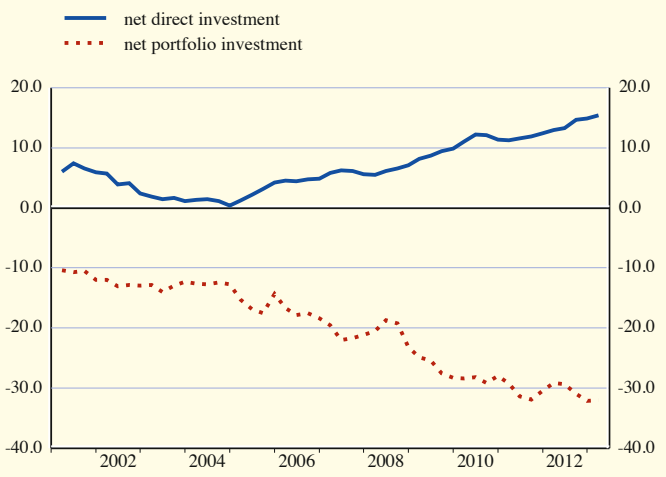
	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs		Total	Into MFIs	Into non-MFIs	Total	To MFIs	To non-MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Oustanding amounts (international investment position)													
2010	4,946.7	3,825.3	275.3	3,550.0	1,121.4	17.0	1,104.4	3,908.6	2,940.6	90.4	2,850.3	968.0	14.7	953.2
2011	5,564.7	4,230.1	287.6	3,942.5	1,334.6	13.5	1,321.0	4,392.0	3,337.2	92.6	3,244.6	1,054.7	11.2	1,043.5
2012 Q4	5,830.0	4,376.0	289.1	4,086.9	1,454.1	13.5	1,440.6	4,421.6	3,154.5	108.3	3,046.2	1,267.1	11.3	1,255.8
2013 Q1	5,919.9	4,461.4	283.8	4,177.6	1,458.5	14.6	1,443.9	4,457.6	3,203.5	110.8	3,092.7	1,254.1	12.2	1,241.9
	Transactions													
2010	362.4	231.2	21.2	210.0	131.2	1.6	129.6	273.6	294.8	8.8	286.0	-21.2	-7.7	-13.5
2011	447.0	380.7	22.5	358.2	66.3	-3.5	69.8	328.4	332.5	5.1	327.4	-4.1	-0.9	-3.3
2012	268.4	208.0	-1.1	209.1	60.4	0.3	60.1	204.3	201.2	6.6	194.6	3.1	0.6	2.5
2012 Q3	52.6	30.7	1.5	29.1	21.9	0.1	21.8	47.7	38.0	2.0	36.0	9.7	1.7	8.0
Q4	70.0	58.9	-0.2	59.1	11.2	0.2	11.0	29.6	52.7	1.3	51.4	-23.2	-0.6	-22.6
2013 Q1	65.9	58.5	-0.9	59.4	7.4	1.1	6.4	42.3	41.1	3.3	37.8	1.2	0.7	0.5
2013 Jan.	16.2	29.7	-0.1	29.8	-13.5	0.7	-14.2	6.2	15.4	0.9	14.5	-9.2	1.2	-10.4
Feb.	24.8	21.8	0.0	21.8	3.0	0.3	2.8	35.8	15.1	1.1	14.0	20.7	0.2	20.6
Mar.	24.9	7.1	-0.8	7.8	17.8	0.1	17.7	0.3	10.6	1.2	9.3	-10.3	-0.6	-9.6
Apr.	12.9	10.5	2.0	8.5	2.4	-0.6	3.1	6.1	2.2	0.5	1.6	3.9	1.4	2.5
May	0.1	8.8	0.2	8.6	-8.7	-0.9	-7.8	0.5	3.1	-0.1	3.2	-2.6	0.1	-2.7
	Growth rates													
2010	7.9	6.4	8.9	6.2	13.2	10.6	13.3	7.5	11.0	11.1	11.0	-2.5	-37.9	-1.8
2011	9.1	10.1	8.4	10.2	6.0	-21.4	6.4	8.5	11.3	5.7	11.5	-0.6	-7.6	-0.5
2012 Q3	6.4	7.2	-0.5	7.8	3.7	4.6	3.7	7.3	8.8	7.3	8.9	2.3	16.0	2.2
Q4	4.8	4.9	-0.4	5.3	4.4	1.4	4.5	4.7	6.3	7.2	6.2	0.5	6.0	0.5
2013 Q1	4.5	4.7	-0.1	5.1	3.9	2.0	3.9	3.8	5.6	8.1	5.5	-0.6	19.1	-0.7

C36 Euro area international investment position

(outstanding amounts at end of period; as a percentage of GDP)

C37 Euro area direct and portfolio investment position

(outstanding amounts at end of period; as a percentage of GDP)



Source: ECB.

7.3 Financial account

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

3. Portfolio investment assets

	Total	Equity					Debt instruments									
							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)															
2010	4,907.3	1,907.7	81.2	3.6	1,826.5	47.6	2,579.3	807.6	15.6	1,771.7	74.5	420.3	316.3	41.7	104.0	0.2
2011	4,762.6	1,703.4	62.5	3.1	1,640.8	39.6	2,592.9	725.7	16.0	1,867.2	94.2	466.3	300.6	57.5	165.7	0.5
2012 Q4	5,266.7	1,947.5	70.7	2.8	1,876.7	42.4	2,852.4	674.9	15.6	2,177.5	97.8	466.8	288.0	53.8	178.8	1.5
2013 Q1	5,523.6	2,141.8	88.2	3.1	2,053.5	48.3	2,915.8	655.7	16.6	2,260.1	98.3	466.0	279.9	51.1	186.0	0.5
	Transactions															
2010	134.2	77.3	4.1	-0.2	73.2	1.7	103.0	-126.3	-0.8	229.3	51.5	-46.1	-64.9	-11.7	18.8	-1.9
2011	-55.9	-70.8	-15.7	-0.2	-55.1	-7.3	-15.7	-55.1	0.3	39.4	-3.0	30.6	24.3	10.5	6.4	0.2
2012	184.1	58.3	4.9	0.1	53.4	0.0	123.4	-39.5	-0.9	162.8	-8.0	2.5	-18.0	2.3	20.5	0.2
2012 Q3	40.0	4.4	-1.7	0.0	6.0	0.8	34.4	-10.0	-0.4	44.4	0.0	1.1	-2.6	2.8	3.7	-0.2
Q4	79.7	59.7	10.1	0.0	49.6	0.9	38.5	7.1	0.5	31.5	-3.5	-18.5	-20.6	5.6	2.1	0.3
2013 Q1	105.6	62.1	13.9	0.1	48.3	3.4	35.0	-15.6	1.1	50.6	0.7	8.5	4.5	0.6	3.9	-0.2
2013 Jan.	30.5	17.6	0.9	0.0	16.6	-	10.6	-7.5	0.9	18.0	-	2.4	-0.5	2.7	3.0	-
Feb.	43.8	17.3	0.6	0.0	16.8	-	17.7	-5.7	-0.3	23.4	-	8.7	4.9	1.3	3.8	-
Mar.	31.3	27.2	12.4	0.1	14.9	-	6.7	-2.4	0.4	9.1	-	-2.7	0.2	-3.4	-2.8	-
Apr.	41.9	17.3	-0.1	0.0	17.4	-	5.7	-9.8	-6.4	15.5	-	18.8	11.3	15.5	7.6	-
May	17.9	9.1	4.6	0.0	4.6	-	5.5	-0.9	0.1	6.4	-	3.3	3.8	1.1	-0.5	-
	Growth rates															
2010	3.0	4.9	5.6	-5.1	4.8	4.8	4.1	-13.6	-4.9	14.7	124.1	-10.3	-17.9	-25.4	22.3	-91.7
2011	-1.2	-4.1	-20.3	-6.0	-3.4	-15.9	-0.6	-7.0	2.2	2.2	-3.1	7.5	8.0	26.6	6.1	120.7
2012 Q3	1.2	-2.3	-20.3	-5.9	-1.5	-4.7	2.1	-9.3	-17.0	6.6	-6.3	9.5	7.6	-5.0	11.5	-21.6
Q4	3.8	3.2	8.0	2.8	3.0	-0.2	4.6	-5.5	-5.5	8.5	-7.8	0.6	-5.5	3.4	12.4	37.9
2013 Q1	3.1	5.2	21.4	5.8	4.6	13.0	3.6	-6.6	4.8	7.2	-6.0	-6.7	-12.0	12.8	3.4	55.1

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)											
2010	7,470.9	3,175.5	665.8	2,509.7	3,841.4	1,189.9	2,651.5	1,648.3	454.0	69.5	384.6	347.4
2011	7,628.4	3,042.7	556.9	2,485.7	4,142.3	1,273.5	2,868.7	1,772.1	443.5	87.2	356.2	316.5
2012 Q4	8,316.4	3,499.3	539.4	2,959.8	4,353.0	1,181.4	3,171.6	1,963.4	464.2	90.6	373.6	301.0
2013 Q1	8,558.5	3,648.9	523.6	3,125.3	4,415.9	1,184.9	3,231.0	2,009.6	493.7	94.5	399.2	326.3
	Transactions											
2010	253.7	123.1	-13.1	136.2	175.1	55.8	119.3	186.8	-44.5	15.0	-59.5	-38.9
2011	196.6	78.7	19.5	59.2	165.4	78.5	87.0	89.1	-47.5	2.2	-49.7	-37.5
2012	274.5	154.4	-18.3	172.8	120.4	-52.7	173.2	154.8	-0.3	3.4	-3.8	-25.5
2012 Q3	25.2	21.8	-4.8	26.6	45.0	-8.4	53.3	60.0	-41.6	-16.8	-24.9	-12.6
Q4	165.0	95.7	-10.4	106.1	44.0	-5.1	49.1	32.0	25.3	8.1	17.2	-7.3
2013 Q1	116.3	51.9	-7.8	59.7	31.3	-1.1	32.4	45.4	33.2	13.7	19.5	24.5
2013 Jan.	55.3	29.5	-8.7	38.2	16.6	8.5	8.0	-	9.2	-0.3	9.5	-
Feb.	25.3	7.4	3.8	3.6	4.0	2.8	1.2	-	14.0	11.3	2.7	-
Mar.	35.7	15.0	-2.9	17.9	10.7	-12.4	23.1	-	9.9	2.7	7.3	-
Apr.	43.4	11.6	-1.6	13.2	27.9	0.8	27.1	-	3.9	5.0	-1.1	-
May	47.6	44.9	2.0	42.8	-2.0	-1.8	-0.2	-	4.8	1.8	3.0	-
	Growth rates											
2010	3.6	4.3	-2.0	6.2	4.9	4.9	4.8	12.4	-8.8	18.5	-13.4	-9.8
2011	2.6	2.5	3.1	2.2	4.4	6.9	3.3	5.5	-9.1	5.2	-12.1	-10.9
2012 Q3	0.2	1.9	3.1	1.3	1.1	-5.8	4.2	6.5	-17.2	-8.7	-19.3	-22.9
Q4	3.5	4.8	-3.4	6.5	2.9	-4.2	6.0	8.7	-0.1	3.5	-1.0	-7.7
2013 Q1	4.3	5.0	-6.2	7.3	3.7	-2.6	6.3	9.9	4.9	14.6	2.5	-2.2

Source: ECB.

7.3 Financial account

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

5. Other investment assets

	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			Trade credits	Loans/currency and deposits	
											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)														
2010	4,807.6	32.9	32.2	0.7	2,972.0	2,932.7	39.4	161.9	7.6	115.4	19.8	1,640.7	213.3	1,279.5	441.6
2011	4,876.7	35.7	35.4	0.3	3,067.6	3,006.6	61.0	162.8	6.7	116.4	30.2	1,610.6	228.4	1,214.6	506.9
2012 Q4	4,821.2	40.1	39.9	0.3	2,923.3	2,853.2	70.1	166.2	5.1	121.4	29.2	1,691.5	263.0	1,227.3	580.9
2013 Q1	4,894.0	33.0	32.7	0.3	2,954.5	2,884.5	70.0	152.4	5.1	107.4	23.5	1,754.1	262.4	1,249.9	606.1
	Transactions														
2010	169.0	-2.9	-2.8	0.0	10.1	1.3	8.9	41.5	-0.3	41.1	4.9	120.3	8.7	87.8	53.6
2011	176.6	-2.7	-2.8	0.1	50.4	20.6	29.9	4.4	-0.2	4.2	10.3	124.4	8.1	91.2	47.7
2012	-19.0	10.7	10.7	0.0	-121.3	-130.5	9.2	4.7	-1.6	6.4	-1.0	86.8	8.9	61.7	28.4
2012 Q3	-21.0	6.2	6.2	0.0	-40.5	-47.5	7.0	-9.0	-1.5	-7.7	-4.9	22.4	-7.0	15.0	11.2
Q4	-127.9	5.8	5.8	0.0	-114.5	-107.2	-7.3	18.4	0.1	17.9	4.2	-37.7	-1.1	-23.3	-24.5
2013 Q1	64.7	-6.9	-6.9	0.0	11.8	12.6	-0.8	-11.0	-0.2	-11.0	-5.1	70.8	0.4	44.0	26.2
2013 Jan.	71.5	-1.6	-	-	60.6	-	-	-8.9	-	-	-6.2	21.4	-	-	11.1
Feb.	37.7	1.3	-	-	-9.6	-	-	-0.8	-	-	2.8	46.7	-	-	2.8
Mar.	-44.5	-6.6	-	-	-39.3	-	-	-1.3	-	-	-1.7	2.7	-	-	12.4
Apr.	81.2	-3.1	-	-	65.0	-	-	1.4	-	-	1.9	17.9	-	-	22.2
May	-41.0	-5.2	-	-	-1.7	-	-	-3.1	-	-	-1.3	-31.1	-	-	-11.9
	Growth rates														
2010	3.7	-12.7	-12.5	-9.9	0.4	0.1	23.6	33.9	-3.1	53.7	32.8	7.8	4.2	7.3	13.0
2011	3.8	-5.4	-5.5	40.4	1.8	0.8	76.6	3.0	-3.2	4.2	51.5	7.8	3.8	7.4	11.1
2012 Q3	-0.8	-8.1	-8.2	-1.0	-5.0	-5.6	28.1	5.1	-24.4	9.4	47.0	7.1	4.7	7.8	7.6
Q4	-0.4	31.2	31.5	-0.7	-3.9	-4.3	15.6	3.1	-23.5	5.8	-3.3	5.5	4.3	5.2	5.9
2013 Q1	-0.8	5.2	5.2	-1.0	-4.6	-5.1	25.0	3.1	-25.1	5.3	-1.9	5.8	-2.1	6.6	5.0

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)														
2010	5,099.5	269.1	266.1	3.0	3,491.0	3,445.0	46.0	148.0	0.0	141.8	6.2	1,191.5	202.7	842.1	146.7
2011	5,132.3	411.3	408.5	2.8	3,208.3	3,140.6	67.6	223.9	0.1	217.1	6.8	1,288.8	224.0	871.7	193.2
2012 Q4	5,089.3	428.9	428.0	0.9	2,958.0	2,875.1	83.0	227.4	0.1	219.8	7.5	1,475.0	230.2	1,013.3	231.5
2013 Q1	5,155.2	398.6	397.8	0.9	2,977.2	2,893.6	83.6	224.3	0.1	217.5	6.8	1,555.0	233.9	1,046.4	274.7
	Transactions														
2010	139.5	9.4	6.8	2.6	-8.7	-14.6	5.9	65.1	0.0	64.6	0.5	73.7	15.9	31.6	26.2
2011	15.6	135.1	135.3	-0.2	-289.1	-327.7	38.7	74.1	0.0	74.1	0.0	95.4	10.4	65.2	19.9
2012	-195.8	19.0	20.9	-1.8	-238.7	-255.9	17.2	4.4	0.0	3.4	1.0	19.5	4.6	3.2	11.7
2012 Q3	-45.7	21.0	21.3	-0.3	-89.5	-93.2	3.7	-4.5	0.0	-4.7	0.2	27.4	-3.5	15.6	15.2
Q4	-285.9	-0.2	0.2	-0.3	-216.4	-219.1	2.7	-5.6	0.0	-5.9	0.3	-63.8	1.1	-42.6	-22.2
2013 Q1	30.6	-33.2	-33.2	0.0	0.6	1.3	-0.7	-0.4	0.0	-0.1	-0.3	63.6	2.2	25.8	35.6
2013 Jan.	52.7	-22.2	-	-	34.8	-	-	1.8	-	-	-	38.3	-	-	-
Feb.	30.5	-10.3	-	-	13.5	-	-	-1.9	-	-	-	29.3	-	-	-
Mar.	-52.6	-0.7	-	-	-47.6	-	-	-0.3	-	-	-	-4.0	-	-	-
Apr.	71.4	-1.1	-	-	54.6	-	-	-1.7	-	-	-	19.6	-	-	-
May	-80.5	-11.3	-	-	-59.6	-	-	-0.5	-	-	-	-9.0	-	-	-
	Growth rates														
2010	2.8	3.6	2.6	.	-0.2	-0.3	15.5	78.8	.	83.7	5.8	6.4	8.8	3.7	17.8
2011	0.4	50.4	51.0	.	-8.3	-9.6	89.7	50.5	.	52.6	0.2	8.2	5.1	7.9	13.7
2012 Q3	-0.6	36.6	37.4	.	-7.4	-8.2	37.1	9.1	.	8.9	19.0	7.2	1.7	8.2	5.8
Q4	-3.8	4.8	5.2	.	-7.4	-8.1	25.6	2.0	.	1.6	15.4	1.5	2.1	0.3	6.5
2013 Q1	-6.5	18.3	19.0	.	-12.5	-13.3	31.5	-1.4	.	-1.7	11.0	1.5	-0.2	0.2	8.7

Source: ECB.

7.3 Financial account

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

7. Reserve assets [1)]

	Reserve assets														Memo items		
	Total	Monetary gold		SDR holdings	Reserve position in the IMF	Foreign exchange								Other claims	Other foreign currency assets	Pre-determined short-term net drains on foreign currency	SDR allo-cations
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities				Financial derivatives				
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes	Money market instruments					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Outstanding amounts (international investment position)																
2009	462.4	266.1	347.180	50.8	10.5	134.9	11.7	8.1	115.2	0.5	92.0	22.7	-0.1	0.0	32.1	-24.2	51.2
2010	591.2	366.2	346.962	54.2	15.8	155.0	7.7	16.0	131.3	0.5	111.2	19.5	0.0	0.0	26.3	-24.4	54.5
2011	667.1	422.1	346.846	54.0	30.2	160.9	5.3	7.8	148.1	0.8	134.1	13.3	-0.4	0.0	97.4	-86.0	55.9
2012 Q3	733.8	476.4	346.827	53.8	34.2	168.9	5.4	8.2	155.2	0.2	136.1	18.9	0.2	0.5	39.9	-39.5	56.2
Q4	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
2013 May	621.4	371.7	346.696	51.5	31.3	166.1	4.4	8.2	153.5	0.2	133.4	20.0	0.1	0.7	26.1	-30.1	54.4
June	564.3	315.9	346.672	51.3	31.5	164.7	5.5	7.6	151.6	0.2	133.9	17.6	0.0	0.8	27.3	-31.0	54.2
	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	10.2	0.1	-	-1.6	12.9	-1.2	-2.3	-8.3	9.3	0.1	15.9	-6.8	0.1	0.0	-	-	-
2012	14.1	0.0	-	-0.3	3.4	10.3	0.8	1.2	8.0	-0.4	-0.7	9.1	0.4	0.7	-	-	-
2012 Q3	0.1	0.0	-	0.0	2.4	-2.4	-0.5	-0.2	-1.7	-0.3	1.2	-2.6	0.0	0.1	-	-	-
Q4	3.0	0.0	-	0.3	-1.5	4.2	0.6	1.0	2.4	0.0	-0.5	2.9	0.1	0.1	-	-	-
2013 Q1	0.0	0.0	-	-0.5	0.3	0.2	-1.1	0.8	0.9	0.0	-0.8	1.7	-0.5	0.0	-	-	-
	Growth rates																
2009	-1.3	-0.9	-	-2.6	45.5	-4.4	41.1	-21.3	-7.3	1.0	-12.8	25.3	-	-	-	-	-
2010	2.0	0.0	-	-0.1	46.7	3.7	-43.3	75.9	3.6	-5.2	10.3	-24.5	-	-	-	-	-
2011	1.6	0.0	-	-3.0	82.3	-1.2	-30.0	-52.7	6.9	27.4	14.3	-45.2	-	-	-	-	-
2012 Q3	2.7	0.0	-	-1.7	30.0	6.8	-6.1	-25.4	9.7	-53.5	6.9	41.2	-	-	-	-	-
Q4	2.1	0.0	-	-0.5	11.1	6.6	15.1	15.2	5.6	-53.5	-0.6	82.8	-	-	-	-	-
2013 Q1	1.8	0.0	-	-0.9	7.5	6.2	-4.1	30.5	5.6	-50.1	-0.4	68.3	-	-	-	-	-

8. Gross external debt

	Total	By instrument						By sector (excluding direct investment)			
		Loans, currency and deposits	Money market instruments	Bonds and notes	Trade credits	Other debt liabilities	Direct investment: inter-company lending	General government	Eurosystem	MFIs (excluding Eurosystem)	Other sectors
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts (international investment position)										
2009	10,341.7	4,469.0	525.7	3,523.2	176.9	184.9	1,462.1	1,966.1	253.4	4,579.8	2,080.3
2010	10,919.2	4,696.9	454.0	3,841.4	202.7	201.9	1,522.3	2,143.7	271.0	4,750.4	2,231.8
2011	11,421.3	4,637.9	443.5	4,142.3	224.0	270.4	1,703.3	2,312.6	411.3	4,569.0	2,425.2
2012 Q3	11,939.1	4,661.4	434.6	4,324.5	230.5	327.3	1,960.8	2,453.3	432.0	4,504.5	2,588.4
Q4	11,947.9	4,536.2	464.2	4,353.0	230.2	322.9	2,041.5	2,491.7	428.9	4,229.9	2,755.9
2013 Q1	12,096.5	4,555.3	493.7	4,415.9	233.9	366.0	2,031.7	2,560.2	398.6	4,256.6	2,849.3
	Outstanding amounts as a percentage of GDP										
2009	115.9	50.1	5.9	39.5	2.0	2.1	16.4	22.0	2.8	51.3	23.3
2010	119.1	51.2	5.0	41.9	2.2	2.2	16.6	23.4	3.0	51.8	24.3
2011	121.2	49.2	4.7	44.0	2.4	2.9	18.1	24.5	4.4	48.5	25.7
2012 Q3	125.9	49.2	4.6	45.6	2.4	3.5	20.7	25.9	4.6	47.5	27.3
Q4	125.9	47.8	4.9	45.9	2.4	3.4	21.5	26.3	4.5	44.6	29.0
2013 Q1	127.3	47.9	5.2	46.5	2.5	3.9	21.4	26.9	4.2	44.8	30.0

Source: ECB.

1) Data refer to the changing composition of the euro area, in line with the approach adopted for the reserve assets of the Eurosystem. For further information, see the General Notes.

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	Switzerland	United States	Offshore financial centres	International organisations	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
2011	Outstanding amounts (international investment position)														
Direct investment	1,172.7	260.7	-10.6	-13.0	11.4	274.1	-1.3	84.4	73.2	-22.1	125.2	40.0	-146.5	-0.3	758.2
Abroad	5,564.7	1,541.1	28.7	142.2	1,049.2	321.1	0.0	183.8	85.1	74.5	526.0	1,082.9	487.1	0.0	1,584.3
Equity/reinvested earnings	4,230.1	1,128.4	23.9	78.5	776.0	249.9	0.0	146.2	68.4	53.7	394.6	743.1	402.2	0.0	1,293.5
Other capital	1,334.6	412.8	4.7	63.7	273.2	71.1	0.0	37.5	16.6	20.8	131.4	339.8	84.9	0.0	290.7
In the euro area	4,392.0	1,280.4	39.2	155.2	1,037.8	47.0	1.3	99.4	11.9	96.6	400.8	1,042.9	633.5	0.4	826.0
Equity/reinvested earnings	3,337.2	1,052.4	26.1	142.6	855.5	27.0	1.2	83.4	6.3	76.9	236.0	789.1	370.2	0.1	722.7
Other capital	1,054.7	228.0	13.2	12.6	182.2	20.0	0.0	16.0	5.6	19.7	164.8	253.8	263.3	0.3	103.3
Portfolio investment assets	4,762.6	1,536.9	84.5	199.5	1,005.5	99.4	148.0	100.7	52.5	208.0	124.3	1,557.1	384.9	35.2	763.0
Equity	1,703.4	341.8	10.9	41.6	275.9	13.2	0.1	39.1	48.7	90.4	102.0	553.1	215.8	1.4	311.0
Debt instruments	3,059.2	1,195.1	73.6	157.9	729.6	86.2	147.9	61.6	3.9	117.6	22.2	1,004.0	169.1	33.8	452.0
Bonds and notes	2,592.9	1,050.8	68.5	124.8	629.5	83.8	144.2	56.8	2.7	46.3	15.4	828.0	155.1	32.7	405.1
Money market instruments	466.3	144.3	5.1	33.0	100.1	2.4	3.7	4.8	1.2	71.3	6.9	175.9	13.9	1.0	46.9
Other investment	-255.6	-287.7	45.5	-30.0	-154.0	71.4	-220.6	-10.1	-13.5	10.9	-75.1	63.8	82.5	-71.6	45.2
Assets	4,876.7	2,159.9	92.3	91.0	1,777.6	182.7	16.3	26.8	46.1	99.5	257.4	763.5	588.8	36.7	898.0
General government	162.8	63.9	1.5	4.1	44.3	1.3	12.7	1.8	3.2	2.3	1.0	8.5	2.4	30.4	49.3
MFIs	3,103.3	1,497.4	71.9	49.7	1,225.7	147.2	2.9	14.7	20.9	80.2	130.1	473.3	439.6	5.7	441.4
Other sectors	1,610.6	598.7	19.0	37.2	507.7	34.2	0.7	10.2	22.0	17.0	126.3	281.6	146.8	0.6	407.4
Liabilities	5,132.3	2,447.6	46.8	121.0	1,931.6	111.3	236.9	36.8	59.6	88.6	332.5	699.7	506.3	108.3	852.8
General government	223.9	118.2	0.1	0.4	53.5	0.1	64.1	0.1	0.1	0.1	1.2	33.2	1.4	66.6	3.1
MFIs	3,619.5	1,758.6	36.4	84.8	1,436.3	86.2	115.0	24.8	30.8	61.4	256.7	416.0	414.0	38.8	618.3
Other sectors	1,288.8	570.8	10.3	35.8	441.8	25.0	57.8	11.9	28.8	27.0	74.6	250.4	91.0	3.0	231.4
2012 Q2 to 2013 Q1	Cumulated transactions														
Direct investment	84.1	46.1	-7.6	-11.0	50.1	14.6	0.0	-8.1	6.1	-1.6	5.5	-39.3	14.7	0.1	60.8
Abroad	254.4	113.5	1.7	14.5	81.8	15.4	0.0	5.1	7.2	4.3	-2.5	34.9	-4.9	0.0	96.7
Equity/reinvested earnings	200.8	119.4	1.9	16.4	88.2	12.9	0.0	7.9	6.0	1.7	-7.1	29.0	-17.1	0.0	61.0
Other capital	53.5	-5.9	-0.1	-1.9	-6.4	2.6	0.0	-2.8	1.2	2.7	4.7	5.9	12.1	0.0	35.7
In the euro area	170.2	67.4	9.3	25.5	31.8	0.9	0.0	13.2	1.1	6.0	-7.9	74.2	-19.6	0.0	35.9
Equity/reinvested earnings	178.3	35.3	11.0	18.8	3.8	1.8	0.0	16.4	0.9	6.7	7.3	91.1	-0.7	0.0	21.3
Other capital	-8.1	32.1	-1.7	6.7	28.0	-0.9	0.0	-3.2	0.2	-0.7	-15.3	-16.9	-18.9	0.0	14.6
Portfolio investment assets	165.2	-37.5	7.0	7.4	-72.2	7.3	13.0	7.3	3.0	12.4	-6.7	68.5	-14.2	-1.4	133.7
Equity	99.6	30.9	1.4	3.2	25.4	0.9	0.0	3.3	3.0	10.6	3.7	30.9	-11.1	0.0	28.4
Debt instruments	65.5	-68.4	5.6	4.2	-97.6	6.5	13.0	4.0	0.0	1.8	-10.3	37.6	-3.1	-1.4	105.3
Bonds and notes	100.0	-40.1	3.7	3.2	-68.6	7.7	13.9	1.6	0.1	-4.1	-1.6	39.8	-1.9	-1.8	108.0
Money market instruments	-34.5	-28.3	1.8	1.0	-29.0	-1.3	-0.9	2.4	0.0	5.9	-8.8	-2.3	-1.1	0.4	-2.7
Other investment	300.7	251.1	-20.7	9.9	291.5	-22.9	-6.7	4.1	32.6	-20.7	0.0	17.4	-4.4	-17.1	37.8
Assets	-40.2	-17.4	-5.2	10.2	-4.5	-17.3	-0.6	5.0	3.0	-23.3	8.1	-11.5	-34.6	0.5	30.0
General government	4.6	2.8	1.3	0.2	1.2	-0.4	0.6	0.1	-0.1	-1.3	0.4	0.7	0.6	0.1	1.2
MFIs	-140.8	-54.9	-9.0	6.0	-34.0	-16.6	-1.3	0.3	6.2	-18.9	10.5	-28.3	-44.6	0.4	-11.5
Other sectors	96.0	34.7	2.6	4.1	28.3	-0.3	0.1	4.7	-3.2	-3.1	-2.9	16.1	9.4	0.0	40.3
Liabilities	-340.9	-268.4	15.6	0.3	-296.0	5.6	6.1	1.0	-29.6	-2.6	8.1	-28.9	-30.2	17.6	-7.8
General government	-3.1	-20.8	0.1	0.3	-27.1	0.0	5.8	0.3	0.0	0.0	-0.1	-3.6	-0.1	20.0	1.2
MFIs	-365.3	-234.2	12.6	1.9	-250.0	3.6	-2.4	-5.8	-29.5	-4.6	-8.4	-36.7	-36.9	-3.0	-6.1
Other sectors	27.5	-13.4	2.8	-1.9	-19.0	2.0	2.7	6.5	-0.1	2.0	16.6	11.4	6.8	0.6	-2.9

Source: ECB.
1) Excluding Croatia.

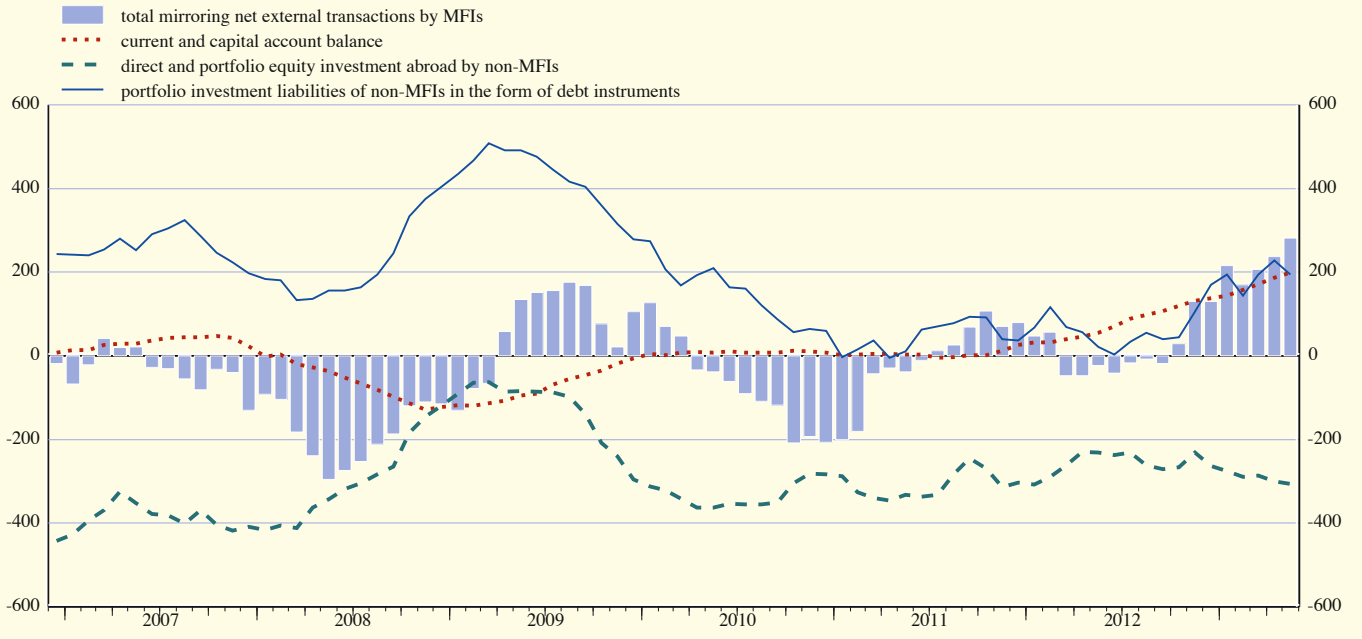
7.4 Monetary presentation of the balance of payments [1]

(EUR billions; transactions)

	B.o.p. items mirroring net transactions by MFIs											
	Total	Current and capital account balance	Transactions by non-MFIs								Financial derivatives	Errors and omissions
			Direct investment		Portfolio investment				Other investment			
			By resident units abroad	By non-resident units in euro area	Assets		Liabilities		Assets	Liabilities		
					Equity	Debt instruments	Equity	Debt instruments				
	1	2	3	4	5	6	7	8	9	10	11	12
2010	-207.0	7.8	-339.3	272.2	-73.0	-248.0	136.2	59.8	-160.9	138.6	18.3	-18.8
2011	80.0	26.0	-428.0	324.1	55.1	-45.8	59.2	37.3	-128.8	169.6	-5.3	16.6
2012	130.3	137.5	-269.2	197.0	-53.4	-183.3	172.8	169.4	-91.5	23.9	17.8	9.3
2012 Q1	-45.2	0.4	-80.7	74.9	-16.8	-84.8	30.5	27.1	-50.7	62.7	-5.3	-2.4
Q2	13.7	19.8	-67.5	49.2	19.1	-16.7	9.6	47.6	-46.7	7.7	-8.0	-0.3
Q3	48.0	44.9	-50.9	44.0	-6.0	-48.2	26.6	28.5	-13.3	22.8	2.8	-3.2
Q4	113.8	72.5	-70.1	28.8	-49.6	-33.6	106.1	66.2	19.2	-69.4	28.3	15.3
2013 Q1	31.8	34.2	-65.8	38.4	-48.3	-54.5	59.7	51.8	-59.8	63.2	9.3	3.5
2012 May	24.1	-1.4	-18.4	21.0	8.3	-7.3	0.0	36.8	-29.4	20.3	-7.5	1.7
June	14.3	18.0	-22.3	5.1	12.5	0.2	15.7	19.1	-22.3	-8.2	-2.2	-1.3
July	12.8	22.4	-15.8	20.0	3.5	-19.2	-0.2	10.8	-28.4	26.2	-1.7	-5.0
Aug.	25.5	10.5	-24.4	38.2	-0.2	-15.6	3.2	3.4	10.3	-3.3	6.2	-2.8
Sep.	9.7	11.9	-10.7	-14.1	-9.4	-13.4	23.7	14.2	4.8	-0.1	-1.7	4.5
Oct.	8.8	17.4	-11.7	6.2	-8.7	-12.3	41.6	5.1	-27.1	-13.6	10.3	1.5
Nov.	66.4	24.7	-15.6	23.1	-8.3	-21.2	24.9	37.8	-6.9	-9.1	7.4	9.6
Dec.	38.6	30.4	-42.9	-0.5	-32.6	-0.1	39.6	23.3	53.2	-46.6	10.6	4.1
2013 Jan.	43.1	-4.0	-15.7	4.1	-16.6	-21.0	38.2	17.5	-12.5	40.1	5.0	7.9
Feb.	-33.1	13.1	-24.6	34.6	-16.8	-27.2	3.6	4.0	-46.0	27.4	3.0	-4.1
Mar.	21.7	25.2	-25.6	-0.3	-14.9	-6.3	17.9	30.4	-1.4	-4.3	1.2	-0.3
Apr.	4.9	17.9	-11.6	4.1	-17.4	-23.1	13.2	26.1	-19.3	17.9	-3.4	0.6
May	69.4	11.8	-0.8	0.5	-4.6	-5.9	42.8	2.8	34.1	-9.5	-7.1	5.2
	12-month cumulated transactions											
2013 May	282.2	199.3	-221.5	120.9	-113.4	-165.0	264.2	194.5	-61.4	16.8	27.7	20.1

C38 Main b.o.p. items mirroring developments in MFI net external transactions [1]

(EUR billions; 12-month cumulated transactions)



Source: ECB.

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

7.5 Trade in goods

1. Values and volumes by product group [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	1,746.0	880.4	353.1	474.3	1,426.8	1,762.6	1,129.2	241.1	367.6	1,104.9	324.3
2012	7.4	1.8	1,870.7	928.0	384.4	515.9	1,524.7	1,791.8	1,147.9	244.7	368.1	1,092.2	360.4
2012 Q2	8.1	1.4	467.4	230.7	96.6	129.0	382.5	448.9	287.8	62.3	91.2	275.7	89.5
Q3	7.5	0.5	474.0	233.4	96.6	131.9	386.6	449.0	285.8	61.9	92.8	273.9	90.2
Q4	5.7	1.0	466.2	230.8	96.4	129.1	379.4	439.9	281.2	58.8	91.8	268.7	89.9
2013 Q1	1.3	-5.1	474.9	235.0	95.6	133.0	384.7	436.1	278.0	58.8	90.5	268.5	86.5
2012 Dec.	-3.1	-5.3	153.6	75.5	32.0	42.7	125.1	143.8	91.9	19.3	30.2	88.8	28.9
2013 Jan.	5.4	1.9	156.9	78.1	31.4	44.2	127.7	148.0	93.4	20.7	30.5	91.4	29.8
Feb.	-1.1	-6.9	157.1	77.6	31.2	44.2	125.2	144.9	93.6	19.0	30.0	86.5	29.1
Mar.	0.1	-9.9	161.0	79.3	33.0	44.6	131.8	143.2	91.0	19.0	29.9	90.6	27.6
Apr.	8.9	1.6	159.3	77.8	32.9	44.3	127.6	144.1	91.6	20.0	30.1	87.9	28.5
May	-0.1	-5.7	155.6	.	.	.	130.6	140.9	.	.	.	89.5	.
	Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)												
2011	7.5	3.5	148.5	143.3	153.4	155.5	145.3	126.4	119.5	136.2	144.6	133.5	102.6
2012	3.3	-3.0	153.0	145.9	160.6	161.1	150.2	122.4	116.0	129.9	137.9	127.3	103.5
2012 Q2	3.6	-3.1	153.3	145.3	161.9	161.8	151.0	123.3	116.6	132.5	138.5	129.5	103.1
Q3	2.9	-5.4	154.0	146.3	159.1	163.4	151.2	121.5	114.9	129.3	136.4	125.9	104.8
Q4	2.4	-2.3	151.9	144.7	160.7	160.3	149.0	120.4	114.3	125.4	136.6	124.7	104.6
2013 Q1	0.2	-4.5	155.4	147.9	159.0	166.9	151.7	120.3	114.3	123.8	135.8	125.5	101.5
2012 Nov.	2.1	-3.3	153.7	146.2	164.9	161.4	150.1	120.9	114.7	123.6	135.0	124.0	104.8
Dec.	-6.0	-7.3	149.8	141.7	158.9	158.4	146.7	118.3	112.7	122.1	133.9	123.0	102.0
2013 Jan.	3.6	1.8	153.7	147.3	156.9	165.5	150.6	122.9	115.7	131.6	137.0	128.1	105.7
Feb.	-1.3	-6.3	154.5	146.9	155.7	167.0	148.7	119.7	114.8	121.7	135.6	121.8	100.6
Mar.	-1.4	-8.9	157.9	149.6	164.4	168.2	155.9	118.4	112.3	118.0	134.7	126.6	98.1
Apr.	8.4	3.0	156.7	147.3	163.2	167.2	150.8	119.9	114.7	122.7	135.1	122.1	104.6

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	Intermediate goods	Capital goods	Consumer goods	Energy	Memo item: Manufacturing	Total (index: 2010 = 100)	Total	Intermediate goods	Capital goods	Consumer goods	Energy	Memo item: Manufacturing
% 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	104.3	4.3	5.7	1.3	1.5	23.0	3.9	108.4	8.4	5.3	-0.7	3.5	25.5	3.8
2012	107.2	2.8	1.3	1.8	2.2	9.8	2.7	111.7	3.1	0.9	1.4	2.8	7.2	1.8
2012 Q3	107.8	3.1	0.7	2.1	2.5	11.0	3.0	112.4	3.5	1.0	2.4	3.7	7.4	2.3
Q4	107.2	1.9	0.8	1.2	2.0	3.7	1.9	110.8	1.1	0.7	0.4	2.2	2.0	1.1
2013 Q1	107.0	0.2	-0.4	0.4	1.4	-4.1	0.1	110.7	-1.1	-0.9	-0.2	1.0	-3.8	-0.3
2012 Dec.	106.7	1.2	0.7	0.9	1.7	0.1	1.2	110.2	0.3	0.4	-0.2	1.7	0.4	0.6
2013 Jan.	106.9	0.4	-0.1	0.3	1.4	-1.7	0.3	110.5	-0.5	-0.4	-0.9	0.8	-1.5	-0.4
Feb.	107.0	0.2	-0.5	0.2	1.2	-2.1	0.2	110.9	-0.9	-1.1	-0.4	0.9	-2.9	-0.4
Mar.	107.1	-0.1	-0.6	0.6	1.4	-8.1	0.0	110.8	-1.9	-1.2	0.8	1.3	-6.8	-0.1
Apr.	106.6	-0.7	-1.1	0.6	1.4	-11.5	-0.6	109.5	-2.8	-1.8	0.0	1.0	-8.8	-0.7
May	106.4	-0.7	.	.	.	.	.	108.9	-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.

7.5 Trade in goods

(EUR billions, unless otherwise indicated; seasonally adjusted)

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 [1]						China	Japan			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Exports (f.o.b.)														
2011	1,746.0	32.9	60.5	213.5	241.6	79.9	109.2	56.8	200.6	405.6	115.7	39.4	112.3	84.6	148.7
2012	1,870.7	34.0	59.1	230.7	245.2	90.1	116.5	59.4	223.5	439.4	120.7	44.7	126.2	97.3	149.4
2011 Q4	447.5	8.3	14.3	54.1	60.5	20.7	28.3	13.5	52.4	106.2	30.7	10.5	28.6	22.4	38.2
2012 Q1	463.1	8.4	15.0	56.5	61.2	22.1	29.4	14.6	55.4	108.6	31.4	10.6	31.2	23.6	37.0
Q2	467.4	8.6	14.9	57.4	61.4	22.8	29.2	14.6	56.0	109.0	30.3	11.4	31.4	24.4	37.7
Q3	474.0	8.5	14.9	58.3	61.7	22.7	29.2	15.0	58.3	110.4	29.8	11.6	31.2	24.5	39.5
Q4	466.2	8.6	14.3	58.5	60.9	22.4	28.7	15.2	53.9	111.4	29.1	11.2	32.4	24.8	35.1
2013 Q1	474.9	8.6	14.5	58.5	61.8	23.3	28.3	15.7	55.7	111.3	29.6	11.0	34.3	25.0	38.2
2012 Dec.	153.6	2.9	4.5	19.4	19.7	7.0	9.1	4.9	17.6	37.4	9.5	3.5	11.0	8.3	11.7
2013 Jan.	156.9	2.9	5.1	19.5	20.9	8.0	9.8	5.4	18.3	37.0	10.2	3.7	11.5	8.2	10.2
Feb.	157.1	2.8	4.6	18.9	20.3	7.6	8.9	5.1	17.7	35.4	9.3	3.5	11.5	7.9	16.3
Mar.	161.0	2.8	4.7	20.1	20.5	7.6	9.6	5.2	19.7	38.8	10.1	3.8	11.2	9.0	11.7
Apr.	159.3	2.8	4.8	18.9	19.9	7.6	9.2	5.1	18.4	36.7	10.0	3.5	11.0	8.1	16.6
May	155.6	.	.	.	.	7.8	9.3	5.4	18.8	37.4	10.0	3.6	11.2	8.6	.
	Percentage share of total exports														
2012	100.0	1.8	3.2	12.3	13.1	4.8	6.2	3.2	11.9	23.5	6.5	2.4	6.7	5.2	8.0
	Imports (c.i.f.)														
2011	1,762.6	29.9	53.2	166.8	226.8	138.8	81.6	35.0	140.8	553.5	218.5	52.6	129.1	91.2	115.8
2012	1,791.8	29.0	52.8	168.3	229.9	143.2	80.9	33.8	150.4	538.8	213.7	48.5	157.0	92.6	115.2
2011 Q4	439.9	7.6	12.8	42.1	57.4	35.5	20.4	8.5	35.8	136.0	52.7	12.9	31.2	23.6	29.1
2012 Q1	454.0	7.2	13.2	42.5	57.4	37.6	20.1	8.4	37.8	138.1	53.5	12.6	39.6	23.8	28.3
Q2	448.9	7.3	13.1	41.4	57.0	35.0	19.7	8.4	37.7	137.1	55.7	12.5	38.5	23.1	30.6
Q3	449.0	7.3	13.7	42.8	57.9	33.7	21.2	8.4	39.1	132.9	53.4	12.1	39.3	23.2	29.6
Q4	439.9	7.2	12.9	41.7	57.6	36.8	19.9	8.6	35.8	130.7	51.1	11.2	39.5	22.5	26.7
2013 Q1	436.1	7.4	13.2	41.6	58.1	38.8	20.2	8.8	35.5	127.6	51.8	10.7	38.5	21.2	25.3
2012 Dec.	143.8	2.2	4.1	14.0	18.9	12.2	6.3	2.9	11.6	43.4	17.4	3.6	12.7	7.5	8.1
2013 Jan.	148.0	2.5	4.3	14.2	19.5	13.3	7.0	2.9	11.9	44.3	17.6	3.7	13.4	7.2	7.5
Feb.	144.9	2.4	4.3	13.6	18.9	12.8	6.3	2.9	11.7	41.3	16.6	3.5	12.9	6.9	10.7
Mar.	143.2	2.5	4.6	13.8	19.6	12.8	6.8	2.9	11.9	42.0	17.6	3.6	12.2	7.1	7.0
Apr.	144.1	2.3	4.4	12.9	18.9	12.2	6.3	2.9	12.3	42.4	16.5	3.5	12.5	6.6	10.4
May	140.9	.	.	.	.	11.5	7.1	2.9	12.6	43.1	17.9	3.7	11.7	6.8	.
	Percentage share of total imports														
2012	100.0	1.6	2.9	9.4	12.8	8.0	4.5	1.9	8.4	30.1	11.9	2.7	8.8	5.2	6.4
	Balance														
2011	-16.6	3.0	7.3	46.6	14.7	-58.9	27.5	21.7	59.8	-147.9	-102.9	-13.2	-16.9	-6.5	32.9
2012	78.9	5.0	6.4	62.3	15.3	-53.1	35.5	25.6	73.2	-99.4	-93.0	-3.8	-30.8	4.7	34.2
2011 Q4	7.6	0.7	1.4	12.0	3.0	-14.7	7.9	5.1	16.6	-29.8	-22.0	-2.5	-2.5	-1.2	9.2
2012 Q1	9.1	1.1	1.8	14.1	3.9	-15.5	9.3	6.2	17.6	-29.5	-22.1	-2.0	-8.5	-0.2	8.7
Q2	18.5	1.3	1.8	16.0	4.3	-12.2	9.4	6.2	18.3	-28.1	-25.4	-1.2	-7.1	1.4	7.1
Q3	25.0	1.2	1.2	15.5	3.8	-11.0	8.0	6.6	19.2	-22.5	-23.5	-0.6	-8.1	1.3	9.9
Q4	26.3	1.4	1.5	16.8	3.3	-14.4	8.8	6.6	18.1	-19.3	-22.0	0.0	-7.1	2.3	8.5
2013 Q1	38.8	1.2	1.2	16.8	3.7	-15.5	8.1	6.9	20.2	-16.3	-22.2	0.3	-4.2	3.9	12.9
2012 Dec.	9.8	0.7	0.4	5.4	0.9	-5.2	2.8	2.0	6.1	-6.0	-7.9	-0.1	-1.7	0.9	3.6
2013 Jan.	8.9	0.5	0.8	5.3	1.4	-5.2	2.8	2.5	6.4	-7.2	-7.5	0.0	-1.9	1.0	2.7
Feb.	12.2	0.4	0.3	5.3	1.4	-5.2	2.5	2.2	6.0	-5.9	-7.2	0.0	-1.4	1.0	5.5
Mar.	17.8	0.3	0.1	6.2	0.9	-5.1	2.8	2.3	7.8	-3.2	-7.5	0.3	-1.0	1.9	4.7
Apr.	15.2	0.5	0.4	6.0	1.0	-4.6	3.0	2.2	6.1	-5.7	-6.5	-0.1	-1.5	1.5	6.2
May	14.6	.	.	.	.	-3.7	2.2	2.4	6.1	-5.8	-7.9	0.0	-0.5	1.9	.

Source: Eurostat.

1) Excluding Croatia.

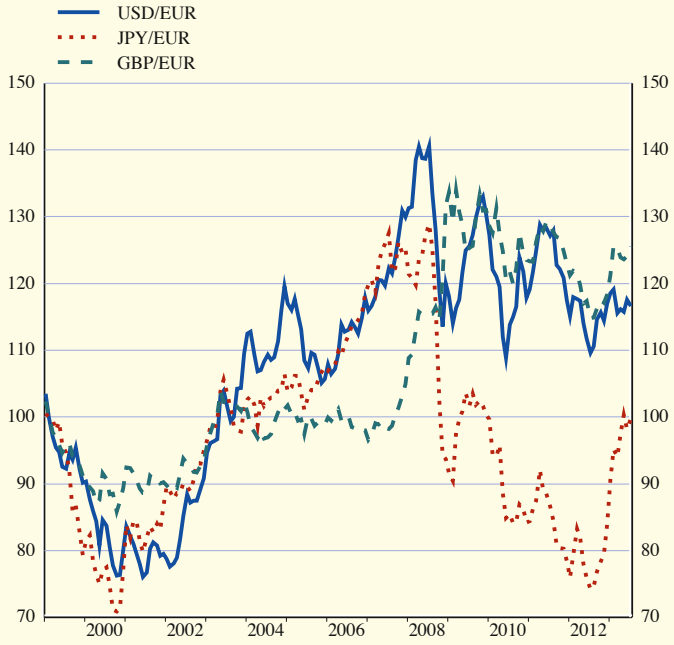
8 EXCHANGE RATES

8.1 Effective exchange rates [1]
(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
2010	103.6	101.5	98.2	96.7	109.5	98.1	111.5	98.1
2011	103.4	100.6	97.6	95.0	108.2	96.1	112.2	97.6
2012	97.9	95.5	93.4	89.7	103.7	90.9	107.1	92.8
2012 Q2	98.2	95.8	93.5	90.2	104.2	91.3	107.5	93.2
Q3	95.9	93.7	91.9	87.9	101.5	89.0	105.0	91.2
Q4	97.9	95.5	93.8	89.5	103.8	90.6	107.4	92.9
2013 Q1	100.8	98.2	96.2	92.1	106.7	93.5	110.2	94.9
Q2	100.9	98.2	96.0	.	.	.	110.6	95.0
2012 July	95.4	93.1	91.1	-	-	-	104.3	90.6
Aug.	95.3	93.1	91.3	-	-	-	104.5	90.6
Sep.	97.2	94.9	93.2	-	-	-	106.6	92.5
Oct.	97.8	95.4	93.7	-	-	-	107.3	92.8
Nov.	97.3	94.8	93.1	-	-	-	106.7	92.3
Dec.	98.7	96.2	94.5	-	-	-	108.3	93.5
2013 Jan.	100.4	97.9	96.0	-	-	-	109.9	94.8
Feb.	101.7	99.0	97.1	-	-	-	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	95.7	-	-	-	110.0	94.6
June	101.6	98.9	96.5	-	-	-	112.0	96.1
July	101.5	98.7	96.3	-	-	-	111.9	96.0
	Percentage change versus previous month							
2013 July	0.0	-0.1	-0.2	-	-	-	-0.1	-0.1
	Percentage change versus previous year							
2013 July	6.4	6.0	5.7	-	-	-	7.2	6.0

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

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



Source: ECB.
1) For a definition of the trading partner groups and other information, please refer to the General Notes.
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 Romanian leu	Swedish krona	Pound sterling	New Turkish lira
	1	2	3	4	5	6	7	8	9	10	11	12
2010	1.9558	25.284	7.4473	7.2891	0.7087	3.4528	275.48	3.9947	4.2122	9.5373	0.85784	1.9965
2011	1.9558	24.590	7.4506	7.4390	0.7063	3.4528	279.37	4.1206	4.2391	9.0298	0.86788	2.3378
2012	1.9558	25.149	7.4437	7.5217	0.6973	3.4528	289.25	4.1847	4.4593	8.7041	0.81087	2.3135
2012 Q4	1.9558	25.167	7.4590	7.5290	0.6963	3.4528	283.25	4.1123	4.5288	8.6230	0.80740	2.3272
2013 Q1	1.9558	25.565	7.4589	7.5838	0.6996	3.4528	296.50	4.1558	4.3865	8.4965	0.85111	2.3577
Q2	1.9558	25.831	7.4555	7.5566	0.7009	3.4528	295.53	4.1982	4.3958	8.5652	0.85056	2.4037
2013 Jan.	1.9558	25.563	7.4614	7.5746	0.6978	3.4528	294.01	4.1424	4.3835	8.6217	0.83271	2.3543
Feb.	1.9558	25.475	7.4598	7.5868	0.6999	3.4528	292.73	4.1700	4.3839	8.5083	0.86250	2.3738
Mar.	1.9558	25.659	7.4553	7.5909	0.7013	3.4528	303.01	4.1565	4.3923	8.3470	0.85996	2.3453
Apr.	1.9558	25.841	7.4553	7.6076	0.7006	3.4528	298.67	4.1359	4.3780	8.4449	0.85076	2.3406
May	1.9558	25.888	7.4536	7.5684	0.7002	3.4528	292.38	4.1799	4.3360	8.5725	0.84914	2.3739
June	1.9558	25.759	7.4576	7.4901	0.7019	3.4528	295.70	4.2839	4.4803	8.6836	0.85191	2.5028
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
	Percentage change versus previous month											
2013 July	0.0	0.7	0.0	0.2	0.1	0.0	-0.3	-0.2	-1.2	-0.3	1.2	1.0
	Percentage change versus previous year											
2013 July	0.0	2.0	0.3	0.1	0.9	0.0	3.0	2.2	-2.9	1.4	9.3	13.4

	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
2010	1.4423	2.3314	1.3651	8.9712	10.2994	60.5878	12,041.70	4.9457	116.24	4.2668
2011	1.3484	2.3265	1.3761	8.9960	10.8362	64.8859	12,206.51	4.9775	110.96	4.2558
2012	1.2407	2.5084	1.2842	8.1052	9.9663	68.5973	12,045.73	4.9536	102.49	3.9672
2012 Q4	1.2484	2.6671	1.2850	8.1036	10.0506	70.2047	12,473.53	4.9853	105.12	3.9632
2013 Q1	1.2714	2.6368	1.3313	8.2209	10.2428	71.5390	12,789.08	4.8969	121.80	4.0699
Q2	1.3203	2.6994	1.3368	8.0376	10.1383	73.0046	12,784.60	4.7407	129.07	4.0088
2013 Jan.	1.2658	2.6993	1.3189	8.2698	10.3027	72.0716	12,837.99	4.9706	118.34	4.0413
Feb.	1.2951	2.6354	1.3477	8.3282	10.3608	71.9342	12,933.75	4.9359	124.40	4.1403
Mar.	1.2537	2.5694	1.3285	8.0599	10.0588	70.5579	12,590.61	4.7769	122.99	4.0309
Apr.	1.2539	2.6060	1.3268	8.0564	10.1110	70.7738	12,664.51	4.7164	127.54	3.9686
May	1.3133	2.6414	1.3257	7.9715	10.0766	71.4760	12,673.13	4.7223	131.13	3.9200
June	1.3978	2.8613	1.3596	8.0905	10.2349	77.0284	13,033.31	4.7865	128.40	4.1488
July	1.4279	2.9438	1.3619	8.0234	10.1455	78.1762	13,189.17	4.7153	130.39	4.1746
	Percentage change versus previous month									
2013 July	2.2	2.9	0.2	-0.8	-0.9	1.5	1.2	-1.5	1.6	0.6
	Percentage change versus previous year									
2013 July	19.7	18.2	9.3	2.5	6.4	14.8	13.6	-3.9	34.3	7.3

	Mexican peso	New Zealand dollar	Norwegian krone	Philippine peso	Russian rouble	Singapore dollar	South African rand	South Korean won	Swiss franc	Thai baht	US dollar
	23	24	25	26	27	28	29	30	31	32	33
2010	16.7373	1.8377	8.0043	59.739	40.2629	1.8055	9.6984	1,531.82	1.3803	42.014	1.3257
2011	17.2877	1.7600	7.7934	60.260	40.8846	1.7489	10.0970	1,541.23	1.2326	42.429	1.3920
2012	16.9029	1.5867	7.4751	54.246	39.9262	1.6055	10.5511	1,447.69	1.2053	39.928	1.2848
2012 Q4	16.7805	1.5751	7.3664	53.387	40.3064	1.5855	11.2766	1,414.42	1.2080	39.778	1.2967
2013 Q1	16.7042	1.5823	7.4290	53.769	40.1518	1.6345	11.8264	1,433.09	1.2284	39.361	1.3206
Q2	16.2956	1.5920	7.6114	54.620	41.3464	1.6311	12.3996	1,467.08	1.2315	39.031	1.3062
2013 Jan.	16.8760	1.5877	7.3821	54.105	40.1847	1.6326	11.6957	1,417.69	1.2288	39.924	1.3288
Feb.	16.9872	1.5929	7.4232	54.355	40.3342	1.6546	11.8796	1,452.82	1.2298	39.839	1.3359
Mar.	16.2322	1.5657	7.4863	52.813	39.9332	1.6164	11.9169	1,430.31	1.2266	38.264	1.2964
Apr.	15.8895	1.5348	7.5444	53.649	40.7995	1.6120	11.8592	1,460.89	1.2199	37.857	1.3026
May	15.9776	1.5774	7.5589	53.693	40.6842	1.6219	12.1798	1,444.56	1.2418	38.667	1.2982
June	17.0716	1.6682	7.7394	56.658	42.6490	1.6613	13.2088	1,498.33	1.2322	40.664	1.3189
July	16.6893	1.6590	7.8837	56.698	42.8590	1.6595	12.9674	1,473.35	1.2366	40.714	1.3080
	Percentage change versus previous month										
2013 July	-2.2	-0.5	1.9	0.1	0.5	-0.1	-1.8	-1.7	0.4	0.1	-0.8
	Percentage change versus previous year										
2013 July	1.6	7.8	5.7	10.2	7.3	7.1	27.9	4.9	3.0	4.7	6.4

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 DEVELOPMENTS OUTSIDE THE EURO AREA

9.1 Economic and financial developments in other EU Member States

(annual percentage changes, unless otherwise indicated)

	Bulgaria	Czech Republic	Denmark	Croatia	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10	11
	HICP										
2011	3.4	2.1	2.7	2.2	4.2	4.1	3.9	3.9	5.8	1.4	4.5
2012	2.4	3.5	2.4	3.4	2.3	3.2	5.7	3.7	3.4	0.9	2.8
2013 Q1	2.1	1.7	0.9	4.2	0.4	2.2	2.7	1.3	4.8	0.6	2.8
Q2	1.1	1.5	0.5	2.3	-0.1	1.4	1.9	0.5	4.4	0.3	2.7
2013 Apr.	0.9	1.7	0.4	3.1	-0.4	1.4	1.8	0.8	4.4	0.0	2.4
May	1.0	1.2	0.6	1.8	-0.2	1.5	1.8	0.5	4.4	0.3	2.7
June	1.2	1.6	0.6	2.2	0.2	1.3	2.0	0.2	4.5	0.5	2.9
	General government deficit (-)/surplus (+) as a percentage of GDP										
2010	-3.1	-4.8	-2.5	.	-8.1	-7.2	-4.3	-7.9	-6.8	0.3	-10.2
2011	-2.0	-3.3	-1.8	.	-3.6	-5.5	4.3	-5.0	-5.6	0.2	-7.8
2012	-0.8	-4.4	-4.0	.	-1.2	-3.2	-1.9	-3.9	-2.9	-0.5	-6.3
	General government gross debt as a percentage of GDP										
2010	16.2	37.8	42.7	.	44.4	37.9	81.8	54.8	30.5	39.4	79.4
2011	16.3	40.8	46.4	.	41.9	38.5	81.4	56.2	34.7	38.4	85.5
2012	18.5	45.8	45.8	.	40.7	40.7	79.2	55.6	37.8	38.2	90.0
	Long-term government bond yield as a percentage per annum; period average										
2013 Jan.	3.27	1.96	1.61	4.29	3.21	3.97	6.23	3.91	5.90	1.80	1.82
Feb.	3.25	2.01	1.73	4.28	3.22	4.06	6.29	3.99	5.72	2.00	1.92
Mar.	3.54	1.98	1.59	4.32	3.17	4.15	6.38	3.93	5.86	1.92	1.65
Apr.	3.47	1.82	1.42	4.34	3.15	3.95	5.65	3.50	5.46	1.66	1.46
May	3.36	1.67	1.45	4.38	3.10	3.54	5.08	3.28	5.23	1.79	1.62
June	3.40	2.14	1.72	4.63	3.17	3.54	6.02	3.95	5.43	2.05	1.96
	3-month interest rate as a percentage per annum; period average										
2013 Jan.	1.27	0.50	0.30	1.58	0.50	0.53	5.80	4.03	5.71	1.21	0.51
Feb.	1.23	0.50	0.33	1.31	0.49	0.47	-	3.80	5.60	1.19	0.51
Mar.	1.23	0.49	0.27	1.17	0.47	0.47	-	3.48	5.10	1.25	0.51
Apr.	1.22	0.47	0.26	1.03	0.44	0.62	4.57	3.29	4.31	1.24	0.51
May	1.21	0.46	0.24	1.14	0.41	0.74	4.71	2.86	3.83	1.20	0.51
June	1.20	0.46	0.26	1.71	0.39	0.73	4.48	2.69	4.20	1.22	0.51
	Real GDP										
2011	1.8	1.8	1.1	0.0	5.5	5.9	1.6	4.5	2.3	3.7	1.1
2012	0.8	-1.2	-0.4	-2.0	5.6	3.7	-1.7	1.9	0.4	0.7	0.2
2012 Q4	0.6	-1.6	-0.4	-2.0	5.8	3.1	-2.4	0.7	1.1	1.5	0.0
2013 Q1	0.4	-2.4	-0.7	-1.2	6.0	4.2	-0.3	0.5	1.9	1.6	0.3
Q2	.	.	.	.	.	.	.	.	.	0.6	1.4
	Current and capital account balance as a percentage of GDP										
2011	1.4	-2.3	5.9	-0.8	0.0	-1.3	3.1	-2.9	-4.0	6.9	-1.1
2012	0.0	-1.1	5.7	0.1	1.3	1.7	4.4	-1.3	-2.6	6.8	-3.5
2012 Q3	9.8	-4.4	7.7	21.5	4.8	2.7	5.8	-0.8	-3.9	7.1	-4.4
Q4	-1.7	0.8	6.0	-6.1	3.5	4.9	5.3	-0.8	-0.9	6.6	-3.0
2013 Q1	-4.3	1.9	2.2	-14.3	1.1	-2.8	5.2	-1.4	2.2	7.7	-3.8
	Gross external debt as a percentage of GDP										
2011	94.1	59.6	183.2	102.9	145.0	77.8	147.7	71.7	77.2	195.3	419.6
2012	94.8	60.5	182.9	101.6	136.2	75.4	128.0	70.9	74.6	189.8	384.3
2012 Q3	96.5	60.1	187.2	103.6	139.2	78.8	128.8	70.8	78.0	202.6	388.4
Q4	94.8	60.5	182.9	101.6	136.2	75.4	128.0	70.9	74.6	189.8	384.3
2013 Q1	93.4	62.2	185.3	101.9	138.6	73.7	132.0	72.6	74.9	194.2	392.5
	Unit labour costs										
2011	3.0	0.5	-0.1	0.7	2.1	-0.1	1.8	1.1	0.7	-0.6	1.4
2012	0.2	3.2	1.6	1.2	2.8	2.0	4.8	0.9	6.8	3.2	2.9
2012 Q3	1.0	2.2	1.5	1.6	3.2	1.7	5.1	1.3	9.1	3.7	2.9
Q4	1.2	3.3	1.3	1.2	1.0	0.4	4.0	-0.1	7.1	3.9	1.8
2013 Q1	12.3	1.2	1.9	3.5	0.6	-0.6	0.4	2.8	1.3	2.1	-0.4
	Standardised unemployment rate as a percentage of labour force (s.a.)										
2011	11.3	6.7	7.6	13.5	16.3	15.3	11.0	9.6	7.4	7.8	8.0
2012	12.3	7.0	7.5	15.9	14.7	13.3	10.9	10.1	7.0	8.0	7.9
2013 Q1	12.8	7.2	7.1	16.8	12.5	12.5	10.9	10.6	7.1	8.1	7.8
Q2	12.7	7.0	.	16.5	.	11.9	.	10.7	7.5	8.0	.
2013 Apr.	12.8	7.1	7.0	16.6	.	12.2	10.4	10.7	7.3	8.3	7.7
May	12.7	7.0	6.8	16.5	.	11.7	10.4	10.7	7.5	7.9	.
June	12.6	6.8	.	16.5	.	11.7	.	10.6	7.6	8.0	.

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

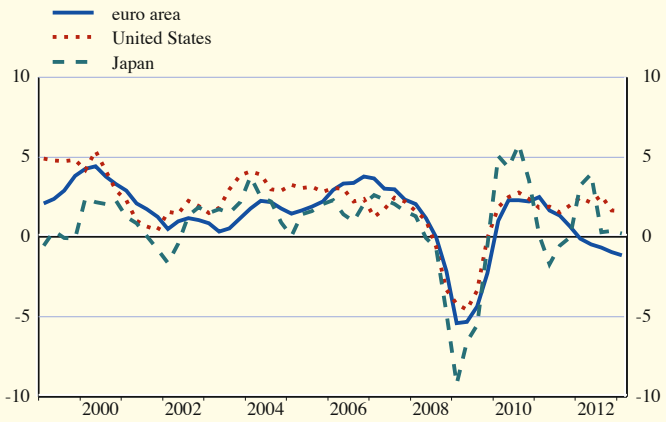
9.2 Economic and financial developments in the United States and Japan

(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										
2009	-0.4	-1.4	-3.1	-13.6	9.3	8.0	0.69	4.17	1.3948	-11.9	73.3
2010	1.6	-1.1	2.4	6.6	9.6	2.5	0.34	3.57	1.3257	-11.4	82.1
2011	3.2	1.9	1.8	3.6	8.9	7.3	0.34	2.10	1.3920	-10.2	86.0
2012	2.1	1.1	2.2	4.2	8.1	8.5	0.43	1.88	1.2848	-8.7	90.0
2012 Q2	1.9	0.5	2.1	5.2	8.2	9.6	0.47	1.83	1.2814	-8.8	88.2
Q3	1.7	0.1	2.6	3.9	8.0	7.0	0.43	1.77	1.2502	-8.6	88.7
Q4	1.9	3.8	1.7	3.3	7.8	7.5	0.32	1.88	1.2967	-8.5	90.0
2013 Q1	1.7	1.1	1.6	2.6	7.7	7.1	0.29	2.09	1.3206	.	.
Q2	1.4	.	.	2.1	7.6	6.9	0.28	2.82	1.3062	.	.
2013 Mar.	1.5	-	-	2.9	7.6	6.9	0.28	2.09	1.2964	-	-
Apr.	1.1	-	-	1.9	7.5	7.1	0.28	1.92	1.3026	-	-
May	1.4	-	-	2.3	7.6	6.9	0.27	2.40	1.2982	-	-
June	1.8	-	-	2.2	7.6	6.8	0.27	2.82	1.3189	-	-
July	.	-	-	.	.	.	0.27	2.91	1.3080	-	-
	Japan										
2009	-1.3	0.3	-5.5	-21.9	5.1	2.7	0.47	1.42	130.34	-8.8	180.1
2010	-0.7	-4.8	4.7	16.6	5.1	2.8	0.23	1.18	116.24	-8.3	188.3
2011	-0.3	0.8	-0.5	-2.5	4.6	2.7	0.19	1.00	110.96	-8.9	204.4
2012	0.0	-2.3	1.9	-0.3	4.4	2.5	0.19	0.84	102.49	.	.
2012 Q2	0.1	-4.2	3.9	5.3	4.4	2.4	0.20	0.84	102.59	.	.
Q3	-0.4	-0.8	0.3	-4.6	4.3	2.4	0.19	0.78	98.30	.	.
Q4	-0.2	-1.1	0.4	-5.9	4.2	2.3	0.19	0.84	105.12	.	.
2013 Q1	-0.6	-0.5	0.2	-7.7	4.2	2.9	0.16	0.70	121.80	.	.
Q2	-0.3	.	.	.	.	3.5	0.16	1.02	129.07	.	.
2013 Mar.	-0.9	-	-	-6.7	4.1	3.0	0.16	0.70	122.99	-	-
Apr.	-0.7	-	-	-2.3	4.1	3.2	0.16	0.76	127.54	-	-
May	-0.3	-	-	.	4.1	3.5	0.16	1.05	131.13	-	-
June	0.2	-	-	.	.	3.8	0.15	1.02	128.40	-	-
July	.	-	-	.	.	.	0.16	1.01	130.39	-	-

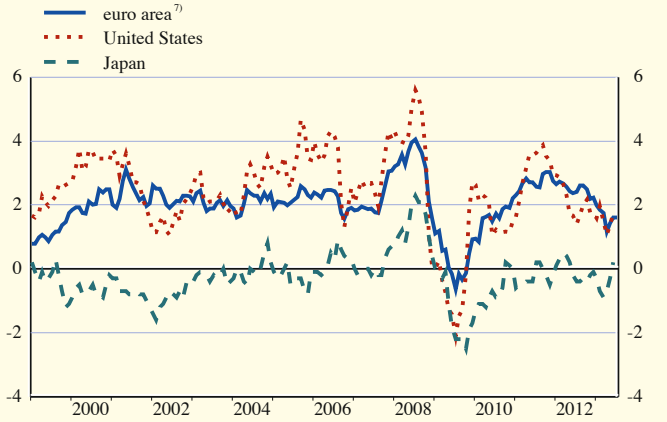
C41 Real gross domestic product

(annual percentage changes; quarterly data)



C42 Consumer price indices

(annual percentage changes; monthly data)



Sources: National data (columns 1, 2 (United States), 3, 4, 5 (United States), 6, 9 and 10); OECD (column 2 (Japan)); Eurostat (column 5 (Japan), euro area chart data); Thomson Reuters (columns 7 and 8); ECB calculations (column 11).

1) Seasonally adjusted. The data for the United States refer to the private non-agricultural business sector.
2) Japanese data from March to August 2011 include estimates for the three prefectures most affected by the earthquake in that country. Data collection was reinstated as of September 2011.
3) Period averages; M2 for the United States, M2+CDs for Japan.
4) Percentages per annum. For further information on the three-month interbank deposit rate, see Section 4.6.
5) For more information, see Section 8.2.
6) General government debt consists of deposits, securities other than shares and loans outstanding at nominal value and is consolidated within the general government sector (end of period).
7) Data refer to the changing composition of the euro area. For further information, see the General Notes.

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:

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

where I_t is the index of adjusted outstanding amounts as at month t (see also below). Likewise, for the year ending in month t, the average growth rate is calculated as:

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

SECTION 1.3

CALCULATION OF INTEREST RATES ON INDEXED LONGER-TERM REFINANCING OPERATIONS

The interest rate on an indexed longer-term refinancing operation (LTRO) is equal to the average of the minimum bid rates on the main refinancing operations (MROs) over the life of that LTRO. According to this definition, if an LTRO is outstanding for D number of days and the minimum bid rates prevailing in MROs are $R_{1,\,MRO}$ (over D_1 days), $R_{2,\,MRO}$ (over D_2 days), etc., until $R_{i,\,MRO}$ (over D_i days), where $D_1+D_2+\ldots+D_i=D$, the applicable annualised rate (R_{LTRO}) is calculated as:

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

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:

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

Similarly, the quarterly transactions F^Q_t for the quarter ending in month t are defined as:

e) $$F^Q_t = (L_t - L_{t-3}) - C^Q_t - E^Q_t - V^Q_t$$

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^Q_t 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^M_t and L_t are defined as above, the index I_t of adjusted outstanding amounts in month t is defined as:

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

The base of the index (for the non-seasonally adjusted series) is currently set as December 2010 = 100. Time series for the index of adjusted outstanding amounts are available on the ECB's website (www.ecb.europa.eu) in the "Monetary and financial statistics" sub-section of the "Statistics" section.

The annual growth rate a_t for month t – i.e. the change in the 12 months ending in month t – can be calculated using either of the following two formulae:

g) $$a_t = \left[\prod_{i=0}^{11}\left(1 + F^M_{t-i} \Big/ L_{t-1-i}\right) - 1\right] \times 100$$

h) $$a_t = \left(I_t \Big/ I_{t-12} - 1\right) \times 100$$

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^M_t can be calculated as:

i) $$a^M_t = \left(I_t \Big/ I_{t-1} - 1\right) \times 100$$

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:

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

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.

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) $$a_t = \left[\prod_{i=0}^{11}\left(1 + {N_{t-i}^M}/{L_{t-1-i}}\right) - 1\right] \times 100$$

m) $$a_t = \left({I_t}/{I_{t-12}} - 1\right) \times 100$$

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, the only difference being that an "N" is used instead of an "F". This is to show that the method used to obtain "net issues" for securities issues statistics differs from that used to calculate equivalent "transactions" for the monetary aggregates.

The average growth rate for the quarter ending in month t is calculated as:

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

where I_t is the index of notional stocks as at month t. Likewise, for the year ending in month t, the average growth rate is calculated as:

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

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values, and the calculations are based on financial transactions, which exclude reclassifications, revaluations and any other changes that do not arise from transactions. Exchange rate variations are not included, as all quoted shares covered are denominated in euro.

SEASONAL ADJUSTMENT OF SECURITIES ISSUES STATISTICS [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:

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

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

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

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:

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

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 31 July 2013.

Unless otherwise indicated, all data series relate to the group of 17 countries that are members of the euro area (the Euro 17) for the whole time series. For interest rates, monetary statistics, the HICP and reserve assets (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), euro area statistical series take into account the changing composition of the euro area.

The composition of the euro area has changed a number of times over the years. When the euro was introduced in 1999, the euro area comprised the following 11 countries (the Euro 11): Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Greece then joined in 2001, forming the Euro 12. Slovenia joined in 2007, forming the Euro 13; Cyprus and Malta joined in 2008, forming the Euro 15; and Slovakia joined in 2009, forming the Euro 16. Estonia joined in 2011, bringing the number of euro area countries to 17. From October 2012, the euro area statistics also include the European Stability Mechanism, an international organisation resident in the euro area for statistical purposes.

EURO AREA SERIES WITH A FIXED COMPOSITION

Aggregated statistical series for fixed compositions of the euro area relate to a given fixed composition for the whole time series, regardless of the composition at the time to which the statistics relate. For example, aggregated series are calculated for the Euro 17 for all years, despite the fact that the euro area has only had this composition since 1 January 2011. Unless otherwise indicated, the ECB's Monthly Bulletin provides statistical series for the current composition.

EURO AREA SERIES WITH A CHANGING COMPOSITION

Aggregated statistical series with a changing composition take into account the composition of the euro area at the time to which the statistics relate. For example, euro area statistical series with a changing composition aggregate the data of the Euro 11 for the period up to the end of 2000, the Euro 12 for the period from 2001 to the end of 2006, and so on. With this approach, each individual statistical series covers all of the various compositions of the euro area.

For the HICP, as well as statistics based on the balance sheet of the MFI sector ("monetary statistics"), rates of change are compiled from chain-linked indices, with the new composition introduced by the linking factor at the point of enlargement. Thus, if a country joins the euro

area in January of a given year, the factors contributing to the chain-linked indices relate to the previous composition of the euro area up to and including December of the previous year, and the enlarged composition of the euro area thereafter. For further details on monetary statistics, refer to the "Manual on MFI balance sheet statistics", available in the "Statistics" section of the ECB's website.

Given that the composition of the European currency unit (ECU) does not coincide with the former currencies of the countries that have adopted the single currency, pre-1999 amounts originally expressed in the participating currencies and converted into ECU at current ECU exchange rates are affected by movements in the currencies of EU Member States that have not adopted the euro. To avoid this effect on the monetary statistics, pre-1999 data [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, Latvia, Lithuania, Hungary, Poland, Romania, Sweden and the United Kingdom.

In most cases, the terminology used within the tables follows international standards, such as those contained in the European System of Accounts 1995 and the IMF Balance of Payments Manual. Transactions refer to voluntary exchanges (measured directly or derived), while flows also encompass changes in outstanding amounts owing to price and exchange rate changes, write-offs and other changes.

In the tables, the wording "up to (x) years" means "up to and including (x) years".

OVERVIEW

Developments in key indicators for the euro area are summarised in an overview table.

MONETARY POLICY STATISTICS

Section 1.4 shows statistics on minimum reserve and liquidity factors. Maintenance periods for minimum reserve requirements start every month on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting for which the monthly assessment of the monetary policy stance is scheduled. They end on the day preceding the corresponding settlement day in the following month. Annual/quarterly observations refer to averages for the last reserve maintenance period of the year/quarter.

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

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.

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 harmonised data provided by the NCBs, which are regularly updated. The annual deficit and debt data for the euro area aggregates may therefore differ from those published by the European Commission. The quarterly euro area aggregates in Sections 6.4 and 6.5 are compiled by the ECB on the basis of Eurostat and national data.

Section 6.1 presents annual figures on general government revenue and expenditure on the basis of definitions laid down in Commission Regulation (EC) No 1500/2000 of 10 July 2000[13] amending the ESA 95. Section 6.2 shows details of general government gross consolidated debt at nominal value in line with the Treaty provisions on the excessive deficit procedure. Sections 6.1 and 6.2 include summary data for the individual euro area countries owing to their importance within the framework of the Stability and Growth Pact. The deficits/surpluses presented for the individual euro area countries correspond to excessive deficit procedure B.9, as defined by Council Regulation (EC) No 479/2009 as regards references to the ESA 95. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit – the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents non-seasonally adjusted quarterly figures on general government revenue and expenditure on the basis of definitions laid down in Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002 on quarterly non-financial accounts for general government[14]. Section 6.5 presents quarterly figures on gross consolidated government debt, the deficit-debt adjustment and the government borrowing requirement. These figures are compiled using data provided by the Member States under Regulation (EC) No 501/2004 and Regulation (EC) No 222/2004 and data provided by the NCBs.

EXTERNAL TRANSACTIONS AND POSITIONS

The concepts and definitions used in balance of payments and international investment position (i.i.p.) statistics (Sections 7.1 to 7.4) are generally in line with the IMF Balance of Payments

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

Manual (fifth edition, October 1993), the ECB Guideline of 16 July 2004 on the statistical reporting requirements of the ECB (ECB/2004/15)[15] and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)[16]. 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)[17] was adopted by the Governing Council of the ECB. This legal act lays down new reporting requirements in the field of external statistics, which mainly reflect methodological changes introduced in the sixth edition of the IMF's Balance of Payments and International Investment Position Manual (BPM6). The ECB will begin publishing the euro area's b.o.p., i.i.p. and international reserves statistics in accordance with Guideline ECB/2011/23 and the BPM6 in 2014, with backdata. The tables in Sections 7.1 and 7.4 follow the sign convention in the IMF Balance of Payments Manual – i.e. surpluses in the current account and the capital account have a plus sign, while in the financial account a plus sign denotes an increase in liabilities or a decrease in assets. In the tables in Section 7.2, both credit and debit transactions are presented with a plus sign. Furthermore, as of the February 2008 issue of the Monthly Bulletin, the tables in Section 7.3 have been restructured in order to allow the data on the balance of payments, the international investment position and related growth rates to be presented together; in the new tables, transactions in assets and liabilities that correspond to increases in positions are shown with a plus sign.

The euro area b.o.p. is compiled by the ECB. Recent monthly figures should be regarded as provisional. Data are revised when figures for the following month and/or the detailed quarterly b.o.p. are published. Earlier data are revised periodically or as a result of methodological changes in the compilation of the source data.

Table 1 in Section 7.2 also contains seasonally adjusted data for the current account. Where appropriate, the adjustment also covers working day, leap year and/or Easter-related effects. Table 3 in Section 7.2 and Table 9 in Section 7.3 present a breakdown of the euro area b.o.p. and i.i.p. vis-à-vis major partner countries, both individually and as a group, distinguishing between EU Member States outside the euro area and countries or areas outside the European Union. The breakdown also shows transactions and positions vis-à-vis EU institutions and international organisations (which, with the exception of the ECB and the European Stability Mechanism, are considered to be outside the euro area for statistical purposes, regardless of their physical location) as well as offshore centres. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives or international reserves. In addition, separate data

15 OJ L 354, 30.11.2004, p. 34.
16 OJ L 159, 20.6.2007, p. 48.
17 OJ L 65, 3.3.2012, p. 1.

are not provided for investment income payable to Brazil, mainland China, India or Russia. The geographical breakdown is described in the article entitled "Euro area balance of payments and international investment position vis-à-vis main counterparts" in the February 2005 issue of the Monthly Bulletin.

The data on the euro area b.o.p. financial account and i.i.p. in Section 7.3 are based on transactions and positions vis-à-vis non-residents of the euro area, regarding the euro area as a single economic entity (see also Box 9 in the December 2002 issue of the Monthly Bulletin, Box 5 in the January 2007 issue of the Monthly Bulletin and Box 6 in the January 2008 issue of the Monthly Bulletin). The i.i.p. is valued at current market prices, with the exception of direct investment, where book values are used for unquoted shares, and other investments (e.g. loans and deposits). The quarterly i.i.p. is compiled on the basis of the same methodological framework as the annual i.i.p. As some data sources are not available on a quarterly basis (or are available with a delay), the quarterly i.i.p. is partly estimated on the basis of financial transactions, asset prices and foreign exchange developments.

Table 1 in Section 7.3 summarises the i.i.p. and financial transactions in the euro area b.o.p. The breakdown of the change in the annual i.i.p. is obtained by applying a statistical model to i.i.p. changes other than transactions, using information from the geographical breakdown and currency composition of assets and liabilities, as well as price indices for different financial assets. In this table, columns 5 and 6 refer to direct investment by resident units abroad and direct investment by non-resident units in the euro area.

In Table 5 in Section 7.3, the breakdown into "loans" and "currency and deposits" is based on the sector of the non-resident counterpart – i.e. assets vis-à-vis non-resident banks are classified as deposits, whereas assets vis-à-vis other non-resident sectors are classified as loans. This breakdown follows the distinction made in other statistics, such as the MFI consolidated balance sheet, and conforms to the IMF Balance of Payments Manual.

The outstanding amounts for the Eurosystem's international reserves and related assets and liabilities are shown in Table 7 of Section 7.3. These figures are not fully comparable with those in the Eurosystem's weekly financial statement owing to differences in coverage and valuation. The data in Table 7 are in line with the recommendations for the template on international reserves and foreign currency liquidity. By definition, the assets included in the Eurosystem's international reserves take account of the changing composition of the euro area. Before countries join the euro area, the assets of their national central banks are included in portfolio investment (in the case of securities) or other investment (in the case of other assets). Changes in the gold holdings of the Eurosystem (column 3) are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999, which was updated on 27 September 2009. More information on the statistical treatment of the Eurosystem's international reserves 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. As a result, data on current and capital accounts and gross external debt include special-purpose vehicles. The data for the United States and Japan contained in Section 9.2 are obtained from national sources.

ANNEXES

CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM[1]

13 JANUARY AND 3 FEBRUARY 2011

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

3 MARCH 2011

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 12 July 2011, notably to continue its fixed rate tender procedures with full allotment.

7 APRIL 2011

The Governing Council of the ECB decides to increase the interest rate on the main refinancing operations by 25 basis points to 1.25%, starting from the operation to be settled on 13 April 2011. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 2.00% and 0.50% respectively, both with effect from 13 April 2011.

5 MAY 2011

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.25%, 2.00% and 0.50% respectively.

9 JUNE 2011

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.25%, 2.00% and 0.50% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 11 October 2011, notably to continue its fixed rate tender procedures with full allotment.

7 JULY 2011

The Governing Council of the ECB decides to increase the interest rate on the main refinancing operations by 25 basis points to 1.50%, starting from the operation to be settled on 13 July 2011. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 2.25% and 0.75% respectively, both with effect from 13 July 2011.

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

4 AUGUST 2011

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.50%, 2.25% and 0.75% respectively. It also decides on several measures to address renewed tensions in some financial markets. In particular, it decides that the Eurosystem will conduct a liquidity-providing supplementary longer-term refinancing operation with a maturity of approximately six months as a fixed rate tender procedure with full allotment. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 17 January 2012, notably to continue its fixed rate tender procedures with full allotment.

8 SEPTEMBER 2011

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.50%, 2.25% and 0.75% respectively.

6 OCTOBER 2011

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.50%, 2.25% and 0.75% respectively. It also decides on the details of its refinancing operations from October 2011 to 10 July 2012, notably to conduct two longer-term refinancing operations – one with a maturity of approximately 12 months in October 2011, and another with a maturity of approximately 13 months in December 2011 – and to continue to apply fixed rate tender procedures with full allotment in all of its refinancing operations. In addition, the Governing Council decides to launch a new covered bond purchase programme in November 2011.

3 NOVEMBER 2011

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 1.25%, starting from the operation to be settled on 9 November 2011. In addition, it decides to decrease the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 2.00% and 0.50% respectively, both with effect from 9 November 2011.

8 DECEMBER 2011

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 1.00%, starting from the operation to be settled on 14 December 2011. In addition, it decides to decrease the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 1.75% and 0.25% respectively, both with effect from 14 December 2011. It also decides to adopt further non-standard measures, notably: (i) to conduct two longer-term refinancing operations with a maturity of approximately three years; (ii) to

increase the availability of collateral; (iii) to reduce the reserve ratio to 1%; and (iv) to discontinue, for the time being, the fine-tuning operations carried out on the last day of each maintenance period.

12 JANUARY 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

9 FEBRUARY 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also approves specific national eligibility criteria and risk control measures for the temporary acceptance in a number of countries of additional credit claims as collateral in Eurosystem credit operations.

8 MARCH, 4 APRIL AND 3 MAY 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

6 JUNE 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 15 January 2013, notably to continue its fixed rate tender procedures with full allotment.

5 JULY 2012

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

2 AUGUST 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively.

6 SEPTEMBER 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively. It also decides on the modalities for undertaking Outright Monetary Transactions (OMTs) in secondary markets for sovereign bonds in the euro area.

4 OCTOBER AND 8 NOVEMBER 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively.

6 DECEMBER 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 9 July 2013, notably to continue its fixed rate tender procedures with full allotment.

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

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively.

2 MAY 2013

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

6 JUNE, 4 JULY AND 1 AUGUST 2013

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.50%, 1.00% and 0.00% respectively.

PUBLICATIONS PRODUCED BY THE EUROPEAN CENTRAL BANK

The ECB produces a number of publications which provide information about its core activities: monetary policy, statistics, payment and securities settlement systems, financial stability and supervision, international and European cooperation, and legal matters. These include the following:

STATUTORY PUBLICATIONS

- Annual Report
- Convergence Report
- Monthly Bulletin

RESEARCH PAPERS

- Legal Working Paper Series
- Occasional Paper Series
- Research Bulletin
- Working Paper Series

OTHER/TASK-RELATED PUBLICATIONS

- Enhancing monetary analysis
- Financial integration in Europe
- Financial Stability Review
- Statistics Pocket Book
- The European Central Bank: history, role and functions
- The international role of the euro
- The implementation of monetary policy in the euro area ("General Documentation")
- The monetary policy of the ECB
- The payment system

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

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

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GLOSSARY

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

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

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

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

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

Break-even inflation rate: the spread between the yield on a nominal bond and that on an inflation-linked bond of the same (or as similar as possible) maturity.

Capital account: a b.o.p. account that covers all capital transfers and acquisitions/disposals of non-produced, non-financial assets between residents and non-residents.

Capital accounts: part of the system of national (or euro area) accounts consisting of the change in net worth that is due to net saving, net capital transfers and net acquisitions of non-financial assets.

Central parity (or central rate): the exchange rate of each ERM II member currency vis-à-vis the euro, around which the ERM II fluctuation margins are defined.

Compensation per employee or per hour worked: the total remuneration, in cash or in kind, that is payable by employers to employees, i.e. gross wages and salaries, as well as bonuses, overtime payments and employers' social security contributions, divided by the total number of employees or by the total number of employees' hours worked.

Consolidated balance sheet of the MFI sector: a balance sheet obtained by netting out inter-MFI positions (e.g. inter-MFI loans and deposits) in the aggregated MFI balance sheet. It provides statistical information on the MFI sector's assets and liabilities vis-à-vis residents of the euro area not belonging to this sector (i.e. the general government and other euro area residents) and vis-à-vis non-euro area residents. It is the main statistical source for the calculation of monetary aggregates, and it provides the basis for the regular analysis of the counterparts of M3.

Collateral: assets pledged or transferred in some form as a guarantee for the repayment of loans, as well as assets sold under repurchase agreements. Collateral used in Eurosystem reverse transactions must fulfil certain eligibility criteria.

Current account: a b.o.p. account that covers all transactions in goods and services, income and current transfers between residents and non-residents.

Current transfers account: a technical b.o.p. account in which the value of real resources or financial items is recorded when these are transferred without receiving anything in exchange. Current transfers cover all transfers that are not capital transfers.

Debt (financial accounts): loans taken out by households, as well as the loans, debt securities and pension fund reserves (resulting from employers' direct pension commitments on behalf of their employees) of non-financial corporations, valued at market prices at the end of the period.

Debt (general government): the gross debt (currency and deposits, loans and debt securities) at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government.

Debt security: a promise on the part of the issuer (i.e. the borrower) to make one or more payment(s) to the holder (the lender) on a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities issued with an original maturity of more than one year are classified as long-term.

Debt-to-GDP ratio (general government): the ratio of general government debt to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 126(2) of the Treaty on the Functioning of the European Union to define the existence of an excessive deficit.

Deficit (general government): the general government's net borrowing, i.e. the difference between total government revenue and total government expenditure.

Deficit-debt adjustment (general government): the difference between the general government deficit and the change in general government debt.

Deficit ratio (general government): the ratio of the general government deficit to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 126(2) of the Treaty on the Functioning of the European Union to define the existence of an excessive deficit. It is also referred to as the budget deficit ratio or the fiscal deficit ratio.

Deflation: a significant and persistent decline in the prices of a very broad set of consumer goods and services that becomes entrenched in expectations.

Deposit facility: a standing facility of the Eurosystem enabling eligible counterparties to make, on their own initiative, overnight deposits with the NCB in their respective jurisdiction. Deposits are remunerated at a pre-specified rate that normally provides a floor for overnight market interest rates.

Disinflation: a process of decelerating inflation that may lead to negative inflation rates of a temporary nature.

Direct investment: cross-border investment for the purpose of obtaining a lasting interest in an enterprise resident in another economy (assumed, in practice, for ownership of at least 10% of the ordinary shares or voting power). Included are equity capital, reinvested earnings and other capital associated with inter-company operations. The direct investment account records net transactions/positions in assets abroad by euro area residents (as "direct investment abroad") and net transactions/positions in euro area assets by non-residents (as "direct investment in the euro area").

Effective exchange rates (EERs) of the euro (nominal/real): weighted averages of bilateral euro exchange rates against the currencies of the euro area's main trading partners. The EER indices of the euro are calculated against different groups of trading partners: the EER-20 comprises the ten non-euro area EU Member States and ten trading partners outside the EU, and the EER-40 encompasses the EER-20 and 20 additional countries. The weights used reflect the share of each partner country in the euro area's trade in manufactured goods and account for competition in third markets. Real EERs are nominal EERs deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness.

Enhanced credit support: the non-standard measures taken by the ECB/Eurosystem during the financial crisis with a view to supporting financing conditions and credit flows above and beyond what could be achieved through reductions in key ECB interest rates alone.

EONIA (euro overnight index average): a measure of the effective interest rate prevailing in the euro interbank overnight market. It is calculated as a weighted average of the interest rates on unsecured overnight lending transactions denominated in euro, as reported by a panel of contributing banks.

Equities: securities representing ownership of a stake in a corporation, e.g. shares traded on stock exchanges (quoted shares), unquoted shares and other forms of equity. Equities usually produce income in the form of dividends.

ERM II (exchange rate mechanism II): the exchange rate arrangement that provides the framework for exchange rate policy cooperation between the euro area countries and the EU Member States not participating in Stage Three of EMU.

EURIBOR (euro interbank offered rate): the rate at which what is known as a prime bank is willing to lend funds (denominated in euro) to another prime bank. The EURIBOR is computed daily, based on the rates of a sample of selected banks, for different maturities of up to 12 months.

Euro area: the area formed by those EU Member States in which the euro has been adopted as the single currency in accordance with the Treaty on the Functioning of the European Union.

European Commission surveys: harmonised surveys of business and/or consumer sentiment conducted on behalf of the European Commission in each of the EU Member States. Such questionnaire-based surveys are addressed to managers in the manufacturing, construction, retail and services industries, as well as to consumers. From each monthly survey, composite indicators are calculated that summarise the replies to a number of different questions in a single indicator (confidence indicators).

Eurosystem: the central banking system made up of the ECB and the NCBs of those EU Member States whose currency is the euro.

Eurozone Purchasing Managers' Surveys: surveys of business conditions in manufacturing and in services industries conducted for a number of countries in the euro area and used to compile indices. The Eurozone Manufacturing Purchasing Managers' Index (PMI) is a weighted indicator calculated from indices of output, new orders, employment, suppliers' delivery times and stocks of purchases. The services sector survey asks questions on business activity, expectations of future business activity, the amount of business outstanding, incoming new business, employment, input

prices and prices charged. The Eurozone Composite Index is calculated by combining the results from the manufacturing and services sector surveys.

External trade in goods: exports and imports of goods with countries outside the euro area, measured in terms of value and as indices of volume and unit value. External trade statistics are not comparable with the exports and imports recorded in the national accounts, as the latter include both intra-euro area and extra-euro area transactions, and also combine goods and services. Nor are they fully comparable with the goods item in b.o.p. statistics. Besides methodological adjustments, the main difference is that imports in external trade statistics are recorded including insurance and freight services, whereas they are recorded free on board in the goods item in the b.o.p. statistics.

Financial account: a b.o.p. account that covers transactions between residents and non-residents in direct investment, portfolio investment, other investment, financial derivatives and reserve assets.

Financial accounts: part of the system of national (or euro area) accounts showing the financial positions (stocks or balance sheets), financial transactions and other changes of the different institutional sectors of an economy by type of financial asset.

Financial vehicle corporation (FVC): an entity whose principal activity is to carry out securitisation transactions. An FVC typically issues marketable securities that are offered for sale to the general public, or sold in the form of private placements. These securities are backed by a portfolio of assets (typically loans) which are held by the FVC. In some cases, a securitisation transaction may involve a number of FVCs, where one FVC holds the securitised assets and another issues the securities backed by those assets.

Fixed rate tender: a tender procedure in which the interest rate is specified in advance by the central bank and in which participating counterparties bid the amount of money they wish to transact at the fixed interest rate.

Fixed rate full-allotment tender procedure: a tender procedure in which the interest rate is pre-specified by the central bank (fixed rate) and in which counterparties bid the amount of money they want to transact at that rate, knowing in advance that all their bids will be satisfied (full allotment).

General government: a sector defined in the ESA 95 as comprising resident entities that are engaged primarily in the production of non-market goods and services intended for individual and collective consumption and/or in the redistribution of national income and wealth. Included are central, regional and local government authorities as well as social security funds. Excluded are government-owned entities that conduct commercial operations, such as public enterprises.

Gross domestic product (GDP): the value of an economy's total output of goods and services less intermediate consumption, plus net taxes on products and imports. GDP can be broken down by output, expenditure or income components. The main expenditure aggregates that make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and imports and exports of goods and services (including intra-euro area trade).

Gross external debt: the outstanding amount of an economy's actual (i.e. non-contingent) current liabilities that require payment of principal and/or interest to non-residents at some point in the future.

Harmonised Index of Consumer Prices (HICP): a measure of the development of consumer prices that is compiled by Eurostat and harmonised for all EU Member States.

Hourly labour cost index: a measure of labour costs, including gross wages and salaries (in cash and in kind, including bonuses) and other labour costs (employers' social contributions plus employment-related taxes paid by the employer minus subsidies received by the employer), per hour actually worked (including overtime).

Implied volatility: the expected volatility (i.e. standard deviation) in the rates of change of the price of an asset (e.g. a share or a bond). It can be derived from the asset's price, maturity date and exercise price of its options, as well as from a riskless rate of return, using an option pricing model such as the Black-Scholes model.

Income account: a b.o.p. account that covers two types of transactions with non-residents, namely (i) those involving compensation of employees that is paid to non-resident workers (e.g., cross-border, seasonal, and other short-term workers) and (ii) those involving investment income receipts and payments on external financial assets and liabilities, with the latter including receipts and payments on direct investment, portfolio investment and other investment, as well as receipts on reserve assets.

Index of negotiated wages: a measure of the direct outcome of collective bargaining in terms of basic pay (i.e. excluding bonuses) at the euro area level. It refers to the implied average change in monthly wages and salaries.

Industrial producer prices: factory-gate prices (transportation costs are not included) of all products sold by industry, excluding construction, on the domestic markets of the euro area countries, excluding imports.

Industrial production: the gross value added created by industry at constant prices.

Inflation: an increase in the general price level, e.g. in the consumer price index.

Inflation-indexed government bonds: debt securities issued by the general government, the coupon payments and principal of which are linked to a specific consumer price index.

Insurance corporations and pension funds: financial corporations and quasi-corporations that are engaged primarily in financial intermediation as the consequence of the pooling of risks.

International investment position (i.i.p.): the value and composition of an economy's outstanding net financial claims on (or financial liabilities to) the rest of the world.

International reserves: external assets readily available to and controlled by monetary authorities for directly financing or regulating the magnitude of payment imbalances through intervention in exchange markets. The international reserves of the euro area comprise non-euro-denominated

claims on non-euro area residents, gold, special drawing rights and the reserve positions in the IMF which are held by the Eurosystem.

Investment funds (except money market funds): financial institutions that pool capital raised from the public and invest it in financial and non-financial assets. See also MFIs.

Job vacancies: a collective term covering newly created jobs, unoccupied jobs or jobs about to become vacant in the near future, for which the employer has recently taken active steps to find a suitable candidate.

Key ECB interest rates: the interest rates, set by the Governing Council, which reflect the monetary policy stance of the ECB. They are the rates at the main refinancing operations, on the marginal lending facility and on the deposit facility.

Labour force: the sum total of persons in employment and the number of unemployed.

Labour productivity: the output that can be produced with a given input of labour. It can be measured in several ways, but is commonly measured as GDP (volume) divided by either total employment or total hours worked.

Liquidity-absorbing operation: an operation through which the Eurosystem absorbs liquidity in order to reduce excess liquidity, or to create a shortage of liquidity. Such operations can be conducted by issuing debt certificates or fixed-term deposits.

Longer-term refinancing operation (LTRO): an open market operation with a maturity of more than one week that is executed by the Eurosystem in the form of a reverse transaction. The regular monthly operations have a maturity of three months. During the financial market turmoil that started in August 2007, supplementary operations with maturities ranging from one maintenance period to 36 months were conducted, the frequency of which varied.

M1: a narrow monetary aggregate that comprises currency in circulation plus overnight deposits held with MFIs and central government (e.g. at the post office or treasury).

M2: an intermediate monetary aggregate that comprises M1 plus deposits redeemable at a period of notice of up to and including three months (i.e. short-term savings deposits) and deposits with an agreed maturity of up to and including two years (i.e. short-term time deposits) held with MFIs and central government.

M3: a broad monetary aggregate that comprises M2 plus marketable instruments, in particular repurchase agreements, money market fund shares and units, and debt securities with a maturity of up to and including two years issued by MFIs.

Main refinancing operation (MRO): a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a weekly standard tender and normally have a maturity of one week.

Marginal lending facility: a standing facility of the Eurosystem enabling eligible counterparties, on their own initiative, to receive overnight credit from the NCB in their jurisdiction at a

pre-specified rate in the form of a reverse transaction. The rate on loans extended within the scope of the marginal lending facility normally provides an upper bound for overnight market interest rates.

MFI credit to euro area residents: MFI loans granted to non-MFI euro area residents (including general government and the private sector) and MFI holdings of securities (shares, other equity and debt securities) issued by non-MFI euro area residents.

MFI interest rates: the interest rates that are applied by resident credit institutions and other MFIs, excluding central banks and money market funds, to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area.

MFI longer-term financial liabilities: deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued by euro area MFIs with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

MFI net external assets: the external assets of the euro area MFI sector (such as gold, foreign currency banknotes and coins, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the euro area MFI sector (such as non-euro area residents' deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

MFIs (monetary financial institutions): financial institutions which together form the money-issuing sector of the euro area. These include (i) the Eurosystem, (ii) resident credit institutions (as defined in EU law), (iii) other financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities, as well as electronic money institutions that are principally engaged in financial intermediation in the form of issuing electronic money, and (iv) money market funds, i.e. collective investment undertakings that invest in short-term and low-risk instruments.

Minimum bid rate: the lower limit to the interest rates at which counterparties may submit bids in the variable tenders.

Open market operation: a financial market operation executed on the initiative of the central bank. These operations include reverse transactions, outright transactions as well as the issuance of fixed-term deposits or debt certificates or foreign exchange swaps. The open market operations can be liquidity providing or liquidity absorbing.

Other investment: an item in the b.o.p. and the i.i.p. that covers the financial transactions/positions with non-residents in trade credits, deposits and loans, and other accounts receivable and payable.

Portfolio investment: euro area residents' net transactions and/or positions in securities issued by non-residents of the euro area ("assets") and non-residents' net transactions and/or positions in securities issued by euro area residents ("liabilities"). Included are equity securities and debt securities (bonds and notes, and money market instruments). Transactions are recorded at the effective price paid or received, less commissions and expenses. To be regarded as a portfolio asset, ownership in an enterprise must be equivalent to less than 10% of the ordinary shares or voting power.

Price stability: as defined by the Governing Council, a year-on-year increase in the HICP for the euro area of below 2%. The Governing Council has also made it clear that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term.

Purchasing power parity (PPP): the rate at which one currency is converted into another so as to equalise the purchasing power of the two currencies by eliminating the differences in the price levels prevailing in the countries concerned. In their simplest form, PPPs show the ratio of the prices in national currency of the same good or service in different countries.

Reference value for M3 growth: the annual growth rate of M3 that is deemed to be compatible with price stability over the medium term.

Reserve requirement: the requirement for institutions to hold minimum reserves with the central bank over a maintenance period. Compliance with the requirement is determined on the basis of the average of the daily balances in the reserve accounts over the maintenance period.

Reverse transaction: an operation whereby the NCB buys or sells assets under a repurchase agreement or conducts credit operations against collateral.

Securitisation: a transaction or scheme whereby an asset or a pool of cash flow-producing assets, often consisting of loans (mortgages, consumer loans, etc.), is transferred from an originator (usually a credit institution) to a financial vehicle corporation (FVC). The FVC effectively converts these assets into marketable securities by issuing debt instruments with principal and interest serviced through the cash flows produced by the asset pool.

Survey of Professional Forecasters (SPF): a quarterly survey that has been conducted by the ECB since 1999 to collect macroeconomic forecasts on euro area inflation, real GDP growth and unemployment from a panel of experts affiliated to financial and non-financial organisations based in the EU.

Unit labour costs: a measure of total labour costs per unit of output calculated for the euro area as the ratio of total compensation per employee to labour productivity (defined as GDP (volume) per person employed).

Variable rate tender: a tender procedure where the counterparties bid both the amount of money they wish to transact with the central bank and the interest rate at which they wish to enter into the transaction.

Volatility: the degree of fluctuation in a given variable.

Write-down: a downward adjustment to the value of loans recorded in the balance sheets of MFIs when it is recognised that the loans have become partly unrecoverable.

Write-off: the removal of the value of loans from the balance sheets of MFIs when the loans are considered to be totally unrecoverable.

Yield curve: a graphical representation of the relationship between the interest rate or yield and the residual maturity at a given point in time for sufficiently homogenous debt securities with different maturity dates. The slope of the yield curve can be measured as the difference between the interest rates or yield at two selected maturities.

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