EUROPEAN CENTRAL BANK

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MONTHLY BULLETIN
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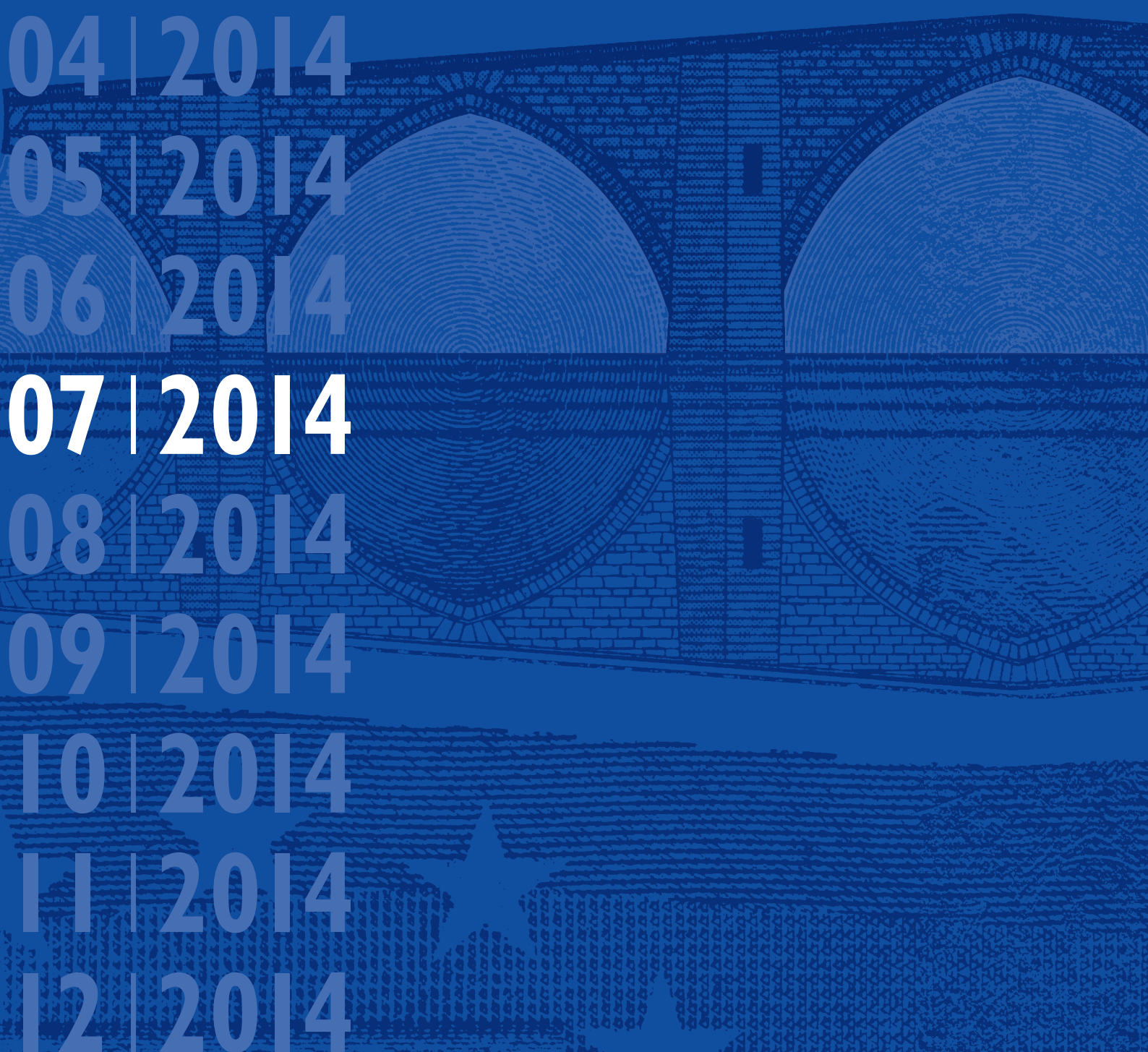

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In 2014 all ECB publications feature a motif taken from the €20 banknote.

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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 3 July 2014 to keep the key ECB interest rates unchanged. The latest information signals that the euro area economy continued its moderate recovery in the second quarter, with low rates of inflation and subdued monetary and credit growth. At the same time, inflation expectations for the euro area over the medium to long term continue to be firmly anchored in line with the Governing Council's aim of maintaining inflation rates below, but close to, 2%. The combination of monetary policy measures decided last month has already led to a further easing of the monetary policy stance. The monetary operations to take place over the coming months will add to this accommodation and will support bank lending. As the measures work their way through to the economy, they will contribute to a return of inflation rates to levels closer to 2%. Concerning the Governing Council's forward guidance, the key ECB interest rates will remain at present levels for an extended period of time in view of the current outlook for inflation. Moreover, the Governing Council is unanimous in its commitment to also using unconventional instruments within its mandate, should it become necessary to further address risks of too prolonged a period of low inflation. The Governing Council is strongly determined to safeguard the firm anchoring of inflation expectations over the medium to long term.

As a follow-up to the decisions taken in early June, the Governing Council also decided on specific modalities for the targeted longer-term refinancing operations (TLTROs). The aim of the TLTROs is to enhance the functioning of the monetary policy transmission mechanism by supporting lending to the real economy. As announced last month, the Governing Council has also started to intensify preparatory work related to outright purchases in the asset-backed securities market to enhance the functioning of the monetary policy transmission mechanism.

Regarding the economic analysis, real GDP in the euro area rose by 0.2%, quarter on quarter, in the first quarter of this year. Economic indicators, including survey results available up to June, signal a continuation of the very gradual recovery in the second quarter of 2014. Looking ahead, domestic demand should be supported by a number of factors, including the further accommodation in the monetary policy stance and the ongoing improvements in financing conditions. In addition, the progress made in fiscal consolidation and structural reforms, as well as gains in real disposable income, should make a positive contribution to economic growth. Furthermore, demand for exports should benefit from the ongoing global recovery. However, although labour markets have shown some further signs of improvement, unemployment remains high in the euro area and, overall, unutilised capacity continues to be sizeable. Moreover, the annual rate of change of MFI loans to the private sector remained negative in May and the necessary balance sheet adjustments in the public and private sectors are likely to continue to dampen the pace of the economic recovery.

The risks surrounding the economic outlook for the euro area remain on the downside. In particular, geopolitical risks, as well as developments in emerging market economies and global financial markets, may have the potential to affect economic conditions negatively, including through effects on energy prices and global demand for euro area products. A further downside risk relates to insufficient structural reforms in euro area countries, as well as weaker than expected domestic demand.

According to Eurostat's flash estimate, euro area annual HICP inflation was 0.5% in June 2014, unchanged from May. Among the main components, services price inflation increased from 1.1% in May to 1.3% in June, while food price inflation fell from 0.1% to -0.2%. On the basis of current information, annual HICP inflation is expected to remain at low levels over the coming months,

before increasing gradually during 2015 and 2016. Meanwhile, inflation expectations for the euro area over the medium to long term continue to be firmly anchored in line with the Governing Council's aim of maintaining inflation rates below, but close to, 2%.

The Governing Council sees both upside and downside risks to the outlook for price developments as limited and broadly balanced over the medium term. In this context, the Governing Council will closely monitor the possible repercussions of geopolitical risks and exchange rate developments.

Turning to the monetary analysis, data for May 2014 continue to point to subdued underlying growth in broad money (M3). Annual growth in M3 was 1.0% in May, compared with 0.7% in April. The growth of the narrow monetary aggregate M1 moderated to 5.0% in May, after 5.2% in April. The increase in the MFI net external asset position, reflecting in part the continued interest of international investors in euro area assets, has recently been an important factor supporting annual M3 growth.

The annual rate of change of loans to non-financial corporations (adjusted for loan sales and securitisation) was -2.5% in May 2014, compared with -2.8% in April. Lending to non-financial corporations continues to be weak, reflecting the lagged relationship with the business cycle, credit risk, credit supply factors and the ongoing adjustment of financial and non-financial sector balance sheets. The annual growth rate of loans to households (adjusted for loan sales and securitisation) was 0.5% in May 2014, broadly unchanged since the beginning of 2013.

Against the background of weak credit growth, the ECB's ongoing comprehensive assessment of banks' balance sheets is of key importance. Banks should take full advantage of this exercise to improve their capital and solvency position, thereby supporting the scope for credit expansion during the next stages of the recovery.

To sum up, the economic analysis indicates that the current low level of inflation should be followed by a gradual upward movement in HICP inflation rates towards levels closer to 2%. A cross-check with the signals from the monetary analysis confirms this picture.

As regards fiscal policies, substantial fiscal consolidation in recent years has contributed to reducing budgetary imbalances. Important structural reforms have increased competitiveness and the adjustment capacity of countries' labour and product markets. However, significant challenges remain. To strengthen the foundations for sustainable growth and sound public finances, euro area countries should not unravel the progress made with fiscal consolidation, in line with the Stability and Growth Pact, and should proceed with structural reforms in the coming years. Fiscal consolidation should be designed in a growth-friendly manner, and structural reforms should focus on fostering private investment and job creation. A full and consistent implementation of the euro area's existing fiscal and macroeconomic surveillance framework is key to bringing down high public debt ratios, to raising potential growth and to increasing the euro area's resilience to shocks.

The Governing Council also announced on 3 July 2014 that the frequency of its monetary policy meetings will change to a six-week cycle, from January 2015. The reserve maintenance periods will be extended to six weeks to match the new schedule. Moreover, the Governing Council announced its commitment to publish regular accounts of the monetary policy meetings, which is intended to start with the January 2015 meeting.

This issue of the Monthly Bulletin contains three articles. The first article discusses the concept of the euro area risk-free interest rate, as well as its relevance for the economy in general and monetary policy in particular. The second article describes the difficulties faced by small and medium-sized enterprises during the financial crisis and provides an overview of existing and possible new instruments for enhancing access to finance for this group of firms. The third article reviews the Phillips curve for the euro area as a whole and the individual euro area countries, focusing on the relationship between inflation and measures of economic slack in the period since 1999.

ECONOMIC AND MONETARY DEVELOPMENTS

1 THE EXTERNAL ENVIRONMENT OF THE EURO AREA

Notwithstanding a moderate slowdown in the first quarter of 2014, global economic activity remains on a gradual expansionary path, supported by solid momentum in a number of advanced economies. While geopolitical uncertainties and structural hurdles are delaying a stronger recovery in emerging market economies overall, a greater differentiation of growth prospects across countries is becoming more evident. Global inflation has recently increased, but remains rather low compared with historical averages.

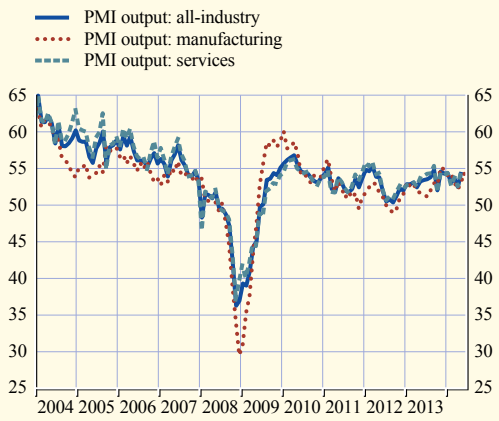
1.1 GLOBAL ECONOMIC ACTIVITY AND TRADE

The global recovery is progressing, albeit still at a modest and uneven pace. Following some temporary weakness in the first quarter of 2014, world economic activity is expected to regain vigour in the second quarter of the year, as signalled by stronger sentiment readings in May and June. More specifically, the global manufacturing Purchasing Managers' Index (PMI) edged up further to 52.7 in June, from 52.1 in May, with activity being supported mostly by advanced economies and in particular the United States and the United Kingdom. Meanwhile, the manufacturing sector returned to growth in China, while it maintained its momentum in India, thereby signalling an improvement in business conditions for these two large emerging market economies. Excluding the euro area, the global manufacturing PMI also ticked up in June (see Chart 1).

Forward-looking indicators imply a modest acceleration of world activity in the quarters ahead, amid continuing growth rotation across regions. The new orders component of the manufacturing PMI stood slightly higher in June, while in April the OECD's composite leading indicator, designed to anticipate turning points in economic activity relative to trend, continued to point to a steady momentum in advanced economies, but growth below trend in major emerging market economies (see Chart 2). Geopolitical considerations and structural impediments continue to weigh on the economic prospects of some major emerging market economies.

Chart 1 Global PMI (excluding the euro area)

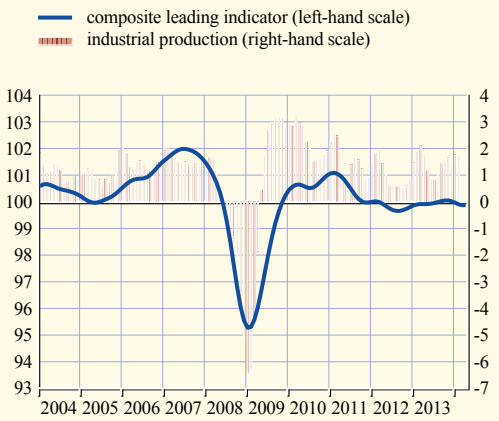
(seasonally adjusted monthly data)



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.

World trade growth momentum turned negative in April 2014 for the first time since October 2012. According to the CPB Netherlands Bureau for Economic Policy Analysis, the volume of world imports of goods declined by 0.4% in April on a three-month-on-three-month basis. The decline was concentrated in the emerging market economies, led by trade weakness in Asia and central and eastern Europe, while advanced economies sustained positive trade growth. Meanwhile, the global PMI for new manufacturing export orders in June pointed to some easing in global trade in the second quarter of the year. Looking ahead, although global trade growth is expected to gradually rebound, as investment in advanced economies picks up, it will likely remain below pre-crisis averages, suggesting a somewhat weaker relationship between global trade and economic activity. Box 1 discusses the factors underpinning global trade-to-income elasticity and argues that structural changes are likely to keep the trade elasticity below pre-crisis levels in the medium term.

The balance of risks to the global outlook remains tilted to the downside. Geopolitical risks, as well as developments in emerging market economies and global financial markets, may have the potential to affect economic conditions negatively, including through effects on energy prices.

Box 1

UNDERSTANDING GLOBAL TRADE ELASTICITIES: WHAT HAS CHANGED?

In recent years world trade growth has been weak not only in real terms but also relative to global economic activity. This box reviews the weakness in global trade since mid-2011 from a historical perspective and discusses the factors underpinning the relationship between global trade and GDP. It finds that the income elasticity of global trade has varied significantly over time and that, in addition to cyclical demand developments, structural factors appear to have lowered the trade-to-income elasticity well before the recent economic and financial crisis. While the global trade elasticity is expected to recover from its current low levels, it is unlikely to return to pre-crisis averages in the medium term.

Weakness in global trade

In absolute terms, global trade growth was weaker in 2013 than the already low growth rate observed in 2012. It has also weakened significantly relative to global economic activity. Over the period 1981-2007, the gross income elasticity of global trade, measured as the ratio of the average growth rate of imports of goods and services to average GDP growth, was 1.8. In 2011-13, this ratio declined significantly to 1.1.[1] The decline is robust to different aggregation weights being used for global GDP and to the choice of more narrowly defined sectors such as trade in goods or manufacturing (see table). However, the results appear to be sensitive to the chosen pre-crisis sample period: the decline becomes relatively limited when the sample is extended back to the 1950s, suggesting that the trade-output relationship has varied over time.

Indeed, when the trade-to-GDP ratio is assessed using moving averages, the elasticity displays clear and persistent deviations from the constant mean ratio. Whereas trade growth accelerated relative to economic activity from the mid-1980s to the mid-1990s, the elasticity started to

1 The quantification of the elasticity based on the period 2011-13 is only suggestive, as the sample is relatively limited.

Historical ratios of global trade to output growth

Sample period	Ratio[1]	Trade variable	Output variable
1981-2007	1.8	Imports of goods and services	GDP[2]
2011-2013	1.1		
1981-2007	2.0	Imports of goods and services	GDP[3]
2011-2013	1.4		
1950-2007	1.6	Merchandise exports	Merchandise production
1981-2007	1.9		
2011-2013[4]	1.4		
1950-2007	1.6	Manufacturing exports	Manufacturing production
1981-2007	2.1		
2011-2013[4]	1.5		

Sources: ECB calculations, World Trade Organization, CPB Netherlands Bureau for Economic Policy Analysis and United Nations Industrial Development Organization (UNIDO).
1) Imports, GDP: quarterly data; exports, production: annual data.
2) At purchasing power parity.
3) At market exchange rates.
4) For 2013, WTO series are extrapolated using growth rates from CPB and UNIDO data.

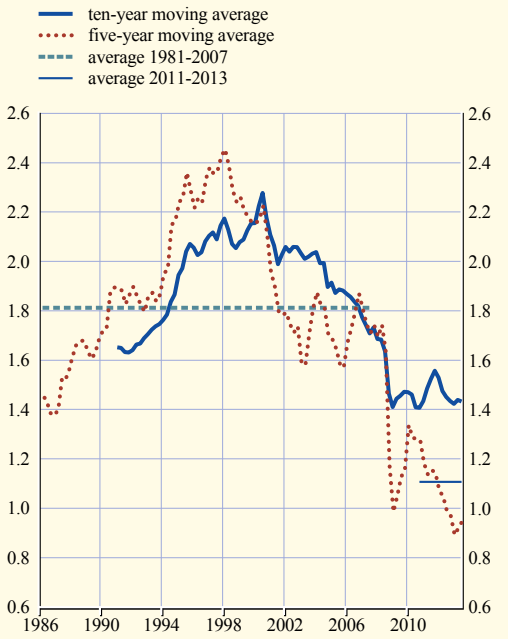
decline in the late 1990s, before falling to 20-year lows after the crisis and remaining weak thereafter (see Chart A). The chart shows in particular that the gross income elasticity of global trade started to decline about a decade before the crisis.

Factors driving global trade elasticities

The recent change in the trade-to-GDP relationship can be explained in part by cyclical factors and shifts in demand composition. Global demand components that typically have a high import content, such as business investment, have remained uncharacteristically weak since the financial crisis. The slowdown in trade-intensive demand components has been a strong drag on trade growth, leading to a lower trade-to-GDP growth ratio. This effect is of a temporary nature, as it would be reversed by a recovery in global activity and investment.

Taking a historical perspective, however, the decline in the trade elasticity also has structural determinants, which are likely to have a more lasting impact on the trade-to-GDP relationship. A number of factors that had boosted trade in the decades prior to 2000 have since had a diminishing or negligible role. In the literature, falling transportation costs, declining relative prices of tradables and the reduction of trade barriers are commonly cited as factors having

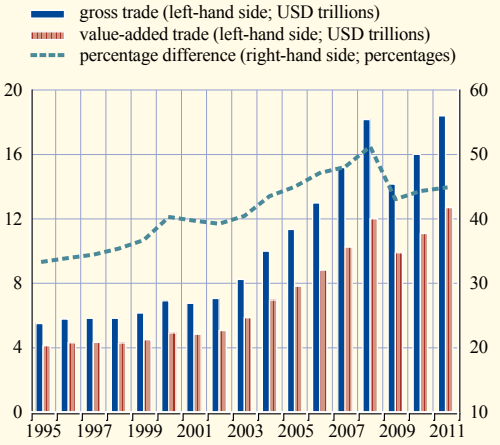
Chart A Ratio of global import growth to GDP growth



Source: ECB calculations.
Notes: Data are quarterly. The latest observation is for the fourth quarter of 2013.

contributed to trade growing faster than output.[2] Yet the significant cost reductions stemming from earlier technology breakthroughs, the amplifying effects on trade from trade liberalisation agreements and productivity gains in the tradable sectors had levelled off by the mid-1990s and have since provided less support to trade growth, which explains in part the fact that the trade elasticity peaked during the mid- to late 1990s (see Chart A).

Chart B Global gross versus value-added trade



Sources: ECB calculations and WIOD.

More recently, the rise of global value chains has helped trade to grow faster than output. Global value chains imply the international fragmentation of production, involving increased outsourcing of intermediate inputs to foreign suppliers. Trade flows are measured in gross terms, which means that they "double count" any traded item whenever it crosses more than one international border. This implies that outsourcing increases (gross) trade relative to activity. The rise of global value chains, or outsourcing, can be measured by comparing gross and value-added trade, as the latter is invariant to where intermediate inputs are produced. Data from the World Input-Output Database (WIOD) show that the gap between gross and value-added trade indeed increased from 33% in 1995 to 51% before the crisis (see Chart B). A comparison of the implied trade-to-income elasticities for value-added and gross trade for the pre-crisis period shows that outsourcing added 0.2 percentage point to the elasticity of global trade over this period.

However, this source of support for the relative growth in trade may decline. The WIOD data, which are only available up to 2011, show that the crisis of 2008-09 has already led to a downward shift in the average length of global value chains. Moreover, anecdotal evidence suggests that in the wake of the 2011 Japanese earthquake and the subsequent supply disruptions in certain manufacturing industries, some companies are aiming to reduce the complexity and length of their supply chains.[3] This would have a downward impact on the medium to long-term global trade elasticity.

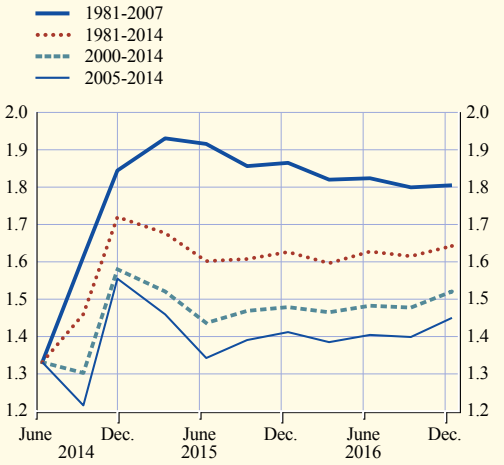
An empirical analysis based on a bivariate Bayesian vector autoregression (BVAR) model further quantifies the decline in the trade elasticity. The BVAR is estimated using quarterly global real imports of goods and services and global real GDP with five lags, and projects trade conditional on the world GDP path implied by the June 2014 Eurosystem staff macroeconomic projections. Chart C shows that when the model is estimated over the pre-crisis period from the first quarter of 1981 to the fourth quarter of 2007, the trade-to-GDP growth ratio at the end of the forecast horizon is 1.8, in line with the pre-crisis trade elasticity. When full account is taken of the post-recession data by extending the sample to the first quarter of 2014, the projected ratio at the end of 2016 declines to 1.6, suggesting that medium-term trade is likely to remain below

2 See, for example, Jacks, D., Meissner, C. and Novy, D., "Trade Costs, 1870-2000", *American Economic Review*, Vol. 98, No 2, 2008, pp. 529-534; and Baier, S. and Bergstrand, J., "The growth of world trade: tariffs, transport costs, and income similarity", *Journal of International Economics*, Vol. 53, No 1, 2001, pp. 1-27.

3 See, for example, "Global value chains: Managing the risks" in *Interconnected Economies: Benefiting from Global Value Chains*, OECD Publishing, 2013.

levels implied by pre-crisis elasticities. If greater weight is given to the more recent data, for example by taking account of only the last 15 or ten years, the ratio declines further to 1.5 and 1.4 respectively.

Chart C Projections for the ratio of global trade to GDP growth using different sample periods



Source: ECB calculations.
Note: Lines show projections using a BVAR model estimated over different sample periods.

Conclusion

In sum, the relationship between trade and output growth observed over the past three years is weaker than that recorded over the 25 years prior to the recent economic and financial crisis. Some of this weakness is likely to be cyclical, reflecting relatively moderate growth in trade-intensive demand components, in particular business investment, since the crisis. However, the gross income elasticity of global trade displays a high degree of variation over time, with the elasticity having already begun to decline well before the crisis. This cautions against taking a specific pre-crisis trend as given. Instead, empirical models and the prospect of reduced support to trade coming from global value chains point to a medium-term trade elasticity that remains below the levels implied by the pre-crisis relationship between global trade and economic activity.

1.2 GLOBAL PRICE DEVELOPMENTS

Despite having increased in recent months, global inflation remains relatively low by historical averages, reflecting rather stable commodity prices and ample global spare capacity. Headline consumer price inflation in the OECD area further picked up to 2.1% in May, from 2.0% in April, mainly driven by a higher contribution from energy and food prices. Excluding food and energy, OECD annual consumer price inflation slightly decreased to 1.9% in May. The pick-up in inflation was evident in the majority of advanced economies, notably outside Europe, as well as in most large emerging market economies (see Table 1).

Table 1 Price developments in selected economies

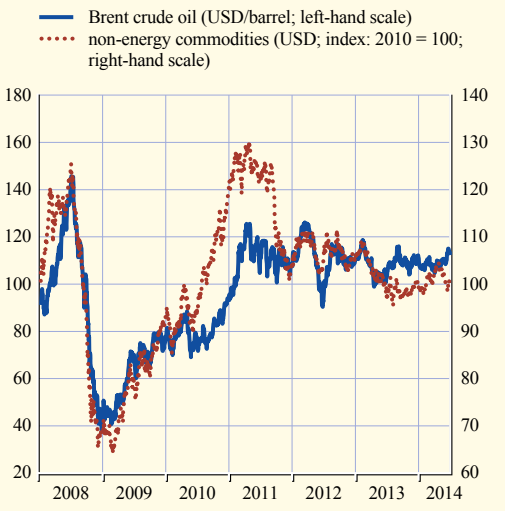
(annual percentage changes)

	2012	2013	2013	2014				
			Dec.	Jan.	Feb.	Mar.	Apr.	May
OECD	2.3	1.6	1.6	1.7	1.4	1.6	2.0	2.1
United States	2.1	1.5	1.5	1.6	1.1	1.5	2.0	2.1
Japan	0.0	0.4	1.6	1.4	1.5	1.6	3.4	3.7
United Kingdom	2.8	2.6	2.0	1.9	1.7	1.6	1.8	1.5
China	2.6	2.6	2.5	2.5	2.0	2.4	1.8	2.5
Memo item:								
OECD excluding food and energy	1.8	1.6	1.6	1.6	1.6	1.7	2.0	1.9

Sources: OECD, national data, BIS, Eurostat and ECB calculations.

The outlook for global inflation is strongly influenced by commodity price developments and more importantly by energy prices. After fluctuating within a range of USD 106-111 per barrel over the past few months, oil prices increased to USD 115 in June shortly after the escalation of the conflict in Iraq (see Chart 3). Brent crude oil prices stood at USD 112 per barrel on 2 July, which is about 9% higher than their level one year ago. On the supply side, although no oil production disruptions have occurred so far, the recent increase in oil prices reflects concerns about possible oil supply losses related to the conflict in Iraq. Meanwhile, political instability and technical issues continue to weigh on oil production in both OPEC and non-OPEC countries, although global supply increased in May with respect to April. On the demand side, growth in global oil demand remains sluggish according to the International Energy Agency, in line with moderate global GDP growth. Looking forward, oil market participants expect lower oil prices over the medium term, with December 2015 Brent futures contracts trading at USD 105 per barrel. Box 2 shows that more stable commodity prices over the past few years have explained a large part of the decline in global inflation and discusses demand and supply factors likely to shape commodity price developments in the near future.

Chart 3 Main developments in commodity prices



Sources: Bloomberg and HWWI.

Non-energy commodity prices, on aggregate, decreased by about 1% in June, reflecting a decline in both food and metal prices. Food prices were lower due to the expectation of more favourable weather conditions, as El Niño is now forecasted to be milder than expected at the beginning of the year. In aggregate terms, the non-energy commodity price index (denominated in US dollars) is currently about 1.3% higher compared with one year ago.

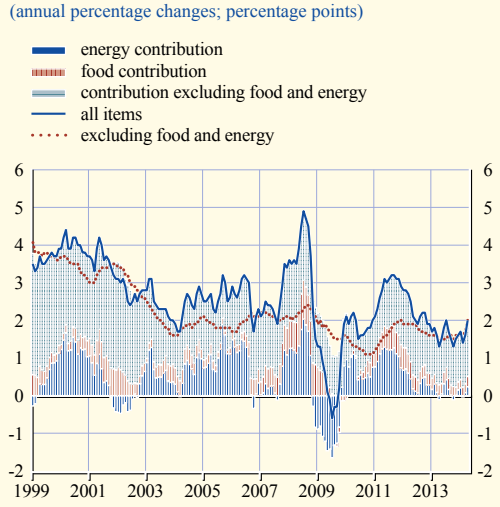
Box 2

COMMODITY PRICE DEVELOPMENTS AND THEIR IMPLICATIONS FOR GLOBAL INFLATION

The decline in global inflation in recent years is largely explained by a drop in the contribution of energy and food prices. OECD headline inflation declined from a high of 3.2% in the summer of 2011 to a low of 1.4% in February 2014, before increasing slightly again (see Chart A). Over four-fifths of this decline is attributed to reduced contributions from the food and energy components. This box discusses the drivers of this reduction in the contributions of energy and food prices to inflation, assesses the outlook for commodity prices on the basis of recent developments and discusses the implications for global inflation.

Chart A Contribution of energy and food prices to OECD inflation

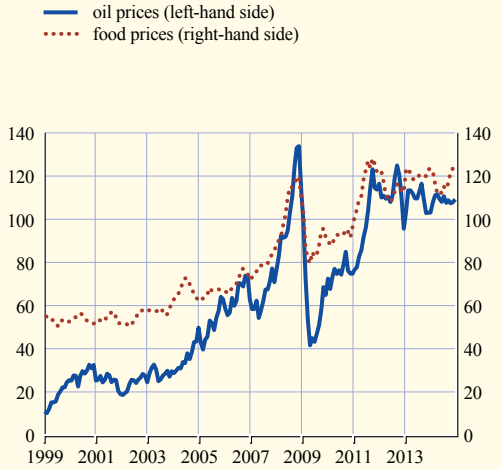
(annual percentage changes; percentage points)



Sources: OECD and ECB staff calculations.
Notes: Monthly data; the latest observation is for April 2014. The calculation of the contributions is based on ECB staff calculations.

Chart B Oil and food prices

(USD per barrel; index: 2010=100)



Source: IMF.
Note: Monthly data; the latest observation is for May 2014.

Factors behind the recent stability in commodity prices

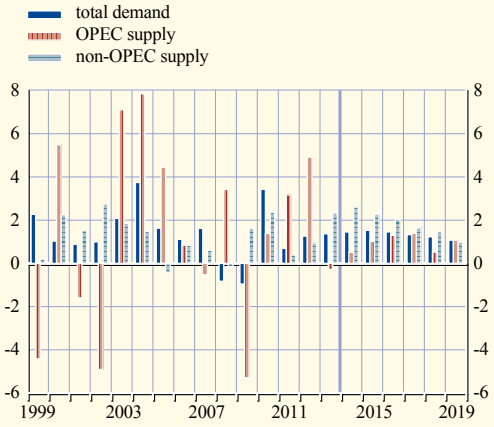
From 1999 onwards there was a broad-based increase in international oil and food prices, which was interrupted by the 2008 financial crisis (see Chart B).[1] The upward trend observed in oil and food prices is largely explained by increasing demand for commodities owing to strong economic growth in emerging economies, in particular China. Combined with somewhat lagging supply, the steep rise in demand for commodities pushed up oil and food prices sharply. This upward trend in commodity prices was reflected in the almost constantly high contribution of energy and food prices to OECD inflation, averaging 1 percentage point over the period 1999-2008 (see Chart A).

In stark contrast to this upward trend, oil and food prices have been broadly stable since 2011 (see Chart B). This reflects changes on both the supply and the demand side. With regard to the supply side, the high levels of oil and food prices have encouraged investment, which has led to an increase in the production of these commodities and, in turn, to better-supplied commodity markets. This is particularly notable in the case of the oil market, where technical innovations combined with high oil prices triggered the shale oil revolution in North America, thereby boosting non-OPEC oil production (see Chart C). As far as food prices are concerned, owing to good weather conditions, among other things, there was an excess supply of cereals, for example, as supply rose strongly in the aftermath of severe weather-related shortages in 2012, leading to higher prices and boosting production. As regards the demand side, while the acceleration of growth in emerging economies was the main driver behind the steep rises in oil and food

1 For the energy contribution, the focus is on oil prices, as these constitute the largest component of energy inflation and are also most subject to price changes.

Chart C Demand and supply developments and projections in the oil market

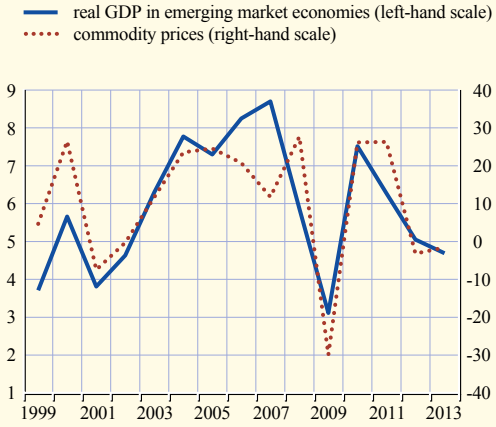
(annual percentage changes)



Source: International Energy Agency (IEA).
Notes: The values from 2014 refer to IEA projections (based on the June Medium-Term Oil Market Report). As projections on OPEC production are not available, the projections for OPEC refer to OPEC crude capacity.

Chart D Commodity price changes and real GDP growth in emerging market economies

(annual percentage changes)



Sources: Haver Analytics and IMF.
Note: The commodity price index contains all primary commodities.

prices over the period 1999-2008, growth in these economies has since slowed (see Chart D). Although the level of oil demand continues to be high, growth in the demand for commodities is moderating. To sum up, since 2011 slowing growth in demand together with favourable supply developments have prevented oil and food prices from increasing at similar rates to those observed from 2003. Instead, notwithstanding some short-run volatility, oil and food prices have remained broadly stable. Taking into account the transmission lag to inflation, these commodity price changes have caused the contribution of oil and food prices to global inflation to decline since 2013, reaching 0.4 percentage point on average since 2013, compared with 1 percentage point in the preceding decade.

The outlook for oil and food prices

Turning to the outlook for commodity prices, the recent supply and demand-side developments suggest that, compared with the period in which demand-related tightness continuously pushed prices upwards, a better-supplied commodity market can be expected.

In the case of oil prices, the International Energy Agency (IEA) expects the oil market to remain well balanced over the next five years, as growth in oil supply is projected to surpass growth in oil demand (see Chart C). On average, according to the IEA's projections, oil demand will grow at 1.3 million barrels per day (mb/d) each year compared with an average projected growth in oil supply capacity of 1.5 mb/d each year. On the demand side, growth in oil demand is expected to remain relatively steady, in part because the growth in demand from China is expected to decline (China's contribution to global oil demand growth is expected to drop to 30% over the next five years, as compared with 60% over the previous six years). On the supply side, non-OPEC production related to the exploration of shale oil resources is expected to provide most of the growth in oil production capacity over the next few years. In addition, production capacity in OPEC countries is projected to expand owing to investment.

However, risks to the oil price outlook exist. The main such risk relates to potential oil supply disruptions. While Iraq has the highest potential to increase oil production, political instability and security problems might impede the expansion in oil production capacity, thereby shifting the global balance of supply and demand. Similarly, an escalation of the tensions in Ukraine has the potential to affect the supply of energy, pushing oil prices higher.

With regard to food prices, the outlook is more difficult to determine. In the short to medium term, compared with the prices of other commodities such as oil, food prices are generally less sensitive to the macroeconomic cycle and typically react more to weather-related developments and other largely exogenous supply-side factors, such as the development of land under cultivation.

Conclusions – implications for global inflation

A large part of the recent decline in OECD inflation is due to a decreasing contribution from the energy and food components, which in turn is explained by more stable oil and food prices. In contrast to the previous decade, growth in oil and food prices has moderated since 2011 owing to generally better-supplied commodity markets combined with slowing growth in emerging market economies. Looking ahead, all things being equal, the commodity market in general is expected to remain well balanced. This implies that the contribution of energy and food to global inflation is likely to remain limited. However, potential supply-side disruptions pose an upside risk to this outlook.

1.3 DEVELOPMENTS IN SELECTED ECONOMIES

UNITED STATES

In the United States, real GDP contracted in the first quarter of 2014, following a pick-up in activity in the second half of 2013, largely reflecting unusually severe weather conditions (see Table 2). According to the third estimate by the US Bureau of Economic Analysis, real GDP declined at an annualised rate of 2.9% (-0.7% quarter on quarter), after having increased by 2.6% (0.7% quarter on quarter) in the fourth quarter of 2013. Real GDP was revised further downwards relative to the second estimate, due largely to a downward revision to private consumption and to a larger negative contribution from net exports. The contraction in the first quarter of 2014, compared with the previous quarter, reflected mainly a negative contribution to growth from inventory building and a decline in exports.

The latest indicators are consistent with a sharp rebound in growth in the second quarter. The resilience in private consumption is expected to continue, as shown by strong consumer

Table 2 Real GDP growth in selected economies

(percentage changes)

	Annual growth rates					Quarterly growth rates		
	2012	2013	2013 Q3	2013 Q4	2014 Q1	2013 Q3	2013 Q4	2014 Q1
United States	2.8	1.9	2.0	2.6	1.5	1.0	0.7	-0.7
Japan	1.4	1.5	2.4	2.4	2.8	0.3	0.1	1.6
United Kingdom	0.3	1.7	1.8	2.7	3.1	0.8	0.7	0.8
China	7.7	7.7	7.8	7.7	7.4	2.3	1.7	1.4

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

confidence in June, sustained improvements in the labour market, and positive wealth effects stemming from rising stock and house prices. The pick-up in industrial production and core capital goods orders in May, and high manufacturing confidence levels in June, suggest that business investment is on a stronger footing. At the same time, the housing market appears to have bottomed out at the end of the first quarter, following a weather-related slowdown. The rebound in home sales in April and May, and the expansion in homebuilders' confidence in June, bode well for the recovery in this sector. Looking ahead, the recovery is expected to accelerate during the second half of the year, led by the strengthening of private domestic demand, owing to supportive financial conditions and rising confidence, and by a diminishing fiscal drag.

Annual CPI inflation increased to 2.1% in May, up from 2.0% in April, largely reflecting strong gains in food and energy prices. Annual inflation excluding food and energy rose to 2.0%, from 1.8% in April. Base effects in energy and food prices – which are expected to fade away – have continued to play an important role in driving up headline inflation. Looking ahead, substantial slack in the economy, particularly in the labour market, and subdued wage growth are expected to keep price pressures contained.

In the context of generally improving economic prospects, at its meeting on 18 June 2014 the Federal Open Market Committee (FOMC) announced that it would reduce the pace of its monthly asset purchases by a further USD 10 billion, to USD 35 billion, starting from July. The reduction is divided equally between purchases of mortgage-backed securities (from USD 20 billion to USD 15 billion) and longer-term Treasury securities (from USD 25 billion to USD 20 billion). The FOMC reaffirmed that, in determining how long to maintain the 0% to ¼% target range for the federal funds rate, it "will take into account a wide range of information, including measures of labour market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments".

JAPAN

In Japan, first quarter GDP growth was stronger than market expectations and was revised up to 1.6% from 1.5% mainly due to a bigger contribution from private non-residential investment. Real GDP is expected to contract during the second quarter as private spending rebalances. The declines in industrial production and retail sales during April and May are consistent with this outlook. The latest sentiment data provide a more mixed picture of short-term developments. The manufacturing PMI returned to expansionary territory and increased to 51.5 in June from 49.9 in May. In contrast, the Economy Watchers Survey continues to signal a contraction in activity, notwithstanding its improvement during May.

Annual consumer price inflation increased further in May to 3.7% from 3.4% in April, whereas the narrower measure of inflation – CPI excluding food, beverages and energy – declined by 0.1 percentage point to 2.2% in May. The increase in CPI inflation since March of 2.1 percentage points suggests an almost full pass-through of the VAT increase.

At its monetary policy meeting on 13 June 2014, the Bank of Japan decided to leave the existing targets for the monetary base unchanged.

UNITED KINGDOM

In the United Kingdom, domestic demand continues to support the robust economic performance that has been observed for several quarters. The latest releases for survey indicators and high-frequency data suggest that household consumption and business investment have both grown

vigorously since April. Reflecting the economic momentum, the unemployment rate declined further to 6.6% in the three months to April 2014 and credit conditions have generally improved. Notwithstanding these positive developments, looking ahead, disappointing dynamics in productivity growth, coupled with the need for private and public sector balance sheet adjustment, could pose a risk to the sustainability of the recovery.

Annual CPI inflation eased further to 1.5% in May 2014. Inflationary pressures are likely to remain contained for some time in a context of subdued wage growth. Despite strong job creation, wage growth stood at 0.7% year on year in the three months to April. While such a development can be partly explained as the result of base effects related to the timing of bonus payments, also core average earnings (excluding bonuses) slowed significantly. In contrast, in the housing market, supply and demand mismatches have continued to put upward pressure on prices.

At its meeting on 5 June 2014 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

After a relatively weak first quarter of 2014 and despite an ongoing correction in the housing market, growth momentum is firming on the back of modest fiscal and monetary stimulus and stronger external demand. This was confirmed by a further rise in the manufacturing PMI in June. The authorities continued to emphasise that China was moving towards a lower, but more sustainable, growth path and that growth expectations should be adapted accordingly, downplaying expectations of additional policy stimulus.

Price pressures remained contained. In May, annual CPI inflation continued to fluctuate around 2%, while PPI inflation remained negative. As a result of the additional policy stimulus, credit growth has stopped decelerating recently, leading to a renewed increase in the economy's already high financial leverage. After a sharp drop earlier in the year, external trade has started to rebound due to recovering exports to the euro area, the United States and emerging Asia, although exports to Japan remain weak.

1.4 EXCHANGE RATES

In June, the exchange rate of the euro slightly declined against the currencies of most of the euro area's main trading partners. On 2 July 2014, the nominal effective exchange rate of the euro, as measured against the currencies of 20 of the euro area's most important trading partners, stood 0.3% below its level at the beginning of June, but 1.6% above the level one year earlier (see Chart 4 and Table 3). During this period, movements

Chart 4 Nominal effective exchange rate of the euro

(daily data; index: Q1 1999 = 100)

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

Table 3 Euro exchange rate developments

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

	Weight in the effective exchange rate of the euro (EER-20)	Change in the exchange rate of the euro as at 2 July 2014 with respect to	
		2 June 2014	2 July 2013
EER-20		-0.3	1.6
Chinese renminbi	18.7	-0.3	6.2
US dollar	16.8	0.3	4.9
Pound sterling	14.8	-2.1	-7.2
Japanese yen	7.2	-0.2	6.6
Swiss franc	6.4	-0.6	-1.8
Polish zloty	6.2	0.2	-4.3
Czech koruna	5.0	-0.2	5.6
Swedish krona	4.7	0.6	5.2
Korean won	3.9	-1.1	-6.8
Hungarian forint	3.2	2.7	6.1
Danish krone	2.6	-0.1	-0.1
Romanian leu	2.0	0.0	-1.3
Croatian kuna	0.6	0.1	1.8

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

in exchange rates were largely related to developments in expectations about future monetary policy, as well as to adjustments in market expectations regarding the economic outlook for the euro area relative to other major economies.

In bilateral terms, since early June, the exchange rate of the euro strengthened somewhat against the US dollar (by 0.3%), but weakened against the pound sterling (by 2.1%) and, to a lesser extent, against the Japanese yen (by 0.2%). Changes vis-à-vis both currencies of emerging economies in Asia and currencies of commodity-exporting countries were mixed over the review period. As far as currencies of other EU Member States were concerned, the exchange rate of the euro appreciated against the Hungarian forint (by 2.7%) and the Swedish krona (by 0.6%), but remained stable vis-à-vis the rest. The Lithuanian litas and the Danish krone, which are participating in ERM II, have remained broadly stable against the euro, trading at, or close to, their respective central rates.

2 MONETARY AND FINANCIAL DEVELOPMENTS

2.1 MONEY AND MFI CREDIT

Monetary data for May 2014 continue to point to an underlying weakness in money and credit. Annual M3 growth remained subdued, but increased somewhat in the context of a still robust growth of M1 and less negative growth of the other components. The low remuneration of monetary assets causes holders of cash to prefer overnight deposits to other deposits or marketable instruments within M3. On the counterpart side, annual growth in broad money was supported by marked monthly increases in MFIs' net external asset position, in part reflecting current account surpluses and continued interest of international investors in euro area securities. The annual rate of change in MFI lending to the private sector (adjusted for sales and securitisation) remained negative in May, but showed an increase for the second consecutive month. The consolidation of bank balance sheets and further deleveraging needs in some sectors and banking jurisdictions still pose a significant drag on credit dynamics.

THE BROAD MONETARY AGGREGATE M3

In May 2014, the underlying growth of broad money remained subdued. Annual M3 growth rose to 1.0% in May, after 0.7% in April (see Chart 5). Reallocations within the M3 aggregate confirm the trend of inflows into highly liquid instruments, with outflows from other short-term deposits and marketable instruments.

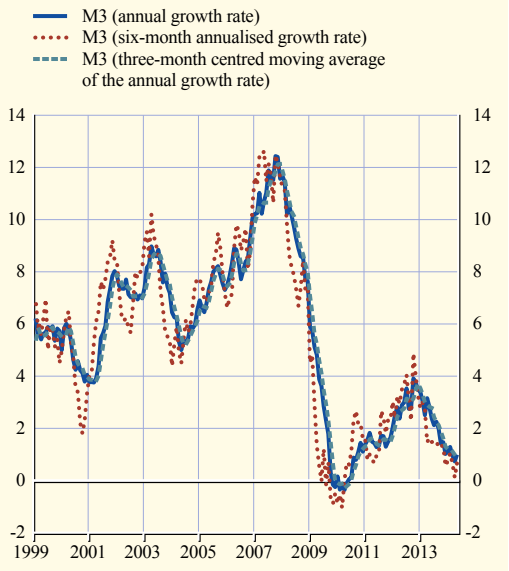
On the component side, the narrow monetary aggregate M1 continued to be the only main component that contributed positively to annual M3 growth. The contribution of other short-term deposits (M2 minus M1) to M3 growth and that of marketable instruments (M3 minus M2) became less negative. Net outflows from M3 instruments with a relatively low remuneration continued to signal a search for yield by the money-holding sector. This search for yield resulted in shifts of funds from higher-yielding instruments within M3 towards less liquid, riskier assets outside M3.

On the counterpart side, money creation continued to be supported by a further significant increase in MFIs' net external asset position in May, related both to current account surpluses and to a continued interest of international investors in euro area securities. By contrast, credit dynamics remained weak, but the uncertainty regarding a turning point in the development of loans to non-financial corporations has receded somewhat. The contraction observed for longer-term financial liabilities continued to reflect both MFIs' reduced funding needs in the context of deleveraging and the shift to deposit-based funding that is being encouraged under the current regulatory regime.

MFIs' main assets continued to decrease in the three months up to May, broadly at the same

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

pace as in the recent past, indicating that the overall trend towards deleveraging has not started to level off. The decline in the three-month period ending in May amounted to €119 billion.

MAIN COMPONENTS OF M3

Looking at the components of M3 in more detail, the annual growth rate of M1 declined to 5.0% in May, after 5.2% in April (see Table 4). May data saw a sizeable monthly inflow, which was driven mainly by developments in overnight deposits, with all the main economic sectors contributing to the monthly inflow into M1. From a general perspective, the robust annual growth of M1 confirms the persistently strong preference for liquidity displayed by the money-holding sector and the return of confidence in euro area financial assets among international investors.

The annual rate of change in short-term deposits other than overnight deposits (M2 minus M1) stood at -1.9% in May, compared with -2.4% in April. This reflected an increase in the annual rate of change in short-term time deposits (i.e. deposits with an agreed maturity of up to two years), to -4.7% in May, from -6.0% in the previous month. At the same time, the annual growth of short-term savings deposits (i.e. deposits redeemable at notice of up to three months) remained positive, but decreased further to 0.5% (after 0.7% in April).

The annual rate of change in marketable instruments (M3 minus M2) increased, although it remained highly negative at -13.4% in May, after -15.3% in April. This continues to reflect highly negative annual rates of change in holdings of money market fund shares/units and repurchase agreements, as well as of short-term MFI debt securities (i.e., with an original maturity of up to two years).

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					
		2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Apr.	2014 May
M1	**55.7**	**8.0**	**6.9**	**6.4**	**6.0**	**5.2**	**5.0**
Currency in circulation	9.4	2.7	2.6	4.1	6.0	5.3	5.5
Overnight deposits	46.4	9.2	7.8	6.9	6.0	5.2	4.9
M2-M1 (=other short-term deposits)	38.3	0.2	0.3	-1.2	-2.4	-2.4	-1.9
Deposits with an agreed maturity of up to two years	16.9	-5.8	-5.0	-6.3	-6.8	-6.0	-4.7
Deposits redeemable at notice of up to three months	21.4	5.8	5.0	3.3	1.4	0.7	0.5
M2	**94.0**	**4.5**	**4.0**	**3.1**	**2.4**	**2.0**	**2.1**
M3-M2 (=marketable instruments)	6.0	-14.9	-17.2	-17.1	-13.9	-15.3	-13.4
M3	**100.0**	**2.8**	**2.2**	**1.5**	**1.1**	**0.7**	**1.0**
Credit to euro area residents		**-0.1**	**-0.5**	**-1.2**	**-1.9**	**-2.2**	**-2.3**
Credit to general government		3.3	2.0	0.1	-0.2	-0.9	-1.4
Loans to general government		-2.6	-6.0	-6.7	-4.0	-3.9	-1.6
Credit to the private sector		-1.0	-1.2	-1.6	-2.3	-2.5	-2.5
Loans to the private sector		-1.1	-1.9	-2.2	-2.2	-1.8	-2.0
Loans to the private sector adjusted for sales and securitisation [2]		-0.6	-1.4	-1.8	-2.0	-1.6	-1.4
Longer-term financial liabilities (excluding capital and reserves)		**-4.6**	**-4.2**	**-3.6**	**-3.4**	**-3.5**	**-3.4**

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 annual growth rate of all M3 deposits – which include repurchase agreements and represent the broadest component of M3 for which a timely sectoral breakdown is available – stood at 1.6% in May, after 1.5% in April. Likewise, the annual growth rates of deposits held by households and by non-financial corporations increased slightly – by 0.1 and 0.2 percentage point respectively. Deposits held by non-monetary financial intermediaries exhibited a less negative rate of change than in previous months.

MAIN COUNTERPARTS OF M3

The annual rate of change in MFI credit to euro area residents declined marginally, standing at -2.3% in May, after -2.2% in April (see Table 4). This reflected a decrease in the annual growth rate of credit to the general government sector, while the annual rate of change in credit to the private sector remained unchanged at -2.5% for the third consecutive month.

The annual rate of change in credit to the general government fell to -1.4% in May, after -0.9% in April, reflecting net monthly sales of government securities by euro area MFIs. The annual growth of government debt securities held by MFIs returned to negative territory in May. In an environment of easing conditions in sovereign debt markets, sales of government securities by euro area MFIs are consistent with a renewed interest of international investors in euro area financial assets.

The composition of credit to the private sector was significantly affected by a specific securitisation operation in France, which distorted the figures for private securities other than shares upwards, and those for loans to households for house purchase downwards.

The annual rate of change in MFI loans to the private sector (i.e. adjusted for sales and securitisation) stood at -1.4% in May, thus increasing for the second consecutive month. The monthly flow in May 2014 was slightly negative, driven by monthly net redemptions of loans to non-financial corporations. Outflows were observed for, in particular, short-term and medium-term maturities, while loans with long-term maturities saw a small inflow.

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					
		2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Apr.	2014 May
Non-financial corporations	**41.2**	**-3.1**	**-3.7**	**-3.6**	**-3.0**	**-2.8**	**-2.6**
Adjusted for sales and securitisation[2]	-	*-2.0*	*-2.8*	*-2.9*	*-3.0*	*-2.8*	*-2.5*
Up to one year	24.0	-1.0	-3.7	-4.1	-4.8	-5.1	-4.9
Over one and up to five years	17.1	-6.4	-5.7	-5.3	-5.3	-3.6	-3.8
Over five years	58.8	-2.9	-3.1	-2.9	-1.5	-1.5	-1.2
Households[3]	**49.5**	**0.3**	**0.1**	**0.1**	**-0.1**	**0.0**	**-0.7**
Adjusted for sales and securitisation[2]	-	*0.3*	*0.3*	*0.3*	*0.3*	*0.4*	*0.5*
Consumer credit[4]	10.9	-3.4	-2.7	-3.0	-2.7	-2.1	-2.2
Lending for house purchase[4]	73.8	1.1	0.8	0.9	0.6	0.7	-0.3
Other lending	15.2	-1.0	-1.2	-1.5	-1.7	-1.7	-1.7
Insurance corporations and pension funds	**0.9**	**12.4**	**12.8**	**10.9**	**9.5**	**5.4**	**2.8**
Other non-monetary financial intermediaries	**8.5**	**-0.2**	**-5.7**	**-9.0**	**-11.2**	**-7.4**	**-6.7**

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.

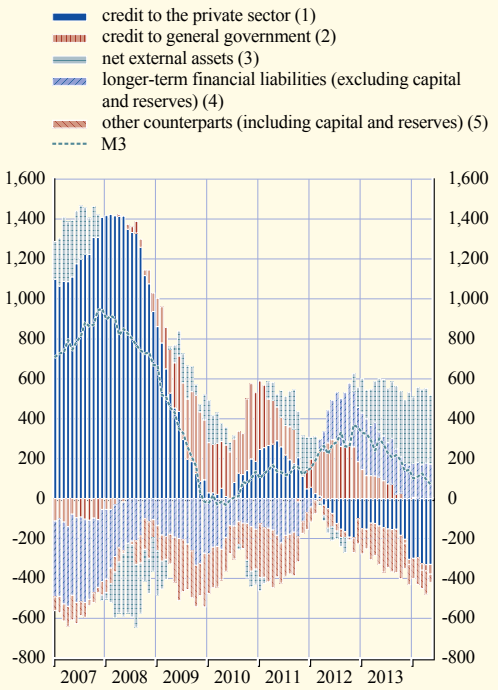
The annual rate of change in loans to non-financial corporations (adjusted for sales and securitisation) improved to -2.5% in May, after -2.8% in April (see Table 5), although further monthly net redemptions of similar magnitude as in the previous two months were recorded. The annual growth rate of loans to households (adjusted for sales and securitisation) increased by 0.1 percentage point, to 0.5% in May.

The annual rate of change in MFIs' longer-term financial liabilities (excluding capital and reserves) has remained negative for more than two years now. It stood at -3.4% in May, broadly unchanged from the growth rate observed over the past six months (see Table 4). The monthly flow was negative in May, reflecting on-going net redemptions in several euro area countries.

The net external asset position of euro area MFIs increased by €27 billion in May. Since July 2012, MFIs' net external assets have constantly increased, representing the main factor supporting M3 growth, and counteracting the negative contribution of net redemptions in MFI credit to euro area residents. In the 12 months to May, the net external asset position of euro area MFIs increased by €344 billion (see Chart 6).

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.

Overall, the latest monetary data confirm the weakness of underlying money and credit dynamics. Broad money growth continues to be supported both by increases in MFIs' net external assets and by shifts away from longer-term financial liabilities. At the same time, subdued monetary dynamics also reflect a search for yield by the money-holding sector, in an environment marked by a low remuneration of monetary assets and returning confidence. The dynamics of lending to households and firms remains weak, but the uncertainty regarding a turning point in the development of loans to non-financial corporations has receded somewhat.

2.2 SECURITIES ISSUANCE

In April 2014 debt securities issuance by euro area residents continued to contract and was slightly more negative than in March. This reflected, on the one hand, the growing issuance of government bonds in more favourable market conditions and, on the other, a further decline in the year-on-year growth rate of debt securities issuance by non-financial corporations. While the growth rate of debt securities issuance by MFIs remained in negative territory, this sector was the strongest contributor to euro area residents' issuance of quoted shares.

DEBT SECURITIES

The annual growth rate of debt securities issuance by euro area residents remained negative at -1.0% in April, down from -0.7% in the previous month (see Table 6). At the sectoral level, the annual growth rate of issuance by non-financial corporations (NFCs) continued to decline and stood at 6.2% in April, down from 7.9% in March, while the growth rate of debt securities issuance by MFIs remained negative at -7.6%. For the general government sector, the growth rate of issuance increased somewhat to 4.7%, from 4.2% in March. Among other factors, this reflected a growing appetite among investors for relatively high-yielding bonds issued by lower-rated euro area sovereigns, some such investors using the more favourable market conditions to access the bond market. Finally, the annual growth rate of debt securities issuance by non-monetary financial corporations became more negative and stood at -3.6% in April, down from -2.2% in March.

The maturity breakdown of debt securities issued reveals that in April refinancing activity was concentrated on the fixed rate long-term segment of the market. The annual growth rate of long-term debt securities issuance declined slightly to -0.1%, from 0.0% in March. This reflected a year-on-year decrease of 5.3% (after a decrease of 5.0% in March) in the issuance of floating rate long-term debt, which was compensated for by a 1.7% increase (unchanged from previous month) in the issuance of fixed rate long-term debt securities. This decline brings the number of consecutive months of negative growth in the issuance of floating rate long-term debt securities to 21. The annual growth rate of short-term debt securities issuance remained in negative territory for the 20th consecutive month and stood at -10.2%, down from -8.3% in the previous month.

Looking at short-term trends, the decline in debt issuance activity by NFCs was more pronounced than indicated by the annual growth rate (see Chart 7). In April the six-month annualised growth rate of debt securities issuance by NFCs decreased to 3.8%, from 7.2% in the previous month, while that for MFIs declined to -7.7%, from -6.9% in March. In the case of non-monetary financial corporations, the corresponding rate remained negative at -6.8%, after -6.4% in March. By contrast, the six-month annualised growth rate of issuance by the general government sector increased to 4.9%, from 3.9% in March.

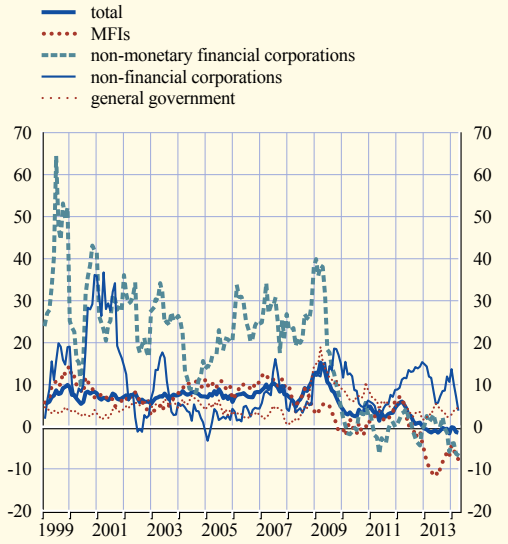
Table 6 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions) April 2014	Annual growth rates[1] 2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 March	2014 April
Debt securities	**16,430**	**-0.2**	**-0.7**	**-0.9**	**-0.8**	**-0.7**	**-1.0**
MFIs	4,797	-6.5	-8.7	-8.9	-8.0	-7.7	-7.6
Non-monetary financial corporations	3,166	-0.7	0.9	0.3	-2.0	-2.2	-3.6
Non-financial corporations	1,084	11.9	10.3	9.8	8.8	7.9	6.2
General government	7,383	3.5	3.3	3.3	3.9	3.8	4.0
of which:							
Central government	6,709	4.0	4.1	4.0	4.5	4.2	4.7
Other general government	675	-0.6	-3.8	-3.1	-0.7	-0.8	-1.9
Quoted shares	**5,840**	**0.6**	**1.1**	**1.2**	**1.6**	**2.0**	**2.2**
MFIs	639	2.5	7.8	7.4	8.7	9.0	10.9
Non-monetary financial corporations	484	2.6	1.5	0.8	1.3	2.0	1.8
Non-financial corporations	4,717	0.2	0.3	0.5	0.8	1.2	1.3

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

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

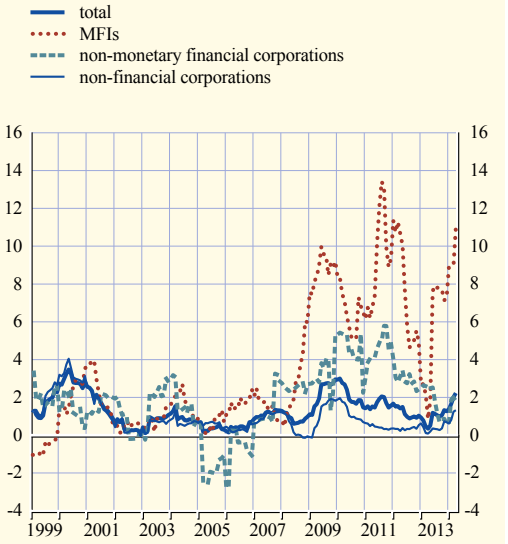
(six-month annualised growth rates; seasonally adjusted)



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 April 2014 the annual growth rate of quoted shares issued by euro area residents increased to 2.2%, from 2.0% in March (see Chart 8). As regards NFCs, year-on-year growth of equity issuance increased to 1.3%, from 1.2% in the previous month. The corresponding growth rate for non-monetary financial corporations decreased to 1.8%, from 2.0% in March. Finally, in April the annual growth rate of equity issuance by MFIs remained robust and stood at 10.9%, up from 9.0% in March, which reflects the ongoing balance sheet strengthening in this sector.

2.3 MONEY MARKET INTEREST RATES

In the period between 4 June and 2 July, money market interest rates, including the EONIA and the EONIA swap rates, declined. The decline was recorded mainly in the period after the 5 June Governing Council meeting. The liquidity injection resulting from the suspension of the weekly fine-tuning operation sterilising the Securities Markets Programme was partly compensated for by lower recourse to Eurosystem refinancing operations and higher absorption by autonomous factors.

Between 4 June and 2 July unsecured money market interest rates decreased. The steady decrease took place after the 5 June Governing Council meeting, when it was decided to lower the key ECB interest rates and to introduce other monetary policy measures to enhance the functioning of the monetary policy transmission mechanism. For example, rates at one-month and three-month maturities decreased by 15 and 10 basis points, respectively. Unsecured rates at longer maturities,

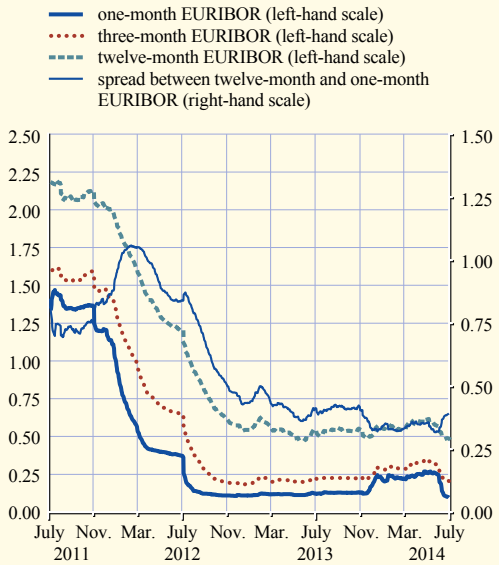
e.g. six and twelve months, also declined. As a result, on 2 July the one-month, three-month, six-month and twelve-month EURIBOR stood at 0.10%, 0.21%, 0.30% and 0.49% respectively. Consequently, the spread between the twelve-month and one-month EURIBOR – an indicator of the slope of the money market yield curve – increased slightly to stand at around 39 basis points on 2 July (see Chart 9).

As regards expectations of future money market rates, the rates implied by three-month EURIBOR futures maturing in September and December 2014 and in March and June 2015 were broadly unchanged relative to the levels prevailing on 4 June 2014, standing at 0.175%, 0.165%, 0.170% and 0.175% respectively on 2 July. Market uncertainty, as measured by the implied volatility of short-term options on three-month EURIBOR futures, continued to decrease in the review period, standing at 0.04% on 2 July, the lowest level since July 2007. The three-month EONIA swap rate declined steadily during the review period and stood at 0.06% on 2 July. The spread between the three-month EURIBOR and the three-month EONIA swap rate decreased by 6 basis points, to stand at 15 basis points on 2 July.

From the end of May until the 5 June Governing Council meeting the EONIA showed some volatility, moving in a range between 0.14% and 0.45%. This volatility mainly reflected lower levels of excess liquidity and end-of-month increases. From the beginning of the maintenance period starting on 11 June both EONIA and its volatility declined significantly, with the EONIA at levels close to zero during most of the period (see Chart 10). The EONIA peaked at 0.34% on 30 June, returning to levels close to zero in the following days. This end-of-month increase was probably driven by liquidity demand stemming from "window dressing".

Chart 9 Money market interest rates

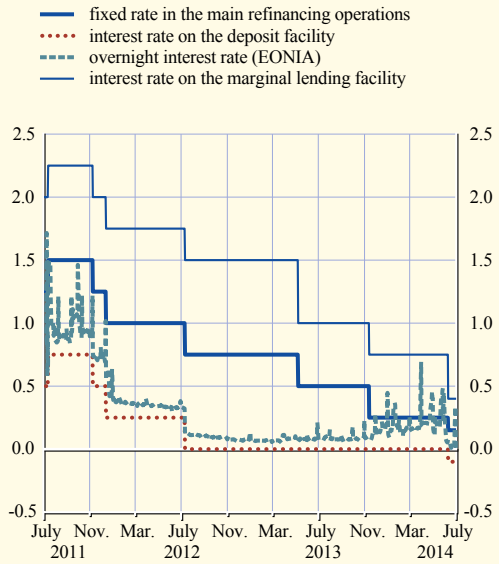
(percentages per annum; spread in percentage points; daily data)



Sources: ECB and Thomson Reuters.

Chart 10 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)



Sources: ECB and Thomson Reuters.

Between 4 June and 2 July 2014 the Eurosystem conducted several refinancing operations, all as fixed rate tender procedures. In the main refinancing operations (MROs) of the fifth maintenance period of 2014, conducted on 10, 17 and 24 June and 1 July, the Eurosystem allotted €136.8 billion, €97.9 billion, €115.0 billion and €97.1 billion respectively. The Eurosystem also carried out two longer-term refinancing operations (LTROs) in June, namely a special-term refinancing operation with a maturity of one maintenance period on 10 June (in which €10 billion was allotted) and a three-month LTRO on 25 June (in which €10.4 billion was allotted). On 5 June 2014 the Governing Council decided to discontinue the Eurosystem's special-term refinancing operations with a maturity of one maintenance period, with effect after the operation allotted on 10 June 2014.

On 5 June 2014 the Governing Council also decided to suspend the weekly fine-tuning operation sterilising the liquidity injected under the Securities Markets Programme, with effect after the operation allotted on 10 June 2014. In this operation the ECB withdrew €108.6 billion through a variable rate tender procedure with a maximum bid rate of 0.15%. Moreover, counterparties opted to repay before maturity, on a weekly basis, funds borrowed in the three-year LTROs allotted on 21 December 2011 and 29 February 2012. On 2 July 2014 a total of €586.4 billion had been repaid since 30 January 2013. Out of the total repayments, €343.2 billion was related to the LTRO allotted on 21 December 2011, and the remaining €243.2 billion was related to that allotted on 29 February 2012.

Excess liquidity decreased slightly in the fifth maintenance period of 2014, averaging €116.6 billion, compared with €117.2 billion in the previous maintenance period. The increase in outstanding open market operations almost fully compensated for the higher absorption by autonomous factors. The net increase in outstanding open market operations resulted mostly from the higher participation in the main refinancing operations (MROs) and in the LTROs (of one maintenance period and of three months) and lower absorption through fixed-term deposits. Average daily recourse to the deposit facility decreased slightly to €28.3 billion in the fifth maintenance period, from €29.7 billion in the previous maintenance period, while average current account holdings in excess of reserve requirements increased from €87.7 billion to €88.3 billion. Average recourse to the marginal lending facility decreased modestly from €0.2 billion to €0.1 billion.

Excess liquidity increased to average levels of around €132.1 billion in the first three weeks of the sixth maintenance period of 2014, mainly on account of a higher volume of outstanding open market operations, which resulted in turn from the suspension of the weekly fine-tuning operation sterilising the liquidity injected under the Securities Markets Programme. The liquidity injection resulting from the latter was partly compensated for by lower recourse to the Eurosystem's refinancing operations (MROs and LTROs) and higher absorption by autonomous factors. The net liquidity injection from the suspension of the weekly fine-tuning operation sterilising the Securities Markets Programme was thereby €66.1 billion.

2.4 BOND MARKETS

In June and early July, ten-year euro area government bond yields continued to decline, notably after the 5 June Governing Council meeting, reaching the lowest levels on record. By contrast, ten-year government bond yields in the United States increased slightly over the period against a background of improving labour market conditions and higher inflation. Sovereign bond spreads

in the euro area fell in the context of slightly declining bond market uncertainty and returning confidence. Financial indicators of long-term inflation expectations in the euro area remained fully consistent with price stability.

Between the end of May and 2 July 2014, ten-year AAA-rated euro area government bond yields declined by around 10 basis points to stand at around 1.4%, which is the lowest level recorded since the time series became available in 2004 (see Chart 11). Shorter-term AAA-rated euro area government bond yields also decreased over the review period. Ten-year government bond yields in the United States increased by around 15 basis points to 2.6%, while in Japan they remained broadly unchanged at around 0.6%.

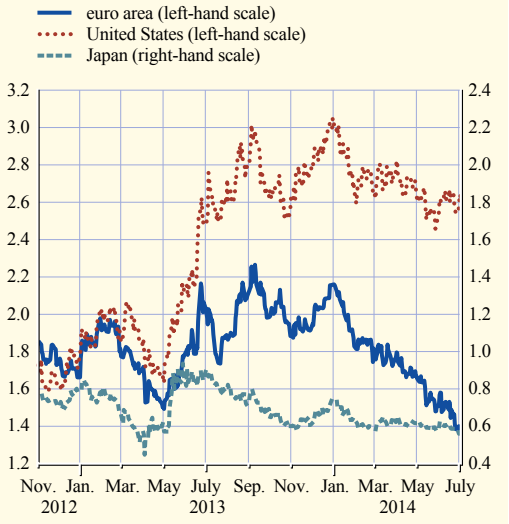
Considering developments in more detail, the decline in long-term euro area government bond yields was mainly in response to the June Governing Council meeting, when it was decided to lower the key ECB interest rates and to introduce other monetary policy measures to enhance the functioning of the monetary policy transmission mechanism. A few days after the Governing Council meeting, long-term euro area government bond yields returned to the levels prevailing at the start of the review period, before drifting slightly further downwards during the remainder of the review period to reach a low of 1.4%. In the United States, long-term government bond yields increased against a background of improving labour market conditions and higher inflation. The announcement by the Federal Open Market Committee (FOMC) on 18 June that it was reducing its asset purchase programme by a further USD 10 billion to USD 35 billion a month did not trigger a significant change in yields.

Investor uncertainty about near-term developments in the bond market, measured by the implied volatility extracted from bond options with a short maturity, declined overall in the euro area within the review period, initially increasing in the period up to the June Governing Council meeting and declining steadily thereafter (see Chart 12). Bond market uncertainty in the United States also declined over the review period. On 2 July, implied volatility in bond markets stood just above 4% in both economic areas.

Overall, between the end of May and early July, long-term bond yields in most euro area countries decreased further, and intra-euro area bond yield spreads continued to narrow amid a continued improvement in investor confidence. This development is consistent with the fact that strong demand was observed for government bond issuances by Spain and Portugal. Country spreads vis-à-vis the overnight indexed swap rate narrowed for most euro area countries.

Chart 11 Long-term government bond yields

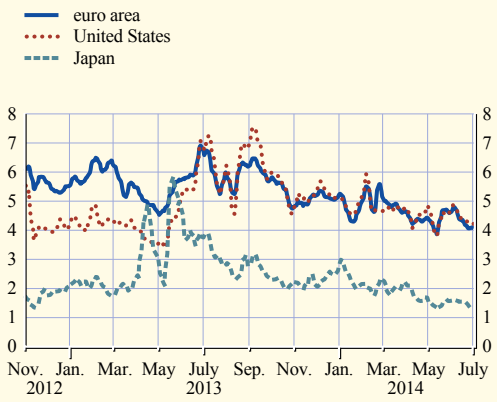
(percentages per annum; daily data)



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

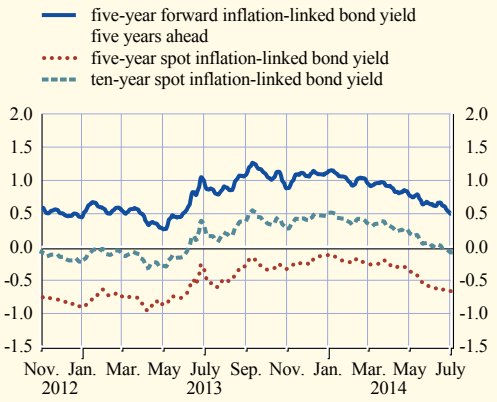
(percentages per annum; five-day moving averages of daily data)



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

Chart 13 Euro area zero coupon inflation-linked bond yields

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



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

Euro area real bond yields, as measured by the yields on inflation-linked government bonds,[1] continued to decline over the period under review (see Chart 13). Between the end of May and 2 July real five-year and ten-year bond yields decreased by around 8 and 11 basis points, to -0.66% and -0.08% respectively. As a result, the long-term forward real interest rate in the euro area declined by 15 basis points, standing at around 0.50% at the end of the review period. The current levels of real yields are the lowest observed in around one year. Box 3 briefly reviews real interest rates in the euro area and their determinants.

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

Box 3

REAL INTEREST RATES IN THE EURO AREA: A LONGER-TERM PERSPECTIVE

According to various measures, longer-term risk-free real interest rates in the euro area currently stand at much lower levels than before the crisis.[1]

Chart A shows five-year forward real interest rates five years ahead for the euro area and the United States, calculated as the differences between nominal overnight index swap (OIS) rates

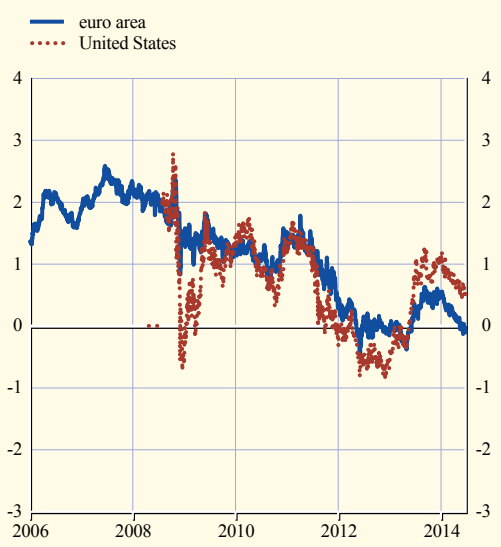
1 Risk-free interest rates are the returns on ideal, perfectly liquid bonds carrying no credit risk. For a detailed discussion, see the article entitled "Euro area risk-free interest rates: measurement issues, recent developments and relevance to monetary policy" in this issue of the Monthly Bulletin.

and inflation-linked swap rates with five and ten years' maturities.[2] If taken at face value, the data suggest that markets currently expect the real interest rate in the euro area to be slightly below 0%, down from around 2% prior to the crisis.

A broad range of complementary, albeit different, explanations have been given to account for the decline in longer-term risk-free real interest rates. Some relate to the effects of a strongly accommodative monetary policy in an environment where short-term nominal policy rates are close to the lower bound. Others point to medium-term developments, such as balance sheet adjustments in the aftermath of the financial crisis and both domestic and global imbalances between investments and savings. Others still are related to changes in long-term determinants of real interest rates, reflecting features such as population dynamics and trend productivity growth.

Chart A Five-year forward real interest rates five years ahead

(percentages per annum)



Sources: Reuters, Bloomberg and ECB calculations. Daily data. Last observation is 23 June 2014.
Note: Real interest rates calculated as the differences between nominal overnight index swap (OIS) rates and inflation-linked swap rates with five and ten-year maturities.

This box reviews some of the factors that weigh on risk-free real interest rates from a longer-term perspective. There cannot be such a review without reference to some notion of the equilibrium real interest rate.[3] Although there is no consensus on its precise definition, this rate can be broadly explained as the level of the real interest rate consistent with output at its potential level and inflation at its objective.[4]

The simplest and most direct way of measuring the equilibrium real interest rate relies on market expectations of the real risk-free interest rate that will prevail in the distant future, as shown in Chart A. However, market-based measures, while being forward-looking and available on a daily basis, inevitably suffer from notable shortcomings. In particular, they are exposed to non-fundamental bouts of optimism or pessimism and tend to be distorted by time-varying premia. Currently, various measures of term premia over longer horizons are negative, reflecting the strongly accommodative stance of monetary policy. This helps to explain why longer-term real interest rates can be low despite the longer-term estimates of potential GDP growth for the period six to ten years ahead being about 1.5%, as indicated by the European Commission and the latest Consensus Forecast Survey.

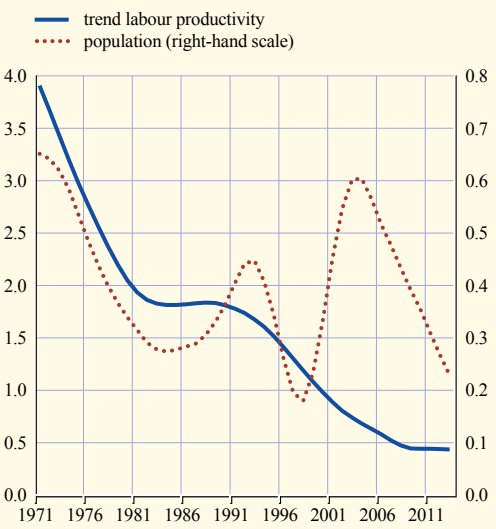
From a conceptual perspective, a more informed discussion which attempts to explain the determinants of the equilibrium real interest rate from a general equilibrium perspective requires a taxonomy that relates to the time frame over which output and inflation stability is

2 Nominal five-year forward rates five years ahead are calculated using five and ten-year OIS rates. Five-year forward inflation-linked swap rates five years ahead are calculated using five and ten-year inflation-linked swap rates.
3 For an overview, see the article entitled "The natural real interest rate in the euro area", *Monthly Bulletin*, ECB, May 2004.
4 For details, see the articles entitled "Potential output, economic slack and the link to nominal developments since the start of the crisis" and "Trends in potential output", *Monthly Bulletin*, ECB, November 2013 and January 2011, respectively.

achieved and maintained. To identify longer-term determinants, a neutral stance concept is advisable that abstracts from business cycle dynamics. In line with this view, the equilibrium real interest rate is imagined to be given by the real interest rate that is expected to prevail in the distant future, when the effects of all shocks hitting the economy have faded away. Real GDP will thus be equal to its potential level and inflation will be in line with its objective. Accordingly, in the long run, the equilibrium real interest rate will be determined entirely by fundamental processes (of both a domestic and global nature) that are linked to technological progress, population dynamics and the time preference of consumers. Moreover, depending on the structural features of the particular analytical framework considered to be appropriate, trends in the fiscal stance, the design of social security systems and changes in the financial structure may also matter.[5]

Chart B Selective long-term determinants of the real equilibrium interest rate in the euro area

(percentages; year-on-year)



Sources: United Nations, Eurostat, AWM database and ECB calculations.
Note: Trend labour productivity estimated using a Hodrick-Prescott filter. Last observation is 2013.

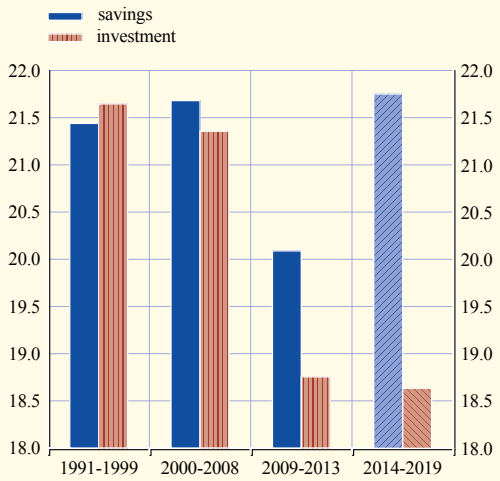
Some of the long-term determinants of the equilibrium real interest rate suggested by economic theory are conducive to a downward trend of this rate. Chart B shows the evolution of the long-term growth rate of technological progress (here measured simply as output per employed person) and population growth. It documents the presence of a declining trend in productivity since the early 1970s, which has stabilised at low levels in the last few years. Population growth, while somewhat more volatile over the past few decades, fell from around 0.7% in the early 1970s to below 0.3% in 2012. Moreover, it is expected to fall further in the coming years.

With regard to a more medium-term-oriented perspective, it should be stressed in particular that shifts in the relative supply of private savings and demand for loans tend to affect the equilibrium real interest rate. This implies that the ongoing rebalancing process in the euro area that has been triggered by the financial crisis exerts downward pressure on real interest rates primarily through two main channels: (i) public and private savings are expected to increase as public finances and private sector balance sheets are strengthened; (ii) as regards the demand for domestic funds, investment as a share of euro area GDP has fallen sizeably in recent years. In the years ahead a certain increase in this ratio can be expected, but there is a risk of a slow recovery. Taken together, the savings-investment gap in the euro area, which has risen sharply in the past five years, may widen further in the period 2014-19 (see Chart C, which uses IMF estimates). While the magnitude of this effect is highly uncertain, it is likely to exert downward pressure on real interest rates, as suggested by Chart D. This chart offers a simple scatterplot analysis between the real ex ante five-year euro area government bond yield and the savings-investment gap in the euro area, indicating a negative relationship. However, global developments – such as the projected narrowing in the savings-investment gap in emerging markets – may well mitigate such forces.

5 For a recent discussion from a general equilibrium perspective, see Kara, E. and v.Thadden, L. (2014), "Interest rate effects of demographic changes in a New-Keynesian life-cycle framework", *Macroeconomics Dynamics*, forthcoming.

Chart C Gross national savings and investments in the euro area

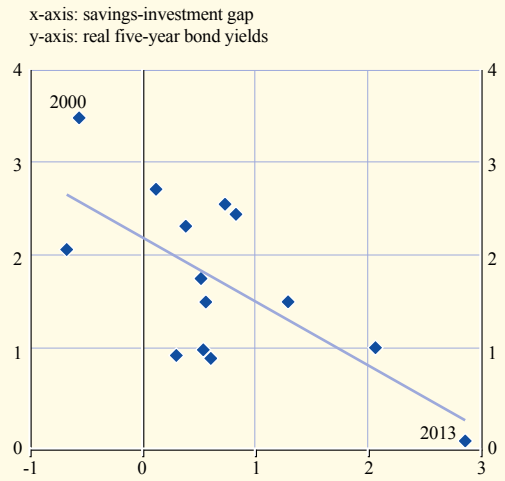
(percentage of GDP)



Sources: IMF and ECB calculations.

Chart D Real five-year bond yields and the savings-investment gap in the euro area from 2000-13

(percentages; percentages per annum)



Sources: IMF, Consensus Economics, Eurostat and ECB calculations.
Note: Nominal five-year government bond yields deflated using weighted five-year ahead inflation expectations from Consensus Economics for the four largest euro area member states.

Moreover, a full-fledged analysis needs to incorporate structural factors, for example the recently observed strong demand for risk-free assets from institutions such as pension funds and insurance companies, in the context of an ageing society and regulatory and accounting changes.

Financial market indicators of long-term inflation expectations, calculated as the spread between corresponding nominal and inflation-linked bonds, have remained broadly unchanged since late May. Break-even inflation rates stood at around 1.1% at the five-year maturity and at around 1.6% at the ten-year horizon on 2 July. Consequently, the bond-based five-year forward break-even inflation rate five years ahead also ended the review period broadly unchanged, but with some volatility during the period, and stood at 2.1% on 2 July (see Chart 14). At the same time, the somewhat less volatile long-term forward break-even inflation rates calculated from inflation-linked swaps increased slightly to stand at 2.1%. Overall, financial market indicators continue to suggest that long-term inflation expectations remain fully consistent with price stability.[2] Box 4 presents inflation risk premia included in market-based measures of inflation expectations.

Between end-May and 2 July the term structure of implied forward overnight interest rates in the euro area shifted downwards for all maturities, with the largest decline taking place for maturities around five years ahead (see Chart 15).

In the period under review the yield spreads of investment-grade corporate bonds issued by euro area corporations (relative to the Merrill Lynch EMU AAA-rated government bond index) narrowed for all rating categories.

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

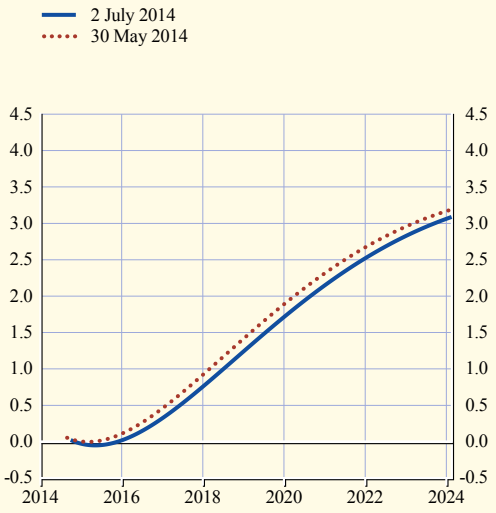
Chart 14 Euro area zero coupon break-even inflation rates and inflation-linked swap rates

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

Sources: Thomson Reuters and ECB calculations.
Note: Break-even inflation rates have been computed as a GDP-weighted average of separately estimated break-even rates for France and Germany.

Chart 15 Implied forward euro area overnight interest rates

(percentages per annum; daily data)



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

Box 4

INFLATION RISK PREMIA IN MARKET-BASED MEASURES OF INFLATION EXPECTATIONS

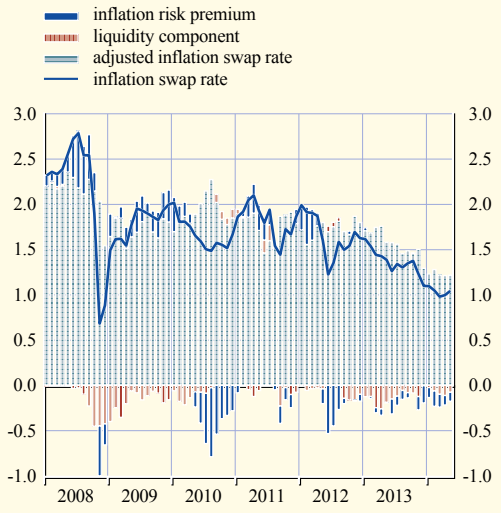
Since summer 2012, in line with movements in HICP inflation, a declining trend has been observed in shorter-term market-based measures of inflation expectations. At the current juncture, market-based inflation expectations suggest only a very gradual increase in inflation over the coming years, with a return to levels close to 2% not before 2020. Inflation expectations based on the ECB Survey of Professional Forecasters (SPF), however, suggest a somewhat faster adjustment towards levels close to 2% (see also Chart B of Box 5 in Section 3, where recent developments in survey-based measures are discussed in more detail). This box shows that risk components in inflation swap rates are partially behind the difference between market-based and survey-based inflation expectations.

Assessment of risk components in inflation swap rates

The measure of inflation expectations derived from swap rates can be influenced by liquidity effects and risk premia, which can be very significant in certain episodes. Estimating these components can help gain an understanding of market-based measures of inflation expectations.

Chart A Decomposition of one-year forward inflation-linked swap rates one year ahead

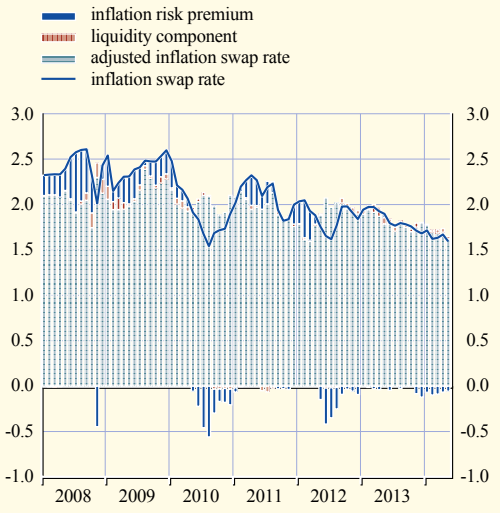
(percentage per annum)



Sources: Thomson Reuters data and ECB calculations.
Notes: The decomposition is based on the regression results of the difference between one-year forward inflation-linked swap rates one year ahead and two-year SPF inflation forecasts on a number of risk indicators (see main text). The latest observation corresponds to May 2014.

Chart B Decomposition of one-year forward inflation-linked swap rates four years ahead

(percentage per annum)



Sources: Thomson Reuters data and ECB calculations.
Notes: The decomposition is based on the regression results of the difference between one-year forward inflation-linked swap rates four years ahead and five-year SPF inflation forecasts on a number of risk indicators (see main text). The latest observation corresponds to May 2014.

The risk premia and liquidity effects are estimated by regressing the difference between inflation expectations derived from inflation swaps and those from the SPF on indicators of risk (e.g. prices from inflation options, inflation volatility, etc.) and liquidity (measured as the difference between bond-based break-even inflation rates and inflation swap rates at the corresponding horizon). The part that is explained by the risk-related regressors is considered a measure of the inflation risk premium. Charts A and B present the decomposition of the observed forward inflation-linked swap rates into adjusted inflation rates, inflation risk premia and a liquidity component.

The decomposition shows that although, on average, the inflation risk premium has been positive, it has become negative in recent months. The presence of a (somewhat) negative inflation risk premium implies that inflation expectations may currently be higher and therefore closer to the survey measures than what is implied by the inflation swaps taken at face value. This is most likely the case at the short-term horizon, while the effect is very small at the longer horizon. The role of liquidity effects appears to be limited, indicating that markets for inflation protection are currently functioning well, in contrast to the period immediately following the collapse of Lehman Brothers.

Interpretation of the inflation risk premium

The inflation risk premium is related to the hedging properties of nominal bonds versus those of inflation-linked bonds and swaps, which in turn depend on the nature of the most likely anticipated shocks to the economy.

If market participants consider a scenario of falling real output (and consumption) but increasing inflation to be very likely, a nominal bond cannot hedge well against such an event, as the return in real terms would deteriorate in times of low consumption (no consumption smoothing). However, if both output/consumption and inflation were to fall, nominal bonds would help hedge against falling consumption because their real return improves with falling inflation. A negative inflation risk premium can therefore be rational if the markets expect that a macroeconomic shock with falling consumption and falling inflation is more likely than a shock accompanied by increasing inflation.

To summarise, unlike in the period immediately following the collapse of Lehman Brothers, markets for inflation protection are currently functioning well and the role of liquidity effects appears limited. The downward risks to inflation can therefore be interpreted partly as a negative inflation risk premium. This is related to the properties of nominal bonds in hedging against falling inflation versus those of inflation-linked bonds and swaps. Overall, the currently low level of inflation swap rates may reflect a combination of low inflation expectations and low demand for hedging against high inflation outcomes.

2.5 INTEREST RATES ON LOANS AND DEPOSITS

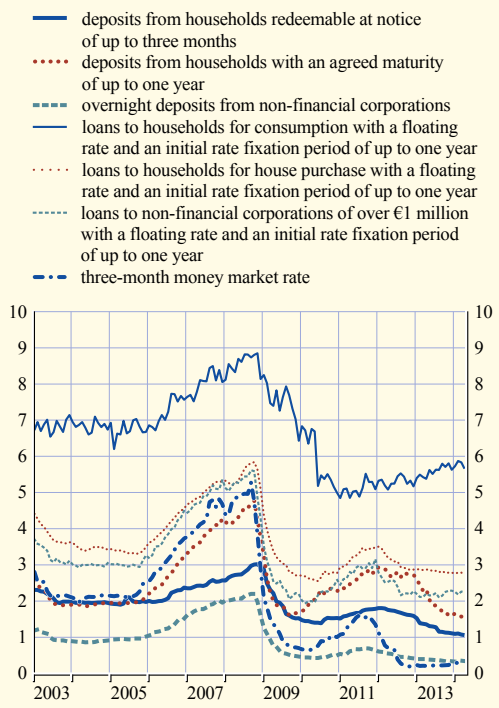
MFI interest rates on deposits from households decreased in April 2014, while those on short-term deposits from non-financial corporations increased. Interest rates on long-term deposits from non-financial corporations remained broadly unchanged. Similarly, most MFI lending rates remained stable, with the notable exception of MFI lending rates on loans to households for house purchase, which continued to decline. Lending rate spreads vis-à-vis market rates declined slightly for short interest rate fixation periods in April, and increased in the case of long interest rate fixation periods.

Looking first at short maturities and shorter interest rate fixation periods in April 2014, MFI interest rates on deposits with an agreed maturity of up to one year increased by 7 basis points, to 0.7%, in the case of non-financial corporations, while those on corresponding deposits from households decreased by 1 basis point, to 1.6%. Lending rates on loans to households for house purchase with a floating rate and an initial rate fixation period of up to one year declined by 7 basis points, to 2.7%, whereas rates on consumer credit decreased by 17 basis points, to 5.7% (see Chart 16). With respect to non-financial corporations, interest rates on small loans (defined as loans of up to €1 million) and large loans (defined as loans of more than €1 million) with short interest rate fixation periods remained broadly unchanged at 3.8% and 2.3% respectively. The spread between interest rates on small loans to non-financial corporations with short rate fixation periods and those on corresponding large loans increased marginally in April, to 155 basis points, thus remaining considerably higher than the average of about 120 basis points recorded since 2007. The relative magnitude of the spread continues to suggest that financing conditions remain tighter for small and medium-sized enterprises than for large firms.

Given the stable developments in the three-month EURIBOR in April, the spread between MFI interest rates on loans to households with short fixation periods and the three-month money market rate decreased by 9 basis points, to 238 basis points, while the corresponding spread for interest rates on large loans to non-financial corporations with short fixation periods fell by 4 basis points, to 191 basis points (see Chart 17).

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

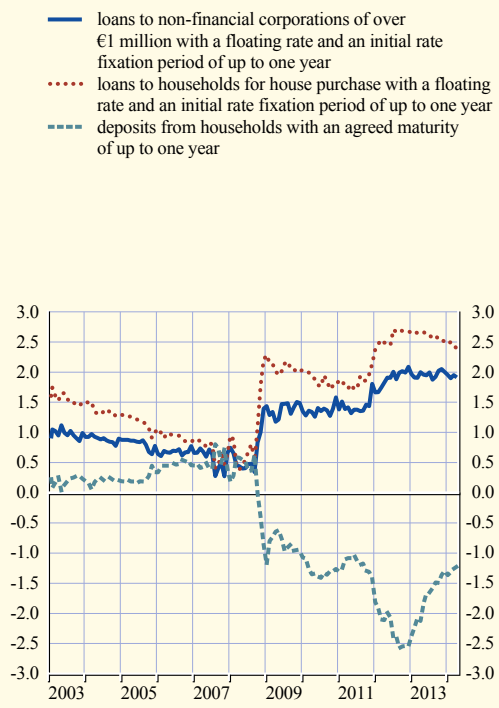
(percentages per annum; rates on new business)



Source: ECB.
Notes: 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).

Since the beginning of 2012, MFIs' interest rates on short-term deposits from both non-financial corporations and households have decreased by between 70 and 140 basis points, whereas MFIs' short-term interest rates on both large loans to non-financial corporations and loans to households for house purchase have declined by between 50 and 70 basis points.

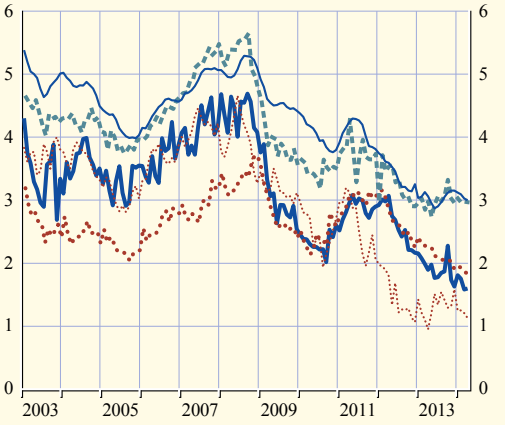
Turning to longer maturities and longer interest rate fixation periods, MFIs' interest rates on long-term deposits from households decreased in April, while those for non-financial corporations increased slightly. In the case of households, interest rates fell by 3 basis points, to stand at 1.8%, while they increased by 1 basis point in the case of non-financial corporations, to stand at 1.6%. Interest rates on loans to households for house purchase with long interest rate fixation periods declined by 3 basis points in April, standing at 3.0% (see Chart 18). Lending rates on both small and large loans to non-financial corporations with long interest rate fixation periods remained unchanged at 3.3% and 3.0% respectively. Hence, the spread between rates on small loans with long interest rate fixation periods and those on corresponding large loans was stable at 30 basis points in April. Since the average yield on AAA-rated seven-year euro area government bonds declined slightly in April, namely by 8 basis points to 1.13%, the spreads between lending rates with long interest rate fixation periods and the yield on such bonds increased for all loans.

Since the beginning of 2012, MFIs' interest rates on long-term deposits have decreased by around 140 basis points, whereas long-term lending rates have declined less markedly, namely by around 60 basis points. Meanwhile, the spread between lending rates with long interest rate fixation periods and the average yield on AAA-rated seven-year government bonds, which can be considered to be a benchmark for longer maturities, has fluctuated between 140 and 280 basis points in the case of loans to non-financial corporations, and between 140 and 220 basis points in that of loans to households for house purchase, thus remaining far above pre-crisis levels, which were around 80 basis points for large loans to non-financial corporations and around 100 basis points for both small loans to non-financial corporations and loans for house purchase.

Overall, the reductions in key ECB interest rates, together with the effects of the non-standard monetary policy measures implemented or announced by the ECB, are gradually being passed through to bank deposit and lending rates. At the same time, weak economic conditions and banks' need to consolidate their balance sheets may still be putting pressure on bank lending rates in some euro area countries.

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

(percentages per annum; rates on new business)



Source: ECB.
Notes: 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). The euro area seven-year government bond yield is based on the ECB's data on AAA-rated bonds, which currently include bonds from Austria, Finland, Germany and the Netherlands.

2.6 EQUITY MARKETS

Between the end of May and early July 2014 stock prices decreased slightly in the euro area, against a background of mixed economic data and heightened geopolitical tensions. In the United States and Japan stock prices increased amid improving economic data in both economic areas. At the same time, stock market uncertainty, as measured by implied volatility, declined in both the euro area and the United States, to the lowest levels observed since 2005 and 2007, respectively.

In the days following the 5 June Governing Council meeting, when it was decided to lower the key ECB interest rates and to introduce other monetary policy measures to enhance the functioning of the monetary policy transmission mechanism, stock prices in the euro area increased, with financial sector stocks gaining the most. However, towards the end of the review period, euro area stock prices declined to levels similar to those before the Governing Council meeting. The decline took place against a background of mixed economic data and heightened geopolitical tensions.

All in all, stock prices in the euro area, as measured by the broad-based Dow Jones EURO STOXX index, decreased slightly between the end of May and 2 July (see Chart 19). Stock prices in the United States, as measured by the Standard & Poor's 500 index, increased by around 3% over the same period. This increase took place against a background of improving economic data for the United States and a positive reaction from equity markets to the latest Federal Open Market Committee (FOMC) meeting, when it was reaffirmed that the highly accommodative monetary policy stance is considered appropriate. Equity prices in Japan, as measured by the Nikkei 225 index, increased by around 5%. The increase took place against a background of improving economic data and a continued commitment by the Bank of Japan to maintain the accommodative monetary policy stance for as long as needed to reach its inflation target.

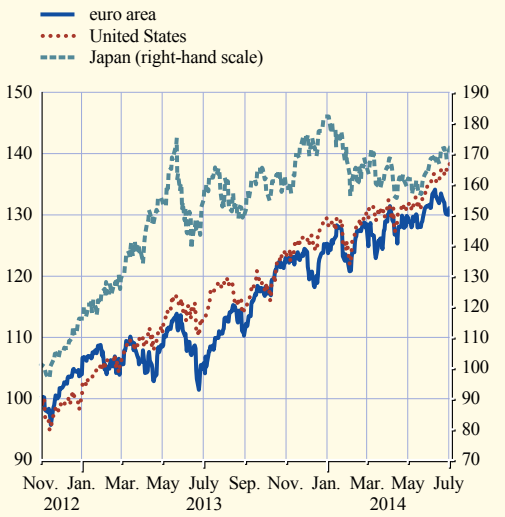
In the euro area, at the sectoral level consumer services, financial sector and industrial sector stocks experienced the largest declines over the period under review. In contrast, gains were recorded in the oil and gas sector and the utilities sector, which both showed increases of around 4%.

In the United States there was also some divergence in the sectoral performance of stock prices. The oil and gas and healthcare sectors both advanced by around 5%, and were the best performers, while the telecommunications sector was the worst performer with a slight decline.

Stock market uncertainty in the euro area, as measured by implied volatility, declined between the end of May and early July, from around 14% to around 13%, with most of the decline taking place in the days after the 5 June Governing Council meeting (see Chart 20). Implied volatility in the United States and Japan also decreased over the period, standing at around 9% and 16% respectively on 2 July, with implied volatility in Japan thereby remaining

Chart 19 Stock price indices

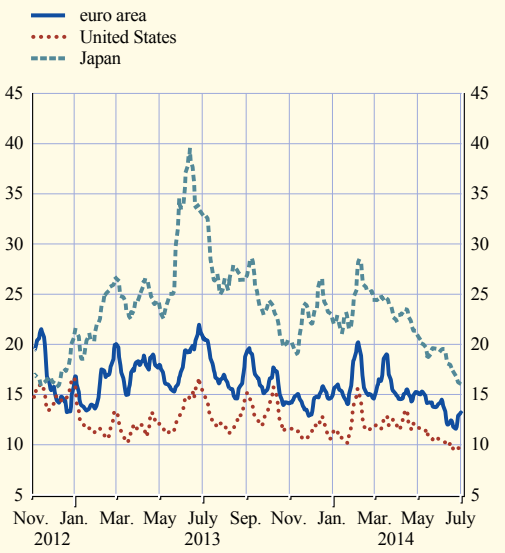
(index: 1 November 2012 = 100; daily data)



Source: Thomson Reuters.

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.

well above that in the other major economic areas. For the euro area, the level of implied stock market volatility reached within the review period was the lowest since the end of 2005 and for the United States the lowest since the start of 2007.

3 PRICES AND COSTS

According to Eurostat's flash estimate, euro area annual HICP inflation was 0.5% in June 2014, unchanged from May. Among the main components, services price inflation increased from 1.1% in May to 1.3% in June, while food price inflation fell from 0.1% to -0.2%. On the basis of current information, annual HICP inflation is expected to remain at low levels over the coming months, before increasing gradually during 2015 and 2016. Inflation expectations for the euro area over the medium to long term continue to be firmly anchored in line with the ECB's primary objective of maintaining inflation rates below, but close to, 2% over the medium term.

Both upside and downside risks to the outlook for price developments remain limited and broadly balanced over the medium term. In this context, the possible repercussions of both geopolitical risks and exchange rate developments will be monitored closely.

3.1 CONSUMER PRICES

Looking at the latest data, according to Eurostat's flash estimate, euro area annual HICP inflation was 0.5% in June 2014, unchanged from May. This outcome conceals higher annual rates of change in the services and energy components, which were offset by a lower annual rate of change in the food component (see Table 7 and Chart 21). Looking beyond developments in individual months, low inflation in the euro area continues to reflect subdued rates of change in non-energy industrial goods prices and, in particular, low or negative rates of change in the energy and unprocessed food components. Muted price pressures in the euro area are associated mainly with the high amount of slack in the economy and past exchange rate developments.

Looking at the main components of the HICP in more detail, Eurostat's flash estimate for June points to a slight increase in energy price inflation over the month (0.1% in June, compared with 0.0% in May) on account of higher oil prices.

For the total food component, comprising both processed and unprocessed food prices, Eurostat's flash estimate shows a further decline in the annual rate of change to -0.2%, from 0.1% in May. As yet there is no official information with regard to the breakdown of the food component for June. Low levels of food price inflation in recent months, particularly in the unprocessed food

Table 7 Price developments

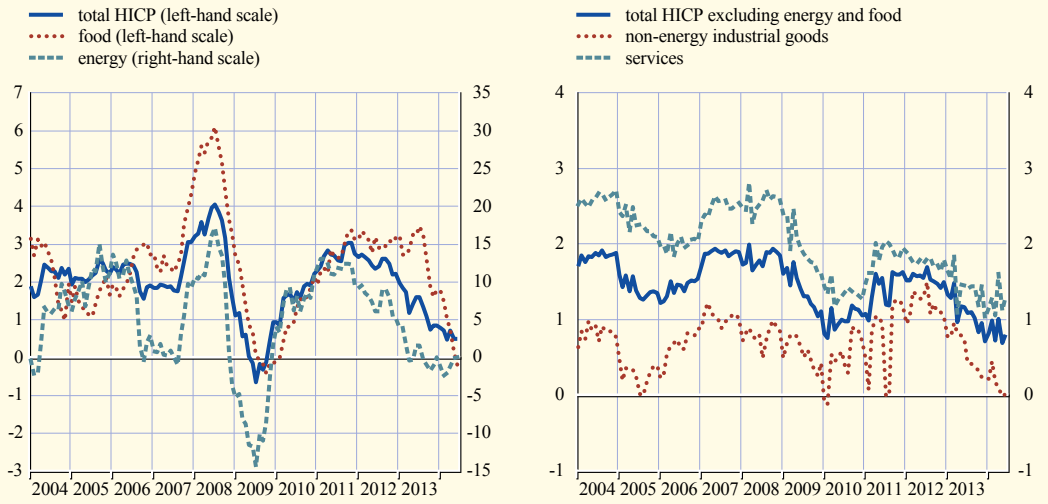
(annual percentage changes, unless otherwise indicated)

	2012	2013	2014 Jan.	2014 Feb.	2014 Mar.	2014 Apr.	2014 May	2014 June
HICP and its components[1]								
Overall index	2.5	1.4	0.8	0.7	0.5	0.7	0.5	*0.5*
Energy	7.6	0.6	-1.2	-2.3	-2.1	-1.2	0.0	*0.1*
Food	3.1	2.7	1.7	1.5	1.0	0.7	0.1	*-0.2*
Unprocessed food	3.0	3.5	1.3	0.9	-0.1	-0.7	-2.1	.
Processed food	3.1	2.2	2.0	1.8	1.7	1.6	1.5	.
Non-energy industrial goods	1.2	0.6	0.2	0.4	0.2	0.1	0.0	*0.0*
Services	1.8	1.4	1.2	1.3	1.1	1.6	1.1	*1.3*
Other price indicators								
Industrial producer prices	2.8	-0.2	-1.3	-1.7	-1.7	-1.2	-1.0	.
Oil prices (EUR per barrel)	86.6	81.7	78.8	79.4	77.8	78.2	79.4	82.3
Non-energy commodity prices	-5.2	-8.0	-13.1	-13.1	-12.4	-7.5	-6.9	-2.7

Sources: Eurostat, ECB and ECB calculations based on Thomson Reuters data.
1) HICP inflation and its components (excluding unprocessed food and processed food) in June 2014 refer to Eurostat's flash estimates.

Chart 21 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)



Source: Eurostat.

component, are mainly the result of favourable weather conditions this year compared with the more adverse weather conditions experienced last year. This low rate of inflation was driven mainly by a sharp decline in the annual rate of change in fruit and vegetable prices, which, together with a downward base effect, led to a 1.4 percentage point drop, to -2.1% in May, in the annual rate of change in unprocessed food prices. This marks a historic low for this component since the start of the series in 1991. Processed food price inflation declined only marginally in May, to 1.5%, from 1.6% in April.

Annual HICP inflation excluding the volatile food and energy components increased to 0.8% in June, after 0.7% in May. This change reflected a higher annual rate of change in services prices (from 1.1% in May to 1.3% in June), while the annual rate of change in non-energy industrial goods prices remained unchanged (at 0.0% in June). The annual rate of change in services prices has been very volatile in recent months, which can partly be attributed to seasonal and calendar effects (the start of the summer season and the different timing of holidays) on travel-related prices (such as package holidays, air transport and hotel accommodation). The 0.0% annual rate of growth in non-energy industrial goods prices in June was the lowest recorded since the summer of 2011, reflecting still relatively weak consumer demand and the dampening impact that the past appreciation of the exchange rate has had on the prices of imported goods.

The low level of HICP inflation excluding the volatile food and energy components suggests that underlying inflationary pressure has remained subdued in a context of high unutilised capacity in the euro area economy.

3.2 INDUSTRIAL PRODUCER PRICES

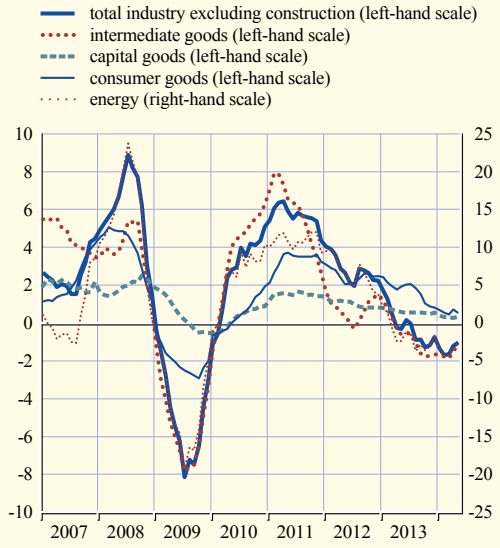
Industrial producer price inflation excluding construction increased to -1.0% year on year in May, up from -1.2% in April (see Table 7 and Chart 22). Excluding energy, industrial producer price inflation was -0.2% in May, which is slightly higher than the -0.3% recorded in April.

Pipeline pressures for the non-energy industrial goods component of the HICP remained weak. The annual rates of change in the PPI of non-food consumer goods industries rose to 0.5% in May, up from 0.4% in April, thus continuing the moderate upward trend that had started after the trough of 0.1% in November 2013. At the same time survey-based indicators for the retail sector showed a slight weakening of pipeline price pressures at the later stages of the price chain. At the earlier stages, these pressures appear to have increased slightly, while remaining negative. In particular, downward pressures from external factors (such as oil prices in euro terms and industrial raw material commodity prices) and domestic factors (such as PPI intermediate goods prices) continued to ease in June and May respectively.

Pipeline pressures for the food component of the HICP broadly weakened at both the earlier and later stages of the price chain. Annual producer price inflation in the consumer food industries edged down to 0.5% in May, from 0.7% in April. Survey data on the input prices of food retailers remained broadly unchanged in May, while those on the margins of food retailers decreased. Earlier in the price chain, the annual rate of change in EU farm gate prices and international food commodity prices in euro terms declined further in June, unwinding the increases observed in the previous two months, as fears faded of weather-related impacts on harvests in different parts of the world as a result of a strong El Niño event.

Chart 22 Breakdown of industrial producer prices

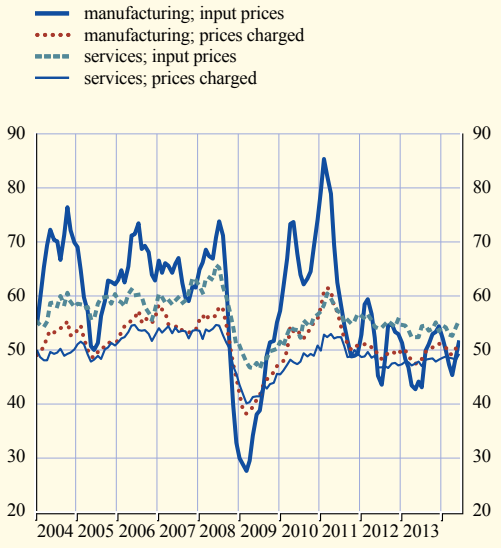
(annual percentage changes; monthly data)



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.

Table 8 Labour cost indicators

(annual percentage changes, unless otherwise indicated)

	2012	2013	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1
Negotiated wages	2.2	1.8	1.9	1.7	1.7	1.7	2.0
Compensation per employee	1.9	1.6	1.7	1.6	1.7	1.6	1.3
Compensation per hour	2.6	1.9	3.0	1.6	1.8	1.4	0.8
Memo items:							
Labour productivity	0.0	0.4	-0.1	0.4	0.5	0.9	0.8
Unit labour costs	1.9	1.2	1.7	1.2	1.3	0.7	0.5

Sources: Eurostat, national data and ECB calculations.

From a sectoral perspective, the latest survey-based evidence confirms subdued pipeline price pressures in both the manufacturing and services sectors. The Purchasing Managers' Index survey indicated moderate increases in the input price indices for the manufacturing and services sectors in June, albeit from still subdued levels. All sub-indices continued to hover around the threshold value of 50, indicating an increase in prices, although they remained below their long-run averages (see Chart 23). According to the European Commission survey, selling price expectations for total industry (excluding construction) and services increased in June, but were still below their long-term averages in both cases.

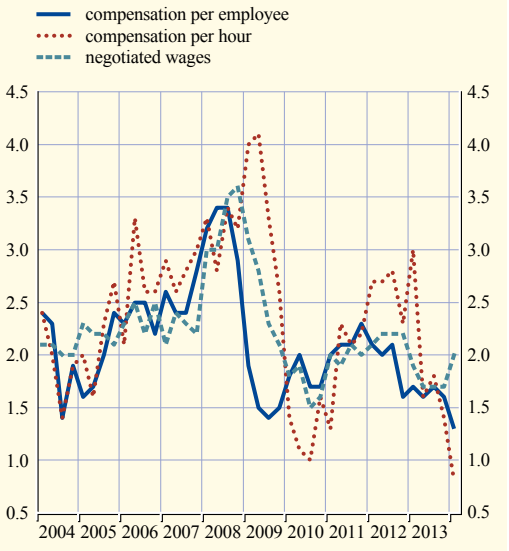
3.3 LABOUR COST INDICATORS

The latest data on labour costs confirm continued moderate domestic price pressures (see Table 8 and Chart 24). In the first quarter of 2014 annual wage growth slowed at the euro area level, when measured in terms of both compensation per employee and per hour worked. The pattern of wage growth at the euro area level continues to conceal substantial divergences in wage developments across countries.

Compensation per employee increased at an annual rate of 1.3% in the first quarter of 2014, down from the 1.6% recorded in the fourth quarter of 2013. Wage growth as measured by compensation per hour declined to 0.8% in the first quarter of 2014, down from 1.4% in the previous quarter. The slowdown in overall wage growth was mainly accounted for by a lower contribution from non-market services (see Chart 25), where the profile of growth reflected base effects associated with an increase in public sector compensation in a number of euro area countries in 2013. Negotiated wages in the euro area grew at an annual rate of 2.0% in the first quarter, which was substantially higher than that for compensation per employee and attributable largely to one-off factors in Germany.

Chart 24 Selected labour cost indicators

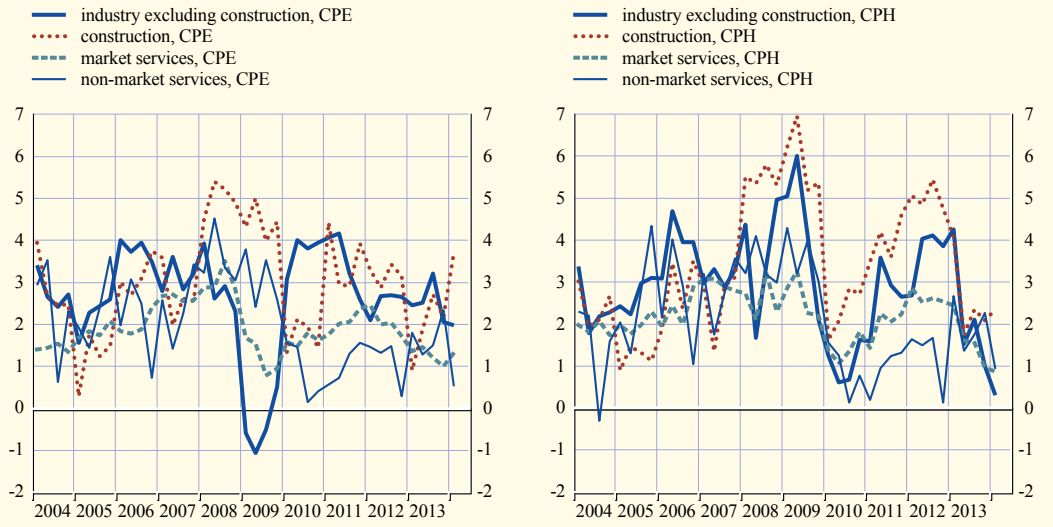
(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.

Chart 25 Sectoral labour cost developments

(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.
Notes: CPE stands for compensation per employee and CPH stands for compensation per hour. "Non-market services" covers activities by government and private non-profit institutions in fields such as public administration, education or health (approximated by the sum of Sections O to Q of the NACE Revision 2 breakdown). "Market services" is defined as the remaining difference to total services (see Sections G to U of the NACE Revision 2 breakdown).

The annual growth rate of unit labour costs fell to 0.5% in the first quarter of 2014, owing to the lower growth rate in compensation per employee and a relatively stable annual rate of change in labour productivity.

3.4 THE OUTLOOK FOR INFLATION

On the basis of current information, annual HICP inflation is expected to remain at low levels over the coming months, before increasing gradually during 2015 and 2016. Inflation expectations for the euro area over the medium to long term continue to be firmly anchored in line with the ECB's primary objective of maintaining inflation rates below, but close to, 2% over the medium term.

Box 5 shows that market and survey-based inflation expectations are broadly consistent with current Eurosystem staff macroeconomic projections for inflation. For the two-year ahead horizon, inflation expectations range from 1.0% to 1.5%, while for the five-year ahead horizon, they range from 1.5% to 2.1%, implying a moderate and gradual rise in inflation rates from the current low levels.

Both upside and downside risks to the outlook for price developments remain limited and broadly balanced over the medium term. In this context, the possible repercussions of both geopolitical risks and exchange rate developments will be monitored closely.

Box 5

RECENT DEVELOPMENTS IN INFLATION FORECASTS AND SHORTER AND LONGER-TERM INFLATION EXPECTATIONS IN THE EURO AREA

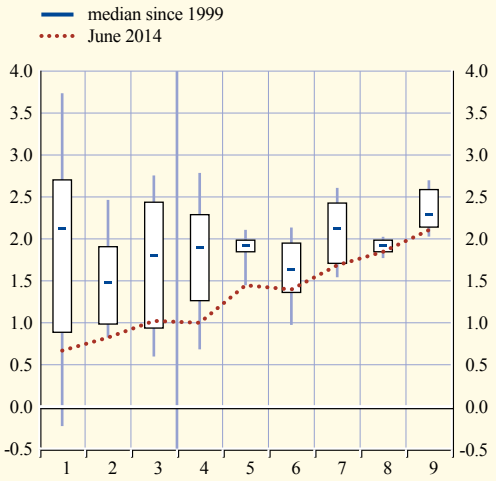
Since late 2011, both headline HICP inflation and various measures of underlying inflation have dropped considerably from elevated levels. Much of this decline was anticipated by the Eurosystem staff macroeconomic projections, the ECB Survey of Professional Forecasters (SPF) and market-based measures derived from inflation swaps, as it reflected, to a large extent, the unwinding of energy price increases. However, further declines in inflation observed since the last quarter of 2013 were less expected and have led to a reassessment of shorter-term inflation expectations by economic agents.

At present, although the entire forward-looking profile of inflation expectations is low in relation to average levels observed since 1999, all measures of inflation expectations point to an increase in the coming years to, again, around 2%. Chart A illustrates both actual recent inflation developments and inflation expectations over short to longer-term horizons, drawing from different sources (market-based measures derived from inflation-linked swaps, survey measures from the SPF and Eurosystem staff macroeconomic projections). Each measure is presented against a box plot of historical developments. The chart shows that current inflation is relatively low when seen in a historical context, even though there have been some occasions when inflation rates were somewhat lower in the past. For the short to medium-term horizon (two years ahead), inflation expectations are in the range 1.0-1.5%. This suggests that inflation is expected to moderately and gradually rise from current low rates. For the longer-term horizon (five years ahead) inflation expectations from market and survey-based measures are in the range 1.5-2.1%.

When comparing the recent profiles of inflation expectations from various sources, Chart B shows that market-based measures of inflation expectations are slightly lower than those from survey data and the Eurosystem staff macroeconomic projections. As discussed in Box 4 in Section 2, this partly reflects the recent developments in inflation risk premia embedded in inflation swap rates. While the inflation risk premium has, on average, been positive, recently it has become negative. Taking this effect into account, the message from the three different sources of shorter-term inflation expectations is broadly consistent.

Chart A Box plot of the profile of inflation expectations from various sources

(annual percentage changes)



1 HICP (six-month average)
2 HICPex (six-month average)
3 GDP deflator (two-quarter average)
4 Inflation-linked swap (one-year forward one year ahead)
5 SPF (two years ahead)
6 (B)MPE HICP (two years ahead)
7 Inflation-linked swap (one-year forward four years ahead)
8 SPF (five years ahead)
9 Inflation-linked swap (five-year forward five years ahead)

Sources: ECB, Eurostat, Reuters and ECB calculations.
Notes: The white boxes represent 10th-90th percentiles. HICPex refers to HICP inflation excluding food and energy for the six-month average. Survey-based SPF inflation expectations are from the second quarter of 2014.

In order to clarify the risks surrounding the central scenario, it is worth considering the uncertainty surrounding inflation expectations at different horizons, as reported by SPF respondents. Charts C and D show the probabilities of inflation being below 1% or 0% respectively, at different horizons (one year, two years and five years ahead). At present, the probability of inflation being below 1% is relatively high for shorter horizons and broadly similar to levels reported in 2009, when commodity prices were also exerting downward pressure on inflation. At the same time, the perceived probability of negative inflation remains very low (less than 5%) and lower than that reported in 2009. SPF respondents thus perceive some risk of inflation below 1% in the coming years but a limited risk of outright deflation.

Chart B Latest profile of inflation expectations

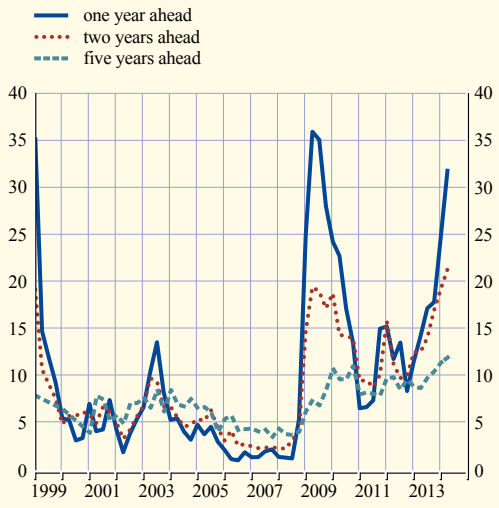
(annual percentage changes)

Sources: ECB, Eurostat, Reuters and ECB calculations.

In the context of differing economic developments and a rebalancing across euro area countries, aggregate inflation expectations for the euro area may conceal different patterns at the national level. Longer-term inflation expectations for the five largest euro area economies, derived from Consensus Economics, are more volatile and exhibit some heterogeneity, but have actually converged somewhat

Chart C Probabilities of inflation below 1%

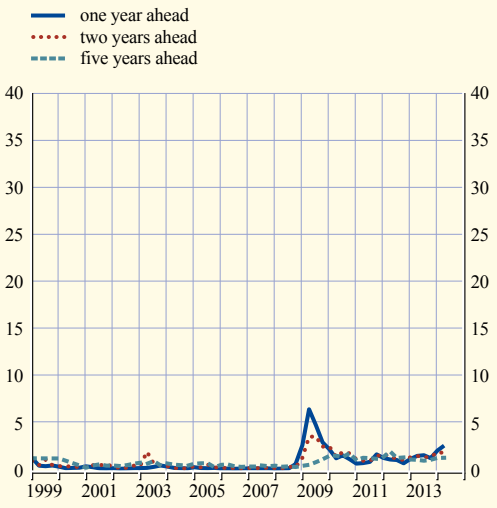
(percentages)



Source: ECB.

Chart D Probabilities of inflation below 0%

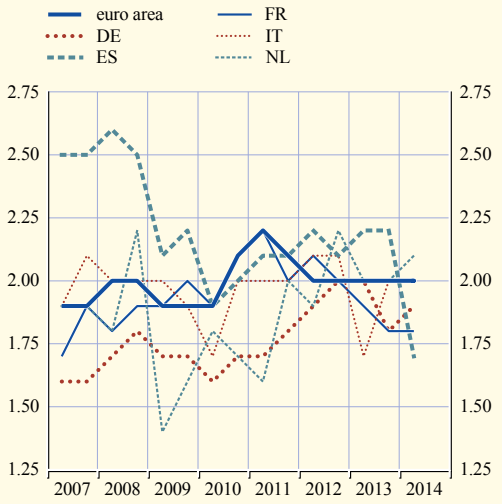
(percentages)



Source: ECB.

Chart E 6-10 years ahead inflation expectations across the largest euro area economies

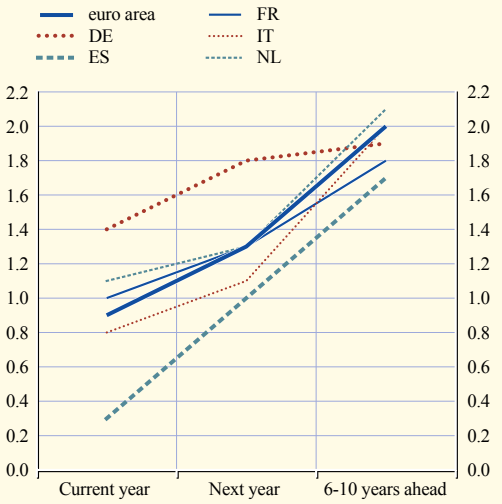
(annual percentage changes)



Source: Consensus Economics.

Chart F Latest (April 2014) profile of inflation expectations across the largest euro area economies

(annual percentage changes)



Source: Consensus Economics.

since 2008 (see Chart E). The upward sloping profile is shared across all countries, although the steepness of the slope reflects current inflation conditions and is flattest for Germany and steepest for Spain (see Chart F). The convergence is in itself a welcome development as it may indicate a normalisation from the boom period seen in some euro area countries prior to the crisis.

Overall, the low level of current measures of short-term inflation expectations is broadly in line with the Eurosystem staff macroeconomic projections, as is the expectation of a gradual increase over time. More medium-term levels of inflation expectations still appear well anchored by the aim of the Governing Council to keep inflation below, but close to, 2% over the medium term.

4 OUTPUT, DEMAND AND THE LABOUR MARKET

Real GDP in the euro area rose by 0.2%, quarter on quarter, in the first quarter of this year. Economic indicators, including survey results available up to June, signal a continuation of the very gradual recovery in the second quarter of 2014. Looking ahead, domestic demand should be supported by a number of factors, including the further accommodation in the monetary policy stance and the ongoing improvements in financing conditions. In addition, the progress made in fiscal consolidation and structural reforms, as well as gains in real disposable income, should make a positive contribution to economic growth. Furthermore, demand for exports should benefit from the ongoing global recovery. However, although labour markets have shown some further signs of improvement, unemployment remains high in the euro area and, overall, unutilised capacity continues to be sizeable. Moreover, the annual rate of change of MFI loans to the private sector remained negative in May and the necessary balance sheet adjustments in the public and private sectors are likely to continue to dampen the pace of the economic recovery. The risks surrounding the economic outlook for the euro area remain on the downside.

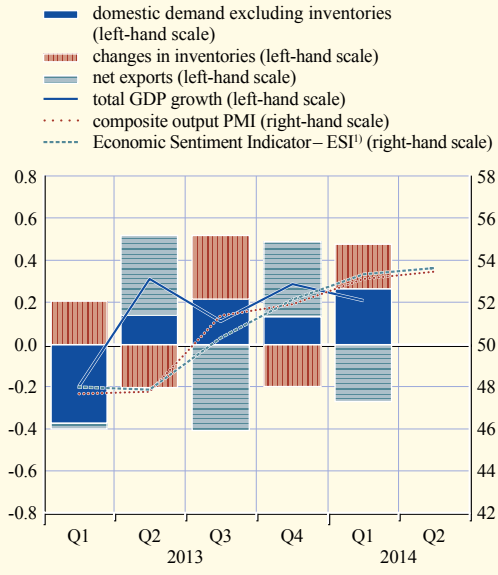
4.1 REAL GDP AND DEMAND COMPONENTS

Real GDP rose further by 0.2%, quarter on quarter, in the first quarter of 2014, having thereby increased for four consecutive quarters (see Chart 26). At the same time, output growth in the last quarter of 2013 has been revised upwards by 0.1 percentage point to 0.3%. The outcome for the first quarter reflected positive contributions from domestic demand and changes in inventories, while net trade made a negative contribution. Although domestic demand contributed positively to growth, it was still somewhat weaker than expected. However, this weakness may be attributed to temporary factors, such as the mild winter (which led to lower energy consumption) and the implementation of various fiscal measures (affecting the profile of private consumption growth). In the first quarter of 2014, output still stood 2.5% below its pre-recession peak in the first quarter of 2008, but 3.5% above its post-recession trough in the second quarter of 2009.

As regards the second quarter of this year, survey data are consistent with a continuation of the very gradual recovery. Although the composite output Purchasing Managers' Index (PMI) and the Economic Sentiment Indicator (ESI), published by the European Commission, both declined in June, they still rose on a quarterly basis between the first and the second quarters of this year. In the second quarter of 2014, both indicators stood at levels above their respective long-term averages. Growth is expected to remain moderate during the course of 2014, before edging up somewhat thereafter. Box 6 shows that there is a tendency to underestimate the strength of recoveries.

Chart 26 Real GDP growth and contributions, composite output PMI and economic sentiment

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



Sources: Eurostat, Markit, European Commission Business and Consumer Surveys and ECB calculations.
1) The ESI is normalised with the mean and standard deviation of the PMI over the period shown in the chart.

Box 6

PREDICTING THE STRENGTH OF RECOVERIES

There is a consensus among professional forecasters that it is particularly difficult to predict turning points in the business cycle and to forecast the amplitude of GDP changes around such turning points.[1] In particular, there might be a tendency to systematically underestimate the depth of recessions and the strength of recoveries. This box aims to shed light on whether there is indeed a tendency to underestimate the strength of recoveries and on what the potential reasons for such a tendency might be.

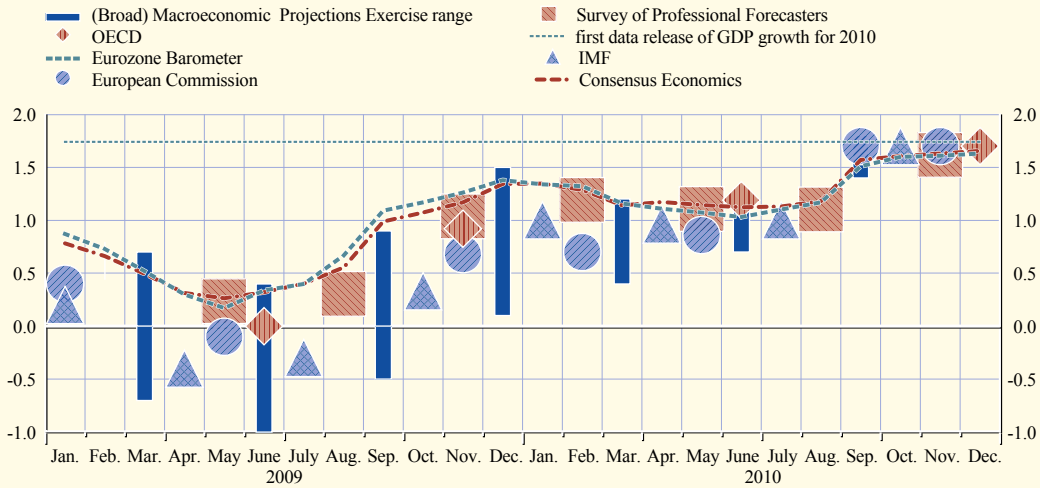
Professional forecasters' experience

Recent experience illustrates that there may indeed be a tendency to underestimate the strength of recoveries. For example, the strength of the recovery in the euro area in 2010 was underestimated. Projections by professional forecasters of annual euro area real GDP growth for 2010 were too low from January 2009 to mid-2010 (see Chart A).

Empirical studies by professional forecasters about predicting the strength of recoveries are scarce. Apart from some case studies which focus on the recovery following the financial crisis of 2008-09, earlier US evidence shows that the strength of recoveries has been underestimated.[2]

Chart A Vintages of projections of annual euro area GDP growth for 2010

(annual percentage changes)



Sources: Consensus Economics, ECB, Eurosystem, Eurozone Barometer IMF and OECD.
Note: GDP growth for 2010 has been revised upwards to 2.0%, from 1.7% in the first release.

1 Against this background, "qualitative" leading indicators have been designed which aim to provide early signals of turning points in the business cycle. For euro area evidence, see "The measurement and prediction of the euro area business cycle", *Monthly Bulletin*, ECB, May 2011; and de Bondt, G. and Hahn, E., "Introducing the Euro Area-wide Leading Indicator (ALI): Real-time signals of turning points in the growth cycle from 2007 to 2011", *Journal of Forecasting*, 33(1), 2014, pp. 47-68.

2 See, for example, Braun, P. and Zarnowitz, V., "Twenty two years of the NBER-ASA quarterly outlook surveys: Aspects and comparisons of forecasting performance", NBER Working Paper 3965, New York, 1992.

Forecast errors of professional forecasters for real GDP growth[1)]

(percentage points)

	Business cycle phase[2)]				
	Overall	Expansion	Recession	First year of recovery	Second year of recovery
Forecast error for current year	0.1 [-0.1 - 0.2]	-0.2 [-0.4 - -0.1]	1.2 [0.8 - 1.6]	-0.6 [-1.0 - -0.2]	0.1 [-0.4 - 0.5]
Forecast error for next year	1.0 [0.6 - 1.5]	0.0 [-0.2 - 0.3]	4.7 [3.5 - 5.8]	-1.1 [-1.7 - -0.6]	0.2 [-0.4 - 0.8]

Sources: Consensus Economics and ECB calculations.
Note: The figures in square brackets refer to two standard deviations around the mean of the average forecast error (forecast of GDP growth minus actual GDP growth) with the average error first calculated for each individual country and then for all 25 countries.
1) Results based on 25 countries in the period 1990-2013.
2) Expansions refer to all years except recessions (identified as years with negative GDP growth) and the first year of recoveries.

However, an empirical analysis of aggregated survey data of professional forecasters from Consensus Economics for 25 economies between 1990 and 2013 indicates that this applies to other economies as well. It shows that there is indeed a tendency to underestimate GDP growth for the first year of a recovery, but that there does not seem to be any bias for the second year (see the table). This finding holds for forecasts both for the current year and the next year, with the bias being somewhat more pronounced for forecasts for the following year.

These results suggest that there is potentially a risk that the projections of professional forecasters of GDP growth for 2014 will be too low, given that 2014 should be the first year with positive real GDP growth following the 2012-13 recession.

The role of the inventory cycle

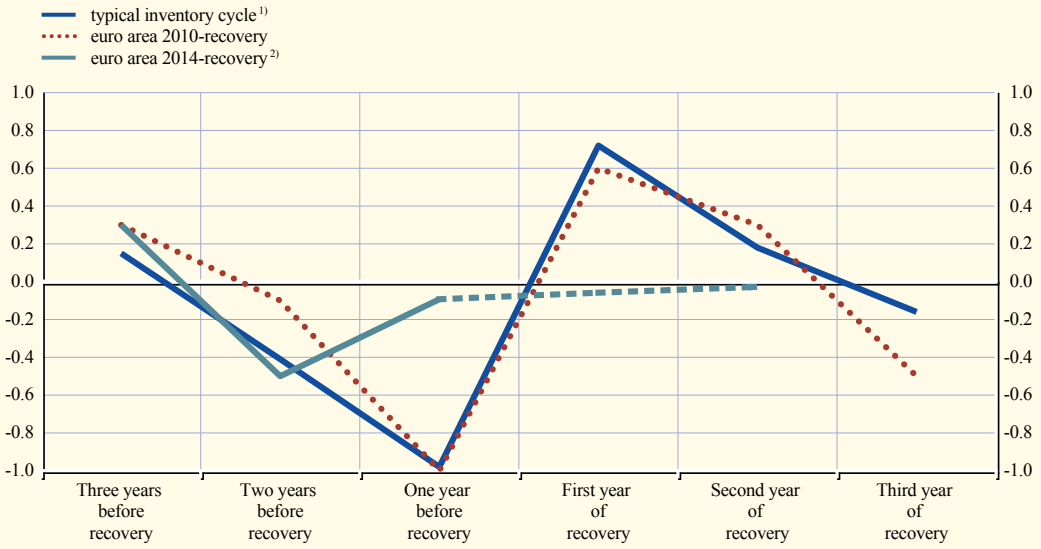
One reason for the apparent tendency to underestimate the strength of recoveries might relate to the inventory cycle. It is common practice among professional forecasters to expect changes in stocks to have a neutral effect and to therefore project their contribution to be equal (or close) to zero in general. The reasons behind this practice may be that the long-run average of the contribution from stocks to GDP growth is usually close to zero, that national accounts data on stocks are sometimes revised considerably and that, in some countries, there is a lack of reliable data for estimating changes in stocks.

However, the literature describes an inventory cycle with a well-defined pattern over the business cycle. This pattern, which is confirmed by US evidence, entails a pronounced negative contribution from stocks in a recession and a positive contribution in a recovery. Changes in stocks are found to be the main driver of strong rebounds in GDP during recoveries.[3] Moreover, looking at data for 16 advanced economies in the period 1970-2013, there is evidence for pronounced changes in stocks around business cycle turning points. In the first year of a recovery the contribution from stocks to GDP growth is about 0.7 percentage point, while the negative contribution to GDP growth in the year before a recovery (which is, by definition, a year with negative GDP growth) is roughly 1 percentage point (see Chart B). While the contributions in the first year of a recovery and in the year before a recovery are highly significant, the contributions in other years are not significantly different from zero. These results are valid

3 See, for example, Sichel, D.E. "Inventories and the three phases of the business cycle", *Journal of Business and Economic Statistics*, 12(3), 1994, pp. 269-277; and Bec, F. and Ben Salem, M., "Inventory investment and the business cycle: the usual suspect", *Studies in Nonlinear Dynamics and Econometrics*, 17(3), 2013, pp. 335-343.

Chart B Contribution from stocks to GDP growth

(percentage points)



Sources: European Commission and ECB calculations.
1) Based on data for 16 advanced economies for 1970-2013.
2) The green dashed line refers to European Commission forecasts for 2014 and 2015.

both for recoveries following financial crises and for those following "normal" recessions. A regression analysis reveals that there is a strong and significant relationship between the negative contributions before a recovery and the positive contribution in the first year of a recovery. In other words, the more negative the contribution of inventories in the year before a recovery, the more positive the contribution in the first year of the recovery.

The contribution from stocks to GDP growth in the euro area in the recovery that started in 2010 (the first year of the recovery) and in the years before it began was largely in line with the typical inventory cycle. In the current cycle, however, the contribution from stocks to GDP growth is likely to be less strong. Notably, the European Commission forecasts the contribution from changes in inventories for 2014 (the first year of the recovery) and 2015 to be close to zero. While past evidence points to a risk of underestimating the strength of recoveries, stemming from a stronger than expected reversal of changes in stocks, this risk seems to be relatively limited in the current cycle, as the negative contribution from stocks to GDP growth in 2013 (one year before the recovery) was only moderately negative compared with previous cycles (at -1.0 percentage point).

Bounce-back effects on GDP

Recoveries may sometimes be characterised by (non-linear) "bounce-back" effects on GDP, meaning that the weaker GDP growth is during the preceding recession, the stronger it is during the recovery. These bounce-back effects are driven by factors beyond the inventory cycle and may be particularly evident when an economy is hit by temporary shocks that are not expected to dampen the level of GDP permanently. It is hard to draw any conclusions from the available literature on the existence or otherwise of a bounce-back effect on GDP during recoveries. While there is some evidence for its existence, in particular for the United States (before the 2008-09

financial crisis), the evidence for several other advanced economies is considerably weaker or even indicates that there is no bounce-back effect in some of these economies.[4] Moreover, the type of recession (i.e. normal or financial crisis-driven) that took place before the bounce-back may also be relevant. In particular, the literature finds that financial crises are usually followed by particularly weak recoveries and that such crises have permanent adverse effects on the level of GDP.[5] This finding is broadly in line with the projections of a gradual strengthening in the economic recovery in the euro area, as currently foreseen by professional forecasters.

Conclusion

In general, there seems to be some evidence that professional forecasters underestimate the strength of recoveries in the first year after a recession. However, the upward risks for euro area GDP growth currently seem to be somewhat smaller than during previous recoveries. First, the upward risk stemming from the inventory cycle seems to be limited because the negative contribution from stocks to GDP growth in the recent recession was moderate and, as such, a moderate positive contribution for 2014 is more likely. Second, the risk of a bounce-back effect on GDP during the current recovery seems to be limited because the euro area has been hit by a financial and sovereign debt crisis, and strong bounce-back effects are less likely after such severe financial crises.

4 See, for example, Bradley, M.D. and Jansen, D.W., "Nonlinear business cycle dynamics: Cross-country evidence on the persistence of aggregate shocks", *Economic Inquiry*, 35, July 1997, pp. 495-509; and Kim, C.-J., Morley, J. and Piger, J., "Nonlinearity and the permanent effects of recessions", *Journal of Applied Econometrics*, 20(2), 2005, pp. 291-309.

5 See, for example, Reinhart, C.M. and Rogoff, K.S., "This time it's different: Eight centuries of financial folly", University Press, Princeton, 2009; and International Monetary Fund, "From recession to recovery: How soon and how strong?", *World Economic Outlook*, Washington D.C., 2009.

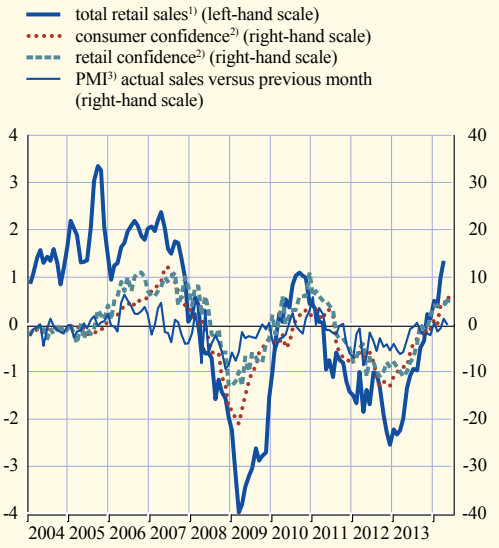
Private consumption in the euro area rose by 0.2%, quarter on quarter, in the first quarter of 2014, following positive but modest growth in the three previous quarters. The latest outcome most likely reflects the rising consumption of retail goods, which was partly offset by lower spending on services and car purchases.

With regard to the second quarter of this year, available information tends, on balance, to suggest a further, albeit moderate, rise in private consumption. In April the volume of retail sales rose by 0.4%, month on month, thus standing 0.6% above the average level recorded for the first quarter, when it increased by 0.7%, quarter on quarter. In addition, in April and May, new passenger car registrations in the euro area stood, on average, almost 2% above their average level for the first quarter, when they had contracted, quarter on quarter, by 2.5%. Survey data on the retail sector for the second quarter of 2014 suggest that the consumption of retail goods continued to display modest growth (see Chart 27). For instance, the European Commission's indicator on confidence in the retail sector improved further in the second quarter. In addition, consumer confidence, which has been on an upward trend since the beginning of 2013, improved markedly between the first and second quarters. Confidence currently stands above its long-term average and is thus consistent with ongoing moderate improvements in consumer spending. The PMI for the retail sector rose from an average of 49.4 in the first quarter to 50.6, on average, in April and May. This is consistent with muted growth in sales in the second quarter of 2014. Finally, the indicator on expected major purchases remained at a low level, suggesting that consumers continue to be cautious in terms of their decisions to purchase durable goods.

Gross fixed capital formation rose further by 0.2%, quarter on quarter, in the first quarter of 2014. This latest rise marks the fourth consecutive increase. With regard to the breakdown of investment in the first quarter, an increase in construction investment was partly offset by a fall in non-construction investment – each accounting for around half of total investment. Looking ahead, business investment is expected to increase moderately, as demand gradually picks up, confidence and financing conditions improve and uncertainty diminishes.

Chart 27 Retail sales, retail sector PMI and measures of confidence

(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.

Incoming data on fixed investment are, on balance, consistent with continued moderate growth in the second quarter of this year. Industrial production of capital goods – an indicator of future non-construction investment – declined in April 2014, by 0.1%, month on month. In the same month, capital goods production stood 0.5% below its average level for the first quarter of 2014, when it increased by 0.6% on a quarterly basis. While this seems to indicate a weak start to the second quarter, high monthly volatility in production data warrants caution. Survey results paint a somewhat more buoyant picture. For instance, although the manufacturing PMI, which has been on an upward trend since mid-2012, declined in the second quarter of this year, it still remains clearly above the theoretical no-growth threshold of 50. Similarly, the European Commission's industrial confidence indicator, which rose above its long-term average in the third quarter of last year, remained broadly stable between the first and second quarters.

In April 2014, construction production rose by 0.8%, month on month, following a somewhat smaller decline in the previous month. As a result, in April, construction production stood 0.7% above the average level for the first quarter, which represents an easing compared with the first quarter, when construction production rose by 2.3% on a quarterly basis. However, the rise in the first quarter reflects, at least in part, positive effects relating to the unusually mild weather conditions seen in parts of the euro area at the beginning of this year. Soft data point to muted developments in the second quarter. For instance, the European Commission's indicator for construction confidence was still well below its historical average in the second quarter and the PMI for construction activity in the euro area stood far below 50 in April and May.

The contribution of euro area net trade to GDP growth fell back into negative territory in the first quarter of 2014, despite positive trade flows. While quarterly export growth declined (to 0.2%), import growth edged up (reaching 0.8%) in the first quarter. As regards the second quarter, available indicators suggest a small decline in export growth alongside a more pronounced slump in import

growth, which, taken together, would be consistent with a small positive net trade contribution in that quarter. In April, the value of exports stood 0.4% above the average for the first quarter, while imports stood 0.3% below their average level. According to short-term indicators, in April trade prices stood below their first-quarter averages, suggesting that, in volume terms, the trade flows were somewhat stronger. Timelier survey data, encompassing the full second quarter, point to slightly lower export growth vis-à-vis the first quarter. Although the PMI for new export orders was consistently above the expansion threshold of 50 in the second quarter, it still showed a decline compared with the first quarter. The European Commission's survey indicator for export order books paints broadly the same picture.

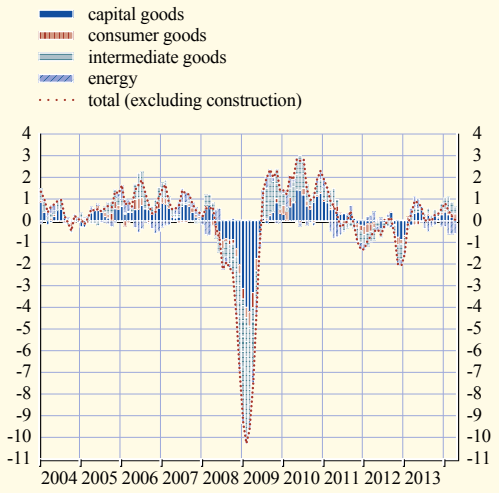
4.2 SECTORAL OUTPUT

In the first quarter of 2014, real value added rose further by 0.1%, quarter on quarter, an increase that was relatively broadly based across the main economic sectors. The exception relates to industry excluding construction for which value added showed a small decline. Total value added has revealed an accumulated rise of 1% since the first quarter of last year and currently stands 4% above its post-recession trough in the second quarter of 2009. Looking ahead, survey data point towards continued growth in value added in the second quarter of this year. As regards sectoral developments, the latest PMIs for output indicate the strongest growth for the manufacturing sector, followed by services, whereas the construction sector is expected to display more sluggish developments.

With regard to developments in the second quarter of 2014, industrial production (excluding construction) increased by 0.8%, month on month, in April. As a result, industrial production stood 0.6% above its average level for the first quarter. This was a relatively robust start to the second quarter compared to the quarterly increase of 0.2% recorded in the first quarter (see Chart 28). Meanwhile, the ECB indicator for euro area industrial new orders (excluding heavy transport equipment) rose by 0.5%, month on month, in April, following a small decline in the previous month. The level of these new orders, therefore, stood 0.3% above the level recorded in the first quarter, when it rose by 0.9% on a quarterly basis. Survey data, which are available up to June, point towards a further expansion of industrial sector output in the second quarter (see Chart 29). Although, the PMI for manufacturing output declined between the first and the second quarters of this year, it still points to robust growth in the second quarter.

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.

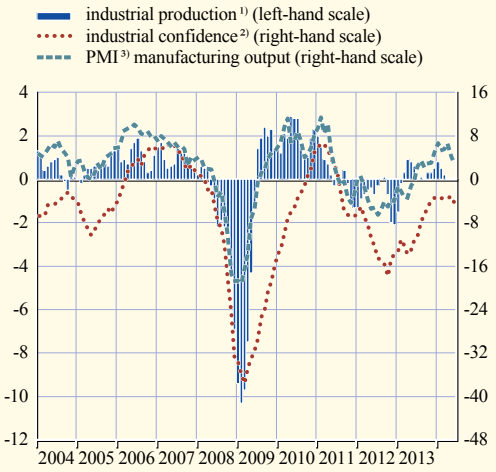
Construction production also rose by 0.8% on a monthly basis in April, thereby making a relatively good start to the second quarter of this

year. However, more timely survey results point to an ongoing weakness in the construction sector.

Although the PMI for services business activity revealed a small decline in June, it still rose between the first and the second quarter of 2014. The index, which averaged 53.1 in the second quarter, is thus in line with a further small increase in output in the services sector for that quarter. Other business surveys, such as those of the European Commission, paint a similar picture.

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.

4.3 LABOUR MARKET

The euro area labour market, which began to stabilise in the spring of 2013, has shown further signs of a gradual improvement. In recent months, employment has been rising, while unemployment has been falling. Survey data have also improved further, but nonetheless suggest only a gradual strengthening of the euro area labour market in the period ahead. These developments are in line with labour markets' typically lagged response to improvements in economic activity.

Employment, which fell by an accumulated 1.7% between the second quarter of 2011 and the third quarter of 2013, edged up by 0.1% on a quarterly basis, in both the last quarter of 2013 and

Table 9 Employment growth

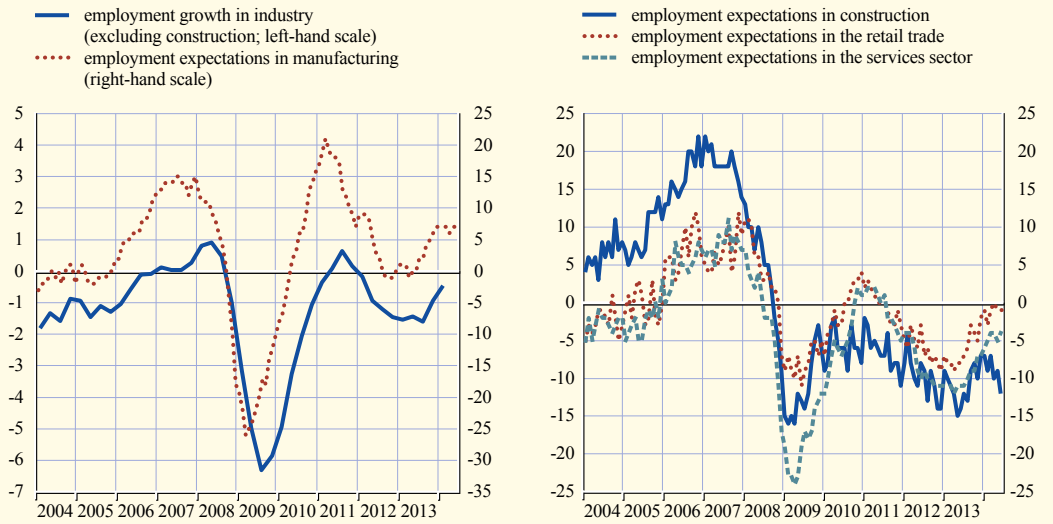
(percentage changes compared with the previous period; seasonally adjusted)

	Persons					Hours				
	Annual rates		Quarterly rates			Annual rates		Quarterly rates		
	2012	2013	2013 Q3	2013 Q4	2014 Q1	2012	2013	2013 Q3	2013 Q4	2014 Q1
Whole economy	-0.6	-0.8	0.0	0.1	0.1	-1.4	-1.1	-0.1	0.1	-0.1
of which:										
Agriculture and fishing	-1.9	-1.4	-0.4	-0.5	0.0	-2.9	-1.0	-0.1	-0.1	0.7
Industry	-2.1	-2.3	-0.4	0.0	-0.2	-3.3	-2.4	-0.2	-0.3	-0.2
Excluding construction	-0.9	-1.4	-0.4	0.2	0.1	-2.0	-1.2	-0.1	-0.1	0.1
Construction	-4.7	-4.6	-0.4	-0.5	-1.0	-6.1	-5.0	-0.6	-0.9	-0.7
Services	-0.1	-0.3	0.1	0.2	0.2	-0.7	-0.7	0.0	0.2	-0.2
Trade and transport	-0.8	-0.8	-0.1	0.2	-0.1	-1.6	-1.2	-0.1	0.1	-0.2
Information and communication	1.2	0.0	-0.3	0.6	0.1	0.6	-0.1	-0.5	0.7	-0.2
Finance and insurance	-0.4	-0.7	0.1	-0.1	0.0	-0.9	-0.8	0.1	-0.1	-0.4
Real estate activities	-0.4	-1.9	0.3	-1.2	1.5	-1.1	-2.4	-1.0	-1.5	1.3
Professional services	0.7	0.4	0.5	0.1	0.4	0.5	-0.1	0.1	-0.3	0.4
Public administration	-0.3	-0.2	0.2	0.3	0.2	-0.5	-0.5	0.1	0.6	-1.0
Other services 1)	0.6	0.0	0.3	0.1	0.4	-0.1	-0.5	0.3	0.1	1.5

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)

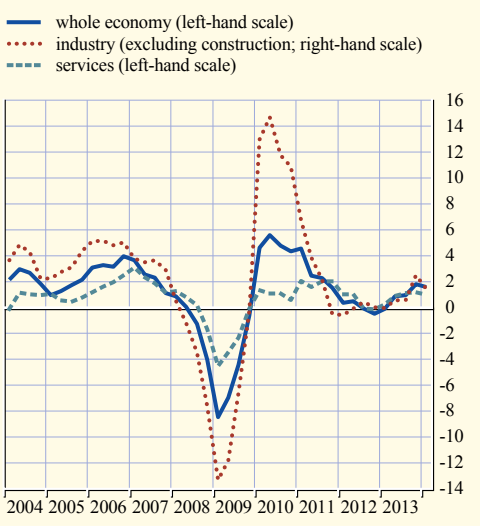


Sources: Eurostat and European Commission Business and Consumer Surveys.
Note: Percentage balances are mean-adjusted.

the first quarter of this year (see Table 9). The latest developments thereby signal the end of the previous prolonged period of job losses. At the sectoral level, the latest outcome for headcount employment reflects employment growth in the services sector as well in industry excluding construction, which was partly offset by continued job losses in the construction sector. Hours worked remained broadly stable over the fourth quarter of last year and the first quarter of 2014. In annual terms, however, hours worked were up by 0.5% in the first quarter, while headcount employment was only 0.1% above its level one year ago. This is in line with the notion that firms tend to extend working time before additional employment takes place. The improvement gleaned from survey results confirms the picture of a modest strengthening of labour markets in the second quarter of 2014 (see Chart 30).

Chart 31 Labour productivity per person employed

(annual percentage changes)



Sources: Eurostat and ECB calculations.

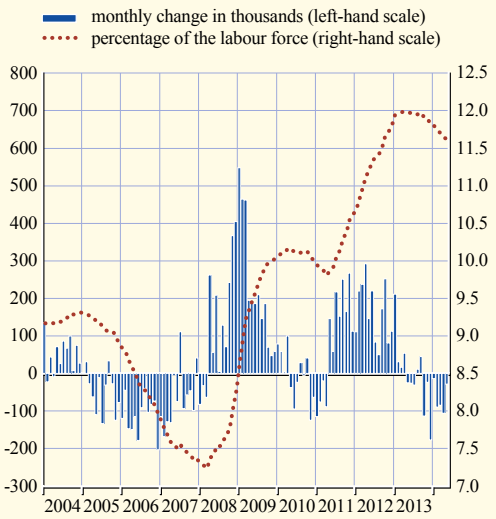
Productivity per person employed rose further by 0.8% in annual terms in the first quarter of 2014, having displayed positive growth rates for four consecutive quarters (see Chart 31). The latest increase was broadly based across sectors, with the construction and agricultural sectors showing the strongest rises in productivity. At the same time, the annual growth rate of hourly labour productivity declined by 0.3 percentage point to 0.4% between the fourth quarter of last year and the first quarter

of this year. The PMI for productivity suggests continued positive productivity growth in the second quarter of this year.

The unemployment rate, which declined in the last quarter of 2013 as well as in the first quarter of this year, displayed a further decline in April, reaching 11.6%, before remaining stable in May (see Chart 32). However, the number of unemployed persons in the euro area nonetheless declined further between April and May. The decline in the unemployment rate since its most recent peak in April 2013 has been relatively broadly based across gender and age groups. Although this decline has been stronger in the group of countries under stress, cross-country differences within the euro area still remain sizeable. This is clearly illustrated by looking at the overall unemployment rate in May for individual countries, which ranged from below 5% to over 25%.

Chart 32 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

4.4 THE OUTLOOK FOR ECONOMIC ACTIVITY

Economic indicators, including survey results available up to June, signal a continuation of the very gradual recovery in the second quarter of 2014. Looking ahead, domestic demand should be supported by a number of factors, including the further accommodation in the monetary policy stance and the ongoing improvements in financing conditions. In addition, the progress made in fiscal consolidation and structural reforms (see Box 7), as well as gains in real disposable income, should make a positive contribution to economic growth. Furthermore, demand for exports should benefit from the ongoing global recovery. However, although labour markets have shown some further signs of improvement, unemployment remains high in the euro area and, overall, unutilised capacity continues to be sizeable. Moreover, the annual rate of change of MFI loans to the private sector remained negative in May and the necessary balance sheet adjustments in the public and private sectors are likely to continue to dampen the pace of the economic recovery.

The risks surrounding the economic outlook for the euro area remain on the downside. In particular, geopolitical risks, as well as developments in emerging market economies and global financial markets, may have the potential to affect economic conditions negatively, including through effects on energy prices and global demand for euro area products. A further downside risk relates to insufficient structural reforms in euro area countries, as well as weaker than expected domestic demand.

Box 7

THE MACROECONOMIC EFFECTS OF STRUCTURAL REFORMS

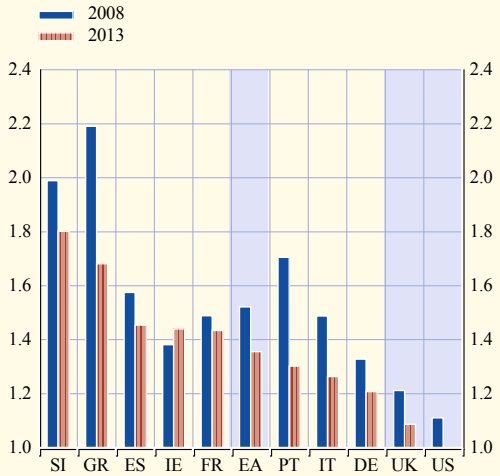
Overall, the financial crisis and subsequent sovereign debt crisis and ensuing recessions have acted as a catalyst for structural reforms in a number of euro area countries. Since the start of the crisis, several euro area countries have stepped up structural reform efforts to enhance the functioning of labour and product markets and to improve economic framework conditions, particularly as part of macroeconomic adjustment programmes. Despite these efforts, progress has been only partial and uneven (as an illustration, see Charts A, B and C for summary indicators of product market and employment protection regulation and the business climate in selected euro area countries, the United Kingdom and the United States).

Analytical work finds that such reforms deliver positive medium to long-term benefits, such as higher potential output. At the same time, some studies find that there may be negative effects on some variables in the short run (e.g. consumption), while other studies show that reforms start producing positive effects on key macroeconomic variables, even in the short run. This box presents a summary of the main findings in the empirical literature on the macroeconomic effects of structural reforms.

Long-term effects of structural reforms

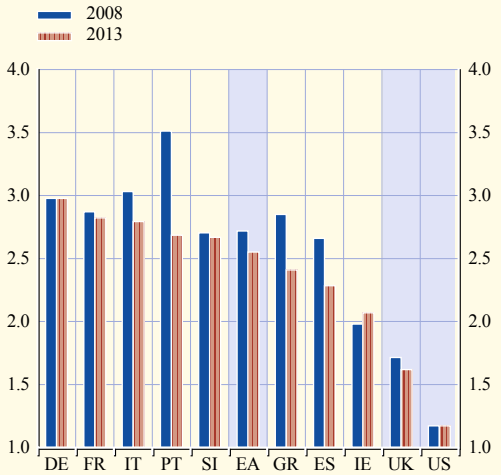
One can expect important employment and output gains from structural reforms via various channels. For instance, reforms to (early) retirement and disability schemes and more emphasis on activating the unemployed through active labour market programmes (e.g. via training or more efficient employment services) will increase labour market participation and

Chart A Product market regulation



Source: OECD.
Notes: It concerns a synthetic indicator of the strictness of regulation of product markets (e.g. state control, barriers to entrepreneurship, trade and investment). A higher value means stricter regulation.

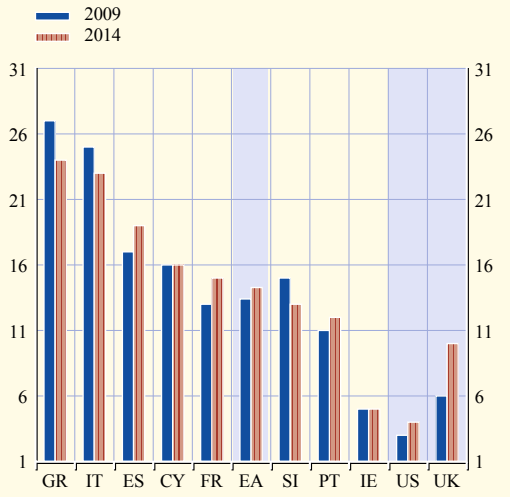
Chart B Employment protection legislation



Source: OECD.
Notes: It concerns a synthetic indicator of the strictness of regulation of labour markets (e.g. notice periods, severance payments, use of temporary contracts). A higher value means stricter regulation.

employment, thereby increasing potential growth. In addition, more flexible wage-setting will increase the responsiveness of wages to the business cycle and productivity developments, meaning that wages can be better tailored to the specific circumstances and needs of individual firms. Furthermore, a lower degree of employment protection and more competition in product markets can lead to more efficient job matches, improve resource allocation and facilitate the restructuring of economies, thereby supporting productivity and growth and helping to reduce structural unemployment.

Chart C Ease of doing business, rank



Source: World Bank/International Finance Corporation.
Note: The y-axis shows the ranking of the respective country (out of 181 resp. 189) on the overall ease of doing business as measured by a large set of indicators.

Both model simulations and empirical studies largely point to a positive impact of structural reforms on output, consumption, investment and employment.[1] In DSGE model simulations, reforms are typically modelled as reductions in wage and price mark-ups or as increased labour supply. Simulations which introduce reforms with the aim of reducing mark-up levels to the EU or OECD averages typically raise GDP and employment in the least flexible countries by several percentage points. Introducing more radical reform packages, for example by targeting the best performers in the EU or the United States, could boost GDP in the long run by double digits.[2] Cross-country empirical work tends to support this.[3]

Transitory effects

The impact of the reforms mentioned above could take several years to materialise in full. In some cases, the adjustment process following a reform might also entail short-term costs, as the implied reallocation of resources from low to high-productivity firms – resulting from, for example, a product market reform – may translate into a temporary fall in activity and private consumption could be temporarily suppressed.[4] Most DSGE model simulations find

1 See, for example, Gomes, S., Jacquinot, P., Mohr, M. and Pisani, M., "Structural reforms and macroeconomic performance in the euro area countries. A model-based assessment", *Working Paper Series*, No 1323, ECB, 2011; Annicchiarico, B., Di Dio, F. and Felici, F., "Structural reforms and the potential effects on the Italian economy", *Journal of Policy Modeling*, Vol. 35(1), 2013, pp. 88-109; Lusinyan, L. and Muir, D., "Assessing the Macroeconomic Impact of Structural Reforms: The Case of Italy", *IMF Working Papers*, No 13/22, 2013; Varga, J., Roeger, W. and In 't Veld, J., "Growth Effects of Structural Reforms in Southern Europe: The case of Greece, Italy, Spain and Portugal", *European Economy – Economic Papers*, No 511, European Commission, 2013; Anderson, D., Barkbu, B., Lusinyan, L. and Muir, D., "Assessing the Gains from Structural Reforms for Jobs and Growth", Chapter 7 in IMF, *Jobs and Growth: Supporting the European Recovery*, 2014.
2 See, for example, Gomes et al., op. cit.; Varga et al., op. cit.; Annicchiarico et al., op. cit.; Anderson et al., op. cit.
3 See, for example, Bouis, R. and Duval, R., "Raising potential growth after the crisis. A quantitative assessment of the potential gains from various structural reforms in the OECD area and beyond", *Economics Department Working Papers*, No 835, OECD, 2011.
4 The preventive arm of the Stability and Growth Pact allows taking into account the short-term budgetary cost of major structural reforms when defining the adjustment path towards the medium-term budgetary objective defined in terms of the structural budget balance, provided that an appropriate safety margin with respect to the 3% of GDP nominal deficit reference value is preserved and the budgetary position is expected to return to the medium-term budgetary objective within the Stability or Convergence Programme period (see Article 5(1) of Council Regulation (EC) No 1466/97).

no or negligible short-term costs,[5] but in other analyses small costs are found to be incurred.[6] Of course, to a large extent, outcomes depend on the calibrated elasticities and other model assumptions. For instance, in models that feature a zero lower bound of monetary policy, reforms delivering a fall in prices that in turn leads to an increase in real interest rates could act as a drag on growth.[7] On the other hand, this might be more than compensated for by expectations of future improvements in consumers' income and firms' growth as a result of the reforms, which could therefore mean a positive impact on growth, even in the short run.[8] In empirical cross-country estimations, structural reforms typically have no or small transitory effects.[9] Of course, the occurrence of transitory costs may also greatly depend on the type of reform as well as on the state of the economy. For instance, while in normal times more activation in unemployment insurance schemes will yield positive employment gains already in the short run, this might not be the case when the degree of slack in the labour market is significant.

Spillovers

The literature also suggests that the impact of reforms depends on the broader institutional environment. For instance, labour market reforms can be more effective when product markets are flexible. As a result, there can also be important spillover effects between reforms. Studies indeed show that the gains from a comprehensive reform package, which includes both labour and product market reforms, can be proportionally larger than those from stand-alone reforms.[10] Furthermore, the benefits from reforms can also spill over across countries through positive trade linkages.[11]

As an illustrative example of the results from the literature, Table A shows the outcomes of IMF simulations of the impacts of possible reforms in euro area countries in both the short and the long run. For each of the euro area countries, the simulations model the impact of closing roughly 50% of the gap with the OECD frontier cases in labour and product market policies.[12] The table shows that such reforms could boost growth in the long run by more than ten percentage

Table A Growth effects of simultaneous reform packages in the euro area

	Year 1	Year 2	Year 5	Long run
Product market	0.2	0.5	1.7	7.2
Labour market	0.5	0.9	1.4	3.0
Product and labour market	0.7	1.5	3.3	11.0

Source: Anderson et al. (2014).

5 See, for example, Bouis, R. and Duval, R., "Raising potential growth after the crisis. A quantitative assessment of the potential gains from various structural reforms in the OECD area and beyond", *Economics Department Working Papers*, No 835, OECD, 2011; Annichiarico et al. op. cit.; Varga et al., op. cit.

6 See, for example, Eggertsson, G., Ferrero, A. and. Raffo, A. "Can structural reforms help Europe?", *Journal of Monetary Economics*, Vol. 61, 2014, pp. 2-22.

7 See, for example, Eggertsson et al., op. cit. This model does not account for the effects of non-standard monetary policy measures.

8 See, for example, Fernández-Villaverde, J., Guerrón-Quintana, P.A. and Rubio-Ramírez, J., "Supply-Side Policies and the Zero Lower Bound", *NBER Working Papers*, No 17543, 2011.

9 See, for example, Bouis, R., Causa, O., Demmou, L., Duval, R. and Zdzienicka, A., "The Short-Term Effects of Structural Reforms. An empirical analysis", *Economics Department Working Papers*, No 949, OECD, 2012.

10 See, for example, Cacciatore et al. (2012); Lusinyan and Muir (2013); Anderson et al. (2014).

11 See, for example, Gomes et al. (2011); Anderson et al. (2014).

12 The simulations are performed using the Global Integrated Monetary and Fiscal Model and assume that countries move their regulations halfway towards the OECD frontier case in 13 years, while frontloading the reforms in the first 5 years. See Anderson et al. (2014) for details.

Table B 2013 Implementation of country-specific recommendations

	Progress					Total number of recommendations
	Full	Substantial	Some	Limited	No progress	
Belgium			3	4		7
Germany			2	2		4
Estonia		1	3	1		5
Spain	1		8			9
France			4	2		6
Italy			1	5		6
Latvia		1	5		1	7
Luxembourg			1	5		6
Malta			3	2		5
Netherlands		1	2	1		4
Austria			6	1		7
Slovenia		1	2	6		9
Slovakia			2	4		6
Finland		2	3			5

Source: European Commission staff assessment.

points.[13] The reforms also deliver positive effects on GDP even in the first year. Furthermore, the table shows the gains from implementing product market and labour market reforms jointly.

Conclusions

The literature on structural reforms shows that there are large benefits to be gained from the introduction of structural reforms, especially in more rigid economies. Despite important progress made in recent years, there is still much scope and need for reforms to improve the functioning of the economies of euro area countries and, thereby, support output growth and job creation. For example, in quantitative terms, according to the assessment by European Commission staff, euro area countries have only fully or substantially implemented 7 out of the 86 country-specific recommendations endorsed in 2013 by the European Council (see Table B).

Flexible labour and product markets are essential to help euro area countries respond optimally and rapidly to shocks and to avoid the higher costs of lost output and higher unemployment associated with the slower and more protracted adjustment of rigid economies. The gains from reforms will clearly be larger when reforms are more ambitious and when they are implemented jointly with reforms in other areas. In this light, more efforts are warranted to deregulate product markets, where reform effort has been muted in recent years. Further labour market reform is also necessary and will help to reduce structural unemployment. Designing a comprehensive reform package will also reduce the possibility of transitory costs that might arise in the adjustment process. Overall, in order to achieve these goals, it is crucially important that euro area countries implement swiftly and fully the reforms specified in the 2014 country-specific recommendations recently published by the European Commission.

13 After allowing for the relatively larger reductions in mark-ups in the IMF paper, the results are quantitatively and qualitatively similar to ECB model simulations (see Box 2 in the article entitled "Country adjustment in the euro area: where do we stand?", *Monthly Bulletin*, ECB, May 2013).

ARTICLES

EURO AREA RISK-FREE INTEREST RATES: MEASUREMENT ISSUES, RECENT DEVELOPMENTS AND RELEVANCE TO MONETARY POLICY

This article discusses the concept of the risk-free rate, as well as its relevance to the economy in general and to monetary policy in particular. It presents the challenges involved in measuring euro area risk-free rates, both conceptually and quantitatively. The article argues that these challenges have been exacerbated since the start of the global financial crisis, as different measures of risk-free rates have tended to diverge more than in the past, and it offers explanations as to why these discrepancies have arisen. Finally, the article shows how interest rates derived from overnight index swap (OIS) contracts can be a useful complement to AAA-rated bond yields when reporting on euro area risk-free rates.

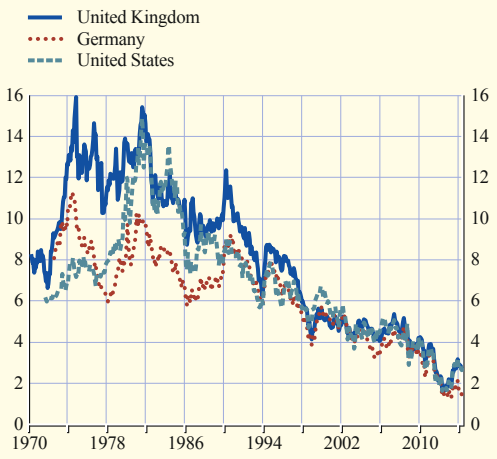
1 INTRODUCTION

The concept of the "risk-free interest rate" – namely the return on an ideal, perfectly liquid bond carrying no credit risk – plays an important role in financial markets and for monetary policy analysis. Risk-free rates most notably serve as a key benchmark for pricing other, risky assets. In particular, measures of the risk-free rate are used as a discount rate to calculate the present value of investment projects or the value of future financial payments. Risk-free yields are also important for monetary policy-makers both because the pass-through of policy rates across the risk-free term structure is a key part of the monetary policy transmission mechanism and because risk-free interest rates can provide information about market expectations of key economic variables, including the evolution of the key ECB interest rates.

The theoretical notion of the risk-free rate is typically measured by the yield on high-rated sovereign bonds. Using this measure, over the last three to four decades there has been a trend decline in risk-free yields across major industrialised economies, and long-term yields have reached historically low levels over the last couple of years (see Chart 1). Part of this decline undoubtedly reflects a stabilisation in inflation expectations and a compression of inflation risk premia,[1] but over the recent period other factors have also been at work.[2] After the start of the global financial crisis in late 2008, the increased demand for liquid and risk-free assets probably spurred the further decline in yields on assets that are considered close to risk-free. Additionally, more structural factors like strong demand from "real money investors" (comprising institutions such as pension funds and insurance companies) – in the context of an ageing society and regulatory and accounting changes – have also continued to exert downward pressure on yields. On the supply side, in recent years there has also been a decline in the size of some categories of risk-free asset.

Chart 1 A longer-term perspective on ten-year government bond yields

(percentages per annum)



Sources: Deutsche Bundesbank, Bank of England and Federal Reserve Board.

1 Long-term nominal bond yields can be understood as long-term real yields, average long-term inflation expectations over the maturity of the bond and inflation risk premia, i.e. a generalisation of the Fisher equation.

2 For a discussion of some of the driving forces of long-term bond yields, see P. Turner, "Is the long-term interest rate a policy victim, a policy variable or a policy lodestar?", in J.S. Chadha, A.C.J. Durré, M.A.S. Joyce and L. Sarno (eds.), *Developments in Macro-Finance Yield Curve Modelling*, Cambridge University Press, 2014.

For instance, certain high-rated securitisation instruments have disappeared and the volume of AAA-rated sovereign debt has shrunk owing to a deterioration in the creditworthiness (and credit rating) of several sovereign issuers. Moreover, in some jurisdictions, large-scale purchases of high-rated fixed income securities by central banks have contributed further to the decline in the supply of risk-free assets available to private sector investors and hence to the reduction in yields.

In Chart 1, German bond yields have been used to represent euro area risk-free rates over a long period, including the time before and after the introduction of the euro. For the period back to September 2004, the ECB publishes a yield curve (i.e. interest rates at various maturities) based on AAA-rated euro area government bonds and this could, in principle, be seen as a good proxy for the risk-free yield curve of the currency area. However, during the financial crisis the pool of AAA-rated issuers shrank and the yields of issuers remaining in the pool sometimes diverged, affected to varying degrees by credit risk premia, liquidity premia and other factors. This has reduced the representativeness of the AAA yield curve as a risk-free curve for the euro area as a whole.

Against this background, this article considers in detail the recent challenges involved in measuring risk-free rates for the euro area. As well as highlighting some of the reasons for the divergence across various common measures of risk-free rates during the financial crisis, the article also suggests that interest rates derived from OIS can provide a useful complement to AAA-rated yields in reporting on risk-free rates.

The article is structured as follows. Section 2 explains the concept of the risk-free rate, as well as its relevance to the economy in general and to monetary policy in particular. Section 3 then discusses the challenges involved in measuring the euro area risk-free rates, both conceptually and quantitatively. Section 4 describes developments in euro area risk-free rates during the crisis and highlights the differences that have emerged between yields based on AAA-rated government bonds and OIS contracts. Finally, Section 5 concludes.

2 RISK-FREE RATES: CONCEPT AND RELEVANCE TO MONETARY POLICY

The notions of a "risk-free asset" and a "risk-free rate of return" play a central role in economic analysis and are frequently referred to by financial market commentators. At an abstract level, a risk-free asset can be defined as a security that pays a specified unit of account at a certain date in the future in any possible state of the world. A specific example could be a zero coupon bond that pays out €100 in three years' time with absolute certainty.[3] The price at which this bond is purchased today determines its return, which is then referred to as the "three-year risk-free rate". In this example, the certainty of getting €100 at maturity is equivalent to saying that the issuer of the bond will honour its obligations in all states of the world. Accordingly, the risk-free property of the bond can be characterised as the absence of default or credit risk.

In practice, the assumption of absolute certainty regarding a bond's promised payoff seems unrealistic. While there have always been sound public and corporate bond issuers that have never defaulted on their debt, for any newly issued bond there is always some residual uncertainty as to whether default can be completely ruled out over the time until the bond matures. Hence, investors and commentators usually seem to employ some relative notion of safety when referring

3 A zero coupon bond pays the so-called principal amount at maturity but no coupons before; it is also called a pure discount bond, as discussed in Box 1.

to a risk-free rate. One common practice is to rely simply on the label awarded by credit rating agencies to judge a bond's riskiness, so that a AAA rating would constitute the dividing line separating (approximately) risk-free assets from their riskier counterparts. However, it must be borne in mind that a rating is usually a relative (rather than an absolute) statement of credit risk. Thus, broadly speaking, a higher-rated bond would be expected to default less often than its lower rated counterpart, although the actual expected default frequency of each rating category may well change over time and across the business cycle.[4]

Besides default or credit risk, however, there are several other sources of risk that are of relevance to the price or return of an asset. A bond can, for instance, be subject to liquidity risk, when investors face the possibility of future adverse market conditions if selling the bond before maturity. This risk of deteriorating liquidity would lead to a lower bond price (and a higher yield) on account of liquidity premia. Conversely, for bonds that exhibit particularly high standards in terms of safety and liquidity, investors will, in general, be willing to pay a higher price (i.e. accept a lower yield), especially if these bonds are more readily accepted as collateral in financial transactions. The negative liquidity premium on these bonds would rise in absolute terms were the pool of high-quality bonds to shrink, as this would lead to an increase in the relative scarcity of such much-prized assets (a "scarcity premium"). A nominal bond is also typically subject to inflation risk. Taking the example used above, the assumed absence of credit risk implies that the bond pays back €100 after three years, which makes it risk-free "in nominal terms". However, it is not risk-free "in real terms" because how much of a (euro area) consumption basket the bond's payoff could buy in three years will still be uncertain.[5]

Notwithstanding these further facets of the concept of risk-freeness, the remainder of this article will consider "risk-free" assets as those that have a very low perceived credit risk and – relatedly – carry the highest rating.

The risk-free rate has important functions in financial markets and in the economy more generally. Most importantly, estimates of risk-free rates serve as a benchmark in the pricing of other assets. To take the simplest example, risk-free rates over various terms to maturity (the term structure of interest rates – see Box 1) are required to compute the net present value of a sequence of future risk-free financial payments. The benchmark function also subsumes a communication and coordination aspect, as risk-free yields often serve as a yardstick for the comparison of risky assets – the common practice of quoting euro area sovereign bond yields as spreads vis-à-vis their German counterpart or a swap rate is a case in point.[6]

For monetary policy, the term structure of risk-free yields is important for at least two reasons: (i) it is an important element in the transmission of monetary policy and (ii) it contains useful information about market expectations of key economic variables.

4 The IMF's April 2012 Global Financial Stability Report states that a AAA rating in 2007 was associated, on average, with a default probability (as derived from credit default swap spreads) of about 0.1%, but this figure had increased more than ten-fold to about 1.3% in 2011. One major caveat is that credit default swap spreads typically also incorporate risk premia that go beyond pure compensation for expected losses, so that part of the reported increase in spreads might be attributable to the rise in these premia.

5 "Exchange rate risk" is another aspect underlining the fact that the risk-free property is linked to a specific unit of account. For instance, for investors wishing to receive their payoffs in US dollars, the payoff of €100 is certain (by assumption) but the EUR/USD exchange rate prevailing in three years' time is not, and hence the dollar payoff is risky. Finally, if sold before maturity, the three-year bond in this example is subject to "interest rate risk". For instance, if the investor sells the bond after one year, the price that he receives will depend on the two-year interest rate prevailing at that time, which is uncertain today.

6 See, for example, the article entitled "The determinants of euro area sovereign bond yield spreads during the crisis", *Monthly Bulletin*, ECB, May 2014.

Regarding the role of risk-free rates in monetary policy transmission, the first step in this process normally consists of steering very short-term interbank interest rates by means of monetary policy instruments. Moreover, through its monetary policy strategy and communications, the central bank also affects expectations of how it will steer short-term risk-free rates in the future.[7] Current and expected future short-term risk-free rates are, in turn, a major determinant of the whole term structure of short and longer-term risk-free interest rates. This term structure of risk-free interest rates is therefore a key input into the pricing of other assets that are relevant to the financing conditions of households and corporations, their consumption, production and investment decisions and, finally, price-setting and inflation. For instance, for a given default risk and credit spread of a corporate issuer, a decrease in the risk-free rate of relevant maturity would reduce the firm's market financing costs, improving its ability to finance production and investment, and so on. The term structure of risk-free rates can therefore be seen as the backbone of the wider transmission of the monetary policy stance to a broader range of asset prices and, ultimately, the real economy.

Concerning the information function, the yield curve is a useful tool for the central bank to extract market participants' expectations of future levels of interest rates, inflation and real activity. One example in this respect is the calculation of market-based inflation expectations and inflation risk premia at various horizons from the difference between the term structure of nominal and inflation-linked bond yields.[8] Another example is the inference of market expectations of future monetary policy. This is possible because, as mentioned above, long-term rates reflect expectations of future short-term rates, which in turn reflect expectations of the central bank's key policy rates and its use of other monetary policy instruments. However, besides future rate expectations, longer maturity yields typically contain term premia of unknown and possibly time-varying extent, so that the extraction of interest rate expectations from the yield curve poses some analytical challenges.[9]

7 See, for example, the article entitled "The ECB's forward guidance", *Monthly Bulletin*, ECB, April 2014.
8 See, for example, P. Hördahl and O. Tristani, "Inflation Risk Premia In The Term Structure Of Interest Rates", *Journal of the European Economic Association*, Vol. 10(3), pp. 634-657, 2012; and J.A. Garcia and T. Werner, "Inflation compensation and inflation risk premia in the euro area term structure of interest rates", in J.S. Chadha, A.C.J. Durré, M.A.S. Joyce and L. Sarno (eds.), *Developments in Macro-Finance Yield Curve Modelling*, Cambridge University Press, 2014.
9 For a review of the literature analysing the term structure of interest rates, see, for example, R.S. Gurkaynak and J. Wright, "Macroeconomics and the Term Structure", *Journal of Economic Literature*, Vol. L (June 2012), pp. 331-367, 2012.

Box 1

BOND YIELDS: BASIC CONCEPTS AND ESTIMATION OF A ZERO COUPON YIELD CURVE

A coupon bond is a security that entitles the holder to a pre-specified stream of (coupon) payments over its life (maturity) and, at its maturity date, a final coupon payment and the bond's redemption value (the principal). A zero coupon (or pure discount) bond is the simplest type of fixed income security, providing a single payoff at maturity, i.e. no coupons are paid out beforehand. A coupon bond can therefore be thought of as a collection of zero coupon bonds.

The yield to maturity is defined as the yield that equates the present value of the bond's cash flows with its price. For a bond with a maturity of m years that pays out coupons of C each year over m years and has a final principal payment of X, the yield to maturity (y_m) therefore solves the following equation:

$$P_m = C/(1 + y_m) + C/(1 + y_m)^2 + ... + (C + X)/(1 + y_m)^m \quad (1)$$

where P_m is the bond's price and the right-hand side of the expression represents the present value of the bond's cash flows discounted by the yield to maturity.

In this article, the spot rate for a given maturity, m, is defined as the current yield to maturity on a zero coupon bond with maturity m. By contrast, an m-year implied forward rate h years ahead is defined as the m-year spot rate prevailing from year h to year h+m that can be obtained today [1]. Such a forward rate can be derived from prevailing spot rates and vice versa. For example, if S_2 denotes the two-year spot rate and F_1 denotes the one-year forward rate one year ahead (i.e. the one-year spot rate prevailing in one year that can be obtained today), then:

$$(1 + S_2)^2 = (1 + S_1)(1 + F_1) \quad (2)$$

The yield curve or term structure of interest rates is defined as the relationship between maturity and the corresponding spot rate (zero coupon yield). The forward curve is the relationship between the future horizon h and the corresponding m-period forward rate h periods ahead.

Finally, for a given time to maturity m, and a given term structure of interest rates, the par yield of an m-year bond is the hypothetical fixed coupon rate that would make the bond's price equal its face value (e.g. €100), i.e. make it priced "at par".

As there are very few (sometimes no) zero coupon bonds traded at longer maturities, the term structure of zero coupon rates is not readily available from market data. It has therefore to be estimated based on a set of several coupon-bearing bonds using mathematical techniques. The underlying idea is that the price of each coupon-bearing bond can be understood as the sum of all coupon (and redemption) payments, discounted by the respective zero coupon yield, i.e. the respective point on the term structure of zero coupon rates.

The ECB regularly constructs and publishes two zero coupon yield curves for euro area government bonds (all bonds and AAA-rated bonds). In a first step, those bonds which are sufficiently liquid to enter the curve estimation are identified. The ECB selects bonds with a minimum trading volume of €1 million per day and a maximum bid-ask spread of 3 basis points.

The zero coupon yield curve is assumed to have a specific functional form called the Nelson-Siegel-Svensson model.[2] The estimation of the curve is done by means of an algorithm that minimises the sum (over all selected bonds) of the quadratic differences between the observed bond prices and those implied by the fitted zero coupon curve.

1 In some cases the forward rate on an instrument may be traded directly, but it will still be related to the term structure of spot rates through the process of arbitrage. This is because the payoff structure of such a forward contract can, in principle, be replicated by trading between bonds of different maturities.

2 The Nelson-Siegel-Svensson model's functional form for the zero coupon rate z(TTM) is:

$$z(TTM) = \beta_0 + \beta_1 \left[\frac{1 - e^{\left(\frac{-TTM}{\tau_1}\right)}}{TTM/\tau_1} \right] + \beta_2 \left[\frac{1 - e^{\left(\frac{-TTM}{\tau_1}\right)}}{TTM/\tau_1} - e^{\left(\frac{-TTM}{\tau_1}\right)} \right] + \beta_3 \left[\frac{1 - e^{\left(\frac{-TTM}{\tau_2}\right)}}{TTM/\tau_2} - e^{\left(\frac{-TTM}{\tau_2}\right)} \right]$$

where TTM is the term to maturity and β_i, τ_i are the parameters to be estimated. See L.E.O. Svensson, "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", NBER Working Paper No 4871, 1994.

As a final step, the term structure of forward rates can be derived mathematically using the model's functional form and the estimated parameters.[3]

3 The concepts described in this box are explained in more detail in many finance textbooks. See, for example, J.Y. Campbell, A.W. Lo and A.C. MacKinley, *The Econometrics of Financial Markets*, Chapter 10, Princeton University Press, 1997.

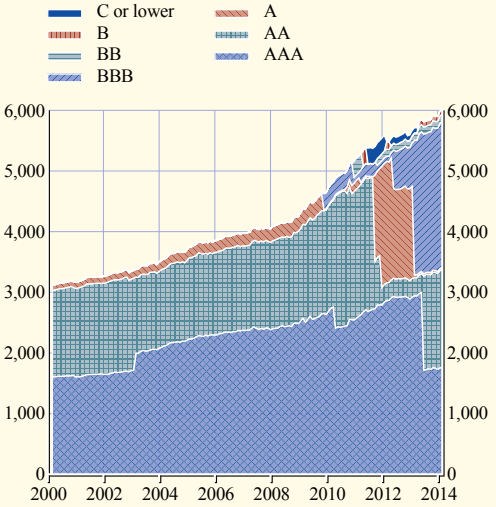
3 MEASURES OF THE EURO AREA RISK-FREE YIELD CURVE

The ECB publishes daily estimates of two euro area yield curves, both derived from government bonds.[10] One yield curve is based on bonds issued by all euro area central governments. This yield curve provides a broad representation of the euro area but is not considered a good proxy for risk-free rates owing to fundamental differences between the countries, as also reflected in rating differences. The other yield curve is based on central government bonds given a AAA rating by Fitch Ratings.

The fact that the AAA curve is linked to the rating provided by a credit rating agency poses two challenges when the curve is used as a candidate measure for the term structure of risk-free rates. First, while market participants required a similar yield across AAA-rated euro area sovereign issuers until 2007, the risk assessment across issuers within this rating class has become more diverse as a result of the financial and sovereign debt crises, which is reflected in quite heterogeneous yield levels. Second, owing to rating downgrades, the sample of bonds underlying the estimation of the curve has changed over time. The estimated yields can therefore be affected by such composition changes, as discussed in Section 4. Moreover, the volume of outstanding euro area government bonds classified as AAA shrank significantly during the crisis, from around two-thirds to currently only around one-third of all euro area central government bonds (see Chart 2), raising questions about the representativeness of the AAA yield curve as a benchmark for the euro area.

Chart 2 Outstanding amounts of euro area central government bonds by ratings

(EUR billions)



Sources: Fitch Ratings and ECB.
Notes: The ratings are those assigned by Fitch Ratings. Only long-term debt securities are included.

Given the intricacies associated with constructing the yield curve based on AAA-rated sovereign issuers, it makes sense to look for alternative representations of the risk-free term structure.[11] One alternative is to use interest rate derivatives. These are typically swap contracts, where two counterparties exchange the difference between a fixed interest payment (the swap rate) and a variable interest payment, which is based on

10 These data series begin in September 2004. For more background information, see the ECB's website and the article entitled "The new euro area yield curves", *Monthly Bulletin*, ECB, February 2008.

11 Using different yield curves for different purposes is in line with the recommendations of a report published in March 2013 by a working group established by the BIS Economic Consultative Committee, entitled "Towards better reference rate practices: a central bank perspective".

future short-term rates. When the variable rate is linked to a reference rate that is considered close to risk-free and expected to remain that way for the duration of the swap contract, the quoted fixed rate of the swap rate itself can also be thought of as close to credit risk-free. Any potential counterparty risk does not distort quoted swap rates, as it is priced "separately".[12]

Before the financial crisis it was common among market participants to benchmark risk-free rates using interest rate swaps, in which the variable rate was based on EURIBOR rates. However, with marked increases in credit risk priced into EURIBOR rates, the yield curve based on EURIBOR-linked swaps was clearly no longer a good proxy of the risk-free yield curve.[13] With the development and deepening of the OIS market (see Box 2), however, it has become feasible to derive a yield curve that is related to future overnight interest rates (the EONIA). The credit risk of overnight lending is naturally much smaller than the credit risk of lending at longer maturities, so the fact that the EONIA has such a short maturity means that the credit risk of OIS rates is normally very small.

12 "Credit value adjustments" are negotiated bilaterally between the counterparties to compensate for counterparty risk and subsequently added to or subtracted from the observed quotes to obtain the final transaction price. For more on credit value adjustments, see, for example, J. Hull and A. White, "LIBOR vs. OIS: The Derivatives Discounting Dilemma", *Journal of Investment Management*, Vol. 11, No. 3, pp. 14-27, 2013.

13 The ECB used EURIBOR-based swaps to extract the instantaneous forward curve until the beginning of 2008, when it changed to using the AAA-rated government bond yield curve (see the February 2008 issue of the Monthly Bulletin). In addition to credit risk, another reason for reconsidering the reference rate function of EURIBOR was the evidence of manipulation within the panel of institutions contributing to the computation of EURIBOR (see the article entitled "Reference interest rates: role, challenges and outlook" in the October 2013 issue of the Monthly Bulletin).

Box 2

THE OVERNIGHT INDEX SWAP MARKET

An overnight index swap (OIS) is a financial contract between two counterparties to exchange a fixed interest rate against a geometric average of overnight interest rates (in the euro area, the EONIA) over the contractual life of the swap. The instrument belongs to the derivative class called "interest rate swaps".

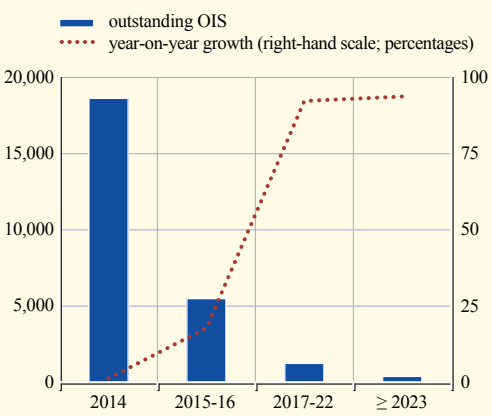
Today there are two main types of euro-denominated interest rate swap, the main distinguishing feature of which is the exposure of the variable rate: (i) OIS, with a variable rate which is the average of the EONIA rates, and (ii) EURIBOR-based swaps, with a variable rate of one of the EURIBOR rates (e.g. the three-month or six-month EURIBOR). Interest rates swaps are used intensively by both financial and non-financial companies. The appeal of interest rate swaps is that the user can easily manage interest rate risk. As an example, a company can issue long-dated, fixed rate bonds and enter into an interest rate swap whereby it agrees to pay a variable interest rate in exchange for receiving a fixed interest rate. In doing so, it changes the interest rate exposure of its debt from fixed to variable.

An important distinction from bonds is that with swaps there is no initial payment and no exchange of principal. Therefore, swaps are non-investible, i.e. they do not serve as a store of value.

The market for interest rate swaps is over the counter (OTC), but many maturities up to 30 years are quoted on various trading platforms. OIS are considered the market standard for swaps with maturities of up to around one year, as also documented by annual ECB money market surveys. Swaps with the variable leg linked to EURIBOR remain the market standard beyond the two-year maturity, but the use of longer-dated OIS has increased (see the chart) so much that quoted OIS rates at these maturities are thought likely to provide a reliable signal about market expectations of future EONIA rates (and associated term premia). As an illustration of the perceived reliability of quoted OIS rates, the financial industry has adopted the OIS curve for the discounting of collateralised derivatives.[1]

Outstanding amounts of OIS contracts by maturity

(EUR billions; percentages)



Source: Depository Trust & Clearing Corporation (DTCC).
Note: Outstanding amounts as at 14 March 2014 of euro-denominated OIS contracts cleared through the DTCC.

1 In derivatives transactions, counterparties mostly post collateral when the market value of the derivative changes. Therefore, credit risk premia in derivatives transactions can be regarded as negligible, so market participants need a reference yield curve that is close to risk-free to value such a collateralised derivative correctly. As an example, one of the big clearing houses, LCH.Clearnet, adopted OIS discounting for interest rate swaps in June 2010.

One potential concern in using OIS rates as a measure of risk-free rates is that the market for OIS contracts is still developing, notably for maturities beyond one year (see Box 2). Nevertheless, the yield curve based on OIS is currently assessed to be a useful additional tool for assessing risk-free rates. Thus, even at long maturities, the resulting forward curve (see Box 3) is a valuable device for assessing market participants' expectations of future levels of overnight interest rates, subject to the potential impact of term premia.

Box 3

CONSTRUCTING A YIELD CURVE FROM OVERNIGHT INDEX SWAP RATES

Quoted overnight index swap (OIS) rates can be interpreted in a similar way to par bond yields, i.e. the hypothetical fixed coupon rate that would make the bond price equal the bond's face value. The derivation of the OIS zero curve consists of the following two steps:

(i) zero spot rates are calculated from quoted OIS rates using a bootstrapping method,[1]

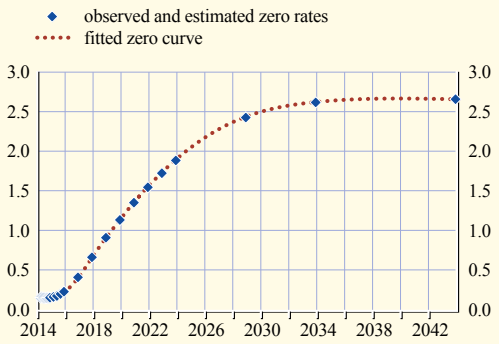
1 Bootstrapping is a method for calculating zero rates from the prices of a set of coupon-bearing rates or quoted swap rates. Starting from an observed or given zero rate, the bootstrapping method can be applied to generate a zero rate for a coupon-bearing rate with longer maturity by applying a no-arbitrage implied forward rate equation. By forward substitution, for example the three-year zero rate can be derived once the one-year and two-year zero rates are known, and the three-year par rate is observed. This can be iterated to generate zero rates for all maturities of observed coupon-bearing rates. See, for example, R.W. McEnally and J.V. Jordan, "The Term Structure of Interest Rates", in Chapter 37 of F.J. Fabozzi and T.D. Fabozzi (eds.), *The Handbook of Fixed Income Securities*, 4th edition, New York, Irwin Professional Publishing, 1995.

(ii) based on these zero rates, a zero curve is estimated with a smoothing spline.[2] The specification of the smoothing spline allows the estimation of a smooth curve, which at the same time fits the zero rates at observed maturities well (see the chart). By comparison with estimating the whole curve in one step by using a numerical optimisation, such as the Nelson-Siegel-Svensson model used for deriving the bond yield curves (see Box 1), the smoothing spline allows the observed data to be matched relatively well for short and long maturities, independently.

Finally, the zero curve obtained can be used to construct OIS-based forward curves.

Examples of constructing OIS zero rates using a smoothing spline

(annual percentages; 2 January 2014)



Sources: Thomson Reuters and ECB calculations.
Notes: Blue points denote zero rates based on observed quotes; the red dotted line is the zero curve on a daily interval.

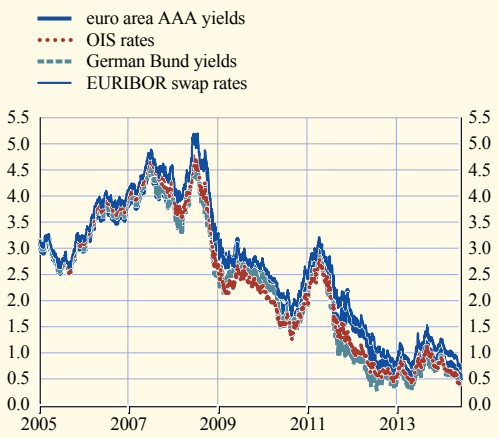
2 A smoothing spline is a method for fitting a smooth function (yield curve) to potentially noisy individual observations (zero yields for specific maturities). One example of a smoothing spline is a function s(x) that minimises $p\sum_i w_i(y_i - s(x_i))^2 + (1-p)\int\left(\frac{d^2s}{dx^2}\right)^2 dx$ where p is a specified smoothing parameter, x_i is a specific maturity, y_i is the corresponding zero rate and w_i are weights that sum to 1. The smoothing parameter p determines the relative weight placed on the conflicting goals of s being smooth and having s closely fitting the data.

4 RECENT DEVELOPMENTS IN EURO AREA AAA BOND RATES AND OIS RATES

Before the onset of money market tensions in the summer of 2007 risk-free rates derived from different euro area instruments moved together quite closely. Chart 3 illustrates this point by plotting four different measures of five-year rates that might have been viewed as proxies for the risk-free rate from the perspective of the start of 2007: yields from the AAA-rated euro area curve, yields from the euro area OIS curve, yields from the German Bund curve[14] and EURIBOR swap rates. All these rates were seen as incorporating little credit risk and they used to display very similar levels and move together closely.

Chart 3 Measures of five-year risk-free rates

(percentages per annum)



Sources: ECB, Thomson Reuters and Deutsche Bundesbank.

Starting in the second half of 2007, however, these measures started to show significant divergences from each other at various times, as described in Sections 4.1 and 4.2 below. (For example, the largest spread between all four measures in Chart 3 reached over 100 basis points in September 2008 after Lehman Brothers collapsed, and it reached similar levels in November 2011 during the sovereign debt crisis.) This raised the issue of which measures should be considered the most reliable proxies for the euro area risk-free rate, which is discussed in Section 4.3.

14 "German Bund curve" refers to the term structure of German government bond yields. This is estimated from coupon-bearing German government bonds on a daily basis by the Deutsche Bundesbank using the Nelson-Siegel-Svensson approach.

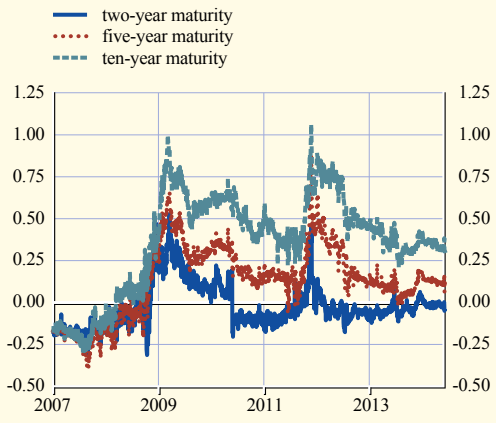
4.1 THE GLOBAL FINANCIAL CRISIS

In the period preceding the start of the global financial crisis in September 2008 there was a small negative spread both between AAA-rated euro area sovereign bond yields and OIS rates and between German Bund yields and OIS rates (see Charts 4 and 5). For example, the forward curves in the top left-hand panel of Chart 6 show that in June 2007 forward rates from OIS exceeded those from AAA-rated bonds and German Bunds at all but very short horizons. The spreads between OIS, Bund and AAA bond rates during this period may have reflected the extreme aversion to bank credit risk at the time, which may also have affected expected future EONIA rates. Moreover, the spread between KfW bond[15] and German Bund yields, a common measure of the liquidity premium, rose gradually over this period. This could indicate flight-to-liquidity flows into high-rated and liquid assets, which could also help explain the low level of German Bund yields and other AAA-rated bond yields (relative to OIS).

After the bankruptcy of Lehman Brothers on 15 September 2008 the relationship between OIS rates on one hand and AAA-rated bond yields and German Bund yields on the other hand changed and a positive spread opened up. (The top right-hand panel of Chart 6 provides a snapshot of the forward curves at the end of November 2008 and illustrates that the AAA curve lay above the others at that time.) One reason for the positive spread was probably an increase in perceived euro area sovereign credit risk, which also affected AAA-rated sovereign issuers after they took on many of the burdens and risks originating in their respective national financial sectors.[16] This is also reflected in the credit default swap (CDS) premia on AAA-rated sovereign issuers, which increased to unprecedented levels during the period, including for Germany (where five-year CDS premia increased to around 90 basis points in February 2009).

Chart 4 Spreads between AAA-rated bond yields and OIS rates at two, five and ten-year maturities

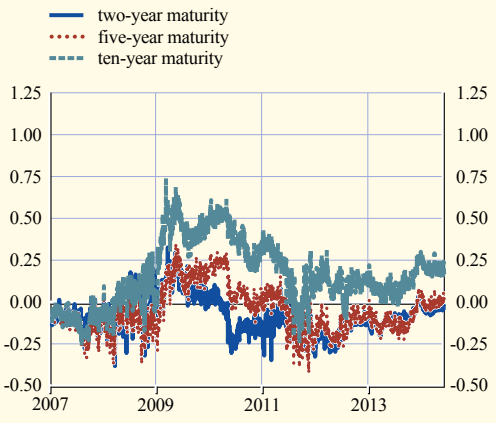
(percentage points)



Sources: ECB and Thomson Reuters.

Chart 5 Spreads between Bund yields and OIS rates at two, five and ten-year maturities

(percentage points)



Sources: Deutsche Bundesbank and Thomson Reuters.

15 The Kreditanstalt für Wiederaufbau (KfW) is a German development bank. Bonds issued by KfW and the German Bund are both guaranteed by the German state and, therefore, carry the same credit risk. See also the box entitled "New evidence on credit and liquidity premia in selected euro area sovereign yields", *Monthly Bulletin*, ECB, September 2009.

16 See, for example, the article entitled "The determinants of euro area sovereign bond yield spreads during the crisis", *Monthly Bulletin*, ECB, May 2014.

At the same time there was also an increasing divergence between the yields on sovereign bonds within the AAA basket. For example, as shown in Chart 7, in the months after the collapse of Lehman Brothers German five-year bond yields were as much as 275 basis points lower than Irish five-year bond yields.[17] Part of that phenomenon is explained by investors pricing in the increased credit risk for Ireland – even though the rating downgrade had not yet taken place – in light of the expected burden entailed in government support for the national financial system. But part is also probably explained by a flight to liquidity, consistent with the sharp increase in the spread between yields on KfW bonds and German government debt during this period (see Chart 8). This may also partly explain why the increase in AAA-OIS spreads was much larger than the corresponding increase in Bund-OIS spreads.

4.2 THE SOVEREIGN DEBT CRISIS

During the sovereign debt crisis, which originated in late 2009, yields based on the pool of all AAA-rated euro area sovereign bonds continued to exceed yields on German Bunds and OIS rates. In Chart 6, the middle panel on the right-hand side and the bottom panel on the left-hand side show the forward curves at two key points in the sovereign debt crisis. For comparison, the middle panel on the left-hand side shows the curves just before the sharp escalation of the sovereign debt crisis.

Spreads between AAA bond, Bund and OIS rates reached new highs in November 2011, as financial market tensions intensified and concerns about the sovereign debt crisis led to large increases in credit premia on most euro area sovereign bonds, including those of some AAA-rated countries. This resulted in another large divergence between yields on euro area AAA-rated sovereign bonds (as shown in Chart 7). Since the exclusion of countries from the AAA pool requires a downgrade from Fitch Ratings, and this can lag behind a rise in credit concerns about a country, this timing effect will have partly contributed to the overall rise in AAA-rated bond yields.

Around the same time the spread between German bond yields and OIS rates also fell to negative levels, suggesting that German yields were being driven down by flight-to-liquidity flows (see Chart 5). This is consistent with the increase in KfW-Bund spreads during this period, indicating a sharp increase in liquidity preference. The negative spread between German bond yields and OIS rates was particularly persistent at short to medium maturities, suggesting that flows into Bunds were concentrated at these maturities.

At the end of November 2011 AAA-OIS spreads started to narrow again as market sentiment improved, against a background of coordinated action by the ECB and other central banks to ease money market tensions, as well as unconventional liquidity measures introduced by the ECB in early December.[18] Subsequently AAA-OIS spreads declined further, although they remained just above 10 and 30 basis points at five and ten-year maturities respectively up to the end of May 2014. Short and medium-term Bund-OIS spreads returned from negative values to close to zero over the same period, while the spread at longer maturities remained positive.

4.3 IMPLICATIONS OF THE CRISIS FOR MEASURING RISK-FREE RATES

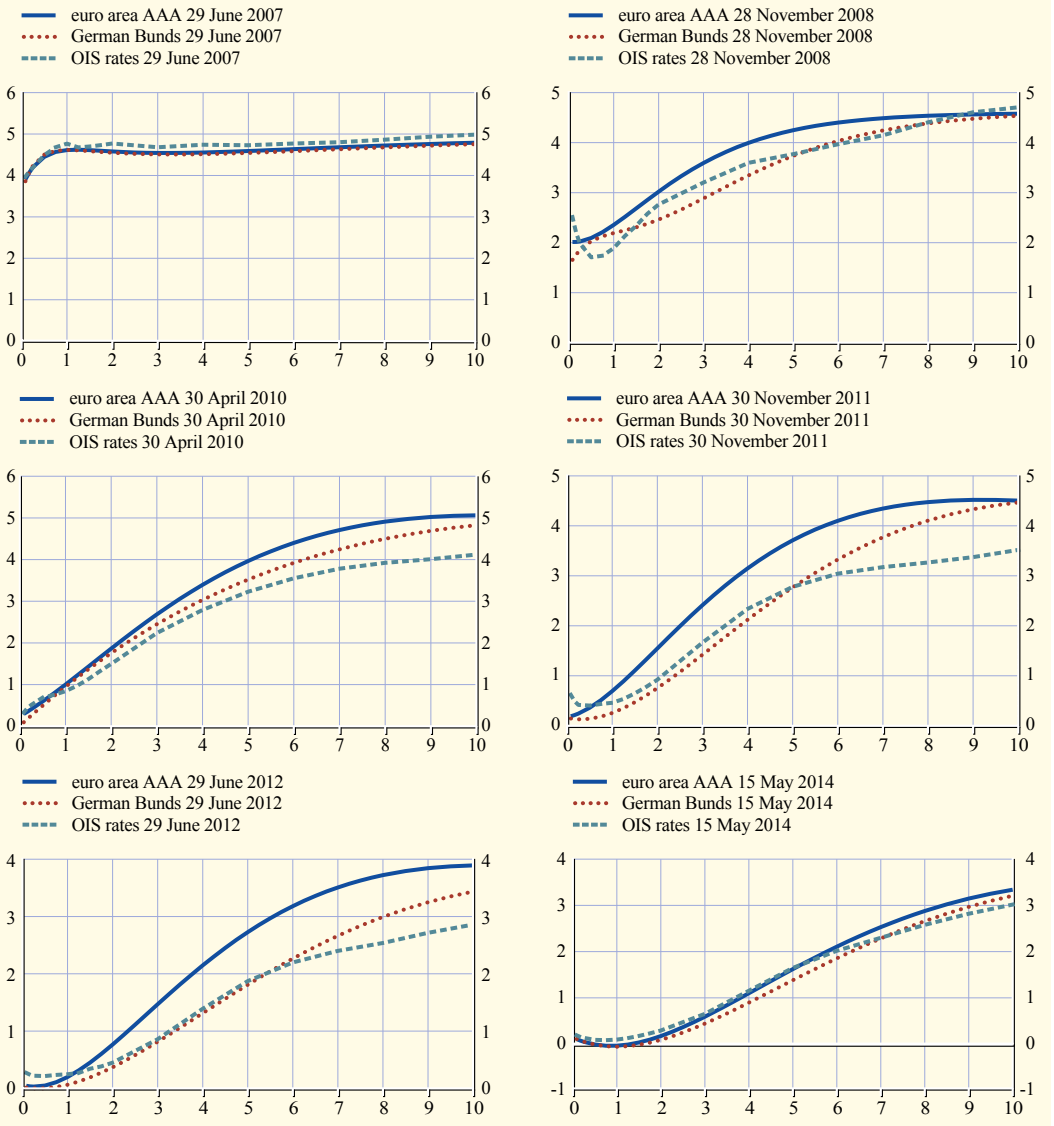
Experience during the crisis shows that there is no unique measure of the euro area risk-free rate. Rising credit risk premia, ratings downgrades and flight-to-liquidity flows have all had different

17 In Chart 7, the discontinuity in the line for Irish five-year sovereign bond yields reflects the fact that in April 2009 Ireland was downgraded by Fitch Ratings and consequently removed from the AAA yield curve.

18 In particular, the ECB announced on 8 December 2011 that it would carry out two three-year longer-term refinancing operations in December 2011 and February 2012. For more details, see Box 3, entitled "Impact of the two three-year longer-term refinancing operations", *Monthly Bulletin*, ECB, March 2012.

Chart 6 Instantaneous forward curves derived from AAA-rated bonds, German Bunds and OIS

(percentages per annum)



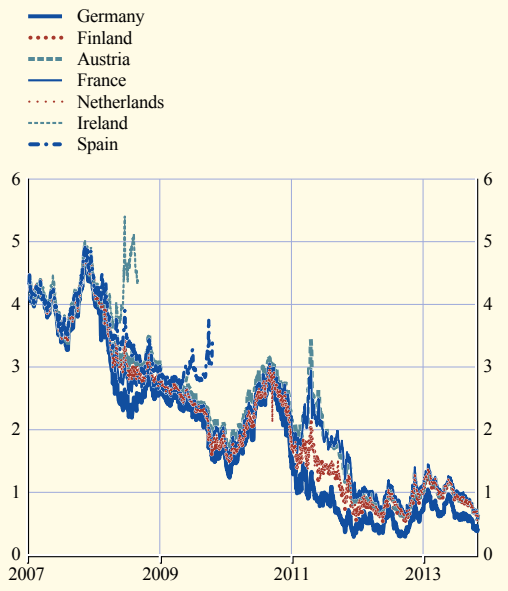
Sources: ECB, Deutsche Bundesbank and Thomson Reuters.

and sizeable effects on traditional bond-based measures of euro-area risk-free rates. Though not entirely insulated from these influences, the yield curve based on OIS contracts potentially offers a more robust measure of risk-free rates and seems to have been less affected by the aforementioned special factors during the crisis, as confirmed by the statistical analysis reported in Box 4.

As regards the specific comparison between the OIS curve and yields based on German Bunds, the empirical evidence reviewed in this article generally suggests that the difference is likely to be more pronounced during periods of financial market stress. As illustrated by the middle panel on the right-hand side of Chart 6, at the end of 2011 the forward curve based on German Bunds was significantly lower for shorter-term maturities than its counterpart based on OIS rates. Lower values

Chart 7 Five-year AAA-rated sovereign bond yields

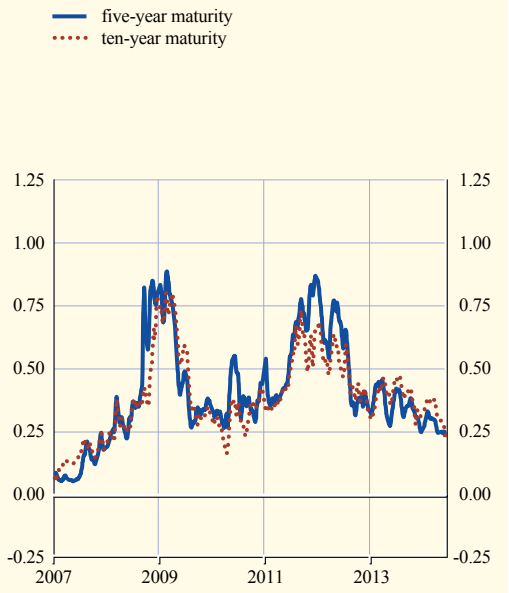
(percentages per annum)



Sources: Thomson Reuters and Deutsche Bundesbank.

Chart 8 KfW-Bund spreads at five and ten-year maturities

(percentage points)



Sources: ECB and Thomson Reuters.

for yields based on German Bunds during the period of financial stress experienced in November 2011 are consistent with the impact of flight-to-liquidity effects uncovered by the formal econometric analysis performed in Box 4. As demonstrated by the results illustrated in the chart in Box 4, flight-to-liquidity effects are likely to increase the price of securities that are considered most liquid, such as German Bunds. In contrast, since the OIS curve is less sensitive to flight-to-liquidity effects, risk-free rate measures based on OIS contracts are less likely to suffer from biases owing to liquidity or scarcity risk premia.

There are therefore good reasons to consider OIS rates as a complement to established measures of risk-free rates, while not replacing them completely. As mentioned earlier, however, the OIS market itself is quite young and liquidity is concentrated at short and medium-term maturities, which would caution against relying on it exclusively.

Box 4

THE RELEVANCE OF CREDIT AND LIQUIDITY RISK TO AAA-RATED BOND YIELDS, BUND YIELDS AND OIS RATES

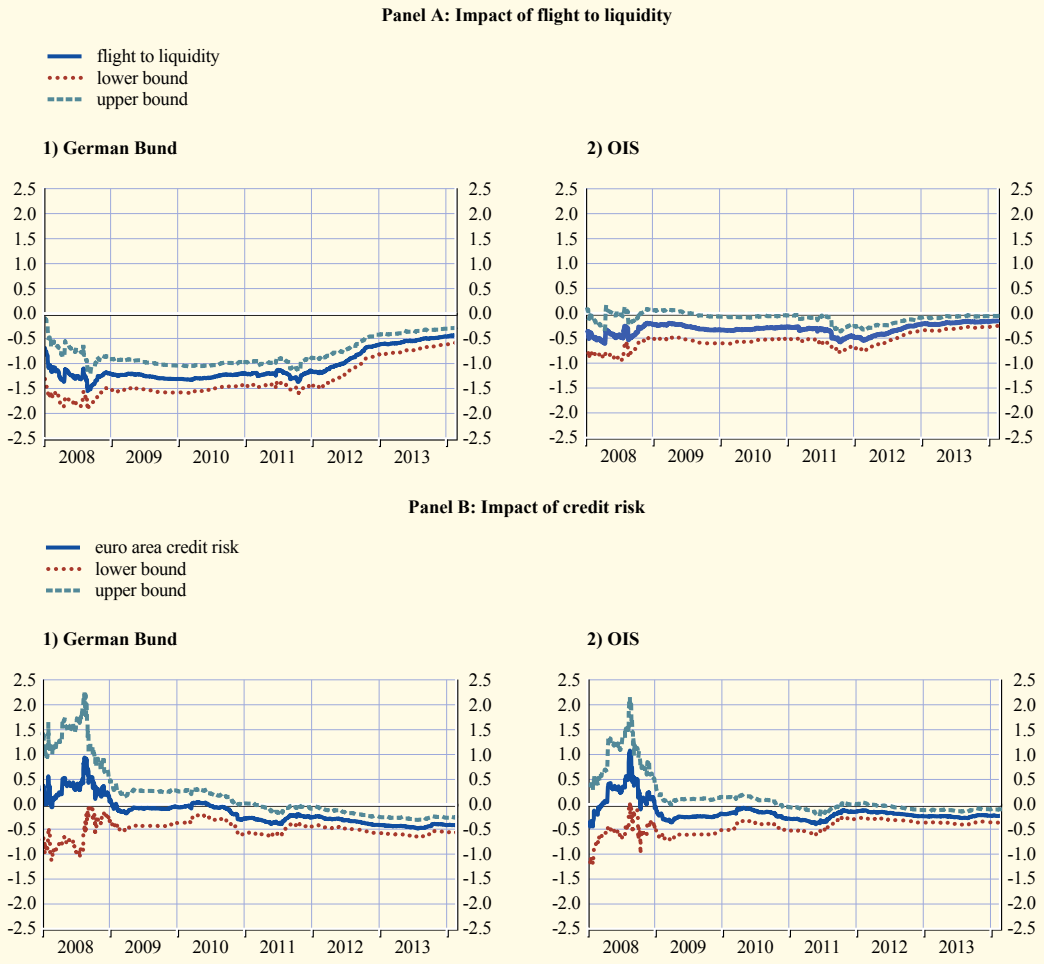
The aim of this box is to assess the role that euro area credit risk and "flight to liquidity" (meaning preference for highly liquid assets) play in developments in yields at the five-year maturity derived from the yield curves of euro area AAA-rated bonds, German Bunds and overnight index swaps (OIS) using regression methods. Euro area credit risk is measured by the

first principle component of euro area sovereign credit default swap (CDS) spreads vis-à-vis the German sovereign CDS. Flight to liquidity is measured by the KfW-Bund spread referred to in the main text.[1]

Three separate three-year rolling-window regressions were run with the same set of regressors, which, in addition to the three measures of interest, include an intercept, the one-period lagged dependent variable, the three-month OIS rate, the three-month EURIBOR-OIS spread, the German sovereign CDS, the German sovereign bid-ask spread, the EUR/USD exchange rate, the implied volatility of the EUR/USD exchange rate, a euro area inflation swap rate, a euro area corporate bond spread, the one-period lagged US stock price index, one-period lagged

Impact of euro area flight to liquidity and credit risk on the German Bund yield and OIS rate at a five-year maturity

(percentage points; February 2008-April 2014)



Source: ECB calculations.
Notes: The lower and upper bounds provide the 95% confidence interval. Time variation is obtained by using three-year rolling regressions.

1 See also R.A. De Santis, "The euro area sovereign debt crisis: identifying flight-to-liquidity and the spillover mechanism", *Journal of Empirical Finance*, Vol. 26, pp. 150-170, 2014; and A. Monfort and J.-P. Renne, "Credit and liquidity risks in euro-area sovereign yield curves", *Banque de France Working Paper Series*, No 352, 2011.

US stock market implied volatility and the one-period lagged US OIS rate. All variables are in first differences and the fixed income variables used as dependent variables all have a five-year maturity.

The results summarised in the chart (for German Bunds and OIS rates only, for reasons of conciseness) suggest that daily changes in OIS rates were generally less sensitive (than either AAA or Bund yields) to movements in flight-to-safety flows over the crisis period. Specifically, the chart plots the pass-through from euro area credit risk and the flight-to-liquidity measure to those yields, together with the respective 95% confidence intervals. During the period 2008-11, as expected, the pass-through from flight to liquidity was negative and on average amounted to about -1.2 percentage points for the German Bund yield, -1 percentage point for the euro area AAA bond yield and -0.3 percentage point for the OIS rate (see Panel A of the chart). This effect has steadily declined in 2013 and 2014 proportionally across the three asset classes. Euro area credit risk negatively affected the German Bund yield and, to a smaller extent, the OIS rate during the euro area sovereign debt crisis (see Panel B of the chart). Credit risk only had a small effect on AAA bond yields, which probably reflects the offsetting effects of credit risk on the German Bund (suggested in Panel B of the chart) and on other high-rated sovereign yields.

5 CONCLUSIONS

The onset of the global financial crisis has posed a number of challenges for measuring risk-free rates in the euro area, with different measures tending to diverge more than they previously did. The euro area yield curve based on AAA-rated government bonds, which is regularly produced by the ECB, was subject to both upward and downward pressures from developments during the crisis. For instance, flight-to-quality flows acted to depress the yields on some AAA-rated government bonds to different extents at various times, while rising credit premia acted to push yields of some AAA issuers higher than others. Moreover, credit rating downgrades have mechanically shrunk the pool of AAA government bonds, in turn making the AAA curve less representative of the euro area as a whole.

The development of the OIS market provides an alternative way of measuring euro area risk-free rates. This market has grown rapidly over recent years, with market participants increasingly using OIS rates as a benchmark, and the fact that OIS are based on the EONIA – the key overnight money market rate – makes them particularly informative from a monetary policy perspective. In this respect, a combined analysis of OIS and AAA rates may be warranted when reporting on risk-free rate developments or when gauging market expectations of future interest rates or macroeconomic variables.

SME ACCESS TO FINANCE IN THE EURO AREA: BARRIERS AND POTENTIAL POLICY REMEDIES

Small and medium-sized enterprises are, particularly in crisis periods, more likely to experience difficulties in obtaining external funding than large firms. This reflects their limited access to external financing sources other than bank loans, which results from their smaller size, less detailed financial statements and shorter track records, leading in turn to more asymmetric information problems, greater dependence on bank lending and higher financing costs. Given the importance of SMEs for the euro area economy, policies that facilitate their access to finance are gaining increasing attention from European policy-makers, including those in the Eurosystem.

1 INTRODUCTION

Small and medium-sized enterprises (SMEs) constitute about 99% of all euro area firms, employ around two-thirds of the euro area's workforce and generate around 60% of value added, and thus play a key part in the euro area economy.[1] Their contribution to economic activity varies significantly from sector to sector; in 2013 their contribution to value added ranged from 24% in energy to more than 80% in construction and real estate. Cross-country variability in the euro area is also significant, with SMEs in Germany and Ireland producing half of total value added and those in Italy, Spain and Portugal more than 65%.

In terms of financing structure, SMEs in the euro area are typically more dependent on bank lending than larger enterprises. SMEs are usually perceived both to have a higher probability of default than larger firms and to be more informationally opaque. For this reason, in particular, SMEs are more hard-pressed to find alternative sources of financing to bank lending, such as debt issuance. Additionally, SMEs are typically too small to absorb the fixed costs associated with debt issuance in the financial market. As a consequence, they are relatively more dependent on bank finance and thus more likely to be affected by banks' increased risk aversion than larger firms.

Access to finance is a major challenge for SMEs in normal times; it was much more so during the financial crisis as credit sources for small firms tended to dry up more rapidly than for large firms, thereby disrupting the business and investment activity of SMEs to a greater extent. Moreover, the sovereign debt crisis and the subsequent fragmentation of financial markets along national lines affected banks' funding conditions and their ability to provide credit to non-financial corporations, especially in those countries with a high proportion of bank-dependent SMEs.

This article describes the difficulties SMEs faced during the crisis and provides an overview of existing and possible new instruments, including at euro area level, for enhancing access to finance for this group of firms.

2 SME ACCESS TO FINANCE IN PERIODS OF CRISIS

Given the importance of SMEs for the euro area economy, it is crucial to consider whether these firms are bearing a disproportionate burden of bank balance sheet deleveraging. Consequently, this article analyses the increased heterogeneity over the last few years in bank financing conditions for SMEs across euro area Member States by drawing on data from MFI interest rate statistics (i.e. bank lending rates), the bank lending survey (BLS) and the SME access to finance survey

1 See European Commission, "A Recovery on the Horizon?" Annual Report on European SMEs 2012/2013, DG Enterprise, 2013.

(SAFE).[2] In particular, this section analyses the role of financial and non-financial firm characteristics in actual financing constraints during the recent financial crisis.

BANKS' LENDING RATES

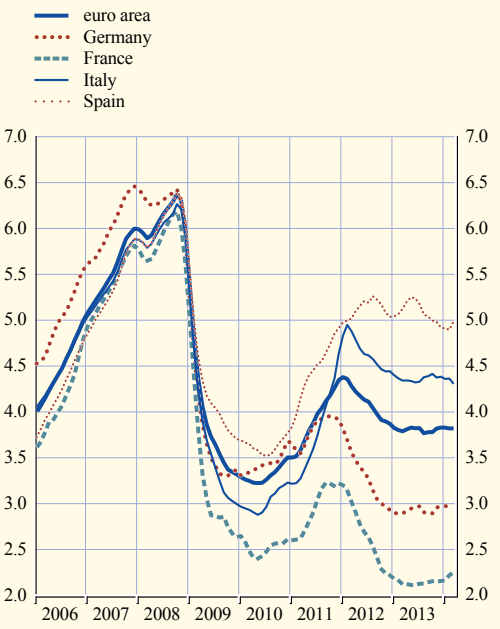
Given the importance of bank financing for SMEs, the bank financing conditions faced by euro area SMEs serve as a useful indicator for the overall degree of access to finance faced by small companies when compared both across euro area countries and with the bank financing conditions for larger firms. In this context, the bank financing conditions for SMEs may be roughly approximated by bank lending rates paid on small loans to enterprises (i.e. the category of loans up to €1 million). For instance, the development of short-term lending rates for small loans to non-financial corporations displayed somewhat increasing heterogeneity across the large euro area countries at the start of the financial crisis in 2008-2009, a pattern which intensified further in 2011 and 2012 (see Chart 1).

This development, in particular since 2011, suggests considerable differences in financing costs for smaller firms located in France and Germany, on the one hand, and in Italy and Spain, on the other. These disparities are likely to reflect differences both in the economic environment and in the associated sovereign risk and respective funding costs of domestic banks.

Further, comparing bank financing costs of SMEs with the respective costs for larger firms (proxied by the category of loans to enterprises of above €1 million) indicates that euro area SMEs were particularly affected by a widening of bank interest rate spreads early on in the crisis and especially in 2011 with the start of the sovereign debt crisis (see Chart 2). The increase in the spread of interest rates paid on small-sized loans may in part reflect the impact of the sovereign debt crisis on banks' financing costs for banks domiciled in distressed countries, with the increase in the banks' financing costs being then passed on to their SME customers in the form of higher lending rates on small-sized loans, given these borrowers' disproportionate dependency on bank financing. Another factor explaining the higher cost of borrowing for SMEs in the stressed economies was the overall deterioration in economic activity in these countries, which affected SMEs more than large companies, given the SMEs' relatively larger reliance on domestic demand. Across the large euro area countries, the development of these spreads also suggests that for firms in Italy and Spain not only was the absolute

Chart 1 Short-term lending rates on loans to non-financial corporations of up to €1 million for the euro area and large countries

(percentages per annum; three-month moving averages)



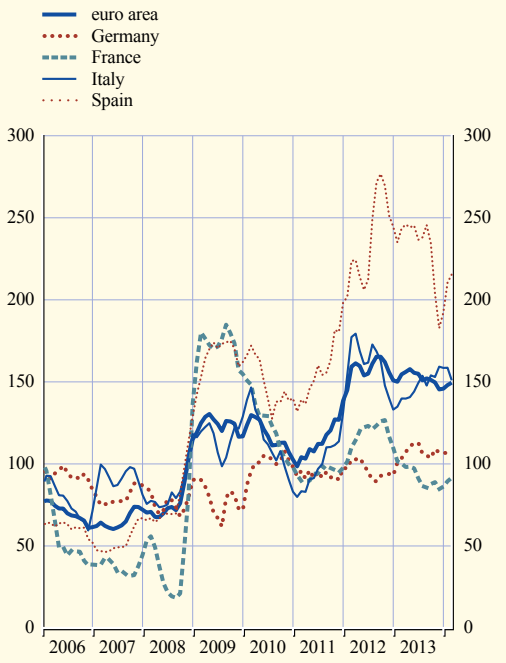
Sources: ECB and ECB calculations.
Notes: Short-term lending rates are a weighted average of loans with floating rates and with an initial rate fixation period of up to one year. Weights are based on new business volumes.

2 The MFI interest rate statistics (MIR) provide information on bank lending rates and deposit rates in the euro area for different loan and deposit categories. The Eurosystem's bank lending survey (BLS) collects information on supply and demand conditions in the euro area credit markets covering bank lending to enterprises and households in the euro area. The Survey on the access to finance of SMEs in the euro area (SAFE) covers micro, small, medium-sized and large firms and provides evidence on the financing conditions faced by SMEs compared with those of large firms.

level of lending rates substantially higher than for firms in France and Germany, but also the premia SMEs paid over and above the rates charged for larger enterprises increased substantially in 2011 and 2012. Only in the second half of 2012, following the easing in sovereign bond market tensions, did these spreads start to decline, although remaining at elevated levels throughout 2013 with only the spread for Spanish SMEs falling – temporarily quite strongly[3] – towards the end of 2013. Whether and to what extent a greater increase in the individual credit risk of smaller firms or the direct and indirect impact of the overall macroeconomic stress and sovereign debt tensions determined these increasing spreads is generally difficult to assess with the available aggregate time series. In particular, it is hard to disentangle this widening from the typically observed pro-cyclical increase of these spreads in troughs. Despite this, empirical evidence on the interest rate pass-through for overall loans to non-financial corporations suggests that for distressed countries macroeconomic risk and borrower risk as well as sovereign spreads have contributed significantly to the rise in corporate lending rates since the first quarter of 2011.[4]

Chart 2 Spread between lending rates on small and large loans to enterprises for the euro area and large countries

(basis points; three-month moving averages)



Source: ECB.
Notes: Small loans are loans of up to €1 million, while large loans are those above €1 million. Aggregation is based on new business volumes.

Concerning the impact of the financial crisis on credit supply to specific entrepreneurial borrowers, empirical evidence suggests that small, bank-dependent firms are particularly affected. More specifically, empirical analyses for the United States indicate that banks that incurred larger losses following the sub-prime crisis increased their lending rates only to bank-dependent borrowers.[5] Likewise, using loan-level data for Portugal, Iyer et al. find that the interbank liquidity shock during the period 2007-2009 translated into binding credit supply restrictions particularly for small firm customers of banks which relied more on interbank borrowing before the financial crisis.[6] This empirical evidence for the financial crisis suggests that the impact of the sovereign debt crisis on banks' funding situation and balance sheets is likely to have had a stronger effect on small, bank-dependent firms and their real activity, as indicated also by first empirical evidence for Italian data[7].

3 This temporary strong fall in the Spanish spread was driven by a temporary marked increase in lending rates for large loans while rates on small loans declined steadily at a moderate pace (see Table 1).

4 See article entitled "Assessing the retail bank interest rate pass-through in the euro area at times of financial fragmentation", *Monthly Bulletin*, ECB, August 2013, pp. 88.

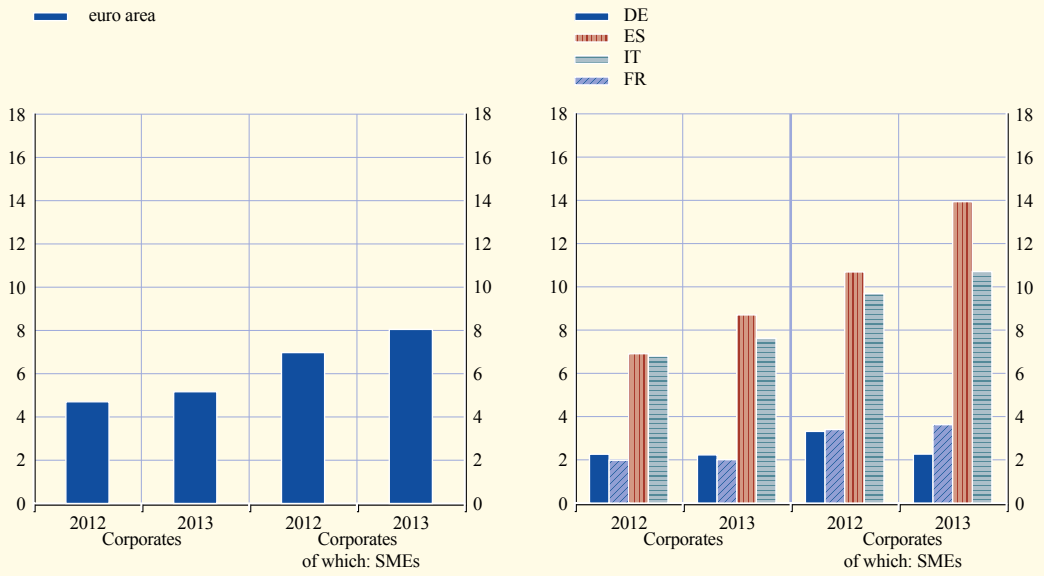
5 See Santos, J.A., "Bank Corporate Loan Pricing Following the Subprime Crisis", *Review of Financial Studies*, Vol. 24, No. 6, 2011, pp. 1916-1943.

6 See Iyer, R., Peydró, J.-L., da-Rocha-Lopes, S. and Schoar, A., "Interbank Liquidity Crunch and the Firm Credit Crunch: Evidence from the 2007-2009 Crisis", *Review of Financial Studies*, Vol. 27, No 1, 2014, pp. 347-372.

7 Balduzzi, P., Brancati, E. and Schiantarelli, F., in "Financial Markets, Banks' Cost of Funding, and Firms' Decisions: Lessons from Two Crises", Institute for the Study of Labor (IZA) discussion paper No 7872, 2013, find in a matched bank-firm dataset for Italy that rising bank CDS and falling bank equity valuations of their lenders induce younger and smaller firms to cut borrowing, investment and employment. Similar effects of the financial crisis 2008-2009 for US small and medium-sized firms were found in Chodorow-Reich, G., "The employment effects of credit market disruptions: firm-level evidence from the 2008-9 financial crisis, *Quarterly Journal of Economics*, Vol. 129, No 1, 2014, pp. 1-59.

Chart 3 Banks' value adjustments and provisions relative to gross domestic exposures to corporates and SMEs – euro area and large countries

(percentages)



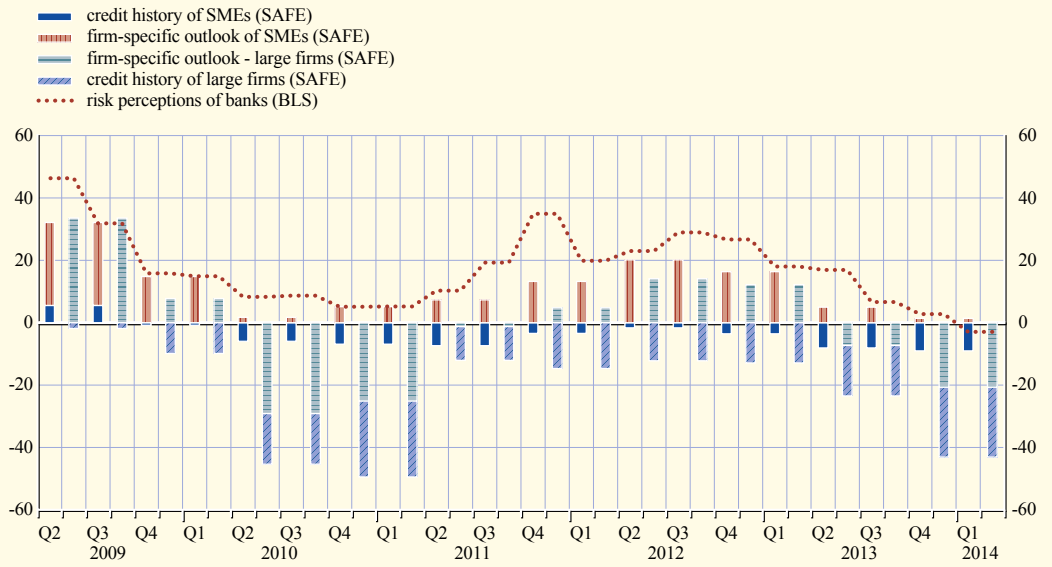
Sources: EBA 2013 transparency exercise; own calculations.
Note: Value adjustments and provisions relative to respective gross domestic exposures for euro area banks covered in the EBA 2013 EU-wide transparency exercise.

In any case, it has to be recognised that the considerable differences in lending rates across the largest euro area countries and across size categories probably reflect to a large extent the heterogeneity in the underlying riskiness of the respective loan engagements, independent of the initial firm-specific or country-specific origin of these risks. The right-hand side of Chart 3 shows the country breakdown across the larger euro area countries of value adjustments and provisions relative to domestic gross exposures to corporates as reported by euro area banks participating in the 2013 European Banking Authority (EBA) transparency exercise. The results differed substantially between German and French banks, on the one hand, and Italian and Spanish banks, on the other, both at end-2012 and in mid-2013 (latest coverage of the exercise). More specifically, value adjustments and provisions for domestic gross exposures hovered at around 2% for the overall corporate portfolio of German and French banks in the sample. By contrast, the figures on the overall corporate portfolio were at significantly higher levels for Italian, and especially Spanish, banks at around 7% and 8%, respectively, over the two periods.

Likewise, as shown in Chart 3 for the euro area level, value adjustments on domestic gross exposures were notably higher for SMEs in the banks' corporate portfolio than for the overall domestic corporate portfolio. Among the larger euro area countries, this difference was particularly pronounced for Italian and Spanish banks (see the country breakdown on the right-hand side of Chart 3), with value adjustments for SME exposures in the corporate portfolio of around 10% for Italian banks and of up to 14% for Spanish banks. This may in part be reflected in the particularly wide lending rate spread between small and large loans to enterprises for the countries displayed in Chart 2. More granular unsecured exposures to SMEs included in the retail portfolio of these banks recorded even higher value adjustments or provisions (not displayed here). Hence, these figures suggest an inherent difference in credit risk across borrower size in general, intensifying with distressed economic and sovereign environments.

Chart 4 Changes in euro area banks' risk perception relating to firms, and risk indicators by firm size

(percentages)



Sources: SAFE; Eurosystem's BLS; own calculations.
Note: Compound risk perceptions calculated as averages across the three risk factors (general economic outlook, industry and firm-specific outlook, risk on collateral demanded).

Changes in credit risk and differences across firm borrower size are likewise reflected in survey evidence. Results from the Eurosystem bank lending survey (BLS) indicate a re-emergence of risk perceptions as an underlying factor mentioned by the surveyed banks to explain their tightening of credit standards at the euro area level at the start of the sovereign debt crisis in 2011 (see Chart 4, risk perception of banks). These risk perceptions then steadily declined following the easing of sovereign bond market tensions that started in summer 2012. This is roughly in line with the temporary rise in the short-term lending rates for small loans to non-financial corporations in 2011 and the decline that followed in 2012 (as displayed in Chart 1). At the same time, evidence from the SME access to finance survey (SAFE) broadly mirrors banks' perception of firms' credit risk, although with marked differences across firm size (see Chart 4, bars on firm-specific outlook and credit history). More specifically, both the firm-specific outlook and firms' credit history were factors which had a systematically more benign impact on large firms' borrowing conditions than on those for SMEs. These differences across firm size were particularly pronounced for the firms' credit histories, suggesting more deeply-rooted structural differences in credit risk for euro area firms depending on their size class.

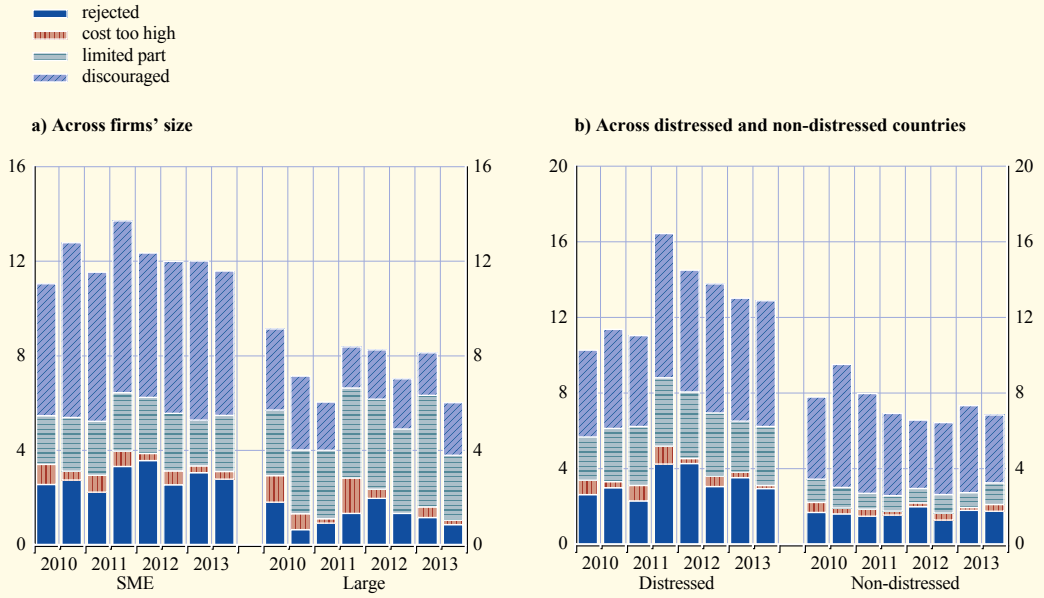
FINANCING OBSTACLES AND SMES' CHARACTERISTICS

Panel a) of Chart 5 shows a composite indicator of financing obstacles, derived from the SAFE, for SMEs and large companies in the euro area. It has been frequently used to identify firms with difficulties accessing bank credit.[8] Since the beginning of the survey, on average 12% of SMEs

8 Financing obstacles are defined as the sum of the percentages of firms which applied for a bank loan, but were rejected, or which received only a limited part of the amount for which they had applied, or which did not take up the loan because borrowing costs were too high. In addition, it includes the percentage of firms that did not apply because of fear of rejection (discouraged borrowers). The survey also contains a measure of perceived financial constraints based on the direct responses of firms on whether access to finance is among their most pressing problems. This indicator is not used in the present article.

Chart 5 Financing obstacles faced by non-financial corporations

(percentages)



Sources: ECB (SAFE) and ECB calculations.
Notes: Financing obstacles are defined as the sum of the percentages of firms that applied for a bank loan, but were rejected or received only a limited part of the amount for which they had applied or did not take up the loan because borrowing costs were too high. In addition, it includes the percentage of firms that did not apply because of fear of rejection (discouraged borrowers). Distressed countries are Ireland, Greece, Spain, Italy and Portugal. Data are not available for Cyprus or Slovenia, which also belong to this group.

have reported financing obstacles, while the percentage is around 8% for large companies. The level and the pattern of financing obstacles have been quite heterogeneous between the two groups of firms. The latest survey, which refers to the period from October 2013 to March 2014, indicates that the percentage of SMEs that did not apply for a bank loan because of a possible rejection was 6%, while it was 2% among large firms (striped blue bar in Chart 5).[9] Straightforward loan rejections were reported by 3% of SMEs, compared with 1% of large firms (blue bar in Chart 5). At the same time, a considerable percentage of firms did not apply for a loan because of sufficient internal funds (47% of SMEs and 48% of large firms) or for other reasons (22% of SMEs and 12% of large firms). In respect of distressed and non-distressed countries (in Chart 5, panel b)), SMEs in the former group were evidently suffering proportionally more than SMEs in non-distressed ones.[10]

As for the factors affecting the availability of external financing, survey data distinguish between factors related to the characteristics of the firms, such as credit history, their own capital, and firm outlook in terms of sales, profitability and business plans, and external factors, such as the general economic activity as perceived by firms and the importance of the access to public support, including guarantees. More firms in distressed countries have reported that the deterioration of these factors has an impact on the availability of external financing (see Chart 6). More than 50% of the respondents in distressed countries have argued that the general economic outlook is an important factor, followed

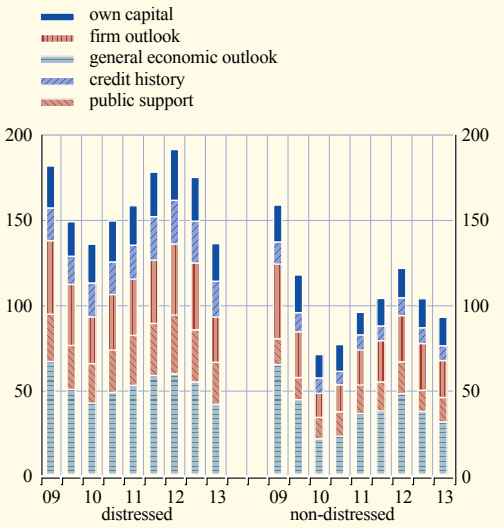
9 For an analysis of the characteristics of discouraged borrowers and their importance for the monetary policy transmission see Popov, A., "Monetary policy, bank capital and credit supply: a role for discouraged and informally rejected firms", ECB Working Paper 1593, 2013.
10 See, for a more detailed analysis, the special feature "Divergence in financing conditions of small and medium-sized enterprises (SMEs) in the euro area" of the publication "Financial integration in Europe", ECB, April 2014.

by their firm outlook (36%). For firms in non-distressed countries, the percentages are lower, at 37% and 24%, respectively. Credit histories play a more important role for firms in distressed countries (22%) than in non-distressed ones (10%), reflecting differences in underlying credit risk. The development of these factors over time closely follows the different phases of the sovereign debt crisis.

In particular, firms reported a lessening of these factors in the survey relating to the period from October 2013 to March 2014, after the peak of the crisis observed in the summer of 2012 and the subsequent easing of the sovereign bond market tensions. Differences remain between the two groups of countries, reflecting continued divergence in economic and firm-specific outlook across countries and ongoing market fragmentation.

Chart 6 Factors which, when deteriorating, affect the availability of external financing among distressed and non-distressed euro area countries

(percentages of all respondents; weighted averages)

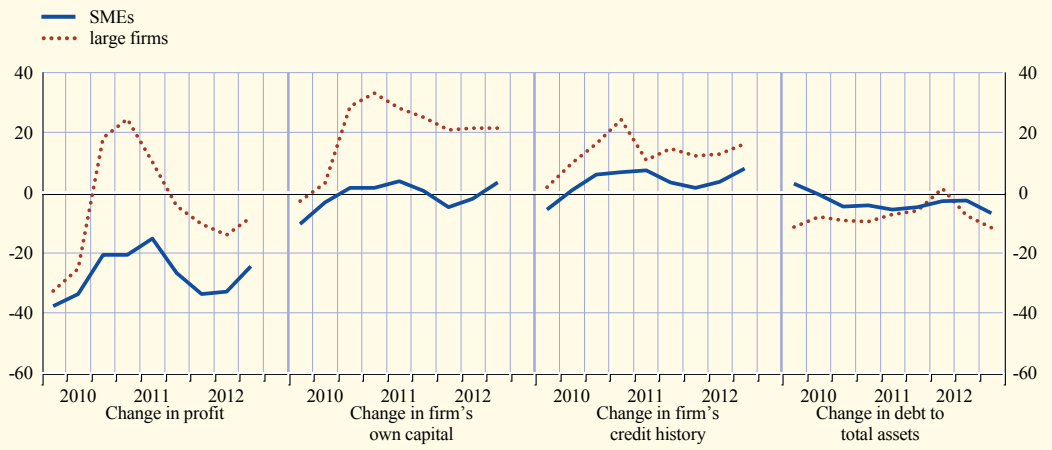


Sources: ECB (SAFE) and ECB calculations.
Notes: Distressed countries are Ireland, Greece, Spain, Italy and Portugal. Data are not available for Cyprus or Slovenia, which also belong to this group.

Although receding, the impact of the recent financial tensions and of the sovereign debt crisis compounded by the recession has strongly increased credit risk, which is a powerful obstacle to the supply of loans. This has been particularly the case for SMEs, whose creditworthiness and financial health have deteriorated more sharply than those of large firms. Indeed, according to survey information, SMEs' profits, liquidity buffers and own capital developed less favourably than those of large firms during the crisis, exacerbating the financial fragility of this group of firms (see Chart 7).

Chart 7 Financial health of euro area SMEs compared with large firms

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



Sources: ECB (SAFE) and ECB calculations.

As broadly documented in the theoretical and empirical analysis of financial constraints, there is a relationship between the financial obstacles encountered by firms and their financial positions, in particular their financial fragility.[11] Results frequently show that highly leveraged firms, firms with low profits and firms with low amounts of collateral at their disposal find it more difficult to access external finance. Size and ownership also matters in this respect.[12] Box 1 describes an empirical investigation based on a sample of euro area SMEs which confirms these results and highlights the differences across selected euro area countries.

11 For a review of the literature, see Silva, F. and Carreira, C., "Measuring firms' financial constraints: a rough guide", Estudos do GEMF No. 14, 2012.

12 Previous studies show that private companies (Brav, O., "Access to Capital, Capital Structure, and the Funding of the Firm", Journal of Finance 64, 2009, pp. 263–307), small-sized (Berger, A. N. and Udell, G. F., "Small Business and Debt Finance", in *Handbook of Entrepreneurship Research*, Kluwer Academic Publishers, UK, 2003, pp. 299–328) and young enterprises (e.g. Rauh, J.D., "Investment and Financing Constraints: Evidence from the Funding of Corporate Pension Plans", Journal of Finance 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 22, 2009, pp. 2362–2392) face different and often more severe constraints than do large firms.

Box 1

IMPACT OF SMEs' FINANCIAL POSITION ON THEIR FINANCING OBSTACLES

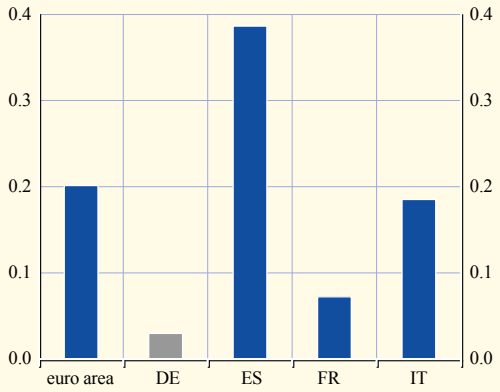
By exploiting a subset of SMEs in the SAFE survey, for which financial information is available, the financial obstacle indicator presented in the chart is regressed on a set of financial characteristics (profitability, liquidity, leverage and interest payment burden) and non-financial characteristics (age, size), which are commonly used in the literature to assess whether firms are financially constrained. Additional variables are included to control for the ownership of the firm, the year, and the country and sector in which the firm is located. The chart displays the marginal effects of the different variables, showing their impact for the whole euro area sample and also for selected countries. The chart confirms that firms with higher leverage and low profits are more likely to face financing obstacles, as are firms with less liquidity and collateral at their disposal. Firms with higher interest payment burdens also encounter more financing constraints. The magnitude of the marginal effects is different across countries, signalling that the financial positions of firms are much more important for discriminating against financially constrained firms in Spain and Italy than in Germany and France.[1]

1 The first variable leverage is the ratio of financial debt to total assets; interest payment burden is defined as the ratio of interest payments to earnings before interest, taxes, depreciation and amortisation plus financial revenues to total assets. Profit margin is the ratio of profit/loss for the period to sales; cash holdings are defined as the ratio of cash and cash equivalents to total assets; tangibility is the ratio of tangible fixed assets to total assets. The model controls also for size (with the logarithm of total assets), age, sector and country dummies when regressed on the euro area. It also includes dummies on ownership (whether a firm is owned by a family or an entrepreneur). All variables based on financial accounts are lagged to reduce endogeneity problems. For a similar analysis based on the SAFE survey, see Ferrando, A. and Mulier, K., "Firms' financing constraints: do perceptions match the actual situation?", ECB Working Paper No 1577, 2013, August.

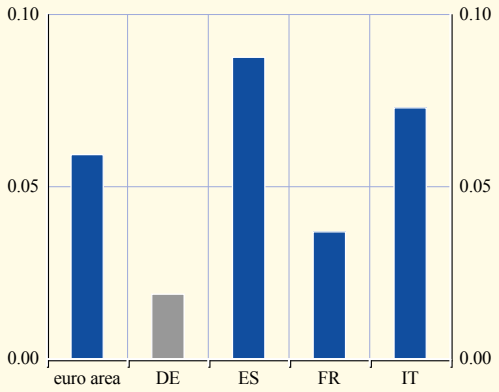
Financing obstacles of SMEs and firms' determinants

(statistically significant coefficients in blue; non-significant coefficients in grey)

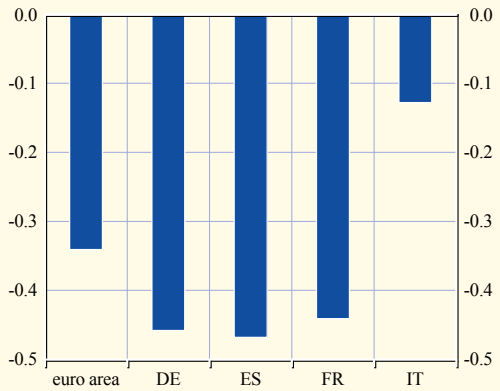
a) Leverage (marginal effects)



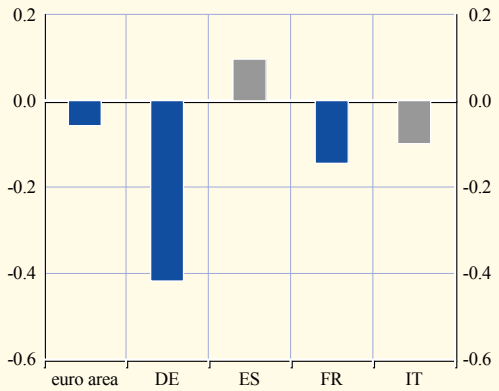
b) Interest payment burden (marginal effects)



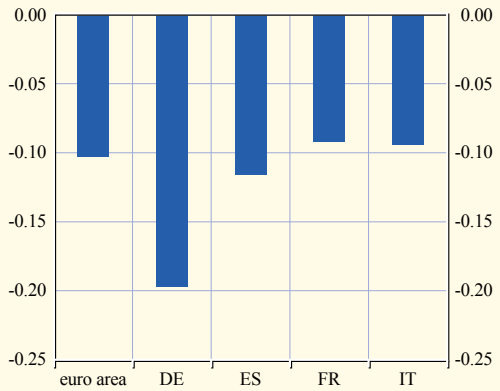
c) Cash holding (marginal effects)



d) Profit margin (marginal effects)



e) Tangibility (marginal effects)



Sources: ECB (SAFE) and AMADEUS Bureau van Dijk; ECB calculations.
Notes: The analysis of the firms' determinants of financing obstacles are based on a probit model where the dependent variable is the financing obstacles faced by firms that applied for a bank loan in the SAFE sample. The variable is a dummy that takes value 1 if a firm has applied for a bank loan, but its application was rejected, or it has received only a limited part of the amount for which it had applied, or the firm did not take up the loan because borrowing costs were too high. In addition, it also includes cases when firms did not apply because of fear of rejection (discouraged borrowers). The probit analysis is run for a subset of firms in 11 euro area countries (Belgium, Germany, Ireland, Greece, Spain, France, Italy, Netherlands, Austria, Portugal and Finland) for which financial information is available in the period 2010-2013 (waves 3-8 of the survey). The number of observations for the whole sample is 14,000.

3 ALTERNATIVE SME FINANCING AND EUROSYSTEM INITIATIVES

The euro area SME sector indeed varies across jurisdictions and industry sectors, and in terms of size, profitability and growth prospects. Given this inherent heterogeneity, several funding instruments and options should be considered to meet the needs of the different SMEs and lenders or investors. This would also imply that any policies to incentivise increased access to finance by SMEs could include both concerted actions by Member States in the EU but also national (and regional) initiatives, focusing on both the bank channel, which will remain important for SME funding, and the non-bank channel. Generally speaking, depending on the stage of development of a given SME, the best strategies to support SME financing may vary across jurisdictions.

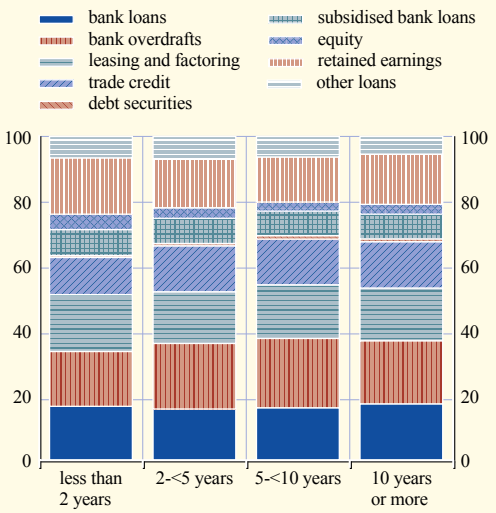
Typically, SMEs are perceived as particularly risky at their earliest stages of development, when they are often unable to generate cash flows which would allow the servicing of debt. At these early stages, SMEs' capital is raised either from the owner's assets or from relatives and friends. When available, SMEs also turn to equity investors, such as business angels and venture capital firms, to obtain financing. At later stages of development, companies can provide track records and collateral. Hence, the risks for investors decline and financial intermediaries are the most common interlocutors, but companies may also be in a position to go public.

Indeed, according to the available information from SAFE, the various financial instruments are used differently depending on the age and size of the firm (as firms become more mature and large, their access to external sources of finance increases). In the first stages of SMEs' development, recourse to bank loans and bank overdrafts are more common as firms are able to build bank relationships that allow a reduction of the informational asymmetries which are typically related to short track records.[13] However, as firms become larger they have access to a broader variety of instruments and the overall contribution of bank lending becomes slightly less important (see Charts 8 and 9). Moreover, subsidised bank loans and other loans from related companies or from individuals (e.g. family and friends) play an important role for young and small firms, while retained earnings and trade credit are used more often as firms mature.

Differences in the use of the various financing instruments are also present across countries (see Chart 10). For instance, bank credit is on average used more by French SMEs, while Italian and Spanish firms more often consider

Chart 8 Use of financing instruments by euro area SMEs by age

(contributions in percentages; average 2009-2013)

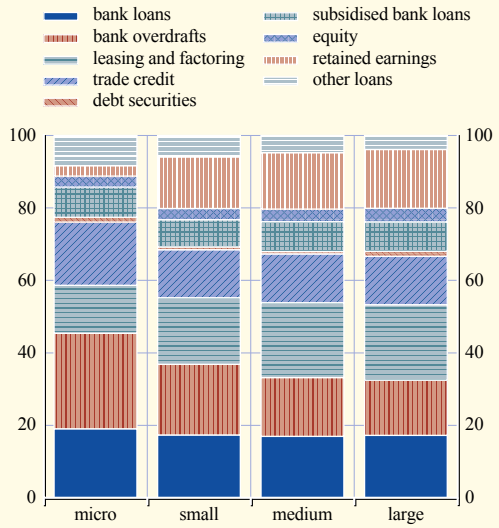


Sources: ECB (SAFE) and ECB calculations.
Note: The bars show the sum of the percentages of SMEs that reported having used a specific instrument between 2009 and 2013.

13 See also Chavis et al., "The Impact of the Business Environment on Young Firm Financing", Policy Research Working Paper series, the World Bank, 2010.

Chart 9 Use of financing instruments by euro area non-financial corporations by size

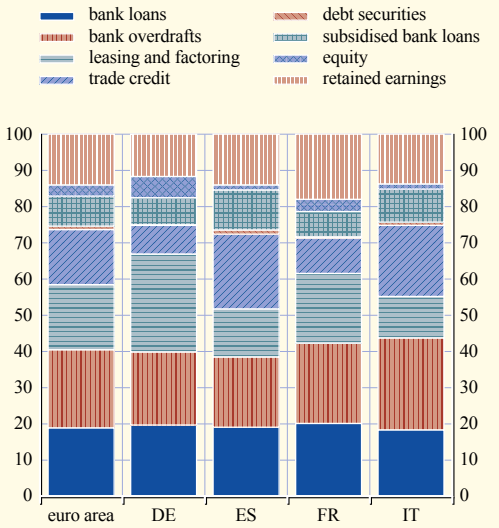
(contributions in percentages; average 2009-2013)



Sources: ECB (SAFE) and ECB calculations.
Note: The bars show the sum of the percentages of non-financial corporations that reported having used a specific instrument between 2009 and 2013.

Chart 10 Use of financing instruments by SMEs in selected euro area countries

(contributions in percentages; average 2009-2013)



Sources: ECB (SAFE) and ECB calculations.
Note: The bars show the sum of the percentages of SMEs that reported having used a specific instrument between 2009 and 2013.

trade credit and subsidised bank loans.[14] Leasing, by contrast, is much more developed as a financial instrument among German SMEs.

In particular, according to a European Commission survey[15], in 2011 at least 50% of German SMEs used leasing, hire-purchase or factoring, and around 40% in France, while the fraction was relatively smaller (around 25%) in Spain and Italy. When firms were asked about the reasons for leasing an asset, price considerations (price of leasing relative to other financing forms) seemed to be the most important factor.[16]

Interestingly, the reasons for leasing assets vary according to size classes. For example, medium-sized enterprises seem to lease owing to price considerations, better cash flow management and the absence of the need to provide collateral. In contrast, micro-enterprises consider tax benefits alongside price considerations as the main reasons for leasing.

The ability of SMEs to revert to alternative external sources of finance is even more limited once they are constrained in their access to bank loans. However, empirical evidence (see Box 2) indicates that financially constrained firms between 2009 and 2013 were trying to replace bank loans with other types of loan obtained from individuals (e.g. family and friends) as well as from related companies and shareholders. They also tended to use trade credit, while market-based instruments

14 Credit guarantee schemes are used widely across economies as an important tool to ease the financial constraints of SMEs and start-ups. For a review of additional measures to support SME financing introduced by several euro area governments during the crisis, see "Divergence in financing conditions of small and medium-sized enterprises (SMEs) in the euro area", special feature of the ECB report entitled "Financial integration in Europe", 2014.

15 European Commission, "SMEs' Access to Finance Survey 2011", 2011.

16 Oxford Economics, "The Use of Leasing Amongst European SMEs", a report prepared for Leaseurope, November 2011, and Kraemer-Eis, H. and Lang, F., "The importance of leasing for SME financing", EIF WP 15, 2012.

or even grants or subsidised loans appeared to be a less common instrument. The analysis in the box does not explicitly consider crowdfunding (although the category "family and friends" could partly include it), which is becoming a new type of market-based finance that could help to stimulate the economic recovery by channelling capital to SMEs. In general, crowdfunding is a term describing the use of small amounts of money, obtained from a large number of individuals or organisations, to fund a project, a business or personal loan, or other needs. This money can be channelled through different vehicles, for example through an online web-based platform. Although the market is growing fast, crowdfunding is still on a small scale. According to a recent study by IOSCO, it accounts for approximately USD 6.4 billion globally.[17]

The differences in the access to and use of various financial instruments imply that different policies implemented by various policy-makers with different merits would need to work, ideally in a coordinated manner. Thus, potential instruments and options should ideally include various aspects such as enhancing the role of leasing, factoring, private equity and mini-bonds as well as expanded stock markets for smaller firms, which could serve as a complement to traditional bank lending in order to broaden SMEs' access to funding. Several initiatives in these fields are under way, as Section 4 indicates below.

17 See "Crowd-Funding: An Infant Industry Growing Fast", IOSCO, February 2014.

Box 2

USE OF ALTERNATIVE SOURCES OF FINANCE BY SMES DURING THE FINANCIAL CRISIS

Following the work by Casey and O'Toole [1], the use of four specific sources of external finance – trade credit, other loans (informal or from a related company), market financing (which includes debt securities issuance, equity provided by the owners or by external investors and subordinated loans) as well as grants and subsidised loans – is regressed on the financing "obstacles" indicator and on a set of control variables. The dependent variables are defined as categorical ones that take value 1 if the firm has used a specific source of finance in the preceding six months; 0 otherwise. The regressors control for size, age, sector and variables, summarising the firm's operating conditions, the overall macroeconomic climate and the frictions in the financial markets.

The table reports the marginal effects of the different firm characteristics on the use of alternative sources of finance. Starting from the first column, it can be seen that financially constrained firms are 7% more likely to use trade credit and 20% more likely to use funds from friends, family or from related companies. There is no indication that financially constrained firms are replacing loans with market-based instruments, grants or subsidised loans. The latter result is somewhat surprising given the fact that credit guarantee schemes were the most common measure implemented by governments during the financial crisis. The main purpose of these measures was to induce banks to reopen their lending facilities, thereby reducing the additional risks that they needed to take on their balance sheets when granting new loans. The empirical result might be related to the fact that financial intermediaries are directly involved in the choice

1 See Casey, E. and O'Toole, C., *Bank-lending constraints and alternative financing during the financial crisis: Evidence from European SMEs*, ESRI Working Paper 450, 2013. The authors find that credit-constrained firms are more likely to use trade credit facilities, informal loans, other company loans and grants or subsidised loans.

of eligible firms; hence, firms that were already denied bank loans could find it difficult to apply for the schemes. Furthermore, financially constrained firms in distressed countries found it more difficult to access alternative sources of finance, as demonstrated by the negative but statistically significant coefficient on the interaction term.[2]

Effects of financing constraints on the use of alternative sources of finance

(marginal effects; percentages)

	Trade credit	Stat. sign.	Other loans (informal or other company)	Stat. sign.	Market financing	Stat. sign.	Grants - subsidised loans	Stat. sign.
Financing obstacles $_{t-1}$	7	***	20	**	6		5	
Financing obstacles $_{t-1}$ X distressed countries	-6	*	-12	**	-8		-4	
small	6	***	3	***	-2		8	***
medium	6	***	8	**	-1		14	***
Age > 10 years	2		1	***	1		-3	*
Family-owned	4	**	-10	**	1		3	
Manufacturing and mining	10	***	3	***	5	**	-1	
Construction and real estate	9	***	0	***	2		4	*
Wholesale and retail trade	6	***	0		-2		0	
General economic outlook	3	*	4	***	8	***	10	***
Profit growth	6	***	2		-1		1	
Distressed countries	32	***	17	***	11	***	11	***

Sources: SAFE and ECB calculations.
Notes: The estimation is based on a panel probit model with random effects with cluster robust standard errors. It is run for eleven euro area countries (Belgium, Germany, Ireland, Greece, Spain, France, Italy, Netherlands, Austria, Portugal and Finland) between 2009 and 2013. Distressed countries are: Ireland, Greece, Spain, Italy and Portugal. The dependent variable is a categorical one that takes value 1 if the firm has used a specific source of finance in the preceding six months. Additional regressors not reported in the table are: GDP growth and ten-year government bond yields. Stars indicate statistically significant at * p<0.10, ** p<0.05 and *** p<0.01.

2 In a recent speech, B. Cœuré (2013) pointed out that it has proved difficult for some government support measures aimed at alleviating SMEs' access to finance to reach the policy targets.

EUROSYSTEM TOOLS AND INITIATIVES

The Eurosystem has at its disposal various tools that are currently helping to restore the normal functioning of the monetary policy transmission mechanism, thereby facilitating the financing of SMEs as well. Given the bank-based nature of the euro area financial system, the main channel through which the ECB's monetary policy impulse reaches the real economy is through bank lending rates. Through its monetary policy implementation, the Eurosystem controls very short-term interest rates. Changes in these interest rates are then transmitted to other interest rates and are thus an important driver of the cost of bank funding in the euro area. In normal times, the Eurosystem implements monetary policy through liquidity-providing operations with maturities of one week and three months. It also undertook longer-term operations during the crisis, including the two longer-term refinancing operations that were conducted in December 2011 and February 2012. These operations helped to facilitate financing of SMEs by providing longer-term funding for banks, because their maturity better matched the maturity of the banks' loans.

In addition, the Eurosystem's collateral framework allows a broad range of assets to be used as collateral in Eurosystem liquidity operations. Collateral availability helps to determine counterparties' ability to obtain central bank funding. At the same time, risk mitigation measures are also necessary to protect the Eurosystem's balance sheet at all points of the economic cycle.

Loans to SMEs can constitute eligible Eurosystem collateral in several ways. First, individual credit claims are eligible collateral, provided they fulfil certain criteria. Credit claims are currently one of the largest asset classes pledged as collateral in Eurosystem liquidity operations, representing about €316 billion after haircuts (at the end of May 2014). The total amount has fluctuated over time; its current level is about 25% below its peak in the second quarter of 2012, but about 25% above the end-2008 level. A subset of this total amount is loans to non-financial corporations (NFCs), including SMEs, coming to about €56 billion. The remaining parts relate to loans to public sector entities and others. These are spread across more than 160,000 individual loans, ranging from very small amounts to over €2 billion, where loans to SMEs are most likely to be those of a smaller size. Loans of less than €1 million constitute around 70% of all credit claims on NFCs accepted as collateral.

Second, an SME loan can also be used in the pool of an SME asset-backed security (ABS), which is also an eligible asset class. Eligible SME ABSs correspond to EUR 57.8 billion in nominal values (as at end-May 2014). Recently, SME loans have also been used in a structured covered bond that is also eligible for Eurosystem collateral purposes and in public sector covered bonds, the cover pools of which consist of government-guaranteed loans to SMEs, which are also eligible for Eurosystem collateral purposes. Third, non-financial corporate bonds are also accepted as collateral, although these bonds are most likely to be issued by medium-sized companies, in addition to large companies, rather than by smaller firms. Finally, since February 2012 the (temporary) additional credit claims (ACC) framework has been in place, whereby other performing credit claims, including other NFC and SME loans, can be pledged with participating national central banks.[18] At end of May 2014, this amounted to approximately €62 billion. The total amount is composed of NFC loans (about 29%), loans to the public sector and loans to private households. The median size of each ACC is around €127,000.

In addition, the Eurosystem lowered its minimum rating requirements in December 2011 and again in June 2012 for some ABSs, including those backed by SME loans. And on 18 July 2013, amid the significant improvements in transparency achieved by the ABS loan-level data initiative (see Box 3 for SME ABSs), the Governing Council decided to introduce measures to reduce ABS minimum rating requirements and haircuts.[19] Specifically, the credit rating requirement at issuance for the ABSs subject to loan-level reporting requirements was lowered to at least two "single-A" (A-) ratings, down from two "triple-A" (AAA-) ratings. In addition, haircuts were lowered by 6 percentage points to 10% for ABSs with at least two single-A ratings (i.e. those eligible under the permanent framework), and by 4 percentage points, to 22%, for ABSs with at least two triple-B ratings (i.e. those eligible under the temporary framework). These decisions allow euro area banks to borrow larger volumes using the same quantity of collateral and consequently encourage banks to extend more credit to SMEs.

Finally, in order to enhance the functioning of the monetary policy transmission mechanism by supporting lending to the real economy, the Governing Council of the ECB decided on 5 June 2014 to conduct a series of targeted longer-term refinancing operations (TLTROs) aimed at improving bank lending to the euro area non-financial private sector over a period of two years, and to intensify preparatory work related to outright purchases of simple and transparent ABSs with underlying assets consisting of claims against the euro area non-financial private sector.

18 Unlike credit claims in the permanent collateral framework, the ACC framework is a non-risk sharing regime which also allows performing loans to be accepted that do not meet the eligibility criteria set forth in the Single List (e.g. a slightly higher probability of default on the underlying assets).

19 Such changes introduced de facto into the permanent collateral framework securities that had been made eligible by the temporary framework introduced in December 2011. However, ABSs with at least two triple-B ratings remain acceptable only in the temporary framework. Moreover, to be eligible collateral, ABSs still need to be rated by at least two different credit agencies.

Box 3

INSIGHTS FROM THE SME ABS LOAN-LEVEL DATA

The Eurosystem's ABS loan-level data initiative, which was announced at the end of 2010, is a key measure to improve, for the Eurosystem and market participants, the transparency and timeliness of ABS collateral. Loan-level requirements must be satisfied by any ABS transaction for it to be an eligible Eurosystem collateral instrument. Given the large use of ABSs as collateral to obtain liquidity from the Eurosystem, originators have a powerful incentive to respect these requirements.

Eurosystem SME ABS loan-level data

(as at May 2014)

Country	Eligible amount (EUR billions)	Number of tranches	Number of loans (millions)
Belgium	14.0	4	0.23
France	3.9	7	0.21
Germany	0.9	2	0.03
Italy	14.7	31	0.24
Netherlands	10.8	2	0.02
Portugal	2.3	3	0.04
Spain	11.1	65	0.33
Total	57.7	114.0	1.10

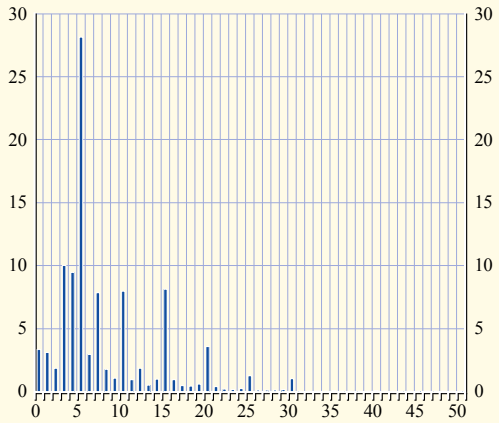
Source: Eurosystem loan-level data.
Note: Refers to countries where the assets are originated.

Eurosystem loan-level reporting requirements began on 3 January 2013 for SME ABSs, and are set out in templates posted on the ECB's website. Data must be provided on a quarterly basis and are stored in a data repository, the European Data Warehouse, where it is available to investors for a small subscription fee.

As a result of these requirements, the Eurosystem now holds standardised tranche and loan-level data for 114 senior SME ABS tranches[1], worth about €57.7 billion as of May 2014, and including about 1.1 million loans (see the Table above for a country breakdown). The submissions contain both mandatory loan-level fields (such as repayment frequency,

Chart A Maturity (years) breakdown of SME ABS loan-level data

x-axis: SME loan legal maturity (years)
y-axis: percent of population

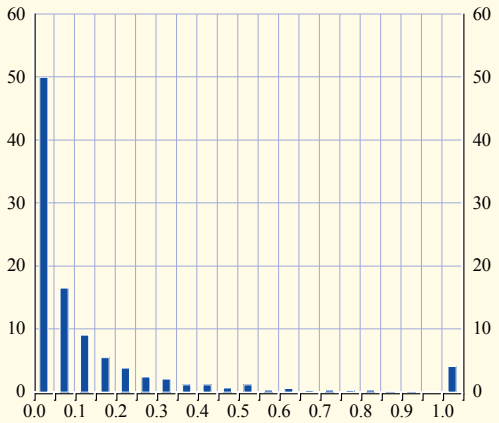


Source: Eurosystem loan-level data.

Chart B Size breakdown of SME ABS loan-level data, by original loan balance

(EUR millions)

x-axis: original loan balance
y-axis: percent of population



Source: Eurosystem loan-level data.

1 Only senior ABS tranches are eligible Eurosystem collateral within an ABS transaction.

current interest rate, original loan balance, and borrower Basel III classification), and optional fields (such as next payment date, loan purpose, and equivalent S&P/Moody's/Fitch/internal bank ratings).

Although the database is relatively new and still developing, it offers an interesting dataset for investigating the features of SME loans in ABSs. For example, Chart A above illustrates the maturity breakdown of SME loans in ABSs. The vast majority of the one million loans appear to be below ten years' maturity, and about one-half below five years' maturity. This picture appears relatively consistent across countries, although Dutch SME loans tend to be extended for relatively longer maturities. At the same time, Chart B suggests that most of the loans are relatively small: out of a total of 1,118,359 loans, 548,728 have an original balance below €50,000, of which 337,518 have an original balance below €25,000.

All in all, the share of SME-related collateral in the total collateral stock of the Eurosystem is significant.

At the same time, the Eurosystem has further tools at its disposal. Thanks to its role in financial markets, the Eurosystem can help to coordinate the actions of counterparties and to provide solutions to market failures, i.e. the Eurosystem can act as a catalyst. The various actions taken by the Eurosystem in this function have concerned, among others, securitisation, covered bonds and the money market.

In addition, by setting explicit transparency requirements for EU ABSs in its ABS loan-level data initiative, the Eurosystem has been able to contribute to improving market participants' confidence in the credit quality of these assets. As a result of the network effect generated by introducing transparency as a collateral eligibility requirement, market participants now expect most traditional ABS instruments (such as residential mortgage-backed securities (RMBSs) and SME ABSs) issued in the euro area to provide loan-level data. This virtuous circle is helping to remove the stigma of US sub-prime RMBSs that has been attached to many well-performing EU ABSs, including SME ABSs.

4 RECENT POLICY INITIATIVES TO PROMOTE SME FINANCING IN THE EURO AREA

Due to the detrimental impact of the financial and real economy crises on SMEs, several policy initiatives have been put in place to promote SME financing in the euro area. The need for such initiatives was first highlighted in the Green Paper by the European Commission entitled "Long-Term Financing of the European Economy" in March 2013, and then followed up by the communication from the Commission to the European Parliament and the Council on 27 March 2014.[20] In this communication, the Commission presented its road map for long-term financing of the economy and highlighted a number of proposed action points in a wide range of areas. Some action points were dedicated to improving SMEs' access to finance, while others might positively influence their funding situation in an indirect way. In particular, the Commission aims to conduct a mapping of the EU and national legislation and practices affecting the availability of SME credit information, with a view to considering possible EU-wide approaches to the credit

20 See http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0150:FIN:EN:PDF and "COM(2014) 168 final", 27 March 2014.

scoring industry and assessing the feasibility of increasing the comparability of SME data across the EU. The lack of adequate, comparable, reliable and readily available credit information on SMEs was also brought to the fore by a High Level Expert Group (HLEG) report[21], which contains various short-term and medium-term recommendations for both public authorities and market participants, touching on financial regulation, market infrastructure, information transparency, taxation, bankruptcy frameworks and the rules constraining cross-border investments.

The Commission in its communication in March 2014 also proposed to revive the dialogue between banks and SMEs, particularly with regard to feedback provided by banks on loan applications and the assessment of best practices for helping SMEs to access capital markets.

The European Commission also highlights crowdfunding (as discussed above) as a potential measure to improve SME access to finance. In this respect, it proposes to carry out a study to explore market developments and the potential of crowdfunding to finance research and innovation and to assess the possibilities of using public funds to support projects through this type of funding.

CAPITAL MARKET SOLUTIONS

The communication on long-term financing by the European Commission in March 2014 also strongly supports the development of capital market options for SME financing. One such option includes developing a high-quality segment in the securitisation market and potentially provides preferential regulatory treatment compatible with prudential principles. The securitisation of SME loans could gain from this potential development and therefore function as a complement and alternative to traditional bank financing, supplemented by a range of recommendations to facilitate such a development both in the regulatory sphere and through risk-sharing policy initiatives. Although it is the second-largest ABS market (after RMBSs), the EU SME ABS sector remains small compared with overall securitisation activity, constituting around 8% of the total outstanding. This corresponds to about €130 billion outstanding[22], most of which since 2008 has been retained on originators' balance sheets for use in borrowing from central banks.[23]

Another approach to unblocking SME credit could be to draw on the public sector's role in resolving market failures that go beyond information asymmetries. In such cases, as regards SME lending, banks are unwilling to roll over lending (or only at higher interest rates) to firms, which increases their inability to meet current payments or at the very least curtails their growth prospects, which in turn holds back the macroeconomic recovery and further increases banks' risk aversion. In this regard, national development banks (NDBs) or promotional banks such as the Kreditanstalt für Wiederaufbau (KfW) in Germany and the Instituto de Credito (ICO) in Spain, and the pan-European European Investment Bank Group (EIB Group, including the European Investment Fund (EIF)) are active in providing both SME finance directly and also guarantees for SME lending. For example, the EIB signed loans worth EUR 18.5 billion for SMEs and mid-caps in 2013, and additional amounts were committed by the EIF for SME securitisations. Harnessing NDBs' comparative advantage in terms of low funding costs (which could be passed on to clients) as well

21 Following the publication of the Green Paper, the Informal ECOFIN Council invited the Economic and Financial Committee (EFC) to consider setting up a High Level Expert Group (HLEG). The HLEG final report "Finance for Growth" of 11 December 2013 included a comprehensive list of short and medium-term recommendations, including at the EU level, focusing on access to financing for SMEs and infrastructures: http://europa.eu/efc/working_groups/hleg_report_2013.pdf

22 See AFME, "Securitisation Data Report Q4:2013".

23 SME ABSs issuance has also been modest since 2008, for several reasons: regulatory uncertainty surrounding the treatment of securitisation in capital and liquidity requirements, weak macroeconomic environments translating into poor transaction economics, and stigma effects on EU ABSs arising from US subprime RMBS issues; increased risk aversion towards SMEs and poor documentation standardisation and transparency are also important factors. Although some progress has been made in overcoming these barriers, they remain important in terms of securitisation becoming considered a widespread, viable, and long-term solution for SME funding.

as their knowledge of national markets could also be helpful, particularly if there were enhanced cross-border cooperation between NDBs. An example of the latter is the agreement between Germany (KfW) and Spain (ICO) in July 2013, whereby both institutions agreed to contribute €800 million to finance SMEs in Spain.

Elsewhere, instruments created via private placement (PP) markets can also improve capital market access for SMEs as an alternative to bank funding. For example, Schuldscheindarlehen – a cross between a bond and a syndicated loan – in Germany is an established domestic private placement market, with approximately €12 billion of financing per year. Several recent initiatives on developing a PP market are under way along the lines of the US private placement model (USPP). In France the Euro PP market initiative (sponsored by the Banque de France) aims to help medium-sized French companies to access new sources of financing, and has raised about €7 billion since its first issuance in September 2012.[24]

REGULATORY INITIATIVES

Financial regulation in the EU has also been adapted in recent years in order to facilitate the financing of SMEs. The Capital Requirements Regulation (CRR) and the Capital Requirements Directive IV (CRD IV) of 27 June 2013 include a correcting factor to lower the capital requirements related to credit risk for exposures to SMEs.[25] Moreover, the revised Markets in Financial Instruments Directive (MiFID II) is creating a dedicated trading platform labelled "SME growth market" to make SME markets more visible and liquid, which should help attract risk-averse investors. Other regulations have reduced the administrative burden for SMEs as regards reporting (Prospectus and Transparency Directives) and simplifying the preparation of financial statements (Accounting Directive). On the investment side, the European Commission has created a special EU passport for fund managers investing in start-up SMEs and social businesses. It has also proposed a new investment fund framework (European Long-Term Investment Funds, or ELTIFs) for participants seeking to invest in companies and projects over the long term.

Perhaps more broadly, the establishment of a banking union, including the Single Supervisory Mechanism (SSM) and the comprehensive assessment currently taking place, will increase confidence in the banking system and hence improve SMEs' access to finance, given the natural reliance of SMEs on bank finance.

Lastly, in addition to EU regulatory changes, several national initiatives have recently been launched in order to facilitate SME access to funding. In particular, on 19 February 2014, the Italian parliament approved a decree law introducing a new category of covered bonds – Obbligazioni Bancarie Collateralizzate or OBCs – which may be backed by corporate bonds, loans to SMEs, shipping loans, lease and factoring receivables, and tranches of securitisations backed by these assets. Also, on 28 February 2014, the Spanish government approved a new SME financing law, which aims to foster alternatives to bank funding for SMEs by, among other measures, improving firms' access to the alternative stock market and also giving more flexibility to allow venture capital firms to invest greater amounts at earlier stages of an SME's development.

24 A Euro PP is a medium or long-term financing operation between an enterprise, whether listed or not, and a limited number of institutional investors, and is based on ad hoc documentation negotiated between the borrower and the investors, and generally includes an arranger.
25 The factor is equal to 0.7619.

5 CONCLUSIONS

SMEs in the euro area are usually more dependent on banks than larger enterprises owing to their typically more opaque balance sheets and corporate capabilities as a result of less informative financial statements and shorter track records. Banks can in part mitigate these informational asymmetries and higher transaction costs for potential investors by establishing long-term and in-depth lending relationships, making it easier to assess the creditworthiness of their borrowers. Nonetheless, in economic downturns or times of crisis these informational asymmetries weigh particularly hard on SMEs' opportunities to obtain financing, and credit sources – including bank credit – tend to dry up for small firms more rapidly than for large companies. Therefore, the lack of funds, alongside a generally stronger dependence on the domestic economic and sovereign environment, disrupts the business and investment activities of small firms to a greater extent.

Given the inherent heterogeneity of the SME sector in the euro area, several funding instruments and options should be considered to meet the needs of the different SMEs and lenders or investors. Indeed, alongside policies at national level, several initiatives were put in place during the crisis by supranational institutions to promote SME financing in Europe. Many of these initiatives are now being enhanced, in particular following the recent communication by the European Commission on long-term financing. EU financial regulations have been amended in order to facilitate the financing of SMEs, and national development banks are being active in facilitating SMEs' access to finance, including by fostering cooperation among themselves.

The Eurosystem has also taken a number of actions that are currently helping to restore the normal functioning of the monetary policy transmission mechanism, thereby facilitating the financing of SMEs. At the same time, the Eurosystem has further tools at its disposal. In addition, the Eurosystem has worked to increase confidence in securitisation markets to foster banks' lending capacities, chiefly by establishing transparency requirements, which have also helped to mitigate stigma effects attached to SME ABSs. In this respect, the joint paper between the ECB and the Bank of England entitled "The case for a better functioning securitisation market in the European Union", published on 30 May 2014, is a contribution towards a revitalisation of the securitisation market, which can complement other long-term wholesale funding sources for the real economy, including SMEs.

Moreover, the Eurosystem can help to coordinate the actions of counterparties and to provide solutions to market failures by acting as a catalyst. In this respect, the ECB will continue to investigate how to stimulate efforts by the private sector to improve the funding conditions of SMEs and support initiatives taken by the European institutions.

Finally, structural policies aiming to develop a financial system that offers a broader range of financing alternatives and instruments can help to improve SMEs' capital structures and financing situations. In addition, a more balanced and harmonised fiscal treatment of firms' debt and equity financing could strengthen SMEs' capital bases, enhance their internal financing capacity and also improve their creditworthiness, a crucial element for them to access external financing. Moreover, measures enhancing the level of competition in the product and factor markets are instrumental in reallocating resources towards better performing SMEs and thus increasing the overall competitiveness of the euro area.

THE PHILLIPS CURVE RELATIONSHIP IN THE EURO AREA

The Phillips curve, which is broadly understood as the relationship between inflation and economic slack, is a standard framework for explaining and forecasting developments in inflation. At the same time, the framework is surrounded by considerable uncertainty, both conceptually and empirically. In particular, there is no single concept of the Phillips curve. Instead, there are various – similarly plausible – specifications, for example using different measures of economic slack and inflation, different assumptions on the role and form of expectations, different variables accounting for supply-side factors, or different econometric designs. This article reviews the Phillips curve relationship between inflation and economic slack in the period since 1999 for the euro area as a whole and for the individual euro area countries. The cross-country aspect is relevant, as the countries display substantial heterogeneity in economic structure and institutional landscape. The article highlights the uncertainty surrounding the Phillips curve relationship, notably regarding the choice of relevant measure of economic slack, instabilities in the relationship over time and its limitations in forecasting inflation. Taking into account different versions of the Phillips curve can to some extent serve as a hedge against such uncertainties. The Phillips curve can be considered a useful tool for cross-checking inflation developments with those in output and demand. However, given the complexity of the inflation process, it is an insufficient basis for forecasting inflation and for policy guidance. The Phillips curve should hence only be considered as one element in a broader-based analysis.

1 INTRODUCTION

In the period since 2008 the fallout from the financial and sovereign debt crises has left its mark in the form of a protracted period of depressed economic activity and high unemployment. Available estimates of potential output and structural unemployment imply persistently negative output gaps and positive unemployment gaps. Economic theory and historical regularities suggest that such protracted underutilisation of capacity should lead to lower inflation.

The Phillips curve – broadly understood – links price or wage growth to a measure of economic slack, such as the output or unemployment gap, and provides a conceptual framework for analysing and forecasting inflation developments. Many macroeconomic models used for policy advice explicitly or implicitly embed this relationship. However, the use of Phillips curve relationships in actual practice needs to be guided by various considerations. For instance, one such consideration concerns the uncertainties surrounding empirical estimates of economic slack. Another is that the rate at which prices change can reflect many more influences than the supply and demand imbalances in labour and goods markets approximated by measures of economic slack. For example, the fact that consumer price inflation in the euro area did not decline more strongly with the wide output gaps in recent years partly reflected the increases in indirect taxes and administered prices implemented in several euro area countries as part of fiscal consolidation efforts. Similarly, import price developments – most notably for energy products – have had alternating upward and downward impacts on euro area inflation in recent years. Such factors influence inflation beyond the degree of domestic economic slack prevailing at the time.

In addition, the strength in the relationship between inflation and economic slack can depend on the state of the economy and may change over time. For instance, structural economic reforms in labour and product markets aimed at relaxing price and wage rigidities may change the response of inflation to economic slack. Furthermore, if prices are downwardly rigid, the relationship becomes non-linear: especially in protracted periods of economic slack, inflation would not decline or would decline only slightly, while it would increase significantly as soon as production capacities were fully employed. Accordingly, inflation developments cannot be linked one-to-one to estimates of economic slack.

This article reviews the relationship between inflation and economic slack (henceforth referred to as the Phillips curve) for the euro area since 1999. As a Phillips curve at the euro area aggregate level may conceal substantial differences across euro area countries, the analysis also assesses the Phillips curve relationship at the country level.

The article is structured as follows: Section 2 reviews the concept of the Phillips curve in order to elicit the different sources of uncertainty that can arise in its empirical application. Section 3 looks at Phillips curve relationships in the euro area as a whole and individual euro area countries in the period 1999-2013, examining differences in the link with alternative measures of economic slack and cross-country differences. Section 4 discusses possible changes in the relationship following the financial and sovereign debt crises. Section 5 reviews additional factors that can affect the Phillips curve relationship, and Section 6 concludes with some general considerations on the use of this relationship for policy analysis.

2 THE PHILLIPS CURVE CONCEPT

The Phillips curve was introduced in the seminal work by A. W. Phillips in 1958, which observed a negative relationship between unemployment and the rate of change in nominal wage rates in the United Kingdom.[1] This observation led some to believe that there was an exploitable trade-off between inflation and employment in an economy, and that monetary policy could permanently lower unemployment at the cost of higher inflation. However, subsequent contributions pointed out that inflation expectations play an important role and that monetary policy cannot permanently affect unemployment, which instead converges in the long run to its natural level, determined by the structural features of the economy.[2] Nevertheless, on account of rigidities in consumer prices or wages, deviations in unemployment from its natural level or, more generally, economic slack could have an impact on inflation in the short term.

Empirical applications of the Phillips curve often link inflation to a measure of economic slack, proxied by estimates of the unemployment or output gaps, but also to past inflation developments as a broad proxy for inflation inertia. In addition, supply-side factors, such as the developments in oil prices (or, more generally, import prices) or in trend productivity, have been incorporated.[3] This "triangular" framework has enjoyed considerable popularity as a way of explaining past inflation dynamics and for forecasting.

Various versions of the Phillips curve have been proposed that incorporate different measures of economic slack, allowing a more explicit role for inflation expectations (for example, by including inflation expectations from survey data as explanatory variables) or, more recently, positing a role for global developments beyond those embodied in commodity prices. Economists continue to disagree on the precise representation of the Phillips curve or its empirical validity. In particular, it has been argued that the contribution of economic slack to explaining inflation developments has

1 Phillips, A.W., "The Relation Between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957", *Economica*, Vol. 25(100), pp. 283-299.

2 Friedman, M., "The role of monetary policy", *The American Economic Review*, Vol. LVIII, 1968; Phelps, E.S., "Phillips Curves, Expectations of Inflation and Optimal Unemployment Over Time", *Economica*, Vol. 34(135), 1967, pp. 254-281; Lucas R.E. Jr., "Expectations and the neutrality of money", *Journal of Economic Theory*", Vol. 4(2), 1972, pp. 103-124. For an extensive review of how the concept has evolved over time, see, for example, Gordon, R., "The History of the Phillips Curve: Consensus and Bifurcation", *Economica*, Vol. 78, 2011, pp. 10-50 or the first chapter in Fuhrer, J., Sneddon Little, J., Kodrzycki, Y. and Olivei, P. (ed.) "*Understanding Inflation and the Implications for Monetary Policy: A Phillips Curve Retrospective*", The MIT Press, 2009.

3 See the "triangle" model proposed in Gordon, R., "Inflation, flexible exchange rates, and the natural rate of unemployment," in Baily, M.N. (ed.), "*Workers, Jobs, and Inflation*", Washington, Brookings, 1982.

been low. Furthermore, it has been observed that the relationship has not been stable over time, and non-linear or time-varying features have been introduced. For example, it has been suggested that the responsiveness of inflation to changes in economic slack in advanced economies has been gradually declining in recent decades and that credible monetary policy leading to strongly anchored inflation expectations could be one of the driving factors behind this development.[4] Finally, many studies have found the Phillips curve to have rather weak forecasting accuracy.

The following sections discuss some of these aspects, with particular focus on the uncertainty related to the measurement of economic slack, the stability of the Phillips curve relationship and its forecasting performance.

3 INFLATION AND ECONOMIC SLACK IN THE EURO AREA IN THE PERIOD 1999-2013

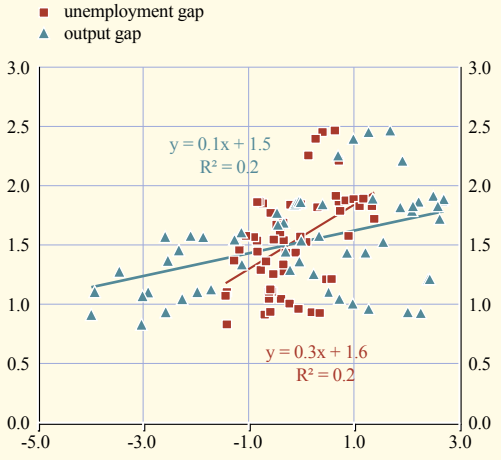
This section looks at the coefficients and fit of simple Phillips curves for the euro area as a whole and for individual euro area countries over the period 1999-2013.[5] The focus is on a linear relationship between inflation and various measures of economic slack, and the analysis abstracts from the role of inflation expectations and supply-side shocks. As a measure of inflation, the analysis uses HICP inflation excluding energy and food, as it is less affected by commodity prices and better reflects price pressures originating within the euro area.

Starting with the analysis for the aggregate euro area, Chart 1 shows a scatter plot of annual HICP inflation excluding energy and food for the period 1999-2013 against two measures of economic slack: the (reversed) unemployment gap and the output gap (both lagged by one quarter).[6] Thus, negative gaps are associated with a high degree of unutilised capacity or economic slack. The coefficients of a linear fit and the associated R^2 measure of the closeness of this fit are also displayed. The coefficients associated with the gaps, or the "slopes" of the Phillips curve, are significant and their signs are as expected – wider negative gaps are typically accompanied by lower inflation rates. According to the R^2 coefficient, the output and unemployment gap can explain around 20% variation in inflation in this simple framework. On the basis of this measure of fit, there seems to be no preference for one measure of economic slack over the other.

Chart 1 HICP inflation excluding energy and food and measures of economic slack

(annual percentage changes and percentage points)

x-axis: economic slack (lagged by one quarter)
y-axis: HICP inflation excluding energy and food



Sources: Eurostat and European Commission.
Notes: Based on quarterly data for the period 1999-2013. The unemployment gap has been used in reversed form (multiplied by -1). Gap measures have been interpolated to obtain quarterly values.

4 See, for example, "The dog that didn't bark: has inflation been muzzled or was it just sleeping?", *World Economic Outlook*, IMF, April 2013.
5 The period before 1999 was characterised by a different monetary policy regime and inflation convergence in the run-up to monetary union in many countries. Therefore, a reduced form relationship such as the Phillips curve might not be meaningful for this period.
6 The unemployment and output gap estimates used throughout the article are taken from the Winter 2014 European Economic Forecast of the European Commission. The annual data are interpolated to quarterly frequency.

These simple regressions, while illustrative, do not account for inflation persistence, which matters, for example, for the overall dynamic impact of economic slack on inflation. To take this into account, the following analysis is based on regressions that relate the annualised quarterly inflation rate to its value in the preceding quarter and to a measure of economic slack.[7]

It should be emphasised that the economic slack is an unobserved variable, and its measurement is subject to considerable uncertainty – especially in real time.[8] Typically used measures – the unemployment and output gaps – are based, respectively, on the estimates of the natural level of unemployment and potential output, which, in turn, are imputed using specific statistical or model-based tools. Therefore, the gaps are surrounded by a high degree of uncertainty and are subject to considerable revision. They also tend to differ depending on the particular methodology used.[9] For this reason, the analysis also relies on alternative proxies of economic slack, including the unemployment rate, the short-term unemployment rate, GDP growth, real unit labour cost, as well as survey measures for the manufacturing sector indicating the degree of capacity utilisation and factors limiting production related to demand and shortage of labour.[10]

Chart 2 shows the estimated cumulative one-year impact of one unit change in economic slack measures on HICP inflation excluding energy and food for different measures of economic slack.[11] For each measure, the chart shows the range of point estimates of one-year impacts obtained across the euro area countries, with the upper and lower end of the boxes indicating the upper and lower quartile of the ranges and the red mark indicating the impact coefficient for the aggregate euro area.[12] To make the results easier to read, the signs of the coefficients for the slack measures related to unemployment have been reversed and those for the survey-based measures have been rescaled to match the variability of these measures to that of the unemployment gap. Chart 3 presents the ranges of in-sample fits of the corresponding Phillips curves as measured by the R^2 coefficient.

7 That is, the regressions: $\pi_t=\alpha+\beta\pi_{t-1}+\gamma gap_{t-1}+\varepsilon_t$, where π_t denotes annualised quarterly rates of change in seasonally adjusted HICP excluding energy and food, gap_{t-1} refers to a measure of economic slack and εt is a random error. It has also been popular in empirical work to include a measure of inflation expectations as an explanatory variable. Nevertheless, inflation expectations are not available for all the euro area countries or for HICP inflation excluding energy and food. Nevertheless, long-term inflation expectations for the euro area have been stable over the period considered and are thus already captured by the constant terms in these regressions.

8 See, for example, the article entitled "Potential output, economic slack and the link to nominal developments since the start of the crisis", *Monthly Bulletin*, ECB, Frankfurt am Main, November 2013 or the box entitled "Slack in the euro area economy", *Monthly Bulletin*, ECB, April 2014.

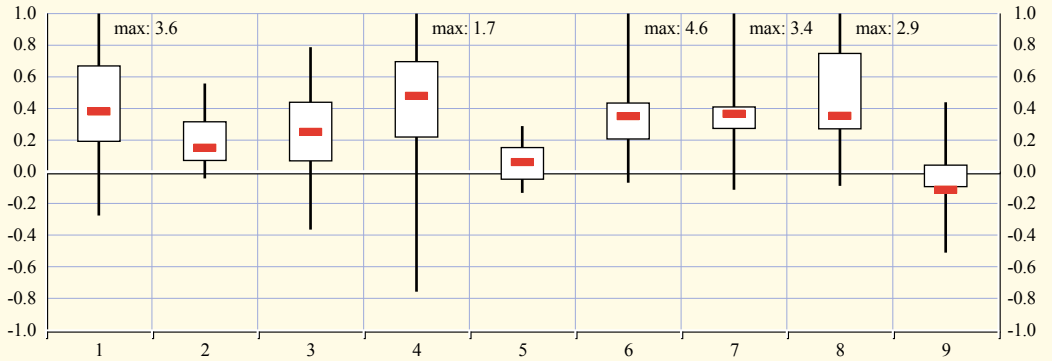
9 See, for example, Orphanides, A. and van Norden, S., "The Reliability of Inflation Forecasts Based on Output Gap Estimates in Real Time", *Journal of Money, Credit and Banking*, Blackwell Publishing, Vol. 37(3), 2005, pp. 583-601; or the box entitled "Recent evidence on the uncertainty surrounding real-time estimates of the euro area output gap", *Monthly Bulletin*, ECB, November 2011; or the article entitled "Zur Verlässlichkeit der Schätzungen internationaler Organisationen zur Produktionslücke", *Monatsbericht*, Deutsche Bundesbank, April 2014.

10 Short-term unemployment as the relevant measure of slack in the labour market has been advocated, for example, by Gordon, R., "The Phillips Curve is Alive and Well: Inflation and the NAIRU During the Slow Recovery", *NBER Working Paper*, No 19390, August 2013 or by Llaudes, R., "The Phillips curve and long-term unemployment," *Working Paper Series*, No 441, ECB, 2005. The short-term unemployment rate is defined as the difference between the total unemployment rate and the percentage of active population that is unemployed for 12 months or more. In Gali, J., Gertler, M. and Lopez-Salido, J.D., "European inflation dynamics", *European Economic Review*, Vol. 45(7), 2001, pp.1237-1270, it is advocated to use the log deviation of real unit labour costs from its mean as a measure of real marginal cost in a New Keynesian Phillips curve for the euro area. Real unit labour cost is defined as the ratio of compensation of employees to nominal GDP. For a discussion on the use of survey measures to assess economic slack, see, for example, the box entitled "A cross-check of output gap estimates for the euro area with other cyclical indicators", *Monthly Bulletin*, ECB, June 2011. While these survey measures have the advantage that revisions are very limited, they only reflect information for the manufacturing sector of the economy.

11 For a regression $\pi_t=\alpha+\beta\pi_{t-1}+\gamma gap_{t-1}+\varepsilon_t$ with quarterly data, the cumulative one-year impact is defined as $\gamma(1+\beta+\beta^2+\beta^3)$, see, for example, Borio, C.E.V. and Filardo, A., "Globalisation and Inflation: New Cross-Country Evidence on the Global Determinants of Domestic Inflation", *Working Paper Series*, BIS, No 227, 2007.

12 The lower and upper quartile refer to the upper bound of the interval containing the 25% and 75% lowest values respectively. The ranges are for the point estimates across countries and thus the statistical parameter uncertainty is not reflected in the charts.

Chart 2 Range of one-year impact coefficients for different euro area countries in a Phillips curve for HICP inflation excluding energy and food



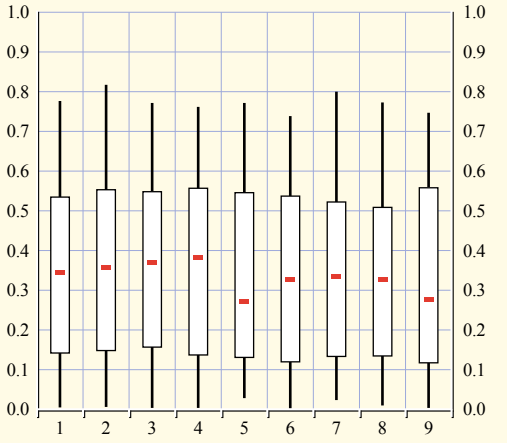
1 Unemployment gap
2 Output gap
3 Unemployment rate
4 Short-term unemployment rate
5 GDP growth
6 Capacity utilisation
7 Insufficient demand
8 Shortage of labour
9 Real unit labour cost

Sources: Eurostat, European Commission and ECB calculations.
Notes: Based on quarterly data in the period 1999-2013. Range of one-year impact coefficients, $\gamma(1+\beta+\beta^2+\beta^3)$, across countries of the euro area from a regression $\pi_t=\alpha+\beta\pi_{t-1}+\gamma gap_{t-1}+\varepsilon_t$, where π_t denotes annualised quarterly rates of change in seasonally adjusted HICP excluding energy and food. The bottom and upper end of the boxes indicate the lower and upper quartile of the ranges. Red '-' marks the coefficient for euro area. The signs of the coefficients for the slack measures related to unemployment have been reversed and those for the survey-based measures have been rescaled to match the variability of these measures to that of the unemployment gap. The short-term unemployment rate is defined as the difference between the total unemployment rate and the percentage of active population that is unemployed for 12 months or more. "GDP growth" refers to annualised quarterly rates of change. "Capacity utilisation", "Insufficient demand" and "Shortage of labour" are from the European Commission business survey for the manufacturing sector. Real unit labour cost is defined as the ratio of compensation of employees to nominal GDP and its log deviation from the mean is included in the regressions. For some countries and slack measures the estimates are based on a shorter sample due to unavailability of data.

A marked heterogeneity across countries can be observed with regard to the magnitude of the impact coefficients and to the fit of the Phillips curve. For most of the countries and most of the slack measures, with the notable exception of the real unit labour cost, the signs of the coefficients are as expected. For some countries, they are nevertheless very close to zero or even negative. For other countries, the magnitude of the coefficients is rather high. The ranges of in-sample fits (R^2) are also relatively wide and they do not favour any particular measure of slack.

From the country results underlying Charts 2 and 3, two observations stand out. First, there are differences between the countries in terms of the measure of economic slack that best fits inflation data. Second, the extent to which Phillips curves fit actual inflation developments across countries is diverse and, for some countries, a Phillips curve relationship seems to explain only a very small portion of inflation developments. These results are broadly in line with earlier analyses of the wage Phillips curve

Chart 3 Range of R^2 coefficients for different euro area countries in a Phillips curve for HICP inflation excluding energy and food



1 Unemployment gap
2 Output gap
3 Unemployment rate
4 Short-term unemployment rate
5 GDP growth
6 Capacity utilisation
7 Insufficient demand
8 Shortage of labour
9 Real unit labour cost

Sources: Eurostat, European Commission and ECB calculations.
Notes: Based on quarterly data for the period 1999-2013. Range of R^2 across countries of the euro area from a regression $\pi_t=\alpha+\beta\pi_{t-1}+\gamma gap_{t-1}+\varepsilon_t$. The bottom and upper end of the boxes indicate the lower and upper quartile of the ranges. Red '-' marks the R^2 for euro area. For definitions of the variables see the notes to Chart 2.

in the euro area and the largest five euro area countries, which found marked heterogeneities across countries in the wage responsiveness to the unemployment gap and some limited advantages to analysing wage developments at the national rather than the euro area-wide level.[13]

The observed cross-country heterogeneity in the slope and fit of the Phillips curve can be explained by a number of factors. The difference across countries in the degree of labour and product market flexibility is one potential factor. There is ample evidence on the heterogeneity of price and wage rigidities in the euro area.[14] Nominal rigidities vary substantially across countries and depend strongly on such features as the intensity of competition, the exposure to foreign markets or the institutional framework.[15]

Another source of heterogeneity could be differences in cyclical developments during the period considered. Some research shows that the slope coefficients could be time-varying and depend on the cyclical position or on the amount of economic slack.[16] Furthermore, for the countries that joined the euro area after 1999, the relationship between inflation and economic slack could be distorted by a declining inflation trend, which reflects inflation convergence in the run-up to joining the monetary union and changes in longer-term inflation expectations. The role of inflation expectations is discussed in more detail in Section 5.

The above analysis is based on a simplified specification of the Phillips curve, which is subject to important caveats. For example, the regressions are not optimised in terms of lead/lag relationships. The relationship could also be blurred by the impact of supply shocks, such as changes in commodity prices or exchange rates. While changes in commodity prices, most notably in oil prices, affect HICP inflation excluding energy and food to a much lesser extent than they affect headline inflation, some indirect effects could be present. Therefore, the correlation between inflation and economic slack observed in such a simplified Phillips curve can be lower than expected a priori, or can even change sign, when, for example, cost components such as commodity prices increase during episodes of economic slack. Finally, high in-sample fit does not necessarily translate into good forecast performance, in particular in the presence of instabilities in the relationship. Some of these issues are studied in the subsequent sections.

Although subject to several caveats, the analysis in this section illustrates that, while there is evidence of a Phillips curve-type relationship in the euro area for the period 1999-2013, the specification and its goodness of fit are subject to considerable uncertainty and cross-country variation. The next section analyses the stability of the relationship, focusing on changes associated with the financial and sovereign debt crises.

13 See Fabiani, S. and Morgan, J., "Aggregation and euro area Phillips curves", *Working Papers Series*, No 213, ECB, February 2003. This article also discusses in more detail the pros and cons of analysing the Phillips curve at the aggregate and at the country level (noise reduction versus aggregation bias, respectively).

14 For more details, see "Final Report on the Wage Dynamics Network (WDN)", ECB, 7 January 2010, http://www.ecb.int/home/html/researcher_wdn.en.html.

15 For example, Morsy, H. and Jaumotte, F., "*Determinants of Inflation in the Euro Area: The Role of Labor and Product Market Institutions*", International Monetary Fund, No 12/37, 2012, using a Phillips curve framework for ten countries of the euro area, shows that "high employment protection, intermediate coordination of collective bargaining, and high union density increase the persistence of inflation".

16 See, for example, Barnes, M.L. and Olivei, G.P., "Inside and outside bounds: threshold estimates of the Phillips curve," *New England Economic Review*, Federal Reserve Bank of Boston, 2003 or Dotsey, M., Fujita, S. and Stark, T., "Do Phillips Curves Conditionally Help to Forecast Inflation?", *Working Paper Series*, No 11-40, Federal Reserve Bank of Philadelphia, September 2011. The evidence for the euro area and selected countries can be found in Benkovskis, K., Caivano, M., D'Agostino, A., Dieppe, A., Hurtado, T., Karlsson, E., Ortega, E. and Várnai, T., "Assessing the sensitivity of inflation to economic activity," *Working Paper Series*, No 1357, European Central Bank, Frankfurt am Main, 2011.

4 THE PHILLIPS CURVE AND THE FINANCIAL AND SOVEREIGN DEBT CRISES

The financial and sovereign debt crises have had a considerable impact on economic activity in the euro area, leading to a protracted period of wide output and unemployment gaps, and have given impetus to structural reforms and other economic adjustments, such as sectoral re-allocations. This section analyses how the crises affected the Phillips curve relationships and provides an assessment of how useful the concept has been in explaining the developments in inflation during these crises. It also illustrates to what extent inflation developments in the recent period of protracted economic slack are in line with historical experience during such episodes.

4.1 STABILITY OF THE PHILLIPS CURVE

Some estimates of Phillips curve relationships have suggested that, for the euro area as a whole, the impact of slack on inflation has weakened in the period since the onset of the financial crisis.[17] On the other hand, a strengthening of the relationship has been observed for some countries over the same period.[18] This section analyses the changes in the relationship by looking at the impact of economic slack on inflation estimated on a pre-crisis sample (1999-2007) and on an entire sample (1999-2013), and provides possible explanations for these changes.[19]

Chart 4 presents the change in the one-year impact on the euro area HICP inflation excluding energy and food for the slack measures considered above. The one-year impact accounts for potential changes both in the estimated slope coefficient and in inflation persistence. For most of the slack measures considered, the changes are minor, with the notable exception of the unemployment rate and the short-term unemployment rate, for which the estimated one-year impacts have declined markedly.[20] To provide a cross-country perspective, Chart 5 reports the number of countries for which the estimated one-year impact has increased, remained the same or declined respectively. Once again, there are marked differences across countries. For some countries, the result is opposite to that for the euro area aggregate – the responsiveness of inflation appears to have actually increased once the data following the financial crisis have been included. This is the case for some stressed countries and could reflect the fact that structural reforms in labour and product markets undertaken in those countries in recent years may have increased competition or reduced nominal rigidities, allowing for stronger adjustment of prices to economic conditions.

It should be noted that, for some of the countries, the change in the magnitude of the impact could be affected by the impact of increases in indirect taxes, which had a non-negligible positive contribution to inflation in a number of countries in recent years. As the increases were at least partly passed through to consumer prices, inflation was higher than what could have been expected

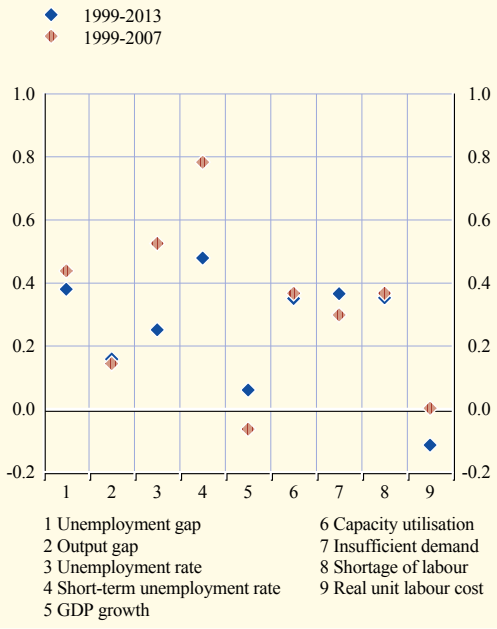
17 See, for example, the article entitled "The development of prices and costs during the 2008-09 recession", *Monthly Bulletin*, ECB, Frankfurt am Main, April 2012 and the article entitled "Potential output, economic slack and the link to nominal developments since the start of the crisis", *Monthly Bulletin*, ECB, Frankfurt am Main, November 2013.

18 See, for example, the article entitled "Variation in the cyclical sensitivity of Spanish inflation: an initial approximation", *Economic Bulletin*, Banco de España, July-August 2013; or *Economic Bulletin*, Banca d'Italia, January 2014. For an analysis on the evolution of the Phillips curve over a longer period, see, for example, IMF, op. cit., or the article entitled "What Inflation Developments Reveal About the Phillips Curve: Implications for Monetary Policy", *Economic Review*, National Bank of Belgium, December 2013.

19 The sample since 2008 is relatively short and features mostly negative output gaps. Therefore, the changes are investigated more indirectly by extending rather than splitting the samples, acknowledging that relatively strong changes over the period 2008-13 might be needed to signal changes in the extended sample.

20 The change in the estimated impact is more than twice the standard error estimated over the entire sample. The 2014 article by the Deutsche Bundesbank (op. cit.) compares the slopes of the Phillips curves with the output gap estimated over the periods 1996-2009 and 1996-2013 and, similarly, does not find any evidence of substantial changes for the euro area.

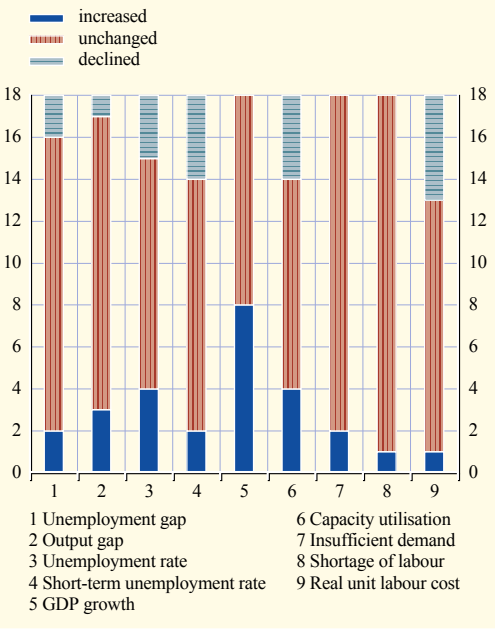
Chart 4 The sensitivity of euro area HICP inflation excluding energy and food to economic slack



Sources: Eurostat, European Commission and ECB calculations.
Notes: Reports $\gamma(1+\beta+\beta^2+\beta^3)$ from a regression $\pi_t=\alpha+\beta\pi_{t-1}+\gamma gap_{t-1}+\varepsilon_t$, estimated over the period 1999-2007 and over entire sample. For definitions of the variables, see the notes to Chart 2.

Chart 5 Changes in the sensitivity of HICP inflation excluding energy and food to economic slack in euro area countries

(number of countries)



Sources: Eurostat, European Commission and ECB calculations.
Notes: Based on quarterly data for the period 1999-2013. Reports the number of countries for which $\gamma(1+\beta+\beta^2+\beta^3)$ from a regression $\pi_t=\alpha+\beta\pi_{t-1}+\gamma gap_{t-1}+\varepsilon_t$ has increased, remained the same or declined. The impact is considered to have remained the same if it does not differ by more than twice its standard error estimated over the entire sample. For definitions of the variables, see the notes to Chart 2.

given the Phillips curve relationship and the amount of economic slack prevalent at the time, leading to an apparent "flattening" of the Phillips curve.[21]

An important point is that the results could at times be sensitive to the choice of Phillips curve specification.[22] For example, for some countries, the direction of change of the one-year impact depends on the particular measure of slack used. Therefore, it is advisable to look at a wide range of specifications when drawing conclusions about the evolution of the Phillips curve and its implications for future inflation.

4.2 CONDITIONAL FORECASTS BASED ON THE PHILLIPS CURVE FOLLOWING THE FINANCIAL CRISIS

Several studies have documented that the forecasting performance of the Phillips curve has been at best mixed. It has been shown that it only occasionally outperforms simpler univariate models and that the best performing Phillips curve specification may change over time. Nevertheless, it has also

21 See, for example, the box entitled "The impact of recent changes in indirect taxes on the HICP", *Monthly Bulletin*, ECB, March 2012. Changes in indirect taxes belong to the broadly defined supply-side shocks, which for simplicity are omitted in the analysis provided in this article.

22 For example, Oinonen, S., Paloviita, M. and Vilmi, L., "How have inflation dynamics changed over time? Evidence from the euro area and USA", *Research Discussion Papers*, No 6, Bank of Finland, 2013 show that the impact of the output gap on inflation has increased in recent years. However the analysis is mainly based on the output gap estimates based on the Hodrick Prescot filter, which look rather implausible over the recent period, as the gap turns positive.

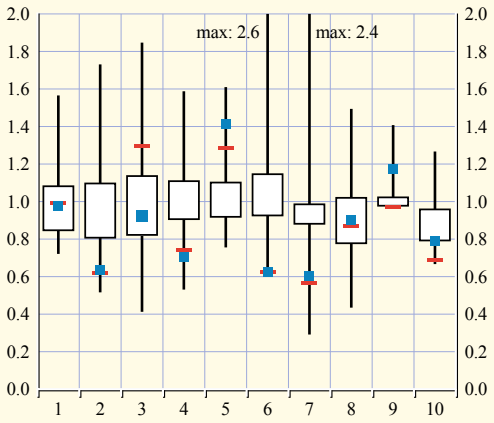
been argued that, during an economic downturn, the correlation between inflation and economic slack, and the relative forecast performance of a Phillips curve model may actually increase.[23] In order to see how meaningful the Phillips curve relationship has been in explaining inflation developments during the recent crises, a set of conditional forecasts is performed, which relies on the latest available data on measures of economic slack for the period in question.

Chart 6 summarises the forecast performance over the period 2008-13 of one-year ahead forecasts for HICP inflation excluding energy and food based on the different measures of economic slack considered in the previous sections. The coefficients are estimated recursively. Forecast accuracy is measured by the root mean squared error (RMSE) for annual inflation rates. To better assess the performance of the model, the relative RMSE is reported. Specifically, Chart 6 shows the ratio of the RMSE of the Phillips curve relative to the RMSE of a univariate autoregressive model of order one (AR(1))[24]. A ratio of less than one indicates that the forecast of the Phillips curve has been, on average, more accurate than the one from the univariate AR(1) model. For the euro area, two forecasts are generated: the first forecast uses the euro area aggregated data (marked by a red minus sign), while the second aggregates forecasts based on country data (marked by a blue square). Box plots represent the range of relative RMSEs for the countries. The last column reports the performance of the forecast that is derived as an average over the slack measures.

Over the period in question the Phillips curve conditional forecasts for the euro area are more accurate than those from the simpler univariate model for most of the slack measures considered. However, the performance is not robust across countries. For each slack measure, there are countries for which the performance of the corresponding Phillips curve is worse than that of the univariate model. In line with typical findings in the forecasting literature, averaging forecasts across slack measures appears to offer gains in the robustness of the forecasting performance of the Phillips curve. For example, the maximum and the upper quartile of the relative RMSE of the average across the measures of slack are lower than for any of the individual slack measures. For the euro area, the

Chart 6 Range of relative performance of one-year-ahead conditional forecasts from a Phillips curve for HICP inflation excluding energy and food for the period 2008-13

(relative RMSE)



1 Unemployment gap
2 Output gap
3 Unemployment rate
4 Short-term unemployment rate
5 GDP growth
6 Capacity utilisation
7 Insufficient demand
8 Shortage of labour
9 Real unit labour cost
10 Average forecast

Sources: Eurostat, European Commission and ECB calculations.
Notes: Range of relative Root Mean Squared Errors (RMSEs) for HICP inflation excluding energy and food from the model $\pi_t=\alpha+\beta\pi_{t-1}+\gamma gap_{t-1}+\varepsilon_t$ across countries. The model is estimated recursively, starting in 1999 and the RMSE is evaluated for the period 2008-13 for annual HICP inflation excluding energy and food. The RMSE is relative to the RMSE of an autoregressive process of order 1 (corresponding to the above regression with $\gamma=0$). For the euro area, the forecasts are derived either directly, using the model for the aggregated data (red minus sign) or indirectly by aggregating the country forecasts (blue square). For definitions of the variables, see the notes to Chart 2.

23 See, for example, Atkeson, A. and Ohanian. L.E., "Are Phillips Curves Useful for Forecasting Inflation?", *Quarterly Review*, Federal Reserve Bank of Minneapolis, 2001 or Stock, J.H. and Watson, M.W., "Phillips Curve Inflation Forecasts", in Fuhrer, J., Kodrzycki, Y., Little, J. and Olivei, G., "*Understanding Inflation and the Implications for Monetary Policy*", Cambridge: MIT Press, 2009, pp. 361-382; Stock, J.H. and Watson, M.W. "Modeling Inflation After the Crisis", Federal Reserve Board of Kansas City Symposium, Jackson Hole, Wyoming, 2010, http://www.kc.frb.org/publicat/sympos/2010/stock-watson.pdf; Faust, J. and Wright, J., "Inflation Forecasting" in Elliott, G. and Timmermann, A. (eds.), *Handbook of Economic Forecasting*, Vol. 2, Amsterdam: North Holland, 2013.

24 This corresponds to the Phillips curve regression described in footnote 7 with the coefficient on the slack measure constrained to 0. Thus the relative RMSE can be considered as indicating the "value added" of including a slack measure in the equation.

accuracy of the indirect forecasts (obtained by aggregating country forecasts) is comparable to the accuracy of the forecasts obtained from aggregate data, with more substantial improvement for the former only in the case of the unemployment rate as the measure of slack.

One important caveat to this analysis is that it is based on the latest estimates of the output and unemployment gaps and these estimates are subject to considerable uncertainty, in particular for more recent quarters, and could be subject to sizeable revisions. In particular, the explanatory power of the gap variables compared with the alternative measures of slack could be overstated as gap measures are often derived conditional on a Phillips curve relationship.[25]

4.3 INFLATION DYNAMICS DURING EPISODES OF PERSISTENT AND SIZEABLE SLACK

Following the financial crisis and the subsequent recession, actual output has fallen below the level of potential output, implying a significant negative output gap in the euro area. Given that most countries in the euro area are expected to recover only slowly, a large amount of slack is expected to persist for an extended period. Nevertheless, inflation is projected to rise slowly over the projection horizon. Several factors can explain rising inflation, despite the amount of slack in the economy remaining large, such as well anchored inflation expectations, downward nominal rigidities, regional or sectoral bottlenecks and the speed of change in the economy or "speed limit" effects (see the box).

25 Like previous results, the assessed forecast performance could also be sensitive to the choice of specification. However, alternative specifications including the exchange rate as another explanatory variable or lag selection by the AIC criterion did not result in systematically more accurate forecasts.

Box

EVIDENCE OF "SPEED LIMIT" EFFECTS ON INFLATION IN THE EURO AREA

The relationship between inflation and slack in the economy is typically considered in a simple linear Phillips curve model (as described in Section 2), where inflationary pressure is related to the level of the output or unemployment gaps. However, the speed of change in the economy and in the gaps may also play a role. This box assesses whether there is evidence of such "speed limit" effects in the euro area, whereby a strong change in the output or unemployment gap can lead to inflationary pressures, even if the level of economic slack is still high.

There are several channels through which speed limit effects could arise. For example, frictions affecting the reallocation of the production factors, capital and labour, could cause the economy to run into bottlenecks and lead to upward pressure on inflation even in the presence of slack in the economy. Firms generally need time to adjust their capacity (i.e. plan and install) to meet changing demand. Moreover, laid-off workers cannot be reemployed and do not become productive instantly, but often need training and education. Hence, firms face output adjustment costs in addition to production costs, which can give rise to temporary supply bottlenecks if demand increases more rapidly than capacity can be put in place. Changes in the composition of demand may also put upward pressure on prices in some sectors, while considerable slack remains in others.[1] In the euro area, frictions owing to large cross-country heterogeneity and

1 For more details, see Dwyer, A., Lam, K. and Gurney, A., "Inflation and the Output Gap in the UK", *Economic Working Paper*, No 6, Treasury, 2010.

Philips curve estimates for the euro area using the level of and changes in slack

	Slack = output gap		Slack = unemployment gap	
	(1)	(2)	(3)	(3)
$Inflation_{t-1}$	0.88***	0.90***	0.90***	0.92***
$Slack_{t-1}$ (level)	0.06***	0.06***	0.09**	0.06**
$Slack_{t-1}$ (change)		0.11**		0.37***
Adjusted R-sq.	0.884	0.887	0.876	0.883
Countries = 18				
Observations = 1075				

Sources: Eurostat, European Commission and ECB calculations.
Notes: ***, ** and * denote statistical significance at the 1%, 5% and 10% level, respectively. The table shows panel estimates for 18 euro area countries using a fixed effect model. The sample period is from the fourth quarter of 1999 to the fourth quarter of 2013. A general Phillips curve relationship is estimated using the annual growth rate of HICP excluding food and energy as a dependant variable, and the regressors include a lagged value of the dependent variable, and a lagged slack term, as well as a lagged one-quarter change in the slack to capture both the level and speed limit effect on inflation. Columns (1) and (2) report the estimated coefficients using the output gap as slack measure, while the unemployment gap is utilised in columns (3) and (4). European Commission estimates (interpolated to obtain quarterly values) of the output and unemployment gaps are used in the estimations.

limited factor mobility could give rise to bottlenecks in some countries and exert a pull on inflation, although there continues to be a high degree of slack for the euro area as a whole. Empirical evidence of speed limit effects is mixed.[2]

At the current juncture, the existence of speed limit effects could be one factor that might explain inflation increases in the euro area in the future, although slack in the economy is expected to remain considerable.[3] As shown in the table, estimates from a general Phillips curve relationship, including both a lagged slack term and a lagged one-quarter change in slack, finds support for the existence of speed limit effects in the euro area (regardless of which measure of slack is assessed). In fact, the results suggest positive and statistically significant effects from both the level of and change in euro area slack on inflation.

2 For example, Turner, D., "Speed Limit and Asymmetric Inflation Effects from the Output Gap in the Major Seven Economies", *Economic Studies*, No 24, OECD, 1995 presents evidence for speed limit effects in three (Germany, Italy and Japan) of the major seven OECD economies over the period 1960-93.

3 Other factors, such as the role of inflation expectations and global slack, may also exert a pull on inflation, although euro area slack remains large. For a discussion on the importance of inflation expectations in the inflationary process, see, for example, Forsells, M. and Kenny, G., "Further evidence on the properties of consumers' inflation expectations in the euro area" and Paloviita, M. and Vrén, M., "The role of expectations in the inflation process in the euro area", both in Sinclair, P. (ed.), "*Inflation Expectations*", Routledge, 2010. For more details on the role of global slack, see, for example, Borio, C. and Filardo, A., "Globalisation and inflation: New cross-country evidence on the global determinants of domestic inflation", *Working Paper Series*, No 227, BIS, 2007.

Against this background, this section illustrates the inflation dynamics in the euro area during episodes with a persistent and high degree of slack in the economy and examines how the most recent episodes of this kind compare to historical experiences. In accordance with previous research, a period of persistent large output gaps is defined as an episode of negative output gaps exceeding -1.5% for at least eight consecutive quarters.[26] Considering a maximum sample period from the first quarter of 1970 to the fourth quarter of 2011, 27 such historical episodes are identified in the euro area (see the table).

All euro area countries, except Austria, Cyprus, Italy and Malta, feature at least one episode of persistent large output gaps and some countries, such as Spain, Greece, Ireland, Luxembourg and Finland, feature up to three such episodes. In this sample, an episode of large and persistent negative output gap lasts on average around three years (11.9 quarters), with an average output gap of -3.7%

26 See Meier, A., "Still Minding the Gap – Inflation Dynamics during Episodes of Persistent Large Output Gaps", *Working Paper*, No 189, IMF, 2010, pp. 10-189.

Historical episodes of persistent and large output gaps

Country	Period	Length (quarters)	Average gap	Trough
Belgium	Q1 1977 - Q3 1979	11	-1.9	-2.4
	Q2 1985 - Q3 1987	10	-1.7	-2
Germany	Q2 2003 - Q4 2005	11	-1.9	-2.4
Estonia	Q1 2009 - Q4 2010	8	-8	-11
Spain	Q3 1980 - Q3 1986	25	-2.5	-3.1
	Q1 1993 - Q1 1997	17	-2.9	-3.8
	Q1 2009 - Q4 2011 (at least)	≥12	-4.4	-5
France	Q1 2009 - Q4 2010	8	-2.5	-3.3
Greece	Q1 1974 - Q4 1975	8	-4.1	-6.4
	Q3 1982 - Q2 1984	8	-2.2	-2.8
	Q3 2009 - Q4 2011 (at least)	≥10	-5.9	-10.2
Ireland	Q4 1982 - Q4 1988	25	-3.6	-5.7
	Q1 1993 - Q4 1994	8	-2.7	-3.1
	Q1 2009 - Q2 2011	10	-4.4	-5.8
Luxemburg	Q1 1982 - Q4 1983	8	-2.7	-3.1
	Q3 1995 - Q3 1997	9	-2.8	-3.7
	Q1 2009 - Q1 2011	9	-3.5	-5.5
Latvia	Q1 2009 - Q4 2011 (at least)	≥12	-9.7	-14.3
Netherlands	Q1 1982 - Q4 1983	8	-2.2	-2.6
	Q4 2002 - Q3 2005	12	-2.1	-2.7
Portugal	Q1 1975 - Q4 1978	16	-6.3	-8.8
	Q1 1984 - Q4 1986	12	-3.7	-4.3
Slovenia	Q1 2009 - Q4 2010	8	-3.2	-5
Slovakia	Q4 1999 - Q2 2003	15	-2.2	-2.7
Finland	Q2 1976 - Q2 1979	13	-4.2	-5.8
	Q3 1991 - Q3 1996	21	-4.1	-6.4
	Q1 2009 - Q4 2010	8	-4.1	-6.3
Average		**11.9**	**-3.7**	**-5.1**

Sources: European commission and ECB calculations.
Notes: The list contains all periods where the output gap was lower than -1.5% for at least eight consecutive quarters. The data under consideration covers the European Commission's estimates of the output gap of 18 euro area countries, with a maximum sample period from the first quarter of 1970 to the fourth quarter of 2011. In the available sample for Austria, Cyprus, Italy and Malta there are no episodes of interest. The output gap estimates have been interpolated to obtain quarterly values.

during the episode. The period since the 2008 global financial crisis accounts for one-third (nine) of all observed episodes. The majority of euro area countries (ten countries) have experienced a renewed episode of persistent and large output gaps since the fourth quarter of 2011.

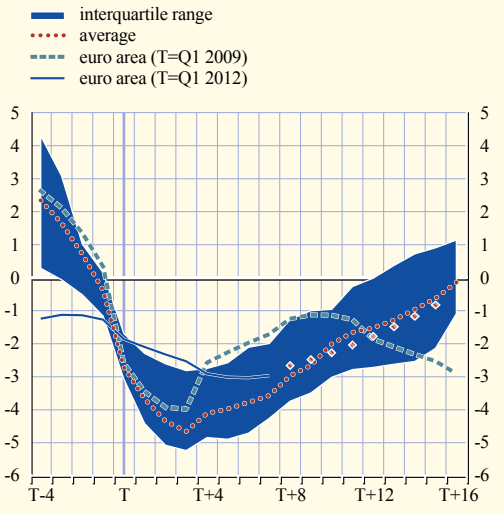
Chart 7 displays the distribution of output gap paths in the identified sample of episodes with persistent and large amounts of slack. Following the onset of the financial crisis in 2008, the euro area output gap reached a trough after three quarters in line with past regularities, but it narrowed more quickly compared with the average of previous episodes. This is partly attributed to the slowdown in euro area potential growth after 2008.[27] The estimated negative gap would have been larger if, in addition to actual output growth, potential output growth had not decelerated substantially as well. The sovereign debt crisis that followed the financial crisis led to a new contraction in economic activity, and the output gap widened, starting from a negative level. In this episode, the trough in the output gap was reached later, and it narrowed more gradually compared with previous episodes. Going forward, projections (based on the European Commission's Winter 2014 projections) suggest that the output gap will gradually close, but will still be slightly negative at the end of the projection horizon. This implies a development in line with historical regularities for episodes of protracted slack.

27 For more details, see the article entitled "Potential output, economic slack and the link to nominal developments since the start of the crisis", *Monthly Bulletin*, ECB, November 2013.

Episodes of sizeable and persistent output gaps have been associated with a strong decline in inflation rates (see Chart 8).[28] In fact, HICP inflation excluding energy and food tends to decline somewhat ahead of the episode, and the decline lasts for ten quarters on average before bottoming out at lower levels. The declining inflation ahead of the episode reflects the negative output gap prior to the start of the episode. The development in euro area HICP inflation excluding energy and food since 2012 features some unusual sluggishness of decline vis-à-vis previous episodes (see Chart 8), even when compared with the financial crisis, when its decline was also small and short-lived by past standards (see Chart 9). The more limited adjustment of HICP inflation excluding energy and food since the financial crisis largely reflects increases in indirect taxes and administered prices owing to the ongoing fiscal consolidation taking place in several euro area countries, as well as the resilience of profit margins in sheltered sectors.[29] It may also reflect nominal downward rigidities, which may become more binding at lower levels of inflation.

Chart 7 Output gap during episodes of persistent and large amounts of slack

(percentages of GDP)



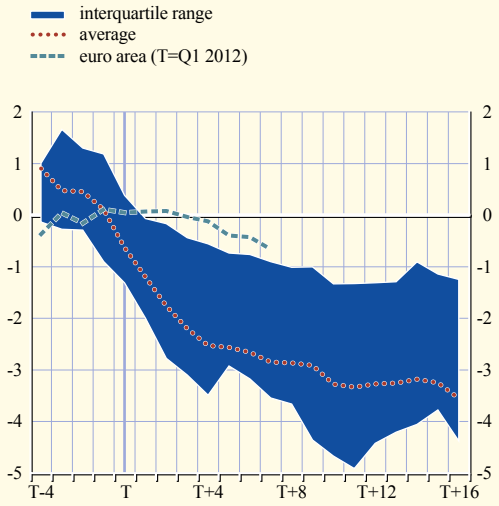
Sources: European Commission and ECB calculations.
Notes: T represents the first quarter of each episode where the output gap has been lower than -1.5% for at least eight consecutive quarters. The data cover a period from four quarters prior to the episode (T-4) to 16 quarters after it (T+16). The cycle range for episodes of large and persistent output gaps is derived as the upper quartile less the lower quartile of developments during all identified episodes. The data under consideration covers the European Commission's estimates of the output gap of 18 euro area countries, with a maximum sample period from the first quarter of 1970 to the fourth quarter of 2011. The output gap estimates have been interpolated to obtain quarterly values. Red diamonds represent the European Commission's projections of the euro area output gap for 2014 and 2015.

Clearly, the responsiveness of euro area HICP inflation excluding energy and food to slack in the economy seems to have diminished compared with previous decades, indicating that a relatively large movement in slack is required to affect inflation in a significant way. These findings are consistent with the findings of a flatter Phillips curve relationship in the euro area in recent decades, as reported in other studies (see, for example, the reference in footnote 4).

28 See also, Meier, A., op. cit., for similar results based on an assessment made on 15 OECD countries.
29 For more details, see the article entitled "Country adjustment in the euro area: where do we stand?", *Monthly Bulletin*, ECB, Frankfurt am Main, May 2013.

Chart 8 Normalised HICP inflation excluding energy and food during episodes of large and persistent output gaps

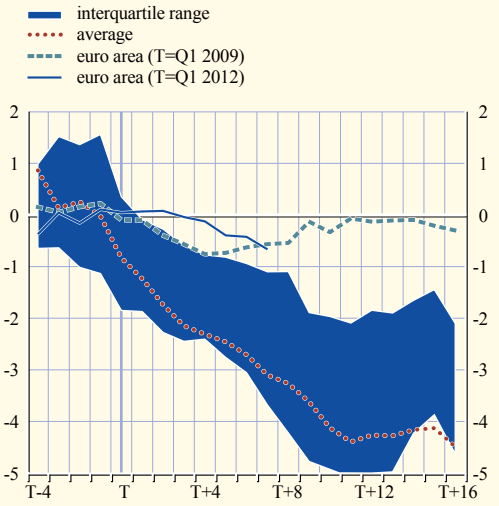
(annual growth, normalised relative to average year-on-year inflation in the five years before the first quarter of each episode)



Sources: Eurostat, OECD and ECB calculations.
Notes: Normalised quarterly HICP inflation rates excluding energy and food during 24 episodes of large and persistent output gaps (output gaps below -1.5% for at least eight consecutive quarters) between the first quarter of 1970 and the fourth quarter of 2011. Normalisation of inflation rates is to the mean inflation during the five years before the first quarter of each episode (denoted by T). The data for Greece (1974-75; 1982-84) and Portugal (1975-78) have been excluded owing to lack of data.

Chart 9 Normalised HICP inflation excluding energy and food during episodes of large and persistent output gaps excluding the financial crisis period

(annual growth, normalised relative to average year-on-year inflation in the five years before the first quarter of each episode)



Sources: Eurostat, OECD and ECB calculations.
Notes: See the notes to Chart 8. The sample covers 15 episodes of large and persistent output gaps, with a maximum sample period from the first quarter of 1970 to the fourth quarter of 2007, thus excluding the global financial crisis. The data for Greece (1974-75; and 1982-84) and Portugal (1975-78) are omitted owing to lack of data.

5 ADDITIONAL FACTORS AFFECTING THE RELATIONSHIP BETWEEN INFLATION AND ECONOMIC SLACK

The analysis presented above abstracts from several factors that may affect the relationship between inflation and economic slack. These include, among other things, inflation expectations, globalisation or structural reforms that are aimed at making labour and product markets more flexible.[30]

It has long been recognised that expectations which are related more directly to inflation or, more indirectly, to the objectives and conduct of monetary policy can change the coefficients of the Phillips curve. In particular, commitments from monetary authorities to achieve price stability by aiming at an inflation target have been successful in lowering inflation rates and anchoring expectations of future inflation in many countries. Some versions of the Phillips curve posit an explicit role for inflation expectations by including them as an explanatory variable.[31] However, it is not straightforward to establish the empirical relevance of such a forward-looking component as opposed to the backward-looking formulation with lags of inflation only, and there is a lack of consensus among economists as to which version provides a better representation of the data.[32]

30 For more details, see Galati, G. and Melick, W., "The Evolving Inflation Process: An Overview", *Working Paper Series*, No 196, BIS, 2006.

31 The most prominent example is the (hybrid) New Keynesian Phillips curve in which current inflation is determined by the real marginal cost, by expectations of future inflation (and by past inflation). See, for example, Galí, J. and Gertler, M., "Inflation Dynamics: A Structural Econometric Approach", *Journal of Monetary Economics*, No 44(2), 1999.

32 See, for example, discussions in Gordon, R., op. cit.; Mavroeidis, S., Plagborg-Møller, M. and Stock, J.H. "Empirical Evidence on Inflation Expectations in the New Keynesian Phillips Curve", *Journal of Economic Literature*, Vol. 52(1), 2014.

Nevertheless, there is evidence that it is important to account for a changing inflation trend when estimating Phillips curve-type relationships or when applying them for forecasting purposes, and long-term inflation expectations can serve as a proxy for this trend.[33] Finally, it has been suggested that often-used professional forecasts might not be the most relevant proxies of inflation expectations in the Phillips curve context.[34] Thus, while inflation expectations are believed to be an important determinant of inflation, there is no consensus as to how and whether they should be incorporated in the empirical short-term Phillips curve framework.

Global economic factors, including stronger international competition owing to increased openness, have become important drivers of domestic inflation and can thus influence the Phillips curve relationship.[35] There are various channels through which globalisation can influence inflation dynamics. For example, increased international competition may change the price-setting behaviour of individual firms, which becomes more countercyclical in order to defend market shares (i.e. price increases remain contained during booms). At the same time, a larger amount of traded goods and services in the economy makes the exchange rate a stronger element of international inflation transmission through import prices. Moreover, in the labour market, increased supply of foreign labour or the threat of outsourcing production to cheaper labour may contain wage growth and make it less responsive to domestic conditions. Accordingly, globalisation can make prices less sensitive to domestic demand pressures, i.e. induce a flattening of the Phillips curve, but could also lead to a steepening of the Phillips curve relationship if increased competition contributes to greater price and wage flexibility.[36] However, so far there is no conclusive empirical evidence to support the notion that globalisation has made domestic inflation less responsive to domestic slack and more dependent on worldwide capacity utilisation. While some have argued that traditional models of inflation are mis-specified, as they do not incorporate the influence of global slack on domestic inflation, others find that global variables have only limited or no systematic impact on domestic prices.[37]

The degree of price flexibility (as represented by the frequency of adjustment or the degree of indexation) and institutional settings (union power and wage bargaining institutions, employment protection legislations, etc.) play an important role in determining the responsiveness of inflation to slack in the economy. With flexible and competitive markets, the economy could achieve higher levels of output in the long run. At the same time, inflationary pressures would remain contained. In addition, reduced rigidities would make prices and wages more responsive in the short run to changing costs or measures of economic slack (i.e. change the slope of the Phillips curve). Therefore, an economy with flexible product and labour markets can respond more rapidly to shocks and avoid the higher costs of lost output and higher unemployment associated with the slower and more protracted adjustment of rigid economies. In particular, it has been shown that

33 See, for example, Faust, J. and Wright, J.H., op. cit. and Carlstrom, C.T. and Fuerst, T.S. "Explaining Apparent Changes in the Phillips Curve: Trend Inflation isn't Constant", *Economic Commentary*, Federal Reserve Bank of Cleveland, 2008.

34 See, for example, Coibion, O. and Gorodnichenko, Y., "Is The Phillips Curve Alive and Well After All? Inflation Expectations and the Missing Disinflation," *NBER Working Paper*, No 19598, 2013.

35 For example, in Borio, C. and Filardo, A., op. cit., a link is drawn between the flattening of the Phillips curve and the spread of globalisation.

36 For more details, see Rogoff, K.S., "Impact of Globalization on Monetary Policy", *Proceedings of the Federal Reserve Bank of Kansas City Jackson Hole Conference,* 2006, pp. 265-305.

37 Evidence of the importance of global slack as a determinant of domestic inflation has been provided by, for example, Borio, C. and Filardo, A., op. cit.. However, their results have been challenged by, for example, Ihrig, J., Kamin, S.B., Lindner, D. and Marquez, J.,"Some Simple Tests of the Globalization and Inflation Hypothesis", *International Finance*", Vol. 13(3), 2010, pp. 343-375. Similarly, Calza, A., "Globalisation, domestic inflation and global output gaps – evidence from the euro area", *Working Paper Series*, No 890, ECB, 2008 finds limited evidence in support of the "global output gap hypothesis" for the euro area.

the necessary economic adjustment after a financial crisis comes with a smaller loss of output and larger reductions in prices in an economy in which real and nominal rigidities are low.[38]

The recent price adjustments in the euro area may be influenced by structural shifts in many countries. Indeed, the relative decline in inflation in the most stressed countries coincides with substantial structural reform efforts aimed at removing nominal rigidities in prices and wages and enhancing labour and product market flexibility. While such structural reforms entail higher potential output and thereby have implications for the estimates of the degree of slack in the economy, they might also amplify the responsiveness of inflation to slack in the future. Thus, the Phillips curve relationship becomes even more uncertain in many euro area countries depending on the impact of the structural reforms undertaken.

6 CONCLUSIONS

The Phillips curve provides an intuitive framework for gauging the relationship between the level of slack and the rate of inflation in the economy and has been a popular tool for explaining and forecasting inflation developments.

At the same time, a range of limitations, as highlighted in this article, suggest that a simple Phillips curve perspective constitutes an insufficient analytical basis to forecast inflation and guide monetary policy. In particular, to date no single best concept of the Phillips curve has been clearly established for such purposes. Instead, there are various – similarly plausible – specifications of the Phillips curve, for example using different measures of economic slack. Furthermore, the suitability of each of these specifications might vary across countries. This is particularly relevant in the euro area, whose constituent countries display substantial heterogeneity in economic structure and institutional landscape, for example relating to labour and product markets.

Considering a wide range of Phillips curve specifications can to some extent serve as a hedge against such uncertainties and, in particular, can result in a more robust forecasting performance. Nevertheless, overall, the framework cannot sufficiently account for the complexity of the inflation process and the relationships with its determinants.

Against this background, the ECB's two-pillar analytical framework is built on a broad and granular set of tools and indicators to assess real economic and price developments, with the Phillips curve relationship between slack and inflation being just one element among others. In particular, the framework includes a comprehensive forecasting framework for short and medium-term inflation developments, relying on a wide set of models and on an economic and monetary analysis.[39]

38 For more details, see Cuerpo C., Drumond, I., Lendvai, J., Pontuch, P. and Raciborski, R., "Indebtedness, Deleveraging Dynamics and Macroeconomic Adjustment", *Economic Papers*, European Economy, p. 477 (Brussels: European Commission).
39 See "*A guide to Eurosystem staff macroeconomic projection exercises*", ECB, June 2001, which is available on the ECB's website.

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
2012	4.0	3.1	2.9	-	-0.2	0.7	0.57	1.72
2013	7.0	4.0	2.4	-	-1.5	1.0	0.22	2.24
2013 Q3	6.9	4.0	2.2	-	-1.9	1.5	0.22	2.05
Q4	6.4	3.1	1.5	-	-2.2	1.4	0.24	2.24
2014 Q1	6.0	2.4	1.1	-	-2.2	-1.1	0.30	1.82
Q2	.	.	.	-	.	.	0.30	1.44
2014 Jan.	6.1	2.4	1.1	1.1	-2.3	-1.1	0.29	1.89
Feb.	6.2	2.4	1.3	1.1	-2.2	-1.0	0.29	1.88
Mar.	5.6	2.2	1.0	1.0	-2.2	-1.1	0.31	1.82
Apr.	5.2	2.0	0.7	0.9	-1.8	-2.7	0.33	1.72
May	5.0	2.1	1.0	.	-2.0	.	0.32	1.56
June	.	.	.	.	.	.	0.24	1.44

2. Prices, output, demand and labour markets

	HICP [1]	Industrial producer prices	Hourly labour costs)	Real GDP (s.a.))	Industrial production excluding construction	Capacity utilisation in manufacturing (%)	Employment (s.a.))	Unemployment (% of labour force; s.a.)
	1	2	3	4	5	6	7	8
2012	2.5	2.8	1.9	-0.7	-2.5	78.6	-0.6	11.3
2013	1.4	-0.2	1.5	-0.4	-0.7	78.3	-0.8	11.9
2013 Q4	0.8	-1.1	1.6	0.5	1.6	79.3	-0.4	11.9
2014 Q1	0.7	-1.6	0.9	0.9	1.2	79.8	0.1	11.7
Q2	0.6	.	.	.	.	.	.	.
2014 Jan.	0.8	-1.3	-	-	1.7	80.1	-	11.8
Feb.	0.7	-1.7	-	-	1.8	-	-	11.7
Mar.	0.5	-1.7	-	-	0.2	-	-	11.7
Apr.	0.7	-1.2	-	-	1.4	79.5	-	11.6
May	0.5	-1.0	-	-	.	-	-	11.6
June	0.5	.	-	-	.	-	-	.

3. External statistics

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)			Reserve assets (end-of-period positions)	Net international investment position (as a % of GDP)	Gross external debt (as a % of GDP)	Effective exchange rate of the euro: EER-20 [5] (index: 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Combined direct and portfolio investment				Nominal	Real (CPI)	
	1	2	3	4	5	6	7	8	9
2012	139.6	89.0	23.9	689.4	-13.2	128.8	97.9	95.6	1.2848
2013	247.8	165.2	80.9	542.1	-12.1	121.0	101.7	98.9	1.3281
2013 Q3	56.0	38.1	-7.7	586.8	-13.3	125.2	101.9	99.2	1.3242
Q4	95.5	48.0	45.5	542.1	-12.1	121.0	103.1	100.0	1.3610
2014 Q1	47.9	35.6	44.5	570.6	.	.	103.9	100.7	1.3696
Q2	.	.	.	.	.	.	103.8	100.1	1.3711
2014 Jan.	8.0	0.7	10.3	570.8	-	-	103.4	100.3	1.3610
Feb.	16.5	15.5	57.4	578.6	-	-	103.6	100.4	1.3659
Mar.	23.5	19.3	-23.2	570.6	-	-	104.6	101.3	1.3823
Apr.	19.9	15.7	-107.0	568.0	-	-	104.5	101.0	1.3813
May	.	.	.	568.7	-	-	103.8	100.1	1.3732
June	.	.	.	.	-	-	103.0	99.1	1.3592

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) 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

	30 May 2014	6 June 2014	13 June 2014	20 June 2014	27 June 2014
Gold and gold receivables	326,477	326,478	326,478	326,479	326,479
Claims on non-euro area residents in foreign currency	245,902	248,259	247,484	244,415	244,416
Claims on euro area residents in foreign currency	23,788	22,865	23,399	25,542	24,394
Claims on non-euro area residents in euro	19,592	19,925	18,836	18,404	18,563
Lending to euro area credit institutions in euro	679,749	653,280	607,617	565,019	568,373
Main refinancing operations	174,002	149,351	136,766	97,887	115,041
Longer-term refinancing operations	505,682	503,892	470,840	467,126	453,276
Fine-tuning reverse operations	0	0	0	0	0
Structural reverse operations	0	0	0	0	0
Marginal lending facility	64	37	11	5	56
Credits related to margin calls	1	0	0	0	0
Other claims on euro area credit institutions in euro	57,409	61,125	63,814	62,898	65,198
Securities of euro area residents in euro	573,745	570,850	569,966	569,373	570,574
Securities held for monetary policy purposes	215,260	212,847	212,543	209,920	209,920
Other securities	358,485	358,003	357,423	359,453	360,654
General government debt in euro	27,267	27,267	27,267	27,267	27,267
Other assets	243,166	242,266	239,419	240,579	242,834
Total assets	2,197,095	2,172,316	2,124,281	2,079,975	2,088,099

2. Liabilities

	30 May 2014	6 June 2014	13 June 2014	20 June 2014	27 June 2014
Banknotes in circulation	953,817	957,808	956,549	955,931	958,314
Liabilities to euro area credit institutions in euro	352,187	343,693	325,814	237,777	243,158
Current accounts (covering the minimum reserve system)	209,392	187,123	199,831	211,226	217,727
Deposit facility	39,910	37,312	17,175	26,544	25,423
Fixed-term deposits	102,878	119,200	108,650	0	0
Fine-tuning reverse operations	0	0	0	0	0
Deposits related to margin calls	7	58	158	7	7
Other liabilities to euro area credit institutions in euro	1,687	1,848	2,663	8,014	8,560
Debt certificates issued	0	0	0	0	0
Liabilities to other euro area residents in euro	163,008	141,639	124,145	168,296	171,568
Liabilities to non-euro area residents in euro	76,456	78,278	67,104	61,649	59,728
Liabilities to euro area residents in foreign currency	1,005	989	971	1,057	809
Liabilities to non-euro area residents in foreign currency	5,342	6,638	6,588	6,192	5,477
Counterpart of special drawing rights allocated by the IMF	52,830	52,830	52,830	52,830	52,830
Other liabilities	209,205	206,278	205,302	204,012	203,433
Revaluation accounts	288,913	288,913	288,913	288,913	288,913
Capital and reserves	92,644	93,403	93,403	95,305	95,309
Total liabilities	2,197,095	2,172,316	2,124,281	2,079,975	2,088,099

Source: ECB.

1.2 Key ECB interest rates

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

With effect from: [1]	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
			Fixed rate	Minimum bid rate			
	Level	Change	Level	Level	Change	Level	Change
	1	2	3	4	5	6	7
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 [2]	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 [3]	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003 7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50
2005 6 Dec.	1.25	0.25	-	2.25	0.25	3.25	0.25
2006 8 Mar.	1.50	0.25	-	2.50	0.25	3.50	0.25
15 June	1.75	0.25	-	2.75	0.25	3.75	0.25
9 Aug.	2.00	0.25	-	3.00	0.25	4.00	0.25
11 Oct.	2.25	0.25	-	3.25	0.25	4.25	0.25
13 Dec.	2.50	0.25	-	3.50	0.25	4.50	0.25
2007 14 Mar.	2.75	0.25	-	3.75	0.25	4.75	0.25
13 June	3.00	0.25	-	4.00	0.25	5.00	0.25
2008 9 July	3.25	0.25	-	4.25	0.25	5.25	0.25
8 Oct.	2.75	-0.50	-	-	-	4.75	-0.50
9 [4]	3.25	0.50	-	-	-	4.25	-0.50
15 [5]	3.25	...	3.75	-	-0.50	4.25	...
12 Nov.	2.75	-0.50	3.25	-	-0.50	3.75	-0.50
10 Dec.	2.00	-0.75	2.50	-	-0.75	3.00	-0.75
2009 21 Jan.	1.00	-1.00	2.00	-	-0.50	3.00	...
11 Mar.	0.50	-0.50	1.50	-	-0.50	2.50	-0.50
8 Apr.	0.25	-0.25	1.25	-	-0.25	2.25	-0.25
13 May	0.25	...	1.00	-	-0.25	1.75	-0.50
2011 13 Apr.	0.50	0.25	1.25	-	0.25	2.00	0.25
13 July	0.75	0.25	1.50	-	0.25	2.25	0.25
9 Nov.	0.50	-0.25	1.25	-	-0.25	2.00	-0.25
14 Dec.	0.25	-0.25	1.00	-	-0.25	1.75	-0.25
2012 11 July	0.00	-0.25	0.75	-	-0.25	1.50	-0.25
2013 8 May	0.00	...	0.50	-	-0.25	1.00	-0.50
13 Nov.	0.00	...	0.25	-	-0.25	0.75	-0.25
2014 11 June	-0.10	-0.10	0.15	-	-0.10	0.40	-0.35

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							
2014 26 Mar.	121,305	121	121,305	0.25	-	-	-	7
2 Apr.	110,643	113	110,643	0.25	-	-	-	7
9	104,619	142	104,619	0.25	-	-	-	7
16	112,165	172	112,165	0.25	-	-	-	7
23	121,816	155	121,816	0.25	-	-	-	7
30	172,621	266	172,621	0.25	-	-	-	7
7 May	129,140	177	129,140	0.25	-	-	-	7
14	137,302	199	137,302	0.25	-	-	-	7
21	131,957	193	131,957	0.25	-	-	-	7
28	174,002	267	174,002	0.25	-	-	-	7
4 June	149,351	229	149,351	0.25	-	-	-	7
11	136,766	193	136,766	0.15	-	-	-	7
18	97,887	150	97,887	0.15	-	-	-	7
25	115,041	151	115,041	0.15	-	-	-	7
2 July	97,103	124	97,103	0.15	-	-	-	7
	Longer-term refinancing operations [5)]							
2014 15 Jan.	7,092	28	7,092	0.25	-	-	-	28
30	4,955	69	4,955	0.25	-	-	-	92
12 Feb.	6,480	30	6,480	0.25	-	-	-	28
27	6,297	63	6,297	0.25	-	-	-	91
12 Mar.	7,522	30	7,522	0.25	-	-	-	28
27	11,617	83	11,617	0.23	-	-	-	91
9 Apr.	28,023	35	28,023	0.25	-	-	-	35
2 May [6)]	13,193	97	13,193	.	-	-	-	90
14	32,335	54	32,335	0.25	-	-	-	28
29 [6)]	10,949	89	10,949	.	-	-	-	91
11 June	9,970	44	9,970	0.15	-	-	-	28
26 [6)]	10,386	84	10,386	.	-	-	-	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
2014 5 Mar.	Collection of fixed-term deposits	219,131	165	175,500	-	-	0.25	0.23	0.22	7
12	Collection of fixed-term deposits	219,077	159	175,500	-	-	0.25	0.23	0.21	7
19	Collection of fixed-term deposits	223,227	160	175,500	-	-	0.25	0.22	0.21	7
26	Collection of fixed-term deposits	180,901	138	175,500	-	-	0.25	0.25	0.22	7
2 Apr.	Collection of fixed-term deposits	199,721	152	175,500	-	-	0.25	0.23	0.21	7
9	Collection of fixed-term deposits	192,515	156	172,500	-	-	0.25	0.24	0.22	7
16	Collection of fixed-term deposits	153,364	139	153,364	-	-	0.25	0.25	0.23	7
23	Collection of fixed-term deposits	166,780	139	166,780	-	-	0.25	0.25	0.23	7
30	Collection of fixed-term deposits	103,946	121	103,946	-	-	0.25	0.25	0.24	7
7 May	Collection of fixed-term deposits	165,533	158	165,533	-	-	0.25	0.25	0.23	7
14	Collection of fixed-term deposits	144,281	141	144,281	-	-	0.25	0.25	0.24	7
21	Collection of fixed-term deposits	137,465	148	137,465	-	-	0.25	0.25	0.24	7
28	Collection of fixed-term deposits	102,878	119	102,878	-	-	0.25	0.25	0.25	7
4 June	Collection of fixed-term deposits	119,200	140	119,200	-	-	0.25	0.25	0.24	7
11	Collection of fixed-term deposits	108,650	122	108,650	-	-	0.15	0.15	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
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	17,847.1	9,811.6	518.8	2,447.1	1,152.6	3,917.1
2013 Dec. [2]	17,847.1	9,811.6	518.8	2,447.1	1,152.6	3,917.1
2014 Jan.	18,010.5	9,834.5	569.0	2,436.0	1,233.4	3,937.5
Feb.	17,994.9	9,825.2	572.2	2,409.7	1,281.0	3,906.9
Mar.	17,978.0	9,885.5	553.4	2,395.7	1,232.6	3,910.7
Apr.	18,000.0	9,948.1	541.2	2,364.4	1,257.2	3,889.1

2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2010	211.8	212.5	0.7	0.5	1.00
2011	207.7	212.2	4.5	0.0	1.25
2012	106.4	509.9	403.5	0.0	0.75
2013	103.3	220.2	116.9	0.0	0.25
2014 11 Feb.	103.6	216.0	112.4	0.0	0.25
11 Mar.	102.8	201.1	98.3	0.0	0.25
8 Apr.	103.6	195.2	91.6	0.0	0.25
13 May	103.5	191.2	87.7	0.0	0.25
10 June	103.9	192.3	88.3	0.0	0.25
8 July	104.4	.	.	.	.

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 [3]	Deposit facility	Other liquidity-absorbing operations [4]	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
	1	2	3	4	5	6	7	8	9	10	11	12
2010	511.1	179.5	336.3	1.9	130.4	44.7	70.8	815.9	94.4	-79.1	212.5	1,073.1
2011	622.1	238.0	389.0	4.4	260.3	253.7	200.5	869.4	63.8	-85.9	212.2	1,335.3
2012	708.0	74.0	1,044.1	1.6	277.3	231.8	208.5	889.3	121.1	144.5	509.9	1,631.0
2013	550.8	91.6	625.3	0.1	241.5	48.3	177.4	925.9	80.2	57.2	220.2	1,194.4
2014 14 Jan.	532.7	129.3	592.1	0.3	236.8	60.1	149.3	947.9	61.2	24.7	248.1	1,256.0
11 Feb.	510.3	105.4	576.4	0.3	232.5	42.1	164.4	931.8	83.4	-12.9	216.0	1,190.0
11 Mar.	510.4	91.8	570.4	0.3	229.5	29.5	175.5	932.1	81.8	-17.6	201.1	1,162.8
8 Apr.	518.9	105.4	534.6	0.7	227.5	29.2	175.5	938.4	73.8	-25.0	195.2	1,162.8
13 May	536.4	128.1	519.6	0.2	222.6	29.7	152.4	947.9	87.7	-2.1	191.2	1,168.8
10 June	536.8	148.1	507.8	0.1	215.9	28.3	126.0	951.0	111.5	-0.4	192.3	1,171.6

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 the reserve bases of credit institutions in Latvia. On a transitional basis, credit institutions located in the euro area may decide to deduct from their own reserve bases any liabilities vis-à-vis credit institutions located in Latvia. Starting from the reserve base as at end-January 2014, the standard treatment applies (see Decision ECB/2013/41 of the ECB of 22 October 2013 on transitional provisions for the application of minimum reserves by the ECB following the introduction of the euro in Latvia).
3) Includes liquidity provided under the Eurosystem's covered bond purchase programmes and the Eurosystem's Securities Markets Programme.
4) Includes liquidity absorbed as a result of the Eurosystem's foreign exchange swap operations.
For more information, please see: http://www.ecb.europa.eu/mopo/liq/html/index.en.html

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
		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													
2012	5,288.1	3,351.2	16.9	1.0	3,333.3	723.1	568.4	10.5	144.2	-	23.4	799.9	8.3	382.3
2013	4,073.0	2,283.2	15.0	1.2	2,267.1	715.3	567.6	24.9	122.8	-	25.0	632.4	8.3	408.7
2013 Q4	4,073.0	2,283.2	15.0	1.2	2,267.1	715.3	567.6	24.9	122.8	-	25.0	632.4	8.3	408.7
2014 Q1	3,916.3	2,087.4	15.0	1.2	2,071.2	721.9	578.0	22.9	121.0	-	26.6	658.0	7.9	414.5
2014 Feb.	3,988.7	2,156.6	15.0	1.2	2,140.5	717.8	571.3	25.0	121.5	-	26.5	668.5	7.9	411.4
Mar.	3,916.3	2,087.4	15.0	1.2	2,071.2	721.9	578.0	22.9	121.0	-	26.6	658.0	7.9	414.5
Apr.	3,926.6	2,101.1	14.1	1.2	2,085.9	712.3	567.6	22.7	122.0	-	26.7	662.3	8.0	416.3
May [p]	3,888.0	2,064.3	14.1	1.3	2,049.0	706.3	567.1	17.4	121.8	-	26.9	664.3	8.0	418.2
	MFIs excluding the Eurosystem													
2012	32,694.6	17,987.2	1,153.4	11,043.4	5,790.4	4,901.6	1,627.0	1,423.3	1,851.3	66.8	1,227.8	4,045.7	214.7	4,250.9
2013	30,444.8	16,983.4	1,082.4	10,651.2	5,249.7	4,671.4	1,694.3	1,334.4	1,642.7	58.1	1,232.7	3,856.0	210.6	3,432.6
2013 Q4	30,444.8	16,983.4	1,082.4	10,651.2	5,249.7	4,671.4	1,694.3	1,334.4	1,642.7	58.1	1,232.7	3,856.0	210.6	3,432.6
2014 Q1	30,586.7	16,943.9	1,092.9	10,642.0	5,208.9	4,697.9	1,774.5	1,305.9	1,617.6	54.0	1,249.2	3,981.5	202.3	3,458.0
2014 Feb.	30,744.2	16,974.8	1,095.3	10,640.9	5,238.6	4,752.1	1,768.8	1,317.4	1,665.9	53.2	1,237.8	4,003.8	208.4	3,514.1
Mar.	30,586.7	16,943.9	1,092.9	10,642.0	5,208.9	4,697.9	1,774.5	1,305.9	1,617.6	54.0	1,249.2	3,981.5	202.3	3,458.0
Apr.	30,738.8	16,962.3	1,093.7	10,651.0	5,217.6	4,679.0	1,790.7	1,270.7	1,617.7	54.0	1,267.9	4,035.9	202.8	3,537.0
May [p]	30,870.7	16,928.9	1,095.3	10,590.0	5,243.6	4,715.6	1,807.0	1,314.3	1,594.4	51.7	1,256.3	4,106.5	203.1	3,608.8

2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents				Money market fund shares/ units [3]	Debt securities issued [4]	Capital and reserves	External liabilities	Remaining liabilities
			Total	Central government	Other general government/ other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11
	Eurosystem										
2012	5,288.1	938.2	3,062.2	81.4	64.5	2,916.4	-	0.0	536.6	298.7	452.5
2013	4,073.0	982.4	2,004.3	62.3	40.1	1,901.9	-	0.0	406.3	202.2	477.8
2013 Q4	4,073.0	982.4	2,004.3	62.3	40.1	1,901.9	-	0.0	406.3	202.2	477.8
2014 Q1	3,916.3	965.6	1,860.2	86.1	38.4	1,735.7	-	0.0	440.5	166.5	483.5
2014 Feb.	3,988.7	960.0	1,921.3	94.9	42.7	1,783.7	-	0.0	445.6	177.5	484.4
Mar.	3,916.3	965.6	1,860.2	86.1	38.4	1,735.7	-	0.0	440.5	166.5	483.5
Apr.	3,926.6	975.4	1,859.4	112.4	50.2	1,696.8	-	0.0	440.0	167.5	484.2
May [p]	3,888.0	980.3	1,811.4	116.7	50.8	1,643.8	-	0.0	442.2	167.8	486.3
	MFIs excluding the Eurosystem										
2012	32,694.6	-	17,195.3	169.6	10,870.4	6,155.3	534.7	4,848.9	2,344.0	3,494.5	4,277.2
2013	30,444.8	-	16,646.8	152.5	10,940.3	5,554.0	462.9	4,352.6	2,399.7	3,106.4	3,476.4
2013 Q4	30,444.8	-	16,646.8	152.5	10,940.3	5,554.0	462.9	4,352.6	2,399.7	3,106.4	3,476.4
2014 Q1	30,586.7	-	16,654.6	181.1	10,955.7	5,517.9	458.1	4,297.8	2,452.9	3,224.9	3,498.5
2014 Feb.	30,744.2	-	16,687.9	177.6	10,941.2	5,569.1	475.0	4,344.6	2,431.6	3,250.1	3,555.0
Mar.	30,586.7	-	16,654.6	181.1	10,955.7	5,517.9	458.1	4,297.8	2,452.9	3,224.9	3,498.5
Apr.	30,738.8	-	16,658.7	144.2	10,925.6	5,588.9	463.1	4,284.1	2,462.7	3,295.7	3,574.5
May [p]	30,870.7	-	16,742.0	172.9	10,950.0	5,619.1	455.5	4,279.0	2,453.2	3,310.5	3,630.4

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) 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.

2.2 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										
2012	26,251.1	12,214.6	1,170.3	11,044.3	3,629.2	2,195.4	1,433.8	767.0	4,845.6	222.9	4,571.8
2013	24,650.4	11,749.8	1,097.4	10,652.4	3,621.2	2,261.8	1,359.4	791.9	4,488.4	218.9	3,780.1
2013 Q4	24,650.4	11,749.8	1,097.4	10,652.4	3,621.2	2,261.8	1,359.4	791.9	4,488.4	218.9	3,780.1
2014 Q1	24,909.8	11,751.2	1,108.0	10,643.2	3,681.3	2,352.5	1,328.7	804.2	4,639.5	210.2	3,823.4
2014 Feb.	24,991.4	11,752.3	1,110.2	10,642.1	3,682.5	2,340.0	1,342.5	792.3	4,672.3	216.3	3,875.7
Mar.	24,909.8	11,751.2	1,108.0	10,643.2	3,681.3	2,352.5	1,328.7	804.2	4,639.5	210.2	3,823.4
Apr.	25,045.6	11,759.9	1,107.7	10,652.2	3,651.6	2,358.2	1,293.3	825.6	4,698.1	210.8	3,899.7
May [p]	25,178.6	11,700.6	1,109.4	10,591.2	3,705.7	2,374.1	1,331.6	815.0	4,770.7	211.1	3,975.5
	Transactions										
2012	90.3	-35.2	-4.7	-30.6	113.1	183.6	-70.5	38.5	-151.1	-14.0	139.0
2013	-1,617.3	-276.3	-73.7	-202.6	-27.9	46.1	-74.1	14.0	-79.2	-2.1	-1,245.7
2013 Q4	-671.7	-100.1	-8.0	-92.1	-137.7	-75.2	-62.5	-5.2	-13.8	0.5	-415.4
2014 Q1	184.3	-3.8	9.1	-12.9	35.0	58.3	-23.4	13.4	117.9	-8.8	30.6
2014 Feb.	-23.1	-1.5	-8.3	6.7	1.5	12.3	-10.8	-5.5	16.3	-0.8	-32.9
Mar.	-77.3	5.1	-2.3	7.4	-10.8	3.5	-14.2	10.9	-23.1	-6.0	-53.4
Apr.	137.9	14.0	0.1	13.9	-36.9	0.0	-36.9	19.6	64.9	0.5	75.8
May [p]	90.5	-56.4	1.6	-58.0	46.7	9.7	36.9	-12.5	37.0	0.4	75.4

2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units [3]	Debt securities issued [4]	Capital and reserves	External liabilities	Remaining liabilities [2]	Excess of inter-MFI liabilities over inter-MFI assets
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2012	26,251.1	876.8	251.0	10,934.9	467.9	2,853.4	2,396.4	3,793.2	4,729.6	-52.1
2013	24,650.4	921.2	214.8	10,980.4	404.8	2,587.0	2,340.2	3,308.6	3,954.2	-60.9
2013 Q4	24,650.4	921.2	214.8	10,980.4	404.8	2,587.0	2,340.2	3,308.6	3,954.2	-60.9
2014 Q1	24,909.8	916.5	267.2	10,994.1	404.1	2,559.2	2,421.9	3,391.5	3,981.9	-26.5
2014 Feb.	24,991.4	910.2	272.5	10,983.8	421.8	2,557.2	2,405.2	3,427.6	4,039.4	-26.3
Mar.	24,909.8	916.5	267.2	10,994.1	404.1	2,559.2	2,421.9	3,391.5	3,981.9	-26.5
Apr.	25,045.6	921.8	256.5	10,975.8	409.1	2,544.4	2,433.7	3,463.2	4,058.7	-17.7
May [p]	25,178.6	928.9	289.6	11,000.8	403.8	2,562.9	2,427.2	3,478.4	4,116.7	-29.6
	Transactions									
2012	90.3	19.5	-5.1	180.1	-18.2	-124.8	156.0	-251.7	151.0	-16.6
2013	-1,617.3	44.4	-37.0	163.1	-46.6	-198.9	78.9	-441.7	-1,187.2	7.7
2013 Q4	-671.7	27.2	-58.9	23.5	-12.7	-25.7	-1.8	-179.2	-426.1	-18.1
2014 Q1	184.3	-5.3	52.0	9.4	-0.6	-27.1	38.4	70.7	13.9	32.9
2014 Feb.	-23.1	1.9	36.9	28.8	-0.7	-16.3	5.3	-16.4	-77.2	14.6
Mar.	-77.3	6.3	-5.3	10.0	-17.6	2.5	19.5	-36.3	-56.0	-0.4
Apr.	137.9	5.3	-10.7	-17.5	5.1	-13.3	7.7	75.0	74.8	11.4
May [p]	90.5	7.1	33.1	19.7	-5.2	11.6	-5.0	-13.1	54.1	-11.7

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]

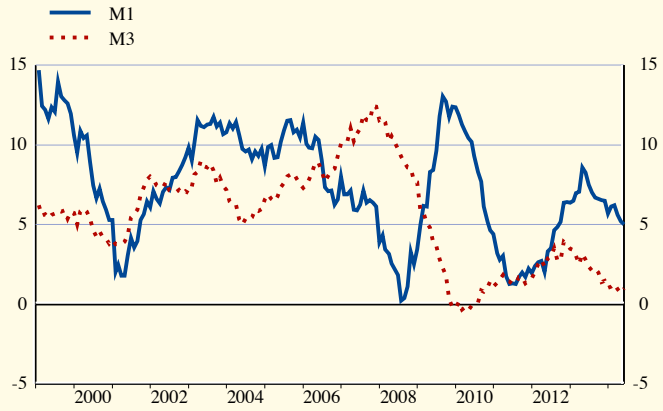
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

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											
2012	5,107.1	3,882.3	8,989.4	790.1	9,779.5	-	7,569.0	3,406.0	13,055.3	10,854.0	-	1,035.6
2013	5,390.0	3,812.4	9,202.4	625.2	9,827.6	-	7,303.4	3,402.2	12,694.5	10,542.0	-	1,162.3
2013 Q4	5,390.0	3,812.4	9,202.4	625.2	9,827.6	-	7,303.4	3,402.2	12,694.5	10,542.0	-	1,162.3
2014 Q1	5,488.3	3,791.7	9,280.0	602.4	9,882.4	-	7,348.4	3,452.9	12,660.6	10,534.5	-	1,263.2
2014 Feb.	5,492.0	3,783.1	9,275.1	637.9	9,912.9	-	7,328.3	3,455.0	12,677.5	10,545.1	-	1,240.6
Mar.	5,488.3	3,791.7	9,280.0	602.4	9,882.4	-	7,348.4	3,452.9	12,660.6	10,534.5	-	1,263.2
Apr.	5,497.2	3,788.2	9,285.4	589.2	9,874.6	-	7,327.9	3,458.6	12,630.7	10,551.5	-	1,271.3
May [p]	5,530.7	3,799.9	9,330.6	593.0	9,923.6	-	7,322.4	3,466.2	12,611.8	10,494.8	-	1,305.4
	Transactions											
2012	307.4	78.1	385.5	-55.4	330.0	-	-116.4	184.9	-102.6	-70.8	-15.1	99.3
2013	291.1	-66.7	224.4	-123.8	100.6	-	-89.6	-25.2	-305.1	-245.7	-219.8	361.7
2013 Q4	48.7	-39.2	9.5	-20.1	-10.6	-	-17.8	-50.7	-152.6	-62.9	-57.1	155.2
2014 Q1	90.4	-23.9	66.5	-22.4	44.1	-	8.5	16.8	-29.3	-11.1	-8.3	79.9
2014 Feb.	47.7	-9.7	38.0	-4.9	33.1	-	-10.7	-2.6	-9.8	6.4	8.5	36.7
Mar.	-3.9	8.6	4.7	-35.5	-30.8	-	23.5	-11.1	-12.1	-4.3	-3.8	32.5
Apr.	9.3	-3.2	6.1	-11.0	-4.9	-	-25.2	0.4	-28.2	21.9	23.2	11.2
May [p]	30.7	10.5	41.2	3.9	45.1	-	-12.2	1.4	-19.1	-53.8	-4.9	26.7
	Growth rates											
2012	6.4	2.1	4.5	-6.5	3.5	3.5	-1.5	5.9	-0.8	-0.6	-0.1	99.3
2013	5.7	-1.7	2.5	-16.2	1.0	1.2	-1.2	-0.7	-2.3	-2.3	-2.0	361.7
2013 Q4	5.7	-1.7	2.5	-16.2	1.0	1.2	-1.2	-0.7	-2.3	-2.3	-2.0	361.7
2014 Q1	5.6	-2.3	2.2	-14.6	1.0	1.0	-1.0	-0.9	-2.5	-2.2	-2.0	375.7
2014 Feb.	6.2	-2.6	2.4	-12.4	1.3	1.1	-1.3	0.1	-2.3	-2.2	-2.0	375.7
Mar.	5.6	-2.3	2.2	-14.6	1.0	1.0	-1.0	-0.9	-2.5	-2.2	-2.0	375.7
Apr.	5.2	-2.4	2.0	-15.3	0.7	0.9	-1.1	-0.9	-2.5	-1.8	-1.6	372.3
May [p]	5.0	-1.9	2.1	-13.4	1.0	.	-1.2	-1.4	-2.5	-2.0	-1.4	344.5

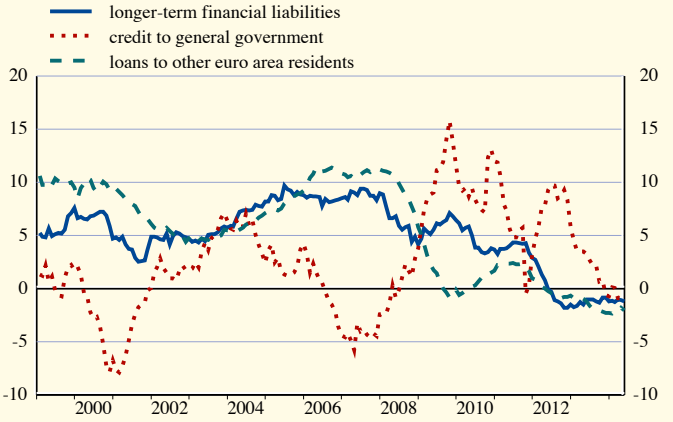
C1 Monetary aggregates [1]

(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]

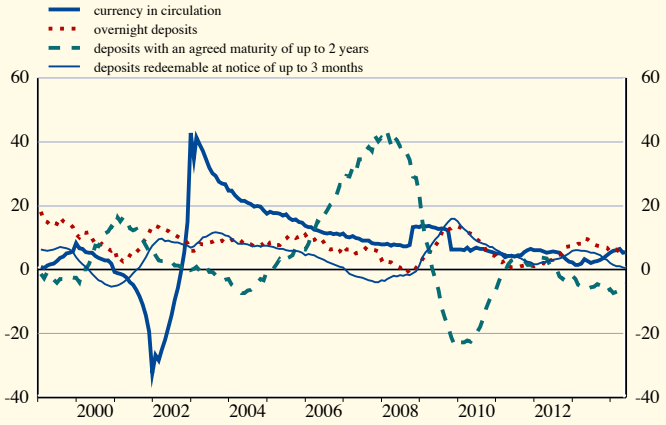
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

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										
2012	863.9	4,243.1	1,801.8	2,080.6	123.7	483.3	183.2	2,685.0	106.1	2,395.2	2,382.7
2013	909.6	4,480.4	1,690.8	2,121.6	118.8	417.9	88.5	2,510.7	91.7	2,372.8	2,328.2
2013 Q4	909.6	4,480.4	1,690.8	2,121.6	118.8	417.9	88.5	2,510.7	91.7	2,372.8	2,328.2
2014 Q1	926.3	4,561.9	1,667.4	2,124.3	116.8	402.0	83.6	2,472.6	91.2	2,358.7	2,425.9
2014 Feb.	919.1	4,572.9	1,664.3	2,118.8	130.1	421.2	86.6	2,470.5	91.3	2,360.4	2,406.0
Mar.	926.3	4,561.9	1,667.4	2,124.3	116.8	402.0	83.6	2,472.6	91.2	2,358.7	2,425.9
Apr.	925.7	4,571.5	1,664.3	2,123.9	119.2	401.8	68.3	2,468.4	91.1	2,321.8	2,446.6
May [p]	928.5	4,602.2	1,672.9	2,127.0	120.5	395.2	77.3	2,480.6	91.1	2,310.6	2,440.1
	Transactions										
2012	20.2	287.2	-36.5	114.6	-17.0	-20.0	-18.4	-105.8	-10.2	-156.1	155.7
2013	45.6	245.5	-109.9	43.2	-11.9	-48.6	-63.3	-137.2	-14.3	-18.4	80.3
2013 Q4	15.9	32.9	-28.6	-10.6	9.6	-3.4	-26.3	17.2	-1.8	-18.2	-15.1
2014 Q1	16.1	74.3	-26.1	2.2	-2.1	-15.8	-4.6	-37.8	-0.5	-7.9	54.6
2014 Feb.	5.3	42.4	-9.2	-0.5	5.6	-6.3	-4.3	-19.1	0.5	-3.5	11.4
Mar.	7.2	-11.1	3.1	5.5	-13.3	-19.1	-3.2	2.8	-0.2	-1.8	22.7
Apr.	-0.7	10.0	-3.0	-0.3	2.4	-0.2	-13.2	-4.8	-0.1	-36.7	16.5
May [p]	2.8	27.9	7.5	3.0	1.1	-6.5	9.3	5.1	0.0	-12.3	-5.0
	Growth rates										
2012	2.4	7.2	-2.0	5.8	-11.8	-3.9	-9.6	-3.8	-8.8	-6.1	6.9
2013	5.3	5.8	-6.1	2.1	-9.5	-10.4	-37.4	-5.1	-13.5	-0.8	3.4
2013 Q4	5.3	5.8	-6.1	2.1	-9.5	-10.4	-37.4	-5.1	-13.5	-0.8	3.4
2014 Q1	6.5	5.4	-6.4	1.1	-9.9	-12.0	-28.4	-4.6	-9.6	-1.7	4.0
2014 Feb.	6.2	6.2	-7.0	1.1	-2.5	-9.2	-31.8	-5.8	-10.7	-0.7	3.6
Mar.	6.5	5.4	-6.4	1.1	-9.9	-12.0	-28.4	-4.6	-9.6	-1.7	4.0
Apr.	5.3	5.2	-6.0	0.7	-7.9	-10.8	-39.1	-4.1	-8.3	-2.7	4.3
May [p]	5.5	4.9	-4.7	0.5	-7.1	-11.2	-27.9	-3.2	-6.7	-3.5	3.6

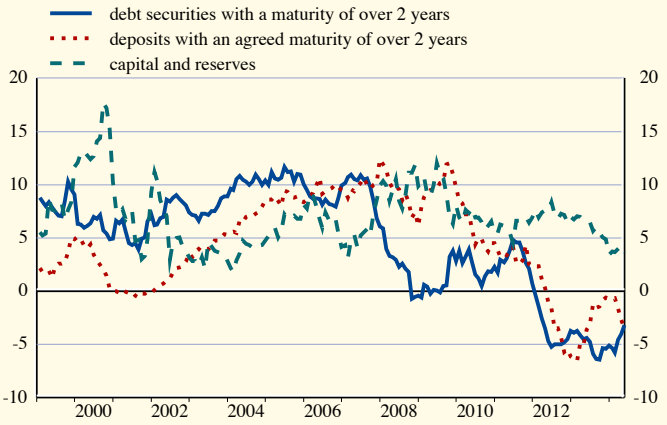
C3 Components of monetary aggregates [1]

(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.

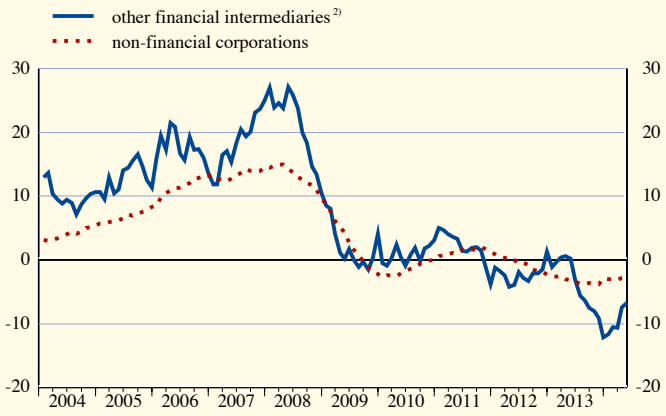
2.3 Monetary statistics [1]

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

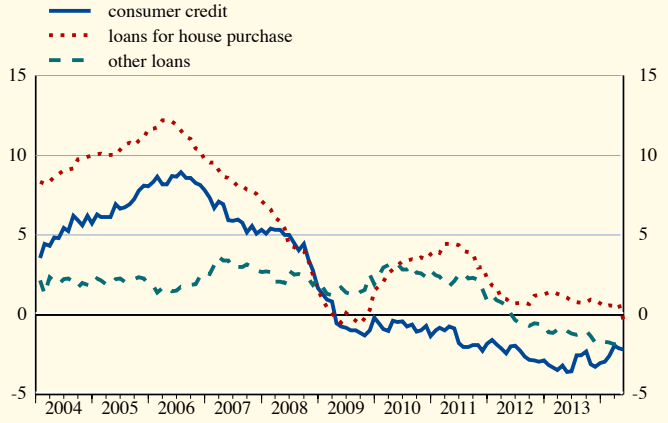
3. Loans as counterpart to M3

	Insurance corporations and pension funds	Other financial intermediaries [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											
2012	89.0	977.0	4,546.5	-	1,129.8	795.7	2,621.1	5,241.4	-	601.8	3,823.5	816.1
2013	98.3	866.8	4,356.1	-	1,067.9	740.5	2,547.8	5,220.7	-	573.3	3,851.6	795.7
2013 Q4	98.3	866.8	4,356.1	-	1,067.9	740.5	2,547.8	5,220.7	-	573.3	3,851.6	795.7
2014 Q1	101.1	861.6	4,339.7	-	1,058.7	734.7	2,546.3	5,232.1	-	572.6	3,867.1	792.4
2014 Feb.	102.5	863.2	4,348.3	-	1,048.0	741.7	2,558.5	5,231.2	-	571.9	3,865.5	793.8
Mar.	101.1	861.6	4,339.7	-	1,058.7	734.7	2,546.3	5,232.1	-	572.6	3,867.1	792.4
Apr.	100.0	885.7	4,329.6	-	1,047.4	739.0	2,543.1	5,236.3	-	571.1	3,871.8	793.4
May [p]	95.8	887.8	4,319.3	-	1,038.3	739.8	2,541.1	5,191.9	-	568.2	3,833.1	790.6
	Transactions											
2012	-2.0	12.9	-107.3	-60.1	6.5	-51.4	-62.4	25.6	34.3	-17.7	48.5	-5.1
2013	9.6	-119.2	-132.7	-127.5	-44.2	-44.9	-43.7	-3.4	14.1	-18.0	27.8	-13.1
2013 Q4	3.0	-33.2	-25.2	-26.8	-8.5	-17.7	1.1	-7.5	-0.6	-6.3	7.0	-8.2
2014 Q1	2.8	6.9	-28.5	-27.4	-7.1	-6.6	-14.8	7.7	9.1	0.4	10.2	-3.0
2014 Feb.	2.6	11.0	-13.2	-12.8	-10.4	2.2	-5.1	5.9	7.7	-0.4	7.3	-1.0
Mar.	-1.4	-1.5	-4.0	-3.4	12.0	-5.9	-10.1	2.6	2.3	1.4	1.6	-0.4
Apr.	-1.2	24.3	-6.3	-3.4	-10.7	7.0	-2.7	5.1	3.0	-1.1	4.9	1.3
May [p]	-4.2	0.8	-7.6	-4.5	-8.7	-1.0	2.1	-42.8	2.8	-2.2	-39.0	-1.6
	Growth rates											
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	10.8	-12.2	-2.9	-2.8	-3.9	-5.7	-1.7	-0.1	0.3	-3.0	0.7	-1.6
2013 Q4	10.8	-12.2	-2.9	-2.8	-3.9	-5.7	-1.7	-0.1	0.3	-3.0	0.7	-1.6
2014 Q1	9.0	-10.6	-3.1	-3.1	-4.9	-5.0	-1.7	-0.1	0.4	-1.9	0.6	-1.9
2014 Feb.	11.0	-10.5	-3.0	-3.2	-5.7	-4.8	-1.3	-0.1	0.4	-2.6	0.6	-1.8
Mar.	9.0	-10.6	-3.1	-3.1	-4.9	-5.0	-1.7	-0.1	0.4	-1.9	0.6	-1.9
Apr.	5.4	-7.4	-2.8	-2.8	-5.1	-3.6	-1.5	0.0	0.4	-2.1	0.7	-1.7
May [p]	2.8	-6.7	-2.6	-2.5	-4.9	-3.8	-1.2	-0.7	0.5	-2.2	-0.3	-1.7

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												
2013	90.0	72.6	4.1	13.3	986.2	122.9	439.4	223.7	323.0	4,345.0	1,059.7	739.4	2,545.9
2013 Q4	90.0	72.6	4.1	13.3	986.2	122.9	439.4	223.7	323.0	4,345.0	1,059.7	739.4	2,545.9
2014 Q1	99.4	82.0	4.0	13.4	980.3	117.8	440.3	221.2	318.8	4,338.9	1,061.0	734.0	2,544.0
2014 Mar.	99.4	82.0	4.0	13.4	980.3	117.8	440.3	221.2	318.8	4,338.9	1,061.0	734.0	2,544.0
Apr.	99.4	82.5	4.1	12.8	995.8	104.8	437.0	227.2	331.5	4,329.1	1,051.6	737.6	2,539.8
May [p]	97.2	80.2	4.1	12.9	988.4	96.2	431.0	231.5	325.9	4,321.0	1,041.7	741.7	2,537.7
	Transactions												
2013	8.8	8.8	-0.3	0.3	-74.4	44.8	-54.8	3.9	-23.5	-133.2	-44.0	-44.9	-44.3
2013 Q4	-8.4	-9.4	0.6	0.4	-47.8	-2.9	-52.3	9.3	-4.8	-35.8	-14.0	-20.3	-1.5
2014 Q1	9.3	9.4	-0.1	0.1	6.3	-5.2	4.6	-3.7	5.4	-18.0	3.5	-6.2	-15.3
2014 Mar.	-1.0	-1.0	0.1	-0.1	8.5	3.1	9.1	0.3	-0.9	-3.9	12.2	-4.5	-11.6
Apr.	0.0	0.5	0.1	-0.6	15.7	-13.0	-3.2	6.1	12.8	-6.1	-8.8	6.4	-3.6
May [p]	-2.2	-2.2	-0.1	0.1	-8.7	-8.6	-6.5	3.7	-5.9	-5.4	-9.5	2.2	1.9
	Growth rates												
2013	10.7	13.7	-7.0	2.2	-6.6	24.4	-10.3	1.9	-6.7	-3.0	-4.0	-5.7	-1.7
2013 Q4	10.7	13.7	-7.0	2.2	-6.6	24.4	-10.3	1.9	-6.7	-3.0	-4.0	-5.7	-1.7
2014 Q1	8.9	9.1	3.9	9.7	-8.6	0.0	-13.8	2.3	-7.2	-3.1	-4.9	-5.0	-1.7
2014 Mar.	8.9	9.1	3.9	9.7	-8.6	0.0	-13.8	2.3	-7.2	-3.1	-4.9	-5.0	-1.7
Apr.	5.2	5.4	1.4	5.5	-6.8	-10.0	-14.2	4.4	-2.0	-2.8	-5.1	-3.7	-1.5
May [p]	2.7	2.0	5.9	6.0	-7.6	-19.9	-15.9	6.8	-3.4	-2.6	-4.9	-3.8	-1.2

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													
2013	5,230.1	575.8	128.6	169.5	277.7	3,857.8	12.7	55.4	3,789.7	796.5	408.6	136.5	76.4	583.6
2013 Q4	5,230.1	575.8	128.6	169.5	277.7	3,857.8	12.7	55.4	3,789.7	796.5	408.6	136.5	76.4	583.6
2014 Q1	5,223.4	570.1	126.9	166.2	277.0	3,863.1	13.1	54.7	3,795.3	790.1	401.0	135.1	75.8	579.2
2014 Mar.	5,223.4	570.1	126.9	166.2	277.0	3,863.1	13.1	54.7	3,795.3	790.1	401.0	135.1	75.8	579.2
Apr.	5,226.7	569.9	126.4	165.3	278.2	3,866.3	13.1	54.7	3,798.4	790.5	399.4	134.7	76.0	579.8
May [p]	5,183.4	567.5	125.0	164.7	277.8	3,826.5	13.1	54.4	3,759.0	789.4	398.4	133.2	76.1	580.1
	Transactions													
2013	-3.8	-18.1	-4.0	-6.8	-7.3	27.5	-1.4	-1.5	30.4	-13.3	-10.7	-3.5	-3.7	-6.1
2013 Q4	0.0	-4.7	-0.5	-1.4	-2.8	11.6	0.1	-0.4	11.8	-6.9	-3.1	-0.4	-1.1	-5.3
2014 Q1	-10.4	-4.5	-1.5	-1.6	-1.3	0.0	0.2	-1.0	0.8	-6.0	-2.1	-1.2	-0.5	-4.2
2014 Mar.	3.8	2.8	2.5	0.0	0.3	2.4	0.3	-0.4	2.5	-1.5	-0.5	1.4	-0.3	-2.6
Apr.	4.2	0.2	-0.4	0.6	0.1	3.3	0.0	0.0	3.3	0.7	-0.8	-0.3	0.2	0.9
May [p]	-41.7	-1.7	-1.3	-0.6	0.2	-40.0	-0.1	-0.5	-39.5	0.0	-0.5	-1.2	0.2	1.1
	Growth rates													
2013	-0.1	-3.0	-2.9	-3.9	-2.5	0.7	-9.9	-2.6	0.8	-1.6	-2.6	-2.5	-4.6	-1.0
2013 Q4	-0.1	-3.0	-2.9	-3.9	-2.5	0.7	-9.9	-2.6	0.8	-1.6	-2.6	-2.5	-4.6	-1.0
2014 Q1	-0.1	-1.9	-0.4	-2.8	-2.1	0.6	-4.6	-2.8	0.6	-1.9	-2.1	-2.8	-2.9	-1.5
2014 Mar.	-0.1	-1.9	-0.4	-2.8	-2.1	0.6	-4.6	-2.8	0.6	-1.9	-2.1	-2.8	-2.9	-1.5
Apr.	0.0	-2.1	-1.1	-2.7	-2.1	0.7	-5.0	-2.9	0.7	-1.7	-2.0	-2.6	-2.5	-1.4
May [p]	-0.7	-2.2	-1.5	-3.1	-1.9	-0.3	-5.6	-3.5	-0.2	-1.7	-2.1	-1.9	-2.5	-1.5

Source: ECB.

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

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

3) Including non-profit institutions serving households.

2.4 MFI loans: breakdown [1), 2)]

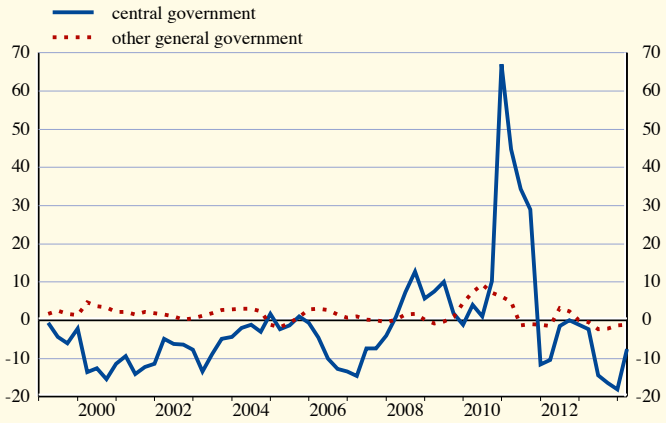
(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

3. Loans to government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks [3)]	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2012	1,153.4	341.8	221.6	565.9	24.1	2,868.2	1,906.7	961.5	60.7	900.7
2013	1,082.4	279.6	213.8	560.7	28.3	2,726.4	1,788.5	937.9	56.5	881.4
2013 Q2	1,101.8	290.3	218.1	565.3	28.0	2,877.8	1,893.7	984.1	58.0	926.1
Q3	1,090.4	285.1	213.8	560.0	31.6	2,767.3	1,807.6	959.7	59.3	900.5
Q4	1,082.4	279.6	213.8	560.7	28.3	2,726.4	1,788.5	937.9	56.5	881.4
2014 Q1 [(p)]	1,092.9	289.2	213.5	562.0	28.2	2,864.7	1,904.5	960.1	58.4	901.7
	Transactions									
2012	-3.6	-4.1	-4.9	2.9	2.4	-128.3	-100.8	-27.5	-1.0	-26.5
2013	-72.1	-61.7	-7.9	-6.7	4.2	-72.3	-75.5	3.2	-2.1	5.3
2013 Q2	-22.1	-21.8	1.1	-3.5	2.0	18.6	25.2	-6.6	-1.3	-5.2
Q3	-12.4	-5.1	-4.5	-6.4	3.5	-91.4	-77.3	-14.0	2.4	-16.4
Q4	-8.0	-5.4	0.0	0.7	-3.3	-10.4	3.5	-13.9	-2.2	-11.8
2014 Q1 [(p)]	9.1	8.5	-0.3	1.0	-0.1	134.9	113.2	21.6	2.1	19.5
	Growth rates									
2012	-0.3	-1.2	-2.2	0.5	11.2	-4.2	-4.9	-2.8	-1.8	-2.8
2013	-6.2	-18.1	-3.5	-1.2	17.2	-2.6	-4.0	0.3	-3.6	0.5
2013 Q2	-5.9	-14.4	-9.5	-0.1	11.6	-4.1	-5.7	-0.9	3.2	-1.1
Q3	-6.3	-16.3	-7.7	-1.0	20.1	-5.5	-6.9	-2.8	3.3	-3.2
Q4	-6.2	-18.1	-3.5	-1.2	17.2	-2.6	-4.0	0.3	-3.6	0.5
2014 Q1 [(p)]	-3.0	-7.6	-1.7	-1.4	8.5	1.8	3.5	-1.3	1.8	-1.5

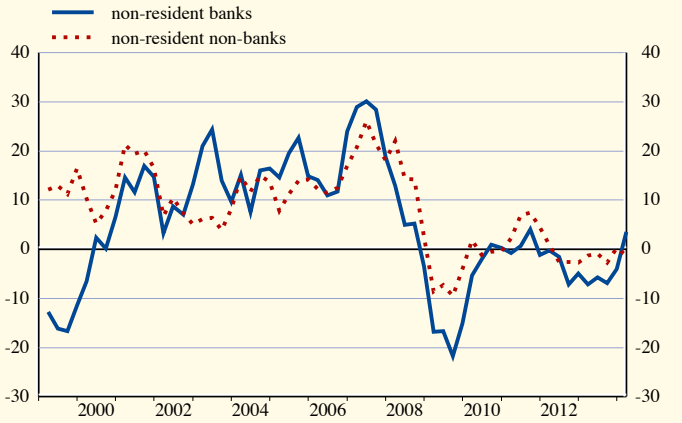
C7 Loans to government [2)]

(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)]

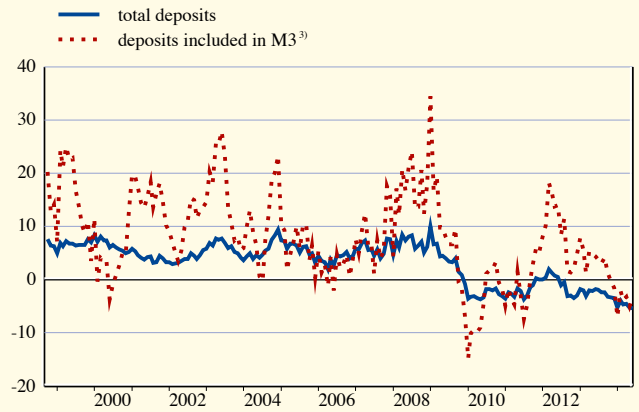
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

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														
2012	691.4	106.5	81.4	484.4	6.4	0.2	12.5	2,020.0	410.1	236.6	1,021.0	13.6	0.3	338.6	260.8
2013	653.5	96.0	76.5	462.8	7.0	0.1	11.0	1,861.6	424.0	221.5	943.0	16.4	0.5	256.1	184.2
2013 Q4	653.5	96.0	76.5	462.8	7.0	0.1	11.0	1,861.6	424.0	221.5	943.0	16.4	0.5	256.1	184.2
2014 Q1	665.6	111.4	78.0	456.0	8.0	0.1	12.0	1,843.2	439.6	215.3	915.3	18.5	0.5	254.0	177.1
2014 Feb.	666.6	111.4	77.1	458.7	8.3	0.1	11.0	1,858.1	438.6	216.9	921.9	17.7	0.5	262.6	178.6
Mar.	665.6	111.4	78.0	456.0	8.0	0.1	12.0	1,843.2	439.6	215.3	915.3	18.5	0.5	254.0	177.1
Apr.	665.0	113.5	77.8	452.8	8.0	0.1	12.7	1,802.6	434.6	220.1	888.3	17.7	0.5	241.3	162.8
May (p)	658.7	110.5	77.2	451.1	8.0	0.1	11.8	1,781.4	437.0	220.4	878.0	16.7	0.3	228.8	147.2
	Transactions														
2012	-12.5	15.2	2.6	-27.6	2.0	0.0	-4.7	-181.2	23.4	-49.5	-166.0	-2.0	-0.3	13.2	9.4
2013	-36.0	-9.2	-5.3	-21.9	1.3	-0.1	-0.8	-54.2	14.8	-14.7	-76.2	3.0	0.3	18.6	32.6
2013 Q4	-15.8	-10.3	1.9	-7.7	-1.1	0.0	1.5	-81.0	-17.6	-13.3	-25.3	-0.5	0.2	-24.5	-15.0
2014 Q1	11.4	15.0	1.2	-6.8	0.9	0.0	1.0	-12.7	14.9	-6.5	-21.0	2.0	-0.1	-2.1	-7.1
2014 Feb.	-10.7	-7.4	-0.2	-2.7	0.1	0.0	-0.4	7.3	2.4	-1.4	-7.4	-2.0	0.0	15.8	12.4
Mar.	-1.1	0.0	0.9	-2.7	-0.3	0.0	1.0	-15.0	1.0	-1.6	-6.6	0.8	0.0	-8.6	-1.5
Apr.	-0.2	2.2	-0.1	-2.9	0.0	0.0	0.7	-40.0	-4.9	5.1	-26.8	-0.7	0.1	-12.8	-14.3
May (p)	-6.4	-3.1	-0.7	-1.7	0.1	0.0	-0.9	-23.4	1.0	-0.1	-11.2	-0.5	-0.2	-12.5	-15.6
	Growth rates														
2012	-1.8	16.5	3.4	-5.4	50.8	-	-32.1	-8.2	6.0	-17.4	-14.0	-14.0	-	2.9	2.5
2013	-5.2	-8.8	-6.5	-4.5	18.7	-	-7.3	-2.9	3.6	-6.2	-7.5	21.8	-	2.7	10.5
2013 Q4	-5.2	-8.8	-6.5	-4.5	18.7	-	-7.3	-2.9	3.6	-6.2	-7.5	21.8	-	2.7	10.5
2014 Q1	-4.5	-1.9	-7.1	-5.1	9.3	-	4.8	-7.7	0.1	-9.3	-9.1	23.5	-	-14.3	-12.8
2014 Feb.	-4.6	-2.3	-6.9	-4.9	24.6	-	-12.7	-4.6	2.1	-7.9	-7.3	21.7	-	-5.3	-4.7
Mar.	-4.5	-1.9	-7.1	-5.1	9.3	-	4.8	-7.7	0.1	-9.3	-9.1	23.5	-	-14.3	-12.8
Apr.	-5.3	-4.1	-7.2	-5.3	5.2	-	-6.5	-8.8	-2.3	-4.6	-10.8	13.0	-	-16.3	-16.8
May (p)	-5.3	-1.2	-7.5	-6.2	4.4	-	1.9	-10.1	-1.4	-4.8	-11.2	12.6	-	-23.4	-27.8

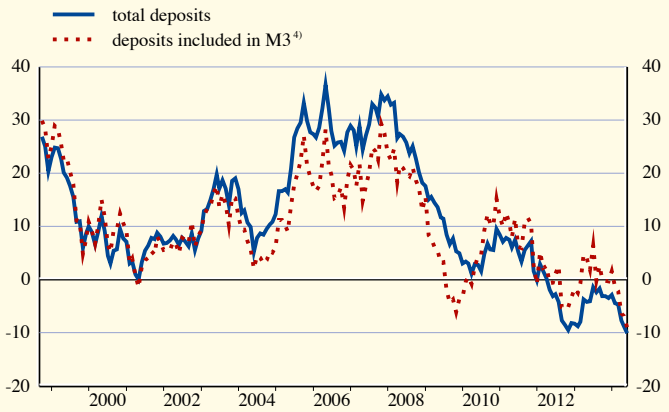
C9 Deposits by insurance corporations and pension funds [2)]

(annual growth rates)



C10 Deposits by other financial intermediaries [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)]

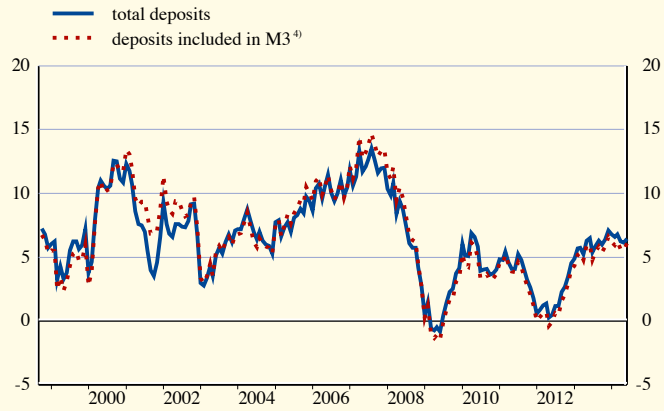
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

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													
2012	1,761.8	1,148.8	408.3	106.5	85.4	2.0	10.9	6,118.9	2,346.2	979.1	747.8	1,937.3	98.0	10.4
2013	1,873.5	1,236.4	404.3	122.9	91.7	1.8	16.5	6,263.3	2,521.5	877.4	806.7	1,969.3	83.9	4.5
2013 Q4	1,873.5	1,236.4	404.3	122.9	91.7	1.8	16.5	6,263.3	2,521.5	877.4	806.7	1,969.3	83.9	4.5
2014 Q1	1,852.6	1,214.8	400.2	126.4	95.8	1.8	13.6	6,287.3	2,538.5	869.7	813.7	1,976.0	83.7	5.7
2014 Feb.	1,832.1	1,189.5	404.0	125.4	95.1	1.8	16.3	6,282.3	2,532.1	873.1	814.3	1,973.4	83.8	5.8
Mar.	1,852.6	1,214.8	400.2	126.4	95.8	1.8	13.6	6,287.3	2,538.5	869.7	813.7	1,976.0	83.7	5.7
Apr.	1,854.1	1,213.4	399.3	126.5	96.4	1.8	16.8	6,300.1	2,562.4	863.2	811.2	1,974.3	83.5	5.5
May [p)]	1,875.4	1,238.4	393.5	126.5	98.3	1.9	16.8	6,322.5	2,589.2	860.4	809.4	1,975.1	83.3	5.0
	Transactions													
2012	82.2	99.6	-35.5	12.9	9.5	0.0	-4.3	224.6	90.1	33.7	21.8	100.7	-9.6	-12.3
2013	119.5	92.4	-3.8	17.8	7.5	-0.1	5.7	148.3	176.8	-100.1	59.5	32.2	-14.1	-5.9
2013 Q4	83.9	63.8	12.1	4.0	-3.0	0.1	6.8	61.5	61.9	-25.5	23.7	4.2	-1.0	-1.8
2014 Q1	-25.4	-25.2	-4.8	3.3	4.1	0.1	-2.9	20.9	14.9	-8.4	6.8	6.4	-0.2	1.3
2014 Feb.	4.4	-1.2	2.6	1.5	1.1	0.1	0.3	12.9	11.0	-0.5	2.5	-1.0	0.2	0.7
Mar.	20.5	25.2	-3.8	1.0	0.7	0.0	-2.6	4.9	6.3	-3.4	-0.5	2.7	-0.1	0.0
Apr.	1.5	-1.2	-1.2	0.1	0.6	0.0	3.2	12.7	23.9	-6.4	-2.6	-1.7	-0.3	-0.3
May [p)]	16.4	22.5	-6.2	0.0	0.2	0.1	-0.1	25.0	28.0	-3.0	-1.8	2.5	-0.2	-0.5
	Growth rates													
2012	4.9	9.5	-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	6.8	8.1	-0.9	16.8	8.7	-3.7	52.4	2.4	7.5	-10.2	8.0	1.7	-14.4	-57.0
2013 Q4	6.8	8.1	-0.9	16.8	8.7	-3.7	52.4	2.4	7.5	-10.2	8.0	1.7	-14.4	-57.0
2014 Q1	6.3	8.4	-2.5	15.4	5.6	16.7	23.4	2.0	6.8	-9.9	7.5	0.6	-10.1	-30.8
2014 Feb.	6.8	8.4	-0.1	15.6	6.4	6.0	18.0	2.1	7.4	-10.6	8.3	0.7	-11.1	-33.6
Mar.	6.3	8.4	-2.5	15.4	5.6	16.7	23.4	2.0	6.8	-9.9	7.5	0.6	-10.1	-30.8
Apr.	6.1	7.7	-1.7	14.1	5.5	26.4	51.2	2.0	6.9	-9.4	6.6	0.3	-8.8	-21.9
May [p)]	6.5	8.1	-0.3	11.5	5.3	20.7	27.7	2.2	7.5	-8.8	5.5	0.3	-6.9	-26.1

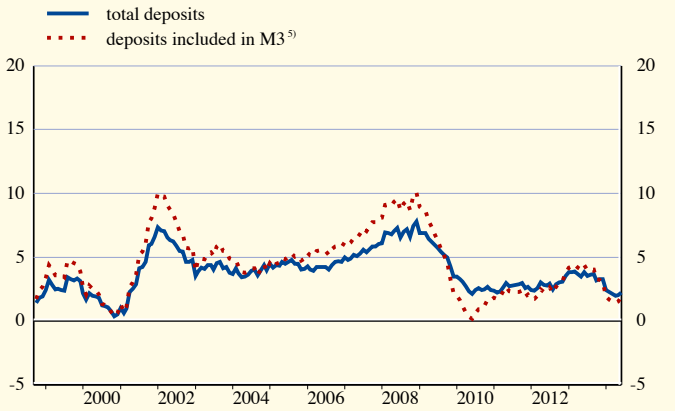
C11 Deposits by non-financial corporations [2)]

(annual growth rates)



C12 Deposits by households [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)]

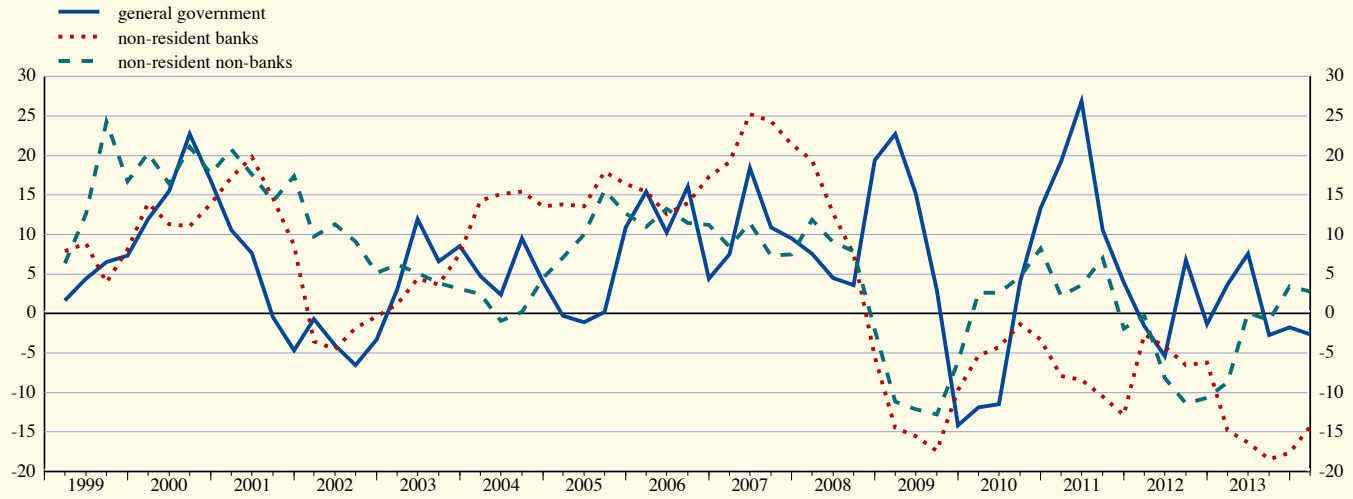
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

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									
2012	447.9	169.6	62.8	111.7	103.8	2,895.4	2,016.8	878.6	39.8	838.7
2013	441.0	152.5	64.1	109.2	115.3	2,519.8	1,626.0	893.8	29.8	864.0
2013 Q2	546.0	235.6	70.9	115.4	124.2	2,806.4	1,873.5	933.0	35.4	897.6
Q3	495.5	190.9	70.7	113.6	120.2	2,666.1	1,737.5	928.6	43.0	885.6
Q4	441.0	152.5	64.1	109.2	115.3	2,519.8	1,626.0	893.8	29.8	864.0
2014 Q1 [p]	488.0	181.1	73.1	110.7	123.3	2,594.9	1,667.7	927.2	33.8	893.4
	Transactions									
2012	-7.9	-22.6	-0.3	-0.4	15.5	-240.2	-135.6	-104.6	-5.1	-99.5
2013	-8.0	-17.9	1.1	-2.6	11.3	-324.7	-355.1	30.4	-8.8	39.2
2013 Q2	46.7	27.7	3.8	3.6	11.7	-68.9	-99.2	30.3	-1.8	32.1
Q3	-49.8	-44.7	-0.1	-1.7	-3.3	-128.8	-127.6	-1.2	7.9	-9.1
Q4	-55.2	-39.1	-6.6	-4.5	-5.0	-124.7	-95.8	-29.0	-13.0	-16.0
2014 Q1 [p]	45.5	28.5	9.0	1.3	6.7	63.3	38.1	25.2	3.9	21.2
	Growth rates									
2012	-1.4	-11.7	10.3	-0.4	18.2	-7.5	-6.2	-10.7	-11.9	-10.6
2013	-1.8	-10.5	1.8	-2.3	10.8	-11.3	-17.7	3.4	-22.7	4.6
2013 Q2	7.6	23.9	-28.2	2.9	16.5	-11.6	-16.3	0.1	-14.4	0.8
Q3	-2.8	-5.4	-24.1	2.1	16.3	-13.1	-18.4	-0.9	2.0	-1.0
Q4	-1.8	-10.5	1.8	-2.3	10.8	-11.3	-17.7	3.4	-22.7	4.6
2014 Q1 [p]	-2.6	-13.5	9.0	-1.2	9.0	-9.0	-14.4	2.8	-7.8	3.2

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.

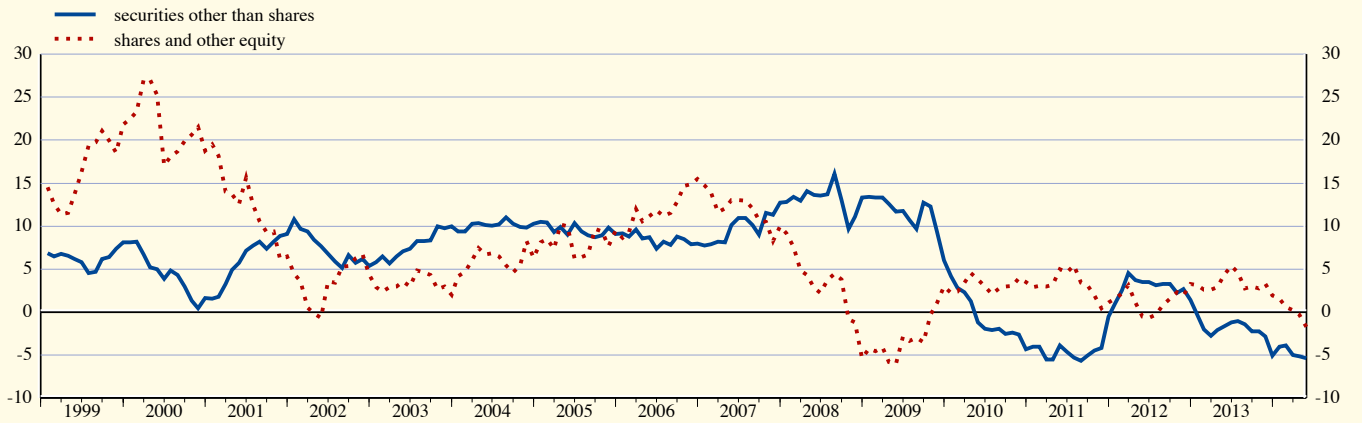
2.6 MFI holdings of securities: breakdown [1), 2)]

(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											
2012	5,774.4	1,748.4	102.9	1,594.2	32.8	1,399.6	23.6	872.8	1,528.5	475.7	752.1	300.7
2013	5,469.9	1,540.0	102.7	1,674.0	20.3	1,305.7	28.7	798.4	1,561.5	457.3	775.4	328.8
2013 Q4	5,469.9	1,540.0	102.7	1,674.0	20.3	1,305.7	28.7	798.4	1,561.5	457.3	775.4	328.8
2014 Q1	5,501.5	1,503.8	113.7	1,755.3	19.2	1,276.5	29.4	803.6	1,560.3	462.7	786.6	311.1
2014 Feb.	5,563.1	1,552.7	113.2	1,749.7	19.1	1,288.4	29.0	811.0	1,546.3	463.1	774.7	308.5
Mar.	5,501.5	1,503.8	113.7	1,755.3	19.2	1,276.5	29.4	803.6	1,560.3	462.7	786.6	311.1
Apr.	5,489.2	1,506.1	111.5	1,772.0	18.6	1,241.9	28.7	810.2	1,577.6	460.1	807.8	309.7
May (p)	5,532.3	1,481.2	113.2	1,788.0	18.9	1,282.9	31.4	816.6	1,571.2	459.3	797.0	315.0
	Transactions											
2012	82.5	-17.8	15.9	191.7	10.5	-67.5	-3.9	-46.3	49.8	6.6	37.9	5.3
2013	-290.2	-220.7	-0.3	65.4	-11.3	-94.3	5.9	-35.0	29.7	-12.2	13.3	28.6
2013 Q4	-184.2	-62.8	1.6	-51.0	-9.0	-61.1	0.1	-2.1	1.9	2.3	-5.2	4.9
2014 Q1	10.5	-38.2	10.4	58.0	-1.4	-20.7	0.5	1.9	-4.2	-0.6	12.6	-16.2
2014 Feb.	7.9	-5.7	5.7	11.9	-0.6	-8.7	-0.6	5.8	-26.8	-3.1	-5.7	-18.0
Mar.	-68.5	-49.3	0.7	-0.8	0.1	-12.5	0.4	-7.1	14.5	0.4	10.9	3.1
Apr.	-18.3	2.0	-2.3	12.5	-0.6	-36.0	-0.7	6.8	15.8	-2.2	19.6	-1.6
May (p)	26.8	-26.1	0.0	11.8	-0.1	40.2	2.1	-1.0	-8.7	-0.4	-12.5	4.2
	Growth rates											
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	-5.0	-12.5	-0.4	4.1	-35.2	-6.7	25.2	-4.1	1.9	-2.6	1.8	9.6
2013 Q4	-5.0	-12.5	-0.4	4.1	-35.2	-6.7	25.2	-4.1	1.9	-2.6	1.8	9.6
2014 Q1	-5.0	-11.7	-6.4	2.6	-36.8	-7.0	11.0	-2.4	0.2	-0.6	1.0	-0.3
2014 Feb.	-3.9	-10.5	-7.2	4.6	-38.5	-6.2	20.3	-1.6	0.6	-1.2	0.9	2.5
Mar.	-5.0	-11.7	-6.4	2.6	-36.8	-7.0	11.0	-2.4	0.2	-0.6	1.0	-0.3
Apr.	-5.2	-11.3	-6.1	3.4	-38.0	-10.0	1.8	-0.7	-0.3	-0.4	0.0	-1.0
May (p)	-5.4	-11.9	-5.3	0.9	-37.8	-7.5	10.8	-1.3	-1.7	-3.7	-0.8	-1.0

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													
2012	5,790.4	-	-	-	-	-	-	12,196.7	96.4	3.6	1.7	0.2	0.9	0.5
2013	5,249.7	-	-	-	-	-	-	11,733.7	96.8	3.2	1.7	0.1	0.9	0.4
2013 Q4	5,249.7	-	-	-	-	-	-	11,733.7	96.8	3.2	1.7	0.1	0.9	0.4
2014 Q1 [p)]	5,208.9	-	-	-	-	-	-	11,735.0	96.8	3.2	1.7	0.1	0.9	0.3
	To non-euro area residents													
2012	1,906.7	47.3	52.7	31.9	1.9	3.5	10.1	961.5	40.1	59.9	38.2	2.0	2.9	9.9
2013	1,788.5	41.0	59.0	38.7	1.8	3.4	9.5	937.9	40.2	59.8	38.1	3.0	2.7	9.3
2013 Q4	1,788.5	41.0	59.0	38.7	1.8	3.4	9.5	937.9	40.2	59.8	38.1	3.0	2.7	9.3
2014 Q1 [p)]	1,904.5	39.1	60.9	39.0	2.6	3.6	10.1	960.1	40.5	59.5	37.9	2.7	2.6	9.4
Holdings of securities other than shares														
	Issued by euro area residents													
2012	1,851.3	94.4	5.6	2.7	0.1	0.4	2.0	3,050.3	98.1	1.9	1.2	0.1	0.1	0.4
2013	1,642.7	93.7	6.3	2.6	0.1	0.3	2.8	3,028.7	98.4	1.6	0.8	0.2	0.1	0.5
2013 Q4	1,642.7	93.7	6.3	2.6	0.1	0.3	2.8	3,028.7	98.4	1.6	0.8	0.2	0.1	0.5
2014 Q1 [p)]	1,617.6	93.0	7.0	2.9	0.1	0.2	3.3	3,080.4	98.4	1.6	0.8	0.1	0.1	0.5
	Issued by non-euro area residents													
2012	434.0	54.9	45.1	19.8	0.3	0.3	19.1	438.8	34.1	65.9	39.1	5.4	0.9	11.8
2013	421.5	52.4	47.6	20.2	0.2	0.6	20.0	376.9	38.2	61.8	37.5	4.1	1.0	10.7
2013 Q4	421.5	52.4	47.6	20.2	0.2	0.6	20.0	376.9	38.2	61.8	37.5	4.1	1.0	10.7
2014 Q1 [p)]	423.4	52.9	47.1	20.0	0.2	0.4	19.8	380.2	37.4	62.6	37.6	5.0	0.7	10.3
Deposits														
	By euro area residents													
2012	6,155.3	93.8	6.2	3.9	0.2	1.1	0.6	11,040.0	97.0	3.0	2.0	0.1	0.1	0.4
2013	5,554.0	93.4	6.6	4.2	0.2	1.0	0.7	11,092.8	96.8	3.2	2.2	0.1	0.1	0.4
2013 Q4	5,554.0	93.4	6.6	4.2	0.2	1.0	0.7	11,092.8	96.8	3.2	2.2	0.1	0.1	0.4
2014 Q1 [p)]	5,517.9	93.0	7.0	4.5	0.2	1.1	0.7	11,136.7	96.8	3.2	2.2	0.1	0.1	0.4
	By non-euro area residents													
2012	2,016.8	58.3	41.7	27.7	1.6	1.0	7.3	878.6	52.4	47.6	31.3	1.9	1.1	6.3
2013	1,626.0	51.3	48.7	33.1	1.7	1.5	7.8	893.8	53.9	46.1	29.7	2.1	1.2	6.4
2013 Q4	1,626.0	51.3	48.7	33.1	1.7	1.5	7.8	893.8	53.9	46.1	29.7	2.1	1.2	6.4
2014 Q1 [p)]	1,667.7	51.5	48.5	33.8	1.6	1.5	7.2	927.2	53.8	46.2	30.0	2.2	1.0	6.6

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
2012	5,068.0	81.8	18.2	9.6	1.6	1.9	2.5
2013	4,582.7	81.0	19.0	10.7	1.3	1.8	2.7
2013 Q4	4,582.7	81.0	19.0	10.7	1.3	1.8	2.7
2014 Q1 [p)]	4,550.7	80.5	19.5	11.0	1.3	1.8	2.8

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						
2013 Oct.	7,937.7	533.5	3,117.7	2,303.1	1,099.1	250.5	633.7
Nov.	7,981.4	523.7	3,131.1	2,335.1	1,106.7	251.9	632.9
Dec.	7,941.7	517.2	3,112.0	2,369.9	1,117.6	254.3	570.6
2014 Jan.	8,042.4	536.5	3,171.4	2,341.7	1,120.2	255.5	617.2
Feb.	8,203.9	544.0	3,213.9	2,422.6	1,143.7	255.6	624.0
Mar.	8,358.7	553.2	3,281.7	2,415.4	1,178.7	258.0	671.8
Apr. [p]	8,472.6	558.3	3,323.7	2,426.5	1,183.2	258.2	722.7
	Transactions						
2013 Q3	57.9	-8.4	58.8	28.4	28.7	2.2	-51.7
Q4	60.6	3.1	6.2	43.5	51.5	3.5	-47.2
2014 Q1	281.8	38.9	105.1	40.6	20.0	3.0	74.1

2. Liabilities

	Total	Loans and deposits received	Investment fund shares issued				Other liabilities (incl. financial derivatives)
			Total	Held by euro area residents		Held by non-euro area residents	
					Investment funds		
	1	2	3	4	5	6	7
	Outstanding amounts						
2013 Oct.	7,937.7	172.2	7,198.5	5,274.0	871.3	1,924.5	567.0
Nov.	7,981.4	174.8	7,244.3	5,312.3	881.2	1,932.0	562.3
Dec.	7,941.7	169.7	7,263.2	5,329.0	885.9	1,934.2	508.8
2014 Jan.	8,042.4	180.6	7,296.3	5,362.1	887.3	1,934.1	565.5
Feb.	8,203.9	183.8	7,447.5	5,477.6	907.0	1,969.8	572.6
Mar.	8,358.7	187.8	7,528.9	5,563.7	925.7	1,965.2	641.9
Apr. [p]	8,472.6	195.4	7,596.5	5,619.8	931.3	1,976.7	680.6
	Transactions						
2013 Q3	57.9	3.7	102.2	68.1	28.3	34.0	-48.0
Q4	60.6	0.7	111.2	93.4	43.8	26.4	-56.0
2014 Q1	281.8	21.2	169.5	127.9	17.0	40.2	90.2

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

	Total	Funds by investment policy						Funds by type		Memo item: Money market funds
		Bond funds	Equity funds	Mixed funds	Real estate funds	Hedge funds	Other funds	Open-end funds	Closed-end funds	
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2013 Sep.	7,045.8	2,424.8	1,908.6	1,748.0	336.5	157.3	470.7	6,954.3	91.5	846.2
Oct.	7,198.5	2,445.6	1,978.4	1,795.6	337.9	159.9	481.2	7,106.9	91.6	835.9
Nov.	7,244.3	2,450.5	2,006.3	1,804.4	339.0	158.6	485.5	7,150.8	93.5	836.7
Dec.	7,263.2	2,471.4	2,043.2	1,806.4	343.5	155.2	443.6	7,166.9	96.3	819.3
2014 Jan.	7,296.3	2,501.2	2,014.9	1,822.8	346.2	158.2	452.9	7,193.6	102.7	855.0
Feb.	7,447.5	2,531.2	2,084.3	1,864.8	347.4	159.0	460.9	7,343.9	103.5	854.9
Mar.	7,528.9	2,561.1	2,092.6	1,891.5	351.2	162.3	470.3	7,421.5	107.5	835.2
Apr. [p]	7,596.5	2,587.3	2,112.4	1,912.6	350.5	159.6	474.2	7,492.6	104.0	836.5
	Transactions									
2013 Oct.	50.8	8.9	21.6	14.5	0.7	2.2	2.8	51.1	-0.3	-5.7
Nov.	22.1	12.1	7.7	2.2	1.8	-3.7	1.9	20.6	1.5	-2.8
Dec.	38.3	-8.8	19.5	14.3	3.5	7.3	2.6	34.6	3.8	-14.7
2014 Jan.	46.4	8.2	12.9	19.6	1.7	1.1	2.9	45.0	1.4	29.6
Feb.	58.1	22.7	13.3	19.6	0.1	1.7	0.6	57.5	0.7	4.9
Mar.	65.0	28.5	9.9	20.6	2.7	1.8	1.5	66.0	-1.0	-19.6
Apr. [p]	47.9	15.2	21.1	12.8	0.5	-2.4	0.7	51.9	-4.0	1.1

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										
2013 Q2	3,045.3	1,649.5	404.3	770.9	247.9	8.4	218.0	1,395.9	324.9	551.1	15.2
Q3	3,096.9	1,686.8	394.4	798.5	257.4	9.0	227.4	1,410.1	343.5	548.7	14.9
Q4	3,112.0	1,708.0	390.3	807.3	264.5	10.4	235.5	1,404.0	346.4	547.9	13.7
2014 Q1 [p]	3,281.7	1,843.8	412.7	858.4	299.1	12.1	261.4	1,437.9	394.5	553.9	14.6
	Transactions										
2013 Q3	58.8	30.0	-11.6	24.2	8.5	0.5	8.5	28.8	20.4	2.7	-0.3
Q4	6.2	9.2	-6.0	2.0	5.9	1.1	6.3	-3.1	6.1	-5.7	-0.6
2014 Q1 [p]	105.1	63.8	9.5	27.1	12.5	0.8	13.8	41.9	12.9	19.1	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										
2013 Q2	2,095.0	738.3	58.9	-	52.2	28.1	599.1	1,356.7	181.7	482.3	109.5
Q3	2,228.6	817.2	72.6	-	56.2	30.4	658.1	1,411.3	197.8	502.7	112.8
Q4	2,369.9	886.3	85.4	-	64.7	35.5	700.7	1,483.6	215.4	536.0	123.2
2014 Q1 [p]	2,415.4	920.8	92.6	-	62.0	33.8	731.2	1,495.8	215.3	552.9	117.2
	Transactions										
2013 Q3	28.4	12.9	1.3	-	0.4	0.6	10.7	15.4	3.3	12.2	0.9
Q4	43.5	18.3	3.6	-	2.4	1.6	10.7	23.4	8.7	0.5	10.0
2014 Q1 [p]	40.6	20.8	3.9	-	10.3	-0.5	6.0	19.9	4.7	22.2	0.2

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										
2013 Q2	1,018.5	880.2	86.8	-	793.4	-	-	138.3	31.4	46.1	0.6
Q3	1,064.3	924.0	86.2	-	837.7	-	-	140.3	33.8	47.6	0.5
Q4	1,117.6	971.0	85.1	-	885.9	-	-	146.6	36.6	49.4	0.5
2014 Q1 [p]	1,178.7	1,013.6	87.9	-	925.7	-	-	165.1	40.6	62.0	0.4
	Transactions										
2013 Q3	28.7	27.0	-1.3	-	28.3	-	-	1.7	1.5	1.3	0.0
Q4	51.5	43.5	-0.3	-	43.8	-	-	8.0	3.9	2.0	0.0
2014 Q1 [p]	20.0	18.5	1.4	-	17.0	-	-	1.6	0.5	1.5	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												
2013 Q1	2,031.7	287.2	1,366.4	1,049.8	462.7	163.6	25.8	4.0	123.1	192.3	86.4	37.8	61.9
Q2	1,998.9	271.7	1,349.0	1,041.5	456.5	162.1	24.3	3.6	117.5	193.2	88.5	35.9	60.7
Q3	1,960.0	264.6	1,326.7	1,031.8	449.9	156.2	19.9	3.5	115.2	180.8	87.6	36.2	64.3
Q4	1,914.8	252.7	1,291.2	1,009.3	442.9	145.4	19.5	3.1	114.0	179.2	90.2	37.8	64.2
2014 Q1	1,881.6	253.9	1,253.2	974.7	430.4	150.4	14.1	3.1	110.9	164.0	103.5	44.2	63.4
	Transactions												
2013 Q1	-29.5	6.0	-30.6	-28.3	-	-0.7	-0.1	0.0	-1.5	-0.1	-1.5	0.1	-3.5
Q2	-32.5	-15.3	-16.5	-8.0	-	-1.5	-1.4	-0.4	-5.3	1.4	2.7	-1.7	-3.0
Q3	-40.2	-6.5	-22.1	-9.6	-	-5.8	-4.3	0.0	-2.3	-12.8	-0.7	0.5	1.3
Q4	-47.2	-11.6	-35.5	-22.7	-	-10.7	-0.6	-0.4	-1.1	-0.8	2.5	1.1	-2.8
2014 Q1	-39.3	0.5	-30.3	-28.5	-	-0.5	0.0	0.0	-1.3	-3.2	-3.5	-1.1	-1.7

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						
2013 Q1	2,031.7	141.5	1,631.3	56.1	1,575.2	31.2	227.8
Q2	1,998.9	129.1	1,615.5	56.2	1,559.3	29.4	225.0
Q3	1,960.0	123.9	1,580.9	56.1	1,524.8	28.8	226.3
Q4	1,914.8	117.2	1,540.3	59.8	1,480.6	29.0	228.4
2014 Q1	1,881.6	134.1	1,480.6	85.0	1,395.6	28.5	238.5
	Transactions						
2013 Q1	-29.5	1.9	-34.6	2.3	-36.9	-0.3	3.5
Q2	-32.5	-12.2	-15.0	0.0	-15.1	-1.6	-3.7
Q3	-40.2	-4.2	-35.5	-0.1	-35.4	-0.7	0.2
Q4	-47.2	-6.1	-40.9	3.5	-44.4	0.6	-0.8
2014 Q1	-39.3	-0.7	-43.1	-3.7	-39.4	0.0	4.4

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												
2013 Q1	1,049.8	751.7	231.7	20.9	0.2	5.7	29.5	192.3	111.8	32.8	79.0	31.5	80.5
Q2	1,041.5	759.7	226.0	20.9	0.2	5.5	29.3	193.2	114.7	33.3	81.4	31.6	78.5
Q3	1,031.8	757.9	216.2	21.5	0.2	5.5	30.5	180.8	110.1	29.5	80.6	30.1	70.7
Q4	1,009.3	740.9	204.9	25.6	0.2	5.4	32.3	179.2	108.0	29.2	78.8	32.8	71.2
2014 Q1	974.7	725.4	192.4	23.7	0.2	5.2	27.7	164.0	99.9	26.9	73.0	33.4	64.1
	Transactions												
2013 Q1	-28.3	-20.6	-3.4	-2.4	0.0	0.0	-0.9	-0.1	-1.5	-1.3	-0.1	-0.4	1.4
Q2	-8.0	7.7	-5.6	0.2	0.0	-0.2	0.0	1.4	3.2	0.7	2.5	0.0	-1.8
Q3	-9.6	-2.1	-9.0	0.7	0.0	0.0	0.8	-12.8	-4.8	-4.0	-0.9	-1.5	-8.0
Q4	-22.7	-17.2	-11.2	4.1	0.0	-0.1	1.8	-0.8	-1.9	-0.1	-1.8	1.9	1.1
2014 Q1	-28.5	-15.1	-8.9	-0.7	0.0	-0.1	-3.7	-3.2	-2.5	-0.6	-1.9	-1.3	-0.5

Source: ECB.

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

2) Excludes securitisations of inter-MFI loans.

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

(EUR billions; outstanding amounts at end of period)

1. Assets

	Total	Currency and deposits	Loans	Securities other than shares	Shares and other equity	Investment fund shares	Money market fund shares	Prepayments of insurance premiums and reserves for outstanding claims	Other accounts receivable/ payable and financial derivatives	Non-financial assets
	1	2	3	4	5	6	7	8	9	10
2011 Q2	7,146.0	775.6	465.1	2,741.2	843.3	1,621.9	79.7	254.2	216.1	148.9
Q3	7,148.0	792.4	463.9	2,764.6	788.2	1,582.7	87.4	255.5	264.8	148.4
Q4	7,158.9	785.2	473.6	2,725.1	793.2	1,615.9	91.2	253.5	271.1	150.1
2012 Q1	7,444.9	797.5	472.9	2,868.9	806.4	1,712.6	103.2	258.1	276.9	148.4
Q2	7,470.3	786.3	471.9	2,882.4	801.6	1,717.1	107.0	261.4	293.7	149.1
Q3	7,684.8	785.8	481.4	2,996.3	819.1	1,796.2	109.1	263.0	284.6	149.3
Q4	7,771.8	788.5	480.4	3,042.9	817.2	1,837.7	110.4	261.7	281.6	151.3
2013 Q1	7,942.1	797.5	477.1	3,107.6	834.1	1,913.9	115.5	266.5	279.1	150.9
Q2	7,882.4	776.7	476.1	3,098.4	830.5	1,907.9	100.0	265.4	275.2	152.2
Q3	7,974.7	769.8	480.2	3,114.3	850.6	1,983.5	95.4	265.2	262.6	153.0
Q4	8,075.2	755.6	482.9	3,186.4	871.2	2,027.3	83.0	263.9	250.5	154.4
2014 Q1 (p)	8,336.1	763.9	500.6	3,282.0	884.9	2,098.4	101.8	272.1	277.0	155.5

2. Holdings of securities other than shares

	Total	Issued by euro area residents						Issued by non-euro area residents
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds	Non-financial corporations	
	1	2	3	4	5	6	7	8
2011 Q2	2,741.2	2,325.1	628.4	1,288.1	234.6	16.7	157.2	416.1
Q3	2,764.6	2,346.7	635.0	1,309.5	226.8	16.7	158.6	418.0
Q4	2,725.1	2,303.0	634.7	1,264.8	223.3	16.3	163.9	422.1
2012 Q1	2,868.9	2,418.6	667.3	1,321.6	235.0	16.9	177.7	450.3
Q2	2,882.4	2,413.9	674.1	1,303.3	238.1	16.7	181.7	468.5
Q3	2,996.3	2,502.9	704.8	1,342.5	245.2	17.1	193.4	493.4
Q4	3,042.9	2,536.9	688.6	1,382.5	250.3	17.7	197.7	506.0
2013 Q1	3,107.6	2,614.9	718.0	1,414.9	255.3	17.4	209.3	492.7
Q2	3,098.4	2,596.3	685.2	1,431.0	254.9	17.4	207.8	502.2
Q3	3,114.3	2,603.1	684.9	1,432.7	257.8	17.8	209.9	511.1
Q4	3,186.4	2,657.2	659.0	1,509.1	256.9	18.0	214.3	529.2
2014 Q1 (p)	3,282.0	2,738.5	663.3	1,583.4	255.8	18.3	217.6	543.5

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
2011 Q2	6,944.0	263.0	42.4	454.1	6,007.4	3,352.4	1,842.1	813.0	177.0	202.1
Q3	7,052.5	270.7	41.6	409.3	6,140.1	3,332.9	1,995.7	811.5	190.7	95.6
Q4	7,067.8	263.7	41.3	408.1	6,167.7	3,345.2	2,018.4	804.0	187.1	91.1
2012 Q1	7,226.6	271.3	43.4	439.6	6,282.6	3,380.5	2,078.4	823.6	189.8	218.3
Q2	7,292.4	280.8	42.2	421.1	6,350.6	3,375.7	2,147.9	827.0	197.8	177.9
Q3	7,365.7	292.0	44.1	452.2	6,389.6	3,422.1	2,142.2	825.3	187.9	319.0
Q4	7,467.5	266.5	49.0	480.6	6,460.8	3,458.5	2,183.5	818.7	210.6	304.3
2013 Q1	7,580.2	278.6	48.6	496.8	6,542.3	3,503.0	2,196.2	843.0	213.9	361.9
Q2	7,628.2	277.8	45.4	505.2	6,577.3	3,517.7	2,220.2	839.4	222.5	254.3
Q3	7,652.4	276.1	46.0	522.3	6,594.0	3,558.6	2,197.5	837.9	214.0	322.3
Q4	7,749.2	266.4	47.2	540.8	6,674.5	3,601.4	2,238.3	834.8	220.4	325.9
2014 Q1 (p)	7,941.7	279.0	48.4	540.8	6,832.3	3,667.3	2,297.4	867.6	241.1	394.5

Source: ECB.

EURO AREA ACCOUNTS

3.1 Integrated economic and financial accounts by institutional sector

(EUR billions)

Uses 2013 Q4	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Exports of goods and services						654
Trade balance [1]						-72
Generation of income account						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,272	129	805	64	274	
Other taxes less subsidies on production	34	13	10	5	6	
Consumption of fixed capital	383	103	218	11	52	
Net operating surplus and mixed income [1]	519	269	226	27	-3	
Allocation of primary income account						
Net operating surplus and mixed income						
Compensation of employees						8
Taxes less subsidies on production						
Property income	608	31	236	268	72	108
Interest	313	28	52	162	72	44
Other property income	294	3	185	106	0	63
Net national income [1]	2,112	1,728	96	42	247	
Secondary distribution of income account						
Net national income						
Current taxes on income, wealth, etc.	348	268	68	12	0	2
Social contributions	490	490				1
Social benefits other than social transfers in kind	504	1	18	36	448	1
Other current transfers	210	75	28	51	56	12
Net non-life insurance premiums	47	34	11	1	1	2
Non-life insurance claims	48			48		1
Other	114	40	16	2	55	9
Net disposable income [1]	2,085	1,492	17	43	533	
Use of income account						
Net disposable income						
Final consumption expenditure	1,962	1,399			564	
Individual consumption expenditure	1,743	1,399			345	
Collective consumption expenditure	219				219	
Adjustment for the change in the net equity of households in pension fund reserves	14	0	1	13	0	0
Net saving/current external account [1]	123	108	16	30	-31	-80
Capital account						
Net saving/current external account						
Gross capital formation	426	137	221	11	57	
Gross fixed capital formation	452	137	247	11	57	
Changes in inventories and acquisitions less disposals of valuables	-26	0	-26	0	0	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0	-1	3	0	-2	0
Capital transfers	48	11	2	1	34	11
Capital taxes	9	8	1	0		0
Other capital transfers	40	3	2	1	34	11
Net lending (+)/net borrowing (-) (from capital account) [1]	89	74	33	32	-51	-89
Statistical discrepancy	0	-13	13	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 Q4	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Imports of goods and services						581
Trade balance						
Generation of income account						
Gross value added (basic prices)	2,209	514	1,259	108	329	
Taxes less subsidies on products	251					
Gross domestic product (market prices)[2]	2,460					
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	519	269	226	27	-3	
Compensation of employees	1,276	1,276				4
Taxes less subsidies on production	300				300	-14
Property income	624	213	106	283	22	91
Interest	307	49	33	216	9	51
Other property income	317	164	73	66	13	40
Net national income						
Secondary distribution of income account						
Net national income	2,112	1,728	96	42	247	
Current taxes on income, wealth, etc.	349				349	1
Social contributions	489	1	19	52	417	2
Social benefits other than social transfers in kind	503	503				3
Other current transfers	183	94	16	49	25	38
Net non-life insurance premiums	48			48		1
Non-life insurance claims	46	36	9	1	0	2
Other	89	58	6	0	24	35
Net disposable income						
Use of income account						
Net disposable income	2,085	1,492	17	43	533	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in the net equity of households in pension fund reserves	14	14				0
Net saving/current external account						
Capital account						
Net saving/current external account	123	108	16	30	-31	-80
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	383	103	218	11	52	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	57	11	25	3	18	2
Capital taxes	9				9	0
Other capital transfers	49	11	25	3	9	2
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 Q4	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		20,210	18,054	32,535	18,078	7,647	4,509	18,688
Monetary gold and special drawing rights (SDRs)				391				
Currency and deposits		7,143	2,077	9,850	2,206	792	786	3,039
Short-term debt securities		39	60	481	412	56	26	669
Long-term debt securities		1,262	270	6,250	3,106	3,053	428	4,186
Loans		87	3,146	12,867	4,549	489	858	2,756
of which: Long-term		66	2,017	10,139	3,420	369	776	.
Shares and other equity		4,757	8,654	1,927	7,357	2,863	1,597	7,199
Quoted shares		837	1,237	441	2,388	426	264	.
Unquoted shares and other equity		2,468	7,057	1,201	3,765	440	1,134	.
Mutual fund shares		1,452	360	285	1,204	1,997	199	.
Insurance technical reserves		6,416	179	3	0	244	8	265
Other accounts receivable and financial derivatives		506	3,667	765	448	150	806	574
Net financial worth								
Financial account, transactions in financial assets								
Total transactions in financial assets		87	139	-703	141	70	43	83
Monetary gold and SDRs				0				0
Currency and deposits		82	89	-357	-103	-10	-81	-144
Short-term debt securities		-3	-4	-69	-23	0	8	-58
Long-term debt securities		-27	-10	-127	74	48	-7	102
Loans		-1	-3	-110	-10	4	67	-33
of which: Long-term		0	17	-44	6	5	48	.
Shares and other equity		-3	24	38	225	33	12	219
Quoted shares		-5	-10	20	14	-2	-1	.
Unquoted shares and other equity		6	28	7	175	6	15	.
Mutual fund shares		-4	6	10	36	29	-2	.
Insurance technical reserves		43	-2	0	0	-1	0	8
Other accounts receivable and financial derivatives		-3	44	-77	-22	-3	44	-12
Changes in net financial worth due to transactions								
Other changes account, financial assets								
Total other changes in financial assets		241	274	-37	30	28	11	-177
Monetary gold and SDRs				-39				
Currency and deposits		-2	2	-18	-21	0	1	-23
Short-term debt securities		0	-1	0	-5	0	0	-8
Long-term debt securities		-2	3	44	-21	5	1	-60
Loans		0	-10	-47	-9	0	11	-13
of which: Long-term		0	-12	-11	-3	0	14	.
Shares and other equity		196	286	21	88	24	3	14
Quoted shares		74	105	1	103	15	15	.
Unquoted shares and other equity		89	179	18	-41	-2	-16	.
Mutual fund shares		33	1	3	26	11	4	.
Insurance technical reserves		42	0	0	0	0	0	1
Other accounts receivable and financial derivatives		7	-5	2	-3	0	-6	-88
Other changes in net financial worth								
Closing balance sheet, financial assets								
Total financial assets		20,538	18,468	31,795	18,249	7,745	4,563	18,595
Monetary gold and SDRs				352				
Currency and deposits		7,224	2,168	9,476	2,082	781	706	2,873
Short-term debt securities		36	55	412	383	56	34	604
Long-term debt securities		1,232	264	6,166	3,159	3,105	422	4,228
Loans		86	3,134	12,710	4,530	493	936	2,710
of which: Long-term		66	2,023	10,085	3,423	374	837	.
Shares and other equity		4,950	8,964	1,985	7,670	2,920	1,612	7,433
Quoted shares		906	1,332	462	2,505	439	278	.
Unquoted shares and other equity		2,563	7,264	1,225	3,899	443	1,133	.
Mutual fund shares		1,481	367	298	1,266	2,038	200	.
Insurance technical reserves		6,500	178	3	0	243	8	274
Other accounts receivable and financial derivatives		510	3,707	689	423	147	844	474
Net financial worth								

Source: ECB.

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

(EUR billions)

Liabilities 2013 Q4	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		6,878	27,829	31,652	17,573	7,683	10,841	16,876
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			33	23,023	35	0	284	2,519
Short-term debt securities			91	583	111	2	680	276
Long-term debt securities			992	4,300	3,151	50	6,913	3,148
Loans		6,165	8,480		4,144	295	2,291	3,378
of which: Long-term		5,821	6,246		2,428	109	2,032	.
Shares and other equity		8	14,449	2,612	9,889	516	4	6,875
Quoted shares			4,202	493	284	148	0	.
Unquoted shares and other equity		8	10,247	1,274	2,710	367	4	.
Mutual fund shares				846	6,896			.
Insurance technical reserves		37	351	70	1	6,656	1	
Other accounts payable and financial derivatives		668	3,433	1,063	241	165	667	679
Net financial worth [1]	-1,422	13,332	-9,775	883	505	-36	-6,332	
Financial account, transactions in liabilities								
Total transactions in liabilities		26	93	-689	121	44	94	172
Monetary gold and SDRs								
Currency and deposits			0	-503	0	0	-4	-16
Short-term debt securities			-13	-76	-14	0	-52	8
Long-term debt securities			29	-36	-14	2	64	7
Loans		-4	-14		-96	-12	81	-40
of which: Long-term		-2	8		-37	1	65	.
Shares and other equity		0	68	-7	260	3	0	221
Quoted shares			22	3	2	1	0	.
Unquoted shares and other equity		0	47	13	141	2	0	.
Mutual fund shares				-23	117			.
Insurance technical reserves		0	1	0	0	48	0	
Other accounts payable and financial derivatives		30	22	-67	-15	4	5	-9
Changes in net financial worth due to transactions [1]	89	61	47	-14	20	26	-51	-89
Other changes account, liabilities								
Total other changes in liabilities		-9	502	1	-60	68	31	-125
Monetary gold and SDRs								
Currency and deposits			0	-43	0	0	0	-19
Short-term debt securities			0	-3	-2	0	0	-8
Long-term debt securities			-13	-10	-17	0	47	-37
Loans		-9	-4		-68	2	4	8
of which: Long-term		-6	-6		-27	1	-1	.
Shares and other equity		0	501	72	52	21	0	-14
Quoted shares			292	75	24	12	0	.
Unquoted shares and other equity		0	209	1	-66	9	0	.
Mutual fund shares				-4	94			.
Insurance technical reserves		0	0	0	0	42	0	
Other accounts payable and financial derivatives		0	18	-16	-24	3	-19	-55
Other changes in net financial worth [1]	12	249	-227	-38	89	-40	-20	-52
Closing balance sheet, liabilities								
Total liabilities		6,895	28,423	30,964	17,634	7,796	10,966	16,923
Monetary gold and SDRs								
Currency and deposits			33	22,477	35	0	280	2,484
Short-term debt securities			77	503	95	2	627	277
Long-term debt securities			1,008	4,255	3,121	51	7,024	3,118
Loans		6,152	8,462		3,980	285	2,375	3,346
of which: Long-term		5,813	6,248		2,364	110	2,096	.
Shares and other equity		8	15,018	2,678	10,201	540	5	7,083
Quoted shares			4,515	570	310	161	0	.
Unquoted shares and other equity		8	10,503	1,288	2,785	378	4	.
Mutual fund shares				819	7,107			.
Insurance technical reserves		37	353	70	1	6,746	1	
Other accounts payable and financial derivatives		699	3,473	981	202	171	654	615
Net financial worth [1]	-1,320	13,643	-9,955	831	614	-51	-6,402	

Source: ECB.

3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2009	2010	2011	2012 Q1-2012 Q4	2012 Q2-2013 Q1	2012 Q3-2013 Q2	2012 Q4-2013 Q3	2013 Q1-2013 Q4
Generation of income account								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	4,449	4,510	4,622	4,673	4,678	4,683	4,693	4,709
Other taxes less subsidies on production	88	85	99	128	126	128	126	129
Consumption of fixed capital	1,388	1,419	1,462	1,496	1,503	1,509	1,516	1,523
Net operating surplus and mixed income [1]	2,089	2,187	2,245	2,175	2,167	2,173	2,191	2,203
Allocation of primary income account								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	2,969	2,804	3,017	2,878	2,819	2,767	2,731	2,702
Interest	1,593	1,381	1,546	1,463	1,407	1,359	1,317	1,282
Other property income	1,376	1,423	1,472	1,415	1,412	1,407	1,413	1,420
Net national income [1]	7,534	7,754	7,977	8,008	8,014	8,031	8,062	8,096
Secondary distribution of income account								
Net national income								
Current taxes on income, wealth, etc.	1,027	1,056	1,114	1,171	1,178	1,195	1,203	1,211
Social contributions	1,678	1,704	1,752	1,786	1,793	1,799	1,808	1,815
Social benefits other than social transfers in kind	1,771	1,815	1,843	1,885	1,897	1,908	1,920	1,930
Other current transfers	773	776	781	790	794	801	810	816
Net non-life insurance premiums	181	181	182	184	184	185	186	186
Non-life insurance claims	182	182	183	186	186	187	188	188
Other	410	413	415	419	423	430	437	442
Net disposable income [1]	7,427	7,644	7,869	7,899	7,902	7,913	7,940	7,972
Use of income account								
Net disposable income								
Final consumption expenditure	7,147	7,306	7,471	7,512	7,515	7,528	7,551	7,576
Individual consumption expenditure	6,380	6,537	6,699	6,741	6,742	6,754	6,774	6,796
Collective consumption expenditure	767	769	772	770	773	775	777	780
Adjustment for the change in the net equity of households in pension fund reserves	61	56	58	58	57	56	57	57
Net saving [1]	280	338	398	387	387	385	390	396
Capital account								
Net saving								
Gross capital formation	1,703	1,780	1,873	1,777	1,747	1,731	1,730	1,722
Gross fixed capital formation	1,752	1,761	1,817	1,767	1,739	1,726	1,719	1,719
Changes in inventories and acquisitions less disposals of valuables	-50	19	56	10	8	5	12	3
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	1	1	1	9	2	0	0	2
Capital transfers	183	221	173	193	199	206	201	166
Capital taxes	34	25	31	26	27	30	31	33
Other capital transfers	149	196	142	167	172	176	170	133
Net lending (+)/net borrowing (-) (from capital account) [1]	-27	-15	-8	109	153	176	189	213

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	2012 Q1-2012 Q4	2012 Q2-2013 Q1	2012 Q3-2013 Q2	2012 Q4-2013 Q3	2013 Q1-2013 Q4
Generation of income account								
Gross value added (basic prices)	8,014	8,201	8,428	8,472	8,474	8,493	8,525	8,563
Taxes less subsidies on products	894	942	974	978	977	982	988	990
Gross domestic product (market prices)[2]	8,908	9,143	9,402	9,450	9,451	9,476	9,514	9,553
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	2,089	2,187	2,245	2,175	2,167	2,173	2,191	2,203
Compensation of employees	4,459	4,521	4,634	4,686	4,692	4,698	4,708	4,724
Taxes less subsidies on production	1,000	1,040	1,084	1,117	1,115	1,121	1,125	1,130
Property income	2,956	2,809	3,031	2,908	2,860	2,805	2,769	2,741
Interest	1,556	1,334	1,492	1,426	1,374	1,327	1,285	1,251
Other property income	1,400	1,475	1,539	1,482	1,487	1,479	1,485	1,490
Net national income								
Secondary distribution of income account								
Net national income	7,534	7,754	7,977	8,008	8,014	8,031	8,062	8,096
Current taxes on income, wealth, etc.	1,032	1,059	1,119	1,176	1,183	1,199	1,208	1,216
Social contributions	1,676	1,705	1,753	1,783	1,790	1,796	1,805	1,812
Social benefits other than social transfers in kind	1,764	1,809	1,837	1,879	1,890	1,902	1,914	1,924
Other current transfers	668	669	673	683	685	688	693	696
Net non-life insurance premiums	182	182	183	186	186	187	188	188
Non-life insurance claims	178	176	177	179	179	180	181	182
Other	308	310	313	318	319	322	324	326
Net disposable income								
Use of income account								
Net disposable income	7,427	7,644	7,869	7,899	7,902	7,913	7,940	7,972
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in the net equity of households in pension fund reserves	61	56	58	58	57	56	57	57
Net saving								
Capital account								
Net saving	280	338	398	387	387	385	390	396
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,388	1,419	1,462	1,496	1,503	1,509	1,516	1,523
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	192	230	180	205	211	219	215	184
Capital taxes	34	25	31	26	27	30	31	33
Other capital transfers	158	205	148	179	184	190	184	151
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	2012 Q1-2012 Q4	2012 Q2-2013 Q1	2012 Q3-2013 Q2	2012 Q4-2013 Q3	2013 Q1-2013 Q4
Income, saving and changes in net worth								
Compensation of employees (+)	4,459	4,521	4,634	4,686	4,692	4,698	4,708	4,724
Gross operating surplus and mixed income (+)	1,440	1,449	1,491	1,494	1,498	1,504	1,512	1,517
Interest receivable (+)	234	202	228	222	217	213	207	203
Interest payable (-)	148	124	147	131	125	120	116	114
Other property income receivable (+)	729	721	748	745	737	728	732	739
Other property income payable (-)	10	10	10	10	10	10	10	10
Current taxes on income and wealth (-)	842	849	883	932	940	948	956	962
Net social contributions (-)	1,673	1,699	1,747	1,781	1,788	1,795	1,803	1,810
Net social benefits (+)	1,759	1,804	1,832	1,874	1,885	1,897	1,908	1,918
Net current transfers receivable (+)	70	70	68	71	74	74	73	74
= Gross disposable income	6,019	6,083	6,214	6,238	6,240	6,240	6,255	6,280
Final consumption expenditure (-)	5,157	5,290	5,441	5,474	5,471	5,478	5,491	5,507
Changes in net worth in pension funds (+)	61	55	58	57	56	56	57	57
= Gross saving	923	849	831	820	826	818	821	829
Consumption of fixed capital (-)	379	386	395	402	403	404	405	407
Net capital transfers receivable (+)	9	13	2	1	0	-1	-3	-4
Other changes in net worth (+)	-381	625	-295	-187	-593	-444	-216	-189
= Changes in net worth	171	1,101	143	233	-170	-30	198	229
Investment, financing and changes in net worth								
Net acquisition of non-financial assets (+)	555	558	573	554	549	543	542	540
Consumption of fixed capital (-)	379	386	395	402	403	404	405	407
Main items of financial investment (+)								
Short-term assets	1	43	124	192	173	167	135	97
Currency and deposits	121	118	118	224	228	218	189	130
Money market fund shares	-46	-59	-23	-31	-39	-30	-27	-15
Debt securities [1]	-74	-16	29	-2	-16	-21	-28	-18
Long-term assets	492	430	224	151	198	187	213	228
Deposits	82	58	54	12	7	8	24	53
Debt securities	0	24	57	-94	-109	-106	-112	-89
Shares and other equity	178	99	-3	101	151	130	135	89
Quoted and unquoted shares and other equity	126	93	44	63	70	42	46	27
Mutual fund shares	52	7	-47	38	81	88	89	62
Life insurance and pension fund reserves	232	249	116	132	149	156	166	175
Main items of financing (-)								
Loans	107	114	88	14	-1	-12	-3	-20
of which: From euro area MFIs	65	147	81	25	21	1	7	-4
Other changes in assets (+)								
Non-financial assets	-643	480	194	-773	-1,009	-953	-668	-717
Financial assets	291	188	-405	525	337	434	389	473
Shares and other equity	87	54	-347	288	233	284	323	444
Life insurance and pension fund reserves	191	120	15	182	164	130	83	70
Remaining net flows (+)	-39	-98	-84	-1	-15	-17	-11	-5
= Changes in net worth	171	1,101	143	233	-170	-30	198	229
Balance sheet								
Non-financial assets (+)	29,221	29,873	30,244	29,625	29,183	29,197	29,312	29,041
Financial assets (+)								
Short-term assets	5,768	5,820	5,957	6,128	6,141	6,182	6,159	6,209
Currency and deposits	5,474	5,597	5,728	5,950	5,980	6,032	6,019	6,076
Money market fund shares	242	184	166	121	112	109	101	97
Debt securities [1]	51	39	63	58	48	42	39	36
Long-term assets	11,647	12,230	12,007	12,703	12,897	12,908	13,140	13,417
Deposits	970	1,027	1,082	1,096	1,103	1,113	1,125	1,148
Debt securities	1,443	1,447	1,394	1,358	1,276	1,311	1,262	1,232
Shares and other equity	4,109	4,261	3,907	4,310	4,485	4,444	4,656	4,853
Quoted and unquoted shares and other equity	2,982	3,060	2,823	3,068	3,176	3,134	3,305	3,469
Mutual fund shares	1,127	1,201	1,083	1,242	1,309	1,310	1,351	1,384
Life insurance and pension fund reserves	5,125	5,494	5,625	5,939	6,034	6,039	6,098	6,184
Remaining net assets (+)	279	266	218	195	158	187	198	169
Liabilities (-)								
Loans	5,936	6,110	6,205	6,196	6,169	6,168	6,165	6,152
of which: From euro area MFIs	4,968	5,213	5,281	5,290	5,279	5,282	5,276	5,268
= Net worth	40,978	42,079	42,222	42,455	42,210	42,305	42,644	42,684

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	2012 Q1-2012 Q4	2012 Q2-2013 Q1	2012 Q3-2013 Q2	2012 Q4-2013 Q3	2013 Q1-2013 Q4
Income and saving								
Gross value added (basic prices) (+)	4,520	4,663	4,823	4,846	4,842	4,852	4,870	4,893
Compensation of employees (-)	2,790	2,834	2,932	2,977	2,979	2,984	2,990	2,999
Other taxes less subsidies on production (-)	44	36	45	53	53	54	54	56
= Gross operating surplus (+)	1,686	1,793	1,846	1,815	1,810	1,814	1,826	1,838
Consumption of fixed capital (-)	782	800	827	849	853	857	861	865
= Net operating surplus (+)	904	993	1,019	966	957	957	965	972
Property income receivable (+)	533	550	565	545	544	533	529	523
Interest receivable	172	158	164	150	143	137	133	131
Other property income receivable	361	392	401	396	402	396	396	392
Interest and rents payable (-)	296	257	286	270	259	249	240	234
= Net entrepreneurial income (+)	1,140	1,286	1,298	1,242	1,243	1,241	1,254	1,261
Distributed income (-)	932	923	977	954	946	938	944	944
Taxes on income and wealth payable (-)	151	169	192	201	200	205	204	206
Social contributions receivable (+)	71	69	74	74	74	73	73	74
Social benefits payable (-)	68	69	70	70	70	70	70	70
Other net transfers (-)	47	45	48	49	49	51	52	51
= Net saving	13	150	85	42	52	50	57	63
Investment, financing and saving								
Net acquisition of non-financial assets (+)	65	145	211	133	102	90	88	83
Gross fixed capital formation (+)	899	927	982	964	945	939	936	939
Consumption of fixed capital (-)	782	800	827	849	853	857	861	865
Net acquisition of other non-financial assets (+)	-52	19	55	18	11	8	13	10
Main items of financial investment (+)								
Short-term assets	95	34	-28	63	47	39	53	73
Currency and deposits	88	67	6	75	80	81	91	110
Money market fund shares	39	-32	-46	-7	-5	-15	-13	-10
Debt securities [1]	-31	-1	12	-5	-27	-27	-25	-27
Long-term assets	149	433	489	241	209	82	91	105
Deposits	-1	22	72	-4	-35	-32	-1	2
Debt securities	22	24	-28	7	6	-2	-5	-14
Shares and other equity	104	249	298	132	172	105	117	125
Other (mainly intercompany loans)	24	138	147	106	67	11	-19	-8
Remaining net assets (+)	82	5	-64	25	59	101	52	55
Main items of financing (-)								
Debt	31	164	238	160	123	35	-22	-6
of which: Loans from euro area MFIs	-105	1	137	-136	-127	-158	-145	-126
of which: Debt securities	90	66	48	119	105	90	87	83
Shares and other equity	262	237	218	191	170	154	182	190
Quoted shares	64	31	27	27	11	21	23	30
Unquoted shares and other equity	198	206	191	164	159	134	159	159
Net capital transfers receivable (-)	82	65	67	64	67	66	63	66
= Net saving	13	150	85	42	52	50	57	63
Financial balance sheet								
Financial assets								
Short-term assets	1,933	1,958	1,931	1,990	1,953	1,940	1,969	2,052
Currency and deposits	1,632	1,695	1,705	1,777	1,757	1,765	1,798	1,880
Money market fund shares	213	182	134	130	127	113	111	117
Debt securities [1]	87	81	92	83	69	62	60	55
Long-term assets	10,376	10,852	10,886	11,640	11,947	11,768	12,239	12,531
Deposits	161	174	236	283	269	263	280	287
Debt securities	236	253	240	267	281	261	270	264
Shares and other equity	7,234	7,544	7,360	7,962	8,257	8,103	8,542	8,846
Other (mainly intercompany loans)	2,745	2,880	3,049	3,128	3,140	3,142	3,146	3,134
Remaining net assets	465	382	465	392	444	455	447	444
Liabilities								
Debt	9,460	9,709	9,864	9,991	9,979	9,936	9,914	9,899
of which: Loans from euro area MFIs	4,684	4,659	4,698	4,474	4,446	4,403	4,360	4,289
of which: Debt securities	814	882	876	1,035	1,055	1,052	1,083	1,085
Shares and other equity	12,588	13,149	12,459	13,378	13,789	13,654	14,449	15,018
Quoted shares	3,509	3,805	3,287	3,748	3,891	3,853	4,202	4,515
Unquoted shares and other equity	9,080	9,344	9,172	9,630	9,898	9,801	10,247	10,503

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	2012 Q1-2012 Q4	2012 Q2-2013 Q1	2012 Q3-2013 Q2	2012 Q4-2013 Q3	2013 Q1-2013 Q4
Financial account, financial transactions								
Main items of financial investment (+)								
Short-term assets	-41	-6	54	44	20	-18	-39	-66
Currency and deposits	-33	-9	14	15	11	8	3	-14
Money market fund shares	6	-8	16	32	10	-12	-19	-34
Debt securities [1]	-14	11	24	-3	0	-13	-22	-18
Long-term assets	293	294	131	187	176	210	244	301
Deposits	15	-5	9	-17	-19	-15	-18	-9
Debt securities	104	191	41	137	96	109	110	133
Loans	9	32	12	9	11	10	1	4
Quoted shares	-49	-1	-11	-8	0	0	10	1
Unquoted shares and other equity	-14	12	13	2	2	1	6	11
Mutual fund shares	228	66	68	64	85	105	135	160
Remaining net assets (+)	17	7	-30	-43	-25	-28	-33	-2
Main items of financing (-)								
Debt securities	5	1	3	7	5	3	3	0
Loans	-4	7	11	-15	0	-7	-23	-5
Shares and other equity	5	6	4	1	2	2	1	5
Insurance technical reserves	247	281	115	155	170	175	183	197
Net equity of households in life insurance and pension fund reserves	241	262	111	139	155	164	170	181
Prepayments of insurance premiums and reserves for outstanding claims	6	19	4	16	15	12	13	16
= Changes in net financial worth due to transactions	15	1	22	41	-6	-9	8	37
Other changes account								
Other changes in financial assets (+)								
Shares and other equity	197	119	-105	197	148	132	97	98
Other net assets	34	-6	14	236	133	94	3	-64
Other changes in liabilities (-)								
Shares and other equity	13	-1	-48	67	55	84	72	65
Insurance technical reserves	169	136	16	190	168	130	82	69
Net equity of households in life insurance and pension fund reserves	197	125	19	188	165	129	81	68
Prepayments of insurance premiums and reserves for outstanding claims	-28	11	-3	2	2	1	1	1
= Other changes in net financial worth	49	-22	-59	176	59	12	-54	-100
Financial balance sheet								
Financial assets (+)								
Short-term assets	331	330	371	408	413	366	356	335
Currency and deposits	195	190	193	209	218	201	201	193
Money market fund shares	95	88	102	125	125	107	99	87
Debt securities [1]	41	52	76	74	69	59	56	56
Long-term assets	5,649	6,041	6,046	6,643	6,774	6,769	6,897	7,020
Deposits	612	605	611	594	595	596	591	589
Debt securities	2,467	2,638	2,660	3,000	3,030	3,031	3,053	3,105
Loans	436	469	481	491	490	487	489	493
Quoted shares	397	422	377	404	413	410	426	439
Unquoted shares and other equity	412	417	421	433	435	435	440	443
Mutual fund shares	1,325	1,489	1,496	1,722	1,812	1,810	1,898	1,951
Remaining net assets (+)	225	247	262	252	249	240	230	219
Liabilities (-)								
Debt securities	42	43	46	55	55	52	52	53
Loans	281	292	301	284	302	300	295	285
Shares and other equity	441	447	403	471	491	499	516	540
Insurance technical reserves	5,586	6,003	6,134	6,479	6,593	6,597	6,656	6,746
Net equity of households in life insurance and pension fund reserves	4,801	5,188	5,318	5,645	5,742	5,745	5,804	5,895
Prepayments of insurance premiums and reserves for outstanding claims	785	815	816	834	851	851	852	851
= Net financial wealth	-146	-168	-204	13	-5	-73	-36	-51

Source: ECB.

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

4 FINANCIAL MARKETS

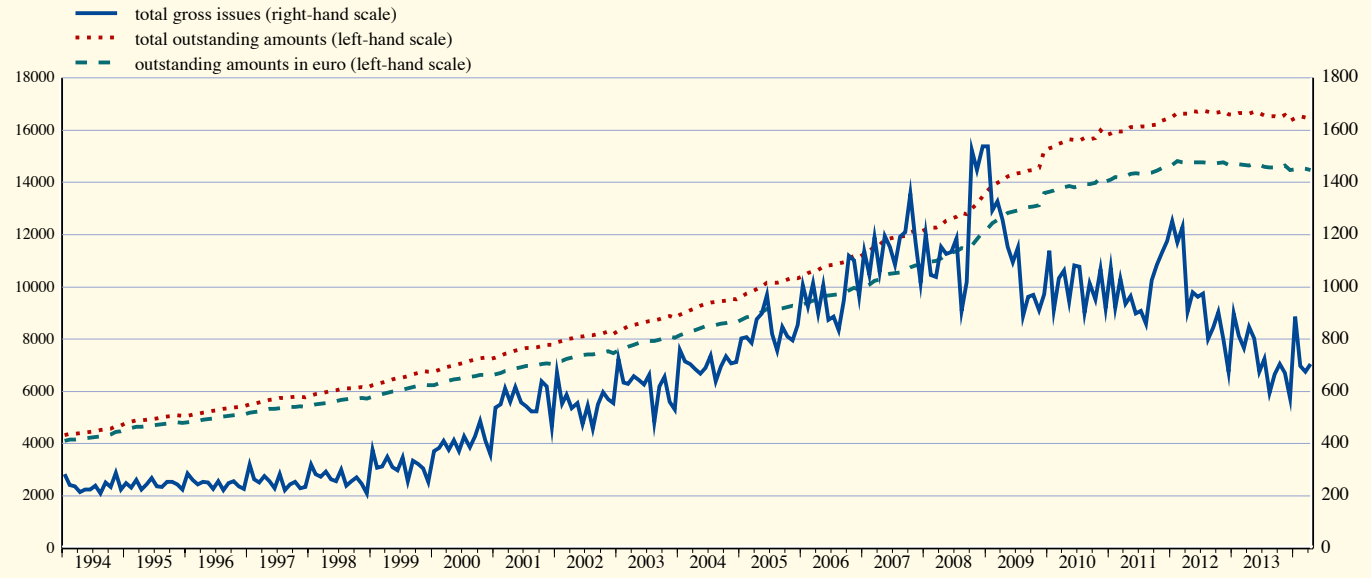
4.1 Securities other than shares by original maturity, residency of the issuer and currency

(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											
2013 Apr.	16,889.4	757.6	-7.7	14,649.4	709.0	-13.6	16,624.0	847.1	-6.8	-0.3	-12.7	-1.4
May	16,956.7	710.0	68.5	14,722.2	664.0	73.9	16,712.4	803.0	92.6	0.0	13.3	-1.0
June	16,894.1	600.3	-62.2	14,670.6	557.6	-51.1	16,643.4	674.8	-62.3	-0.3	-23.7	-0.9
July	16,827.9	639.4	-66.0	14,597.8	590.7	-72.3	16,550.9	725.4	-79.9	-0.9	-57.2	-1.4
Aug.	16,804.7	515.6	-23.4	14,572.9	482.0	-25.0	16,537.0	594.2	-17.1	-0.8	18.4	-0.9
Sep.	16,814.5	606.3	10.3	14,565.9	555.6	-6.6	16,524.1	666.5	-5.1	-0.7	41.4	-0.2
Oct.	16,818.3	642.1	4.8	14,557.2	571.9	-7.5	16,492.9	705.0	-20.0	-1.0	-35.8	-0.5
Nov.	16,928.4	597.6	110.4	14,638.6	538.8	81.7	16,579.8	670.0	85.5	-0.7	19.1	-0.5
Dec.	16,752.4	515.7	-185.9	14,465.1	477.5	-183.4	16,361.1	575.4	-219.6	-1.2	-118.4	-1.6
2014 Jan.	16,774.4	793.5	22.0	14,494.6	735.4	29.6	16,467.0	886.5	88.2	-0.8	67.5	-0.1
Feb.	16,846.9	629.7	68.3	14,554.4	576.7	55.7	16,527.7	697.4	69.7	-0.6	9.1	-0.2
Mar.	16,829.7	648.7	-18.1	14,524.9	579.6	-30.5	16,479.5	675.7	-48.9	-0.7	-46.7	-1.3
Apr.	.	.	.	14,475.4	611.6	-47.6	16,429.9	705.8	-44.9	-1.0	-46.4	-1.4
	Long-term											
2013 Apr.	15,563.5	247.7	-4.4	13,401.2	217.2	-15.4	15,127.4	248.9	-3.0	0.8	-9.9	-0.7
May	15,630.9	254.5	68.6	13,474.8	223.2	74.9	15,211.4	260.9	88.4	1.0	20.5	-0.4
June	15,610.5	208.2	-19.9	13,468.6	181.6	-5.6	15,188.2	201.4	-17.4	0.7	-10.2	-0.2
July	15,538.9	204.7	-71.5	13,383.3	173.1	-84.9	15,083.6	195.3	-94.3	0.1	-54.8	-1.1
Aug.	15,533.4	117.3	-5.6	13,374.4	97.7	-9.1	15,082.2	113.0	-5.5	0.2	37.3	-0.1
Sep.	15,549.9	223.7	16.9	13,380.0	190.6	6.0	15,088.3	216.7	15.6	0.2	56.4	0.5
Oct.	15,579.1	249.1	29.3	13,390.6	199.0	10.8	15,084.4	228.2	5.1	-0.1	-6.7	0.6
Nov.	15,695.7	251.9	115.4	13,482.1	210.0	90.4	15,191.7	240.1	105.7	0.2	45.7	0.9
Dec.	15,596.1	154.0	-100.1	13,390.8	133.1	-91.8	15,080.1	148.5	-103.0	0.1	-43.9	0.5
2014 Jan.	15,562.4	275.6	-32.6	13,357.8	237.3	-31.9	15,089.5	290.2	-4.2	0.1	2.1	1.2
Feb.	15,627.7	233.0	65.1	13,413.4	199.0	55.5	15,142.3	231.6	65.1	0.4	9.2	0.8
Mar.	15,584.0	255.7	-45.1	13,365.3	207.9	-49.5	15,091.1	237.2	-52.2	0.0	-47.8	-0.5
Apr.	.	.	.	13,343.9	222.8	-20.4	15,074.0	247.8	-13.3	-0.1	-16.2	-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											
2012	16,598	5,399	3,256	988	6,271	684	958	589	81	68	187	32
2013	16,361	4,887	3,187	1,060	6,554	674	728	385	64	64	187	29
2013 Q2	16,643	5,122	3,261	1,023	6,559	678	775	408	65	67	201	34
Q3	16,524	5,004	3,243	1,054	6,552	671	662	350	52	64	171	25
Q4	16,361	4,887	3,187	1,060	6,554	674	650	341	57	65	162	25
2014 Q1	16,479	4,829	3,189	1,087	6,694	681	753	371	71	69	201	41
2014 Jan.	16,467	4,924	3,210	1,084	6,579	669	886	467	67	84	228	40
Feb.	16,528	4,891	3,212	1,083	6,659	681	697	333	60	60	199	44
Mar.	16,479	4,829	3,189	1,087	6,694	681	676	311	86	64	175	39
Apr.	16,430	4,797	3,166	1,084	6,709	675	706	327	64	76	205	34
	Short-term											
2012	1,488	601	136	82	606	64	703	490	37	53	103	21
2013	1,281	474	110	75	570	52	511	315	26	48	102	21
2013 Q2	1,455	558	134	90	620	54	538	337	25	52	100	23
Q3	1,436	539	132	90	627	47	487	294	25	46	104	18
Q4	1,281	474	110	75	570	52	445	269	22	45	90	18
2014 Q1	1,388	530	140	83	579	56	500	289	34	50	99	27
2014 Jan.	1,378	533	117	87	587	53	596	372	22	57	115	29
Feb.	1,385	544	122	85	581	52	466	260	35	48	100	23
Mar.	1,388	530	140	83	579	56	438	235	46	46	83	29
Apr.	1,356	521	137	81	567	50	458	258	21	64	91	24
	Long-term [2]											
2012	15,110	4,798	3,120	906	5,665	621	255	99	45	16	83	12
2013	15,080	4,413	3,077	985	5,983	622	217	69	38	17	85	8
2013 Q2	15,188	4,564	3,127	934	5,939	624	237	71	40	16	101	10
Q3	15,088	4,465	3,111	964	5,925	623	175	56	26	18	67	8
Q4	15,080	4,413	3,077	985	5,983	622	206	72	35	20	72	7
2014 Q1	15,091	4,299	3,049	1,003	6,115	624	253	82	37	19	102	14
2014 Jan.	15,090	4,391	3,093	997	5,992	616	290	95	45	26	113	11
Feb.	15,142	4,347	3,090	998	6,078	629	232	74	25	12	100	21
Mar.	15,091	4,299	3,049	1,003	6,115	624	237	77	40	19	92	9
Apr.	15,074	4,276	3,028	1,003	6,142	625	248	69	43	12	113	10
	of which: Long-term fixed rate											
2012	10,434	2,811	1,210	814	5,154	444	165	54	18	15	71	7
2013	10,682	2,648	1,316	883	5,382	452	144	36	18	14	69	6
2013 Q2	10,676	2,719	1,300	839	5,363	455	154	34	20	13	79	8
Q3	10,655	2,671	1,315	863	5,353	454	121	32	12	14	59	5
Q4	10,682	2,648	1,316	883	5,382	452	137	37	18	18	59	5
2014 Q1	10,756	2,570	1,311	897	5,517	461	183	46	20	16	90	11
2014 Jan.	10,685	2,633	1,314	892	5,396	448	211	59	24	23	97	8
Feb.	10,746	2,603	1,313	893	5,477	461	170	39	9	11	93	18
Mar.	10,756	2,570	1,311	897	5,517	461	168	39	27	15	79	7
Apr.	10,763	2,561	1,328	896	5,516	462	157	36	23	11	78	8
	of which: Long-term variable rate											
2012	4,247	1,733	1,813	88	439	175	78	38	25	1	8	5
2013	3,985	1,562	1,656	98	501	169	61	28	17	2	11	2
2013 Q2	4,076	1,606	1,725	92	484	169	70	31	17	2	17	2
Q3	4,017	1,580	1,693	97	477	169	43	20	13	3	4	2
Q4	3,985	1,562	1,656	98	501	169	61	31	16	2	10	2
2014 Q1	3,919	1,533	1,621	101	501	163	57	31	14	2	8	3
2014 Jan.	3,994	1,558	1,664	101	504	167	67	31	19	4	11	3
Feb.	3,980	1,545	1,660	100	507	168	47	29	11	0	4	3
Mar.	3,919	1,533	1,621	101	501	163	58	33	11	3	8	2
Apr.	3,895	1,522	1,583	101	526	162	79	29	16	1	32	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

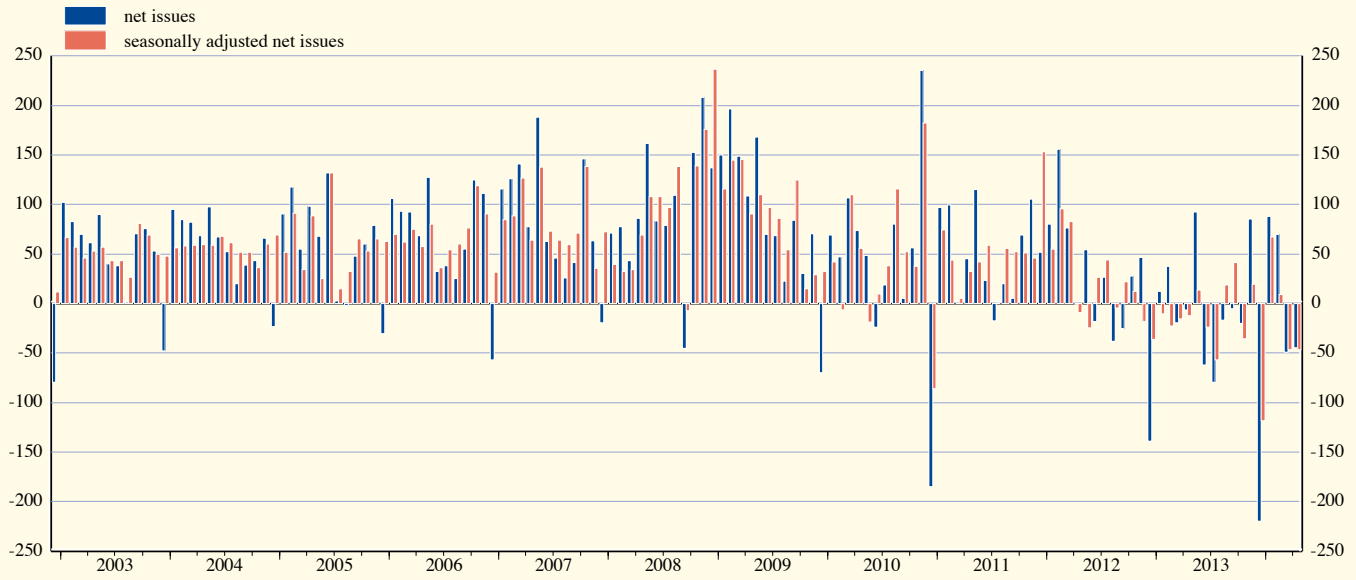
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

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											
2012	20.4	-8.1	1.9	10.5	13.0	3.1	-	-	-	-	-	-
2013	-16.9	-39.7	-7.2	6.7	24.0	-0.6	-	-	-	-	-	-
2013 Q2	7.8	-40.8	3.6	3.5	44.7	-3.3	-7.7	-39.7	2.9	2.4	29.7	-3.0
Q3	-34.0	-36.7	-4.8	11.2	-1.6	-2.1	0.9	-35.5	9.3	11.7	16.0	-0.6
Q4	-51.4	-35.4	-21.6	3.2	0.9	1.4	-45.0	-24.3	-42.1	6.0	14.5	0.9
2014 Q1	36.3	-20.9	-0.8	8.8	46.9	2.2	10.0	-34.1	6.3	6.5	30.2	1.1
2014 Jan.	88.2	28.1	19.3	22.0	24.1	-5.3	67.5	10.1	32.4	20.5	5.7	-1.2
Feb.	69.7	-27.4	1.5	1.4	81.3	12.8	9.1	-56.9	8.9	-2.0	47.6	11.5
Mar.	-48.9	-63.3	-23.1	3.1	35.2	-0.8	-46.7	-55.6	-22.2	1.0	37.2	-7.1
Apr.	-44.9	-28.5	-23.1	-1.8	14.5	-6.0	-46.4	-32.7	-37.8	-8.4	37.3	-4.9
	Long-term											
2012	30.4	0.5	-0.1	10.4	15.4	4.2	-	-	-	-	-	-
2013	1.2	-29.4	-3.9	7.3	26.8	0.3	-	-	-	-	-	-
2013 Q2	22.6	-33.1	5.3	4.0	45.1	1.3	0.1	-39.1	5.4	3.0	31.0	-0.2
Q3	-28.1	-30.7	-4.1	10.9	-4.2	0.1	13.0	-27.6	6.8	11.5	19.9	2.5
Q4	2.6	-14.5	-10.8	8.3	19.8	-0.2	-1.6	-4.9	-28.6	9.0	22.2	0.6
2014 Q1	2.9	-38.6	-9.4	6.1	44.0	0.7	-12.2	-45.5	-2.7	5.7	31.2	-0.9
2014 Jan.	-4.2	-27.8	12.6	9.5	7.9	-6.4	2.1	-31.7	24.7	11.8	3.2	-5.9
Feb.	65.1	-38.7	0.5	3.4	86.5	13.4	9.2	-62.6	5.6	2.2	52.1	11.9
Mar.	-52.2	-49.2	-41.3	5.3	37.8	-4.8	-47.8	-42.1	-38.4	3.1	38.4	-8.9
Apr.	-13.3	-20.9	-20.1	0.1	26.8	0.8	-16.2	-25.7	-30.7	-3.8	44.7	-0.7

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.

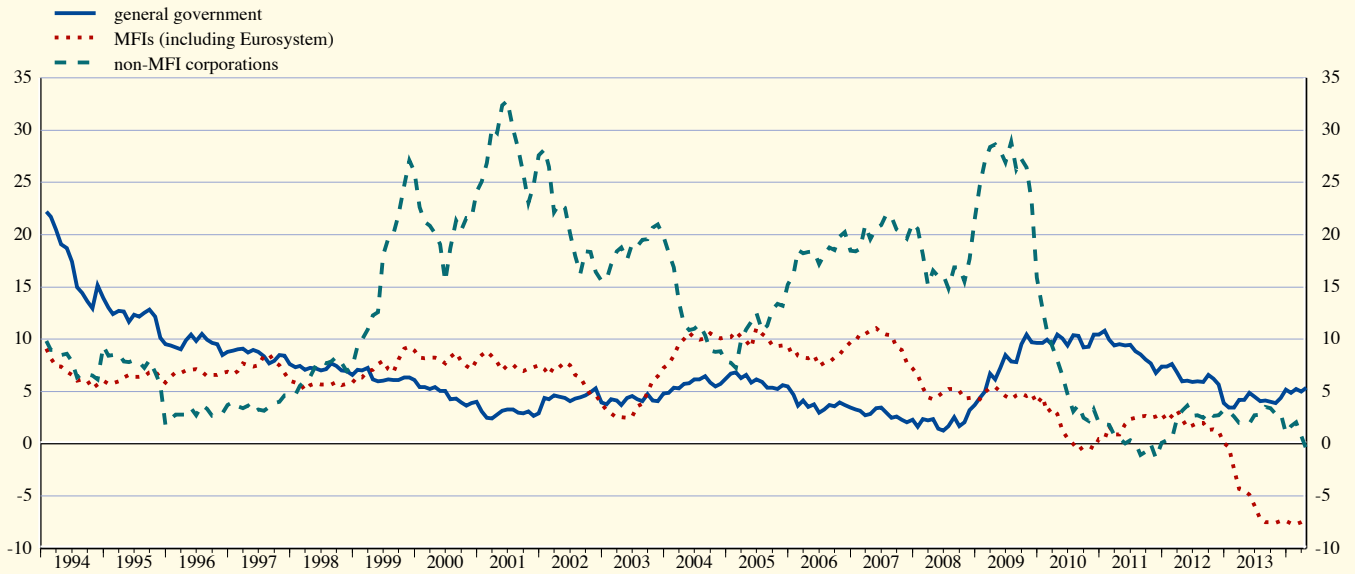
4.3 Growth rates of securities other than shares issued by euro area residents [1)]

(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											
2013 Apr.	-0.3	-6.2	-1.0	12.8	3.5	0.4	-1.4	-10.6	1.9	11.6	3.5	-2.7
May	0.0	-6.5	-0.8	11.2	4.4	-0.4	-1.0	-11.5	2.9	8.4	5.2	-2.9
June	-0.3	-7.3	0.2	10.3	4.3	-2.6	-0.9	-10.8	0.8	5.5	6.3	-2.1
July	-0.9	-8.7	0.5	10.1	4.1	-4.7	-1.4	-11.6	0.7	5.7	5.9	-5.6
Aug.	-0.8	-9.2	1.3	10.7	4.1	-3.6	-0.9	-9.9	0.2	7.3	5.1	-1.4
Sep.	-0.7	-8.9	1.7	10.2	4.1	-3.8	-0.2	-8.4	2.3	8.5	4.3	-3.2
Oct.	-1.0	-9.0	0.7	10.1	3.8	-4.1	-0.5	-7.4	-0.3	8.6	4.2	-5.0
Nov.	-0.7	-8.8	0.7	10.2	4.0	-2.6	-0.5	-5.9	-1.4	12.0	2.8	-2.2
Dec.	-1.2	-8.9	-2.6	8.2	4.6	-1.1	-1.6	-6.9	-6.0	10.7	2.8	0.2
2014 Jan.	-0.8	-8.1	-1.7	9.6	4.4	-2.0	-0.1	-4.4	-4.0	13.7	3.0	2.0
Feb.	-0.6	-7.8	-1.9	8.7	4.5	0.7	-0.2	-5.5	-3.9	10.1	3.9	2.9
Mar.	-0.7	-7.7	-2.2	7.9	4.2	-0.8	-1.3	-6.9	-6.4	7.2	4.1	1.8
Apr.	-1.0	-7.6	-3.6	6.2	4.7	-1.9	-1.4	-7.8	-6.8	3.8	5.3	1.1
	Long-term											
2013 Apr.	0.8	-4.5	-1.3	14.6	4.3	3.2	-0.7	-8.3	0.7	11.8	3.3	-0.1
May	1.0	-4.9	-1.0	13.3	5.1	2.9	-0.4	-10.0	2.0	7.7	5.5	-1.0
June	0.7	-5.9	0.1	12.6	4.8	1.6	-0.2	-10.4	1.3	5.9	7.1	-1.7
July	0.1	-7.2	0.2	12.1	4.5	0.3	-1.1	-11.9	0.9	5.7	6.5	-3.1
Aug.	0.2	-7.5	1.1	12.4	4.5	0.7	-0.1	-10.0	1.9	8.4	5.8	0.3
Sep.	0.2	-7.5	1.2	11.2	4.4	0.3	0.5	-8.4	2.4	9.6	5.3	2.2
Oct.	-0.1	-7.5	0.6	10.9	4.2	0.8	0.6	-6.8	0.3	10.0	5.1	1.7
Nov.	0.2	-7.4	0.6	10.9	4.8	0.4	0.9	-4.7	-0.9	14.2	4.2	1.7
Dec.	0.1	-7.4	-1.5	9.7	5.7	0.6	0.5	-4.2	-4.1	13.6	4.3	3.0
2014 Jan.	0.1	-7.6	-0.8	10.2	5.5	-1.1	1.2	-3.2	-2.4	14.9	4.4	1.2
Feb.	0.4	-7.7	-0.3	10.1	5.6	1.8	0.8	-5.3	-2.4	11.9	5.4	3.3
Mar.	0.0	-7.5	-1.8	9.6	5.4	0.9	-0.5	-6.7	-5.9	9.4	5.5	-0.3
Apr.	-0.1	-7.3	-3.1	8.3	5.9	0.4	-0.7	-7.8	-6.5	6.5	6.8	-0.8

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.

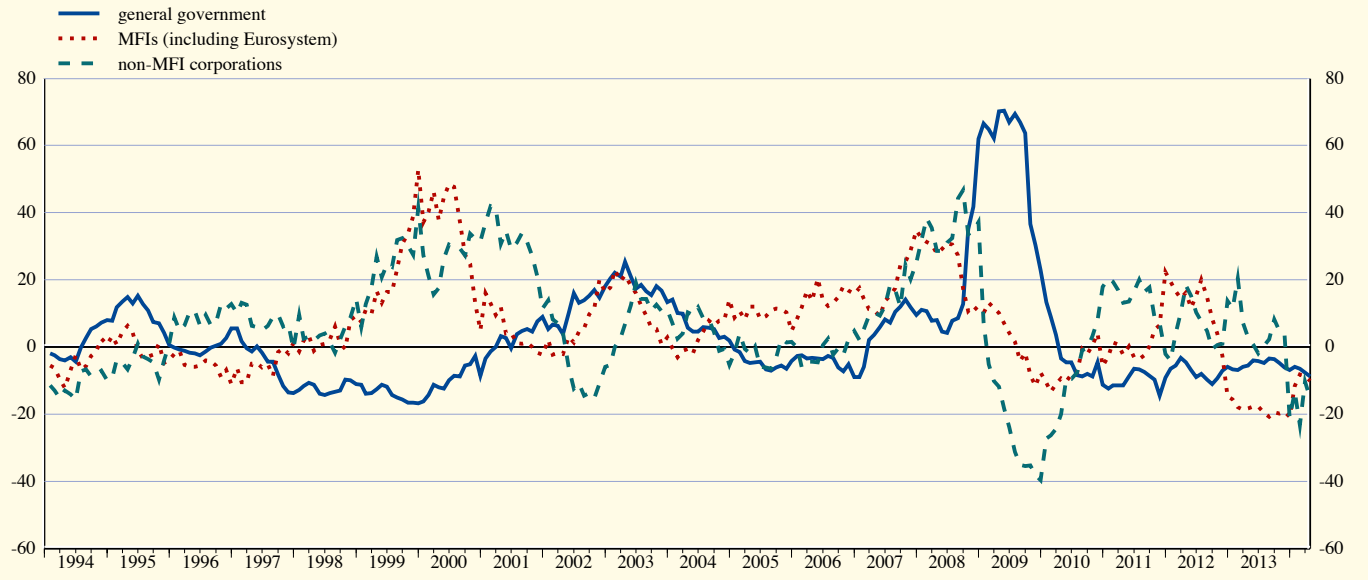
4.3 Growth rates of securities other than shares issued by euro area residents [1] (cont'd)

(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											
2012	5.3	4.1	1.9	10.6	5.9	7.3	-0.9	-0.3	-4.9	-0.4	6.6	23.3
2013	3.3	-3.2	6.7	13.6	4.6	4.1	-7.2	-7.5	-9.4	5.0	-1.3	-0.8
2013 Q2	3.7	-3.3	7.5	15.0	5.1	4.5	-7.5	-6.7	-10.7	2.0	-1.8	-0.8
Q3	3.0	-4.8	7.8	12.9	4.8	3.4	-8.0	-9.6	-8.9	6.9	-1.9	-5.4
Q4	2.3	-5.0	5.2	10.7	4.2	2.6	-6.6	-9.8	-7.9	11.7	6.5	-4.1
2014 Q1	1.8	-5.9	1.4	9.9	4.8	1.8	-5.0	-8.5	-7.2	12.6	12.8	-2.5
2013 Nov.	2.1	-4.8	4.9	10.7	3.9	2.0	-5.6	-9.8	-7.3	12.8	13.2	-3.2
Dec.	2.1	-5.1	3.7	9.5	4.5	2.2	-6.2	-9.3	-9.4	11.1	14.2	-2.9
2014 Jan.	1.7	-5.8	2.0	10.0	4.6	0.0	-5.1	-8.8	-7.6	13.4	15.8	-3.0
Feb.	1.8	-6.2	0.0	10.3	5.2	2.9	-4.2	-8.4	-5.2	12.5	10.5	-0.9
Mar.	1.7	-6.4	0.6	9.1	5.0	3.0	-5.0	-7.2	-7.8	12.9	10.2	-4.3
Apr.	1.7	-6.4	0.9	8.1	5.0	2.6	-5.3	-6.8	-9.7	12.3	13.8	-5.0
	In euro											
2012	5.5	4.6	0.6	10.9	6.0	7.2	-0.6	2.0	-6.5	-1.4	6.3	22.9
2013	3.1	-4.0	4.1	14.7	4.6	4.1	-7.5	-7.2	-10.7	6.2	-1.8	-1.2
2013 Q2	3.4	-4.0	4.6	16.4	5.0	4.4	-7.7	-5.9	-12.0	4.0	-2.4	-1.4
Q3	2.7	-5.9	5.0	14.0	4.8	3.8	-8.4	-9.7	-9.9	8.4	-2.3	-5.8
Q4	2.0	-6.0	2.8	11.4	4.3	2.8	-7.0	-10.3	-8.7	12.8	6.4	-4.5
2014 Q1	1.6	-7.1	-1.2	9.6	4.9	1.7	-5.7	-9.3	-8.4	11.7	12.9	-2.8
2013 Nov.	1.9	-5.8	2.7	11.7	3.9	2.2	-6.0	-10.3	-8.0	13.2	13.4	-3.5
Dec.	2.0	-6.2	2.4	10.3	4.6	2.4	-6.9	-10.2	-10.5	11.2	14.1	-3.4
2014 Jan.	1.4	-6.9	-1.4	9.7	4.6	0.0	-5.9	-9.6	-9.3	12.1	16.0	-3.1
Feb.	1.6	-7.4	-2.7	9.7	5.2	2.7	-4.8	-9.2	-6.1	11.4	10.7	-1.5
Mar.	1.5	-7.8	-1.4	8.4	5.0	2.6	-5.6	-8.1	-8.8	12.2	10.3	-4.1
Apr.	1.5	-8.0	-0.5	7.5	5.1	2.3	-5.9	-7.6	-11.1	11.0	14.2	-4.3

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

(annual percentage changes)



Source: ECB.

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

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

(EUR billions, unless otherwise indicated; market values)

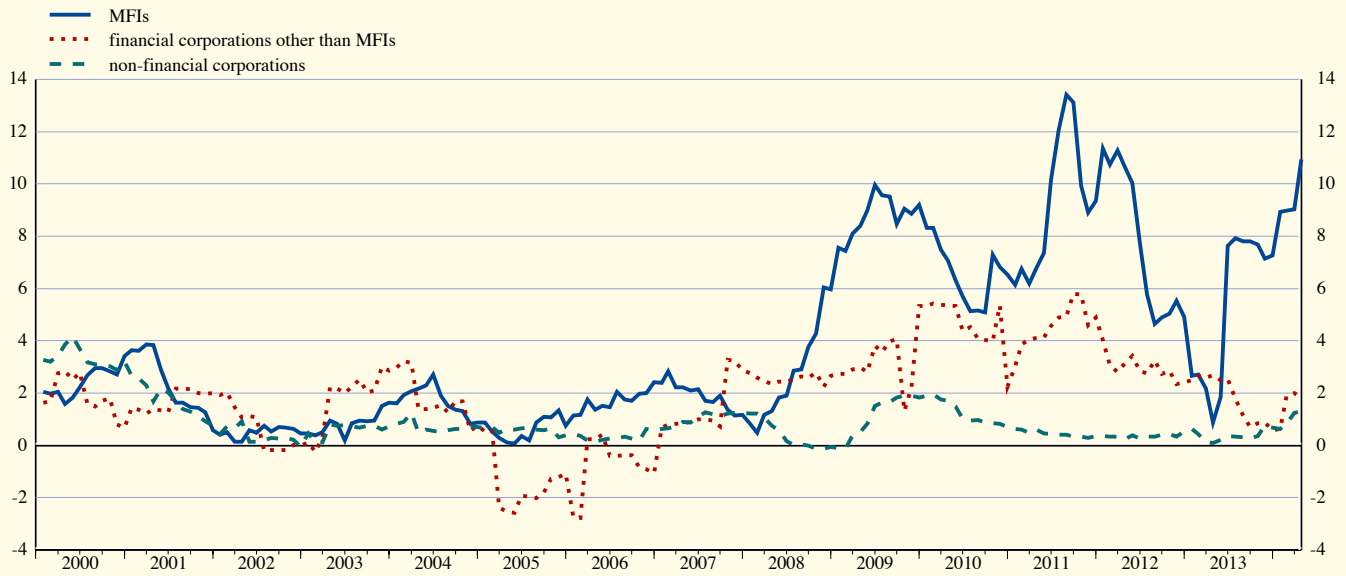
1. Outstanding amounts and annual growth rates

(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
2012 Apr.	4,071.1	106.5	1.4	327.2	10.7	292.3	3.1	3,451.6	0.2
May	3,765.4	106.6	1.5	280.8	10.0	265.5	3.4	3,219.1	0.4
June	3,928.0	106.7	1.1	317.6	7.7	285.0	2.8	3,325.4	0.3
July	4,054.1	106.8	1.0	309.9	5.8	292.1	2.7	3,452.1	0.3
Aug.	4,178.8	106.8	0.9	349.6	4.6	309.4	3.2	3,519.7	0.3
Sep.	4,235.1	106.9	0.9	364.9	4.9	323.9	2.7	3,546.2	0.4
Oct.	4,311.8	107.0	1.0	383.5	5.0	333.8	2.8	3,594.4	0.4
Nov.	4,399.7	106.9	0.9	395.7	5.5	342.3	2.3	3,661.8	0.3
Dec.	4,503.7	107.2	1.0	402.4	4.9	357.3	2.4	3,743.9	0.5
2013 Jan.	4,658.5	107.3	0.9	441.5	2.7	370.7	2.5	3,846.3	0.6
Feb.	4,643.2	107.1	0.8	416.1	2.7	364.5	2.7	3,862.6	0.4
Mar.	4,645.2	106.9	0.5	380.3	2.2	369.0	2.6	3,895.9	0.1
Apr.	4,747.4	106.8	0.3	410.4	0.9	394.9	2.7	3,942.1	0.1
May	4,864.1	107.1	0.5	440.2	1.9	408.0	2.5	4,016.0	0.2
June	4,663.9	107.9	1.2	413.5	7.6	394.5	2.5	3,855.9	0.4
July	4,903.7	108.0	1.1	446.6	7.9	418.7	1.8	4,038.5	0.3
Aug.	4,892.0	107.9	1.1	461.5	7.8	416.1	1.1	4,014.5	0.3
Sep.	5,136.7	107.9	1.0	491.7	7.8	427.6	0.7	4,217.3	0.3
Oct.	5,411.0	108.1	1.1	557.2	7.7	445.1	0.8	4,408.7	0.4
Nov.	5,502.3	108.4	1.3	562.8	7.1	454.6	0.9	4,484.9	0.7
Dec.	5,567.9	108.6	1.3	569.0	7.3	465.8	0.6	4,533.1	0.7
2014 Jan.	5,485.2	108.8	1.4	597.7	8.9	456.1	0.6	4,431.4	0.6
Feb.	5,757.5	108.9	1.7	637.8	9.0	475.3	1.9	4,644.4	0.8
Mar.	5,809.2	109.1	2.0	642.6	9.0	477.1	2.0	4,689.5	1.2
Apr.	5,839.6	109.2	2.2	639.1	10.9	483.5	1.8	4,717.0	1.3

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

(annual percentage changes)



Source: ECB.

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

4.4 Quoted shares issued by euro area residents

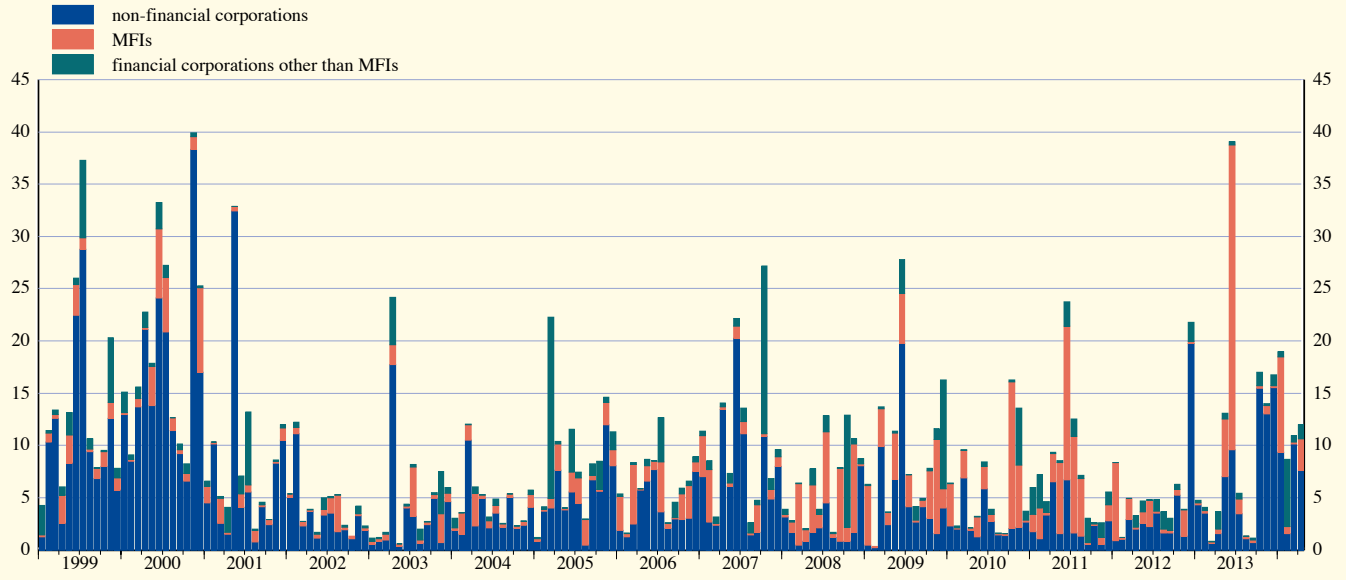
(EUR billions; market values)

2. Transactions during the month

	Total			MFIs			Financial corporations other than MFIs			Non-financial corporations		
	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
2012 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	4.8	0.3	4.5	0.2	0.0	0.2	1.1	0.0	1.1	3.6	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	19.8	10.8	8.9
2013 Jan.	4.6	0.3	4.3	0.0	0.0	0.0	0.2	0.1	0.1	4.3	0.2	4.1
Feb.	4.1	11.4	-7.3	0.3	0.0	0.3	0.3	0.0	0.3	3.5	11.4	-7.8
Mar.	0.7	10.6	-9.9	0.0	0.1	-0.1	0.0	0.3	-0.3	0.6	10.1	-9.4
Apr.	3.6	5.9	-2.3	0.4	5.2	-4.8	1.7	0.0	1.6	1.6	0.7	0.9
May	13.1	1.8	11.3	5.5	0.0	5.5	0.6	0.0	0.5	7.0	1.8	5.2
June	39.1	1.9	37.1	29.2	0.0	29.1	0.3	0.3	0.1	9.6	1.7	7.9
July	5.4	3.0	2.4	1.4	0.0	1.4	0.6	1.9	-1.4	3.5	1.1	2.4
Aug.	1.1	2.3	-1.2	0.0	0.0	0.0	0.0	0.5	-0.5	1.1	1.8	-0.7
Sep.	1.0	1.7	-0.7	0.1	0.0	0.1	0.1	0.6	-0.4	0.7	1.1	-0.4
Oct.	16.9	7.5	9.4	0.1	0.0	0.1	1.3	0.1	1.2	15.5	7.4	8.1
Nov.	14.0	2.1	11.9	0.8	0.0	0.8	0.2	0.1	0.1	13.0	2.0	11.0
Dec.	16.6	7.0	9.6	0.0	0.0	0.0	1.1	0.0	1.1	15.6	7.0	8.6
2014 Jan.	18.9	7.8	11.1	9.1	0.3	8.9	0.5	0.1	0.3	9.4	7.4	1.9
Feb.	8.7	2.3	6.4	0.7	0.0	0.7	6.4	0.3	6.1	1.6	2.0	-0.4
Mar.	10.8	2.4	8.4	0.0	0.0	0.0	0.6	0.6	0.0	10.2	1.8	8.4
Apr.	12.0	2.9	9.0	3.0	0.0	3.0	1.3	0.0	1.3	7.7	2.9	4.7

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
2013 May	0.33	2.04	2.06	2.25	1.31	1.31	0.38	0.83	1.86	1.98	0.48
June	0.32	1.88	1.88	2.12	1.30	1.28	0.38	0.83	1.65	1.77	0.72
July	0.31	1.88	1.90	2.08	1.28	1.23	0.37	0.82	1.63	1.78	0.85
Aug.	0.30	1.81	1.87	2.05	1.15	1.21	0.37	0.70	1.57	1.85	0.51
Sep.	0.30	1.71	1.86	2.06	1.15	1.17	0.35	0.81	1.68	1.87	0.56
Oct.	0.29	1.72	1.83	2.07	1.13	1.15	0.34	0.78	1.65	2.28	0.29
Nov.	0.29	1.60	1.76	2.02	1.12	1.11	0.34	0.75	1.57	1.73	0.47
Dec.	0.29	1.58	1.66	1.91	1.11	1.07	0.34	0.79	1.52	1.63	0.71
2014 Jan.	0.28	1.66	1.64	1.95	1.09	1.05	0.33	0.71	1.42	1.81	0.58
Feb.	0.28	1.60	1.62	1.93	1.10	1.03	0.33	0.63	1.42	1.75	0.83
Mar.	0.28	1.57	1.50	1.86	1.07	1.01	0.35	0.65	1.37	1.58	0.87
Apr.	0.27	1.56	1.44	1.83	1.06	0.99	0.34	0.72	1.24	1.60	0.28

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
2013 May	7.90	17.08	5.62	6.12	7.81	7.20	2.87	3.09	2.95	3.22	3.32	3.32	4.11	3.14
June	7.84	17.03	5.51	6.06	7.65	7.07	2.82	3.00	2.87	3.15	3.25	3.10	4.07	3.01
July	7.75	16.96	5.63	6.12	7.63	7.13	2.84	2.97	2.90	3.17	3.28	3.19	3.75	3.18
Aug.	7.74	17.01	5.62	6.15	7.64	7.15	2.80	3.01	2.97	3.18	3.31	3.00	4.06	3.15
Sep.	7.77	17.02	5.80	6.07	7.62	7.20	2.83	3.05	3.05	3.25	3.35	3.04	3.99	3.16
Oct.	7.67	17.02	5.71	6.04	7.63	7.13	2.77	3.04	3.12	3.27	3.35	3.10	3.95	3.26
Nov.	7.64	16.96	5.81	6.05	7.75	7.21	2.79	3.06	3.15	3.31	3.37	3.30	4.08	3.19
Dec.	7.63	16.94	5.63	6.20	7.44	7.05	2.78	3.00	3.15	3.32	3.37	3.07	3.86	3.05
2014 Jan.	7.69	17.08	5.73	6.08	7.73	7.34	2.76	3.01	3.12	3.31	3.36	3.24	3.81	3.01
Feb.	7.65	17.08	5.87	6.01	7.68	7.38	2.79	2.95	3.09	3.27	3.35	3.29	3.98	3.08
Mar.	7.65	17.08	5.83	5.95	7.55	7.29	2.78	2.90	3.03	3.23	3.29	3.29	4.03	3.11
Apr.	7.60	17.24	5.66	5.83	7.51	7.18	2.72	2.91	3.00	3.24	3.29	3.10	3.87	3.07

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
2013 May	4.14	4.76	4.76	4.12	4.12	3.61	3.48	2.09	2.70	3.21	3.52	2.68	2.79
June	4.14	4.54	4.60	4.40	4.34	3.56	3.41	2.05	2.60	3.01	2.96	2.71	3.12
July	4.12	4.65	4.80	4.34	4.09	3.48	3.45	2.13	2.71	2.72	2.82	2.98	3.17
Aug.	4.10	4.50	4.81	4.41	4.06	3.41	3.39	2.03	2.56	2.82	3.00	2.88	3.10
Sep.	4.13	4.53	4.67	4.39	4.16	3.41	3.42	2.08	2.54	2.86	2.75	2.89	3.28
Oct.	4.14	4.60	4.83	4.39	4.14	3.51	3.50	2.19	2.64	3.14	2.86	3.28	3.38
Nov.	4.08	4.56	4.71	4.34	4.29	3.56	3.50	2.23	2.62	2.96	2.90	2.98	3.10
Dec.	4.12	4.53	4.49	4.20	4.19	3.43	3.41	2.17	2.73	2.67	2.81	2.82	3.13
2014 Jan.	4.15	4.61	4.68	4.25	3.99	3.40	3.48	2.15	2.75	2.76	2.94	2.97	3.13
Feb.	4.11	4.53	4.59	4.26	4.07	3.48	3.45	2.09	2.79	2.91	2.78	2.79	3.16
Mar.	4.08	4.60	4.49	4.24	4.11	3.54	3.47	2.18	2.76	2.83	2.98	2.77	3.23
Apr.	4.12	4.59	4.49	4.10	3.95	3.45	3.45	2.20	2.57	2.88	2.59	2.82	3.20

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)

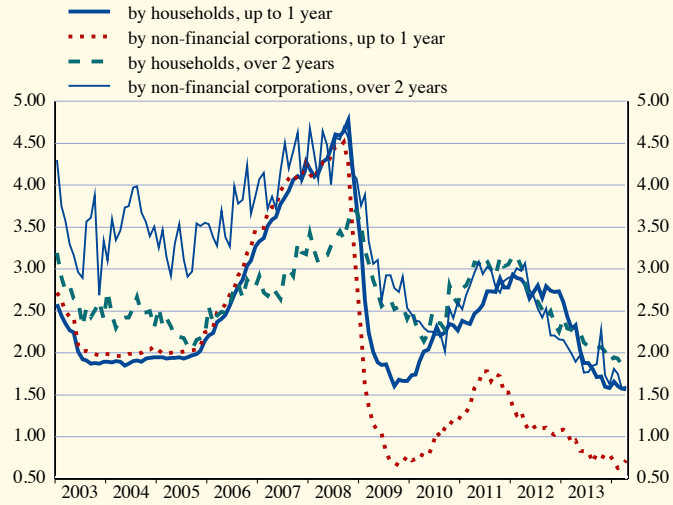
4. Interest rates on deposits (outstanding amounts)

	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight	With an agreed maturity of:		Redeemable at notice of: [2]		Overnight	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
2013 May	0.33	2.41	2.67	1.31	1.31	0.38	1.57	2.79	1.62
June	0.32	2.36	2.67	1.30	1.28	0.38	1.52	2.80	1.73
July	0.31	2.28	2.64	1.28	1.23	0.37	1.46	2.77	1.67
Aug.	0.30	2.22	2.63	1.15	1.21	0.37	1.44	2.82	1.50
Sep.	0.30	2.16	2.63	1.15	1.17	0.35	1.41	2.84	1.66
Oct.	0.29	2.09	2.60	1.13	1.15	0.34	1.34	2.83	1.35
Nov.	0.29	2.02	2.60	1.12	1.11	0.34	1.32	2.84	1.34
Dec.	0.29	1.94	2.57	1.11	1.07	0.34	1.29	2.79	1.05
2014 Jan.	0.28	1.88	2.55	1.09	1.05	0.33	1.24	2.77	1.01
Feb.	0.28	1.84	2.59	1.10	1.03	0.33	1.23	2.78	1.08
Mar.	0.28	1.79	2.53	1.07	1.01	0.35	1.20	2.76	1.11
Apr.	0.27	1.75	2.52	1.06	0.99	0.34	1.18	2.73	1.02

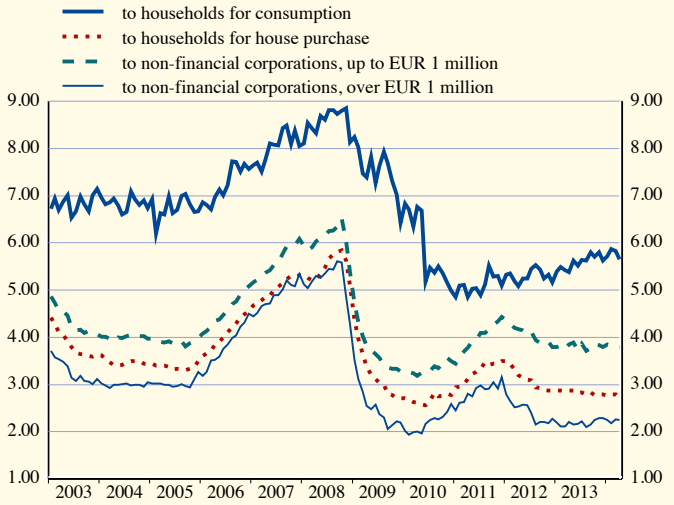
5. Interest rates on loans (outstanding amounts)

	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
2013 May	3.47	3.30	3.46	7.65	6.14	4.86	3.66	3.24	3.13
June	3.50	3.29	3.43	7.62	6.18	4.87	3.63	3.24	3.14
July	3.51	3.24	3.40	7.59	6.18	4.84	3.64	3.26	3.14
Aug.	3.52	3.22	3.37	7.58	6.16	4.82	3.63	3.26	3.12
Sep.	3.55	3.22	3.37	7.64	6.16	4.83	3.65	3.24	3.13
Oct.	3.50	3.20	3.35	7.61	6.10	4.80	3.62	3.27	3.12
Nov.	3.51	3.22	3.34	7.52	6.11	4.79	3.59	3.28	3.12
Dec.	3.59	3.24	3.33	7.49	6.08	4.77	3.61	3.29	3.14
2014 Jan.	3.60	3.17	3.31	7.58	6.11	4.76	3.67	3.30	3.13
Feb.	3.59	3.21	3.37	7.64	6.23	4.83	3.63	3.33	3.17
Mar.	3.57	3.18	3.33	7.61	6.14	4.76	3.62	3.31	3.13
Apr.	3.63	3.16	3.31	7.50	6.14	4.78	3.63	3.30	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.

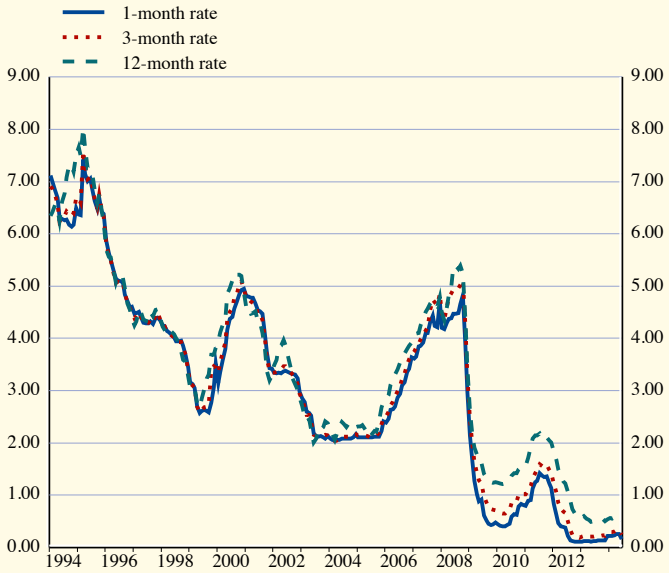
4.6 Money market interest rates

(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
2011	0.87	1.18	1.39	1.64	2.01	0.34	0.19
2012	0.23	0.33	0.57	0.83	1.11	0.43	0.19
2013	0.09	0.13	0.22	0.34	0.54	0.27	0.15
2013 Q2	0.08	0.12	0.21	0.31	0.51	0.28	0.16
Q3	0.09	0.13	0.22	0.34	0.54	0.26	0.15
Q4	0.12	0.16	0.24	0.35	0.53	0.24	0.14
2014 Q1	0.18	0.23	0.30	0.40	0.56	0.24	0.14
Q2	0.19	0.22	0.30	0.39	0.57	0.23	0.13
2013 June	0.09	0.12	0.21	0.32	0.51	0.27	0.15
July	0.09	0.13	0.22	0.34	0.53	0.27	0.16
Aug.	0.08	0.13	0.23	0.34	0.54	0.26	0.15
Sep.	0.08	0.13	0.22	0.34	0.54	0.25	0.15
Oct.	0.09	0.13	0.23	0.34	0.54	0.24	0.15
Nov.	0.10	0.13	0.22	0.33	0.51	0.24	0.14
Dec.	0.17	0.21	0.27	0.37	0.54	0.24	0.15
2014 Jan.	0.20	0.22	0.29	0.40	0.56	0.24	0.14
Feb.	0.16	0.22	0.29	0.39	0.55	0.24	0.14
Mar.	0.19	0.23	0.31	0.41	0.58	0.23	0.14
Apr.	0.25	0.25	0.33	0.43	0.60	0.23	0.14
May	0.25	0.26	0.32	0.42	0.59	0.23	0.14
June	0.08	0.15	0.24	0.33	0.51	0.23	0.13

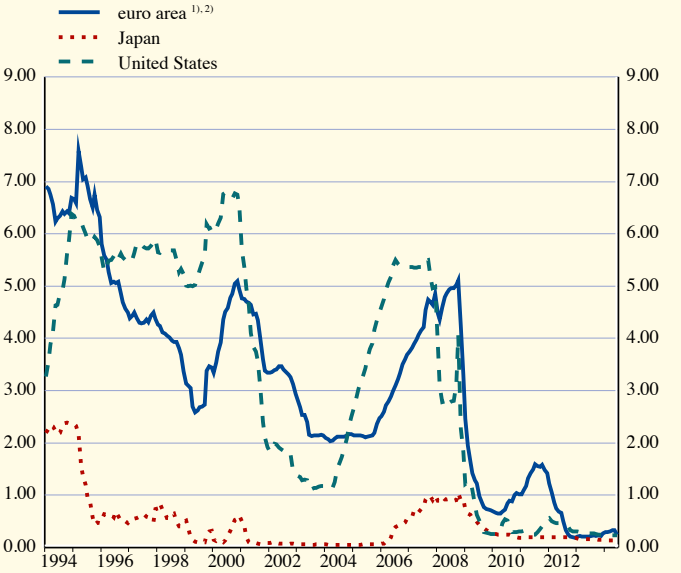
C23 Euro area money market rates [1), 2)]

(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.

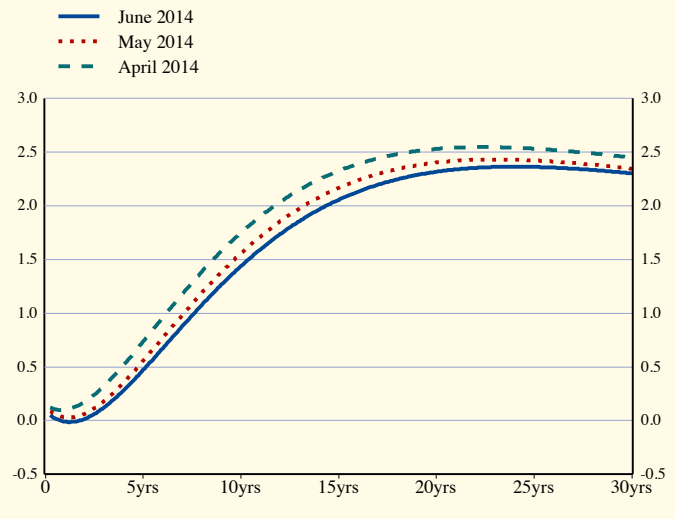
4.7 Euro area yield curves [1)]

(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
2011	0.00	0.09	0.41	1.56	2.13	2.65	2.65	2.24	0.32	1.15	3.24	3.84
2012	0.06	-0.04	-0.01	0.58	1.09	1.72	1.66	1.74	-0.09	0.17	1.84	3.50
2013	0.08	0.09	0.25	1.07	1.62	2.24	2.16	1.99	0.18	0.67	2.53	3.88
2013 Q2	0.03	0.11	0.30	1.05	1.54	2.14	2.11	1.84	0.27	0.73	2.35	3.78
Q3	0.02	0.07	0.22	0.94	1.45	2.05	2.03	1.84	0.17	0.60	2.25	3.74
Q4	0.08	0.09	0.25	1.07	1.62	2.24	2.16	1.99	0.18	0.67	2.53	3.88
2014 Q1	0.16	0.11	0.17	0.76	1.23	1.82	1.66	1.65	0.11	0.40	1.94	3.50
Q2	0.05	-0.01	0.02	0.47	0.88	1.44	1.39	1.42	-0.04	0.16	1.46	3.09
2013 June	0.03	0.11	0.30	1.05	1.54	2.14	2.11	1.84	0.27	0.73	2.35	3.78
July	0.01	0.04	0.18	0.88	1.36	1.95	1.95	1.77	0.14	0.54	2.14	3.59
Aug.	0.02	0.09	0.27	1.06	1.58	2.17	2.16	1.90	0.23	0.71	2.43	3.78
Sep.	0.02	0.07	0.22	0.94	1.45	2.05	2.03	1.84	0.17	0.60	2.25	3.74
Oct.	0.05	0.05	0.15	0.82	1.32	1.95	1.90	1.80	0.09	0.45	2.10	3.74
Nov.	0.08	0.05	0.14	0.82	1.34	1.99	1.91	1.84	0.08	0.43	2.14	3.79
Dec.	0.08	0.09	0.25	1.07	1.62	2.24	2.16	1.99	0.18	0.67	2.53	3.88
2014 Jan.	0.09	0.04	0.11	0.77	1.27	1.89	1.80	1.79	0.04	0.37	2.06	3.61
Feb.	0.14	0.09	0.16	0.79	1.27	1.88	1.74	1.72	0.09	0.41	2.03	3.56
Mar.	0.16	0.11	0.17	0.76	1.23	1.82	1.66	1.65	0.11	0.40	1.94	3.50
Apr.	0.13	0.09	0.16	0.71	1.15	1.72	1.60	1.56	0.10	0.38	1.81	3.36
May	0.09	0.03	0.06	0.56	0.98	1.56	1.47	1.49	0.01	0.23	1.60	3.23
June	0.05	-0.01	0.02	0.47	0.88	1.44	1.39	1.42	-0.04	0.16	1.46	3.09

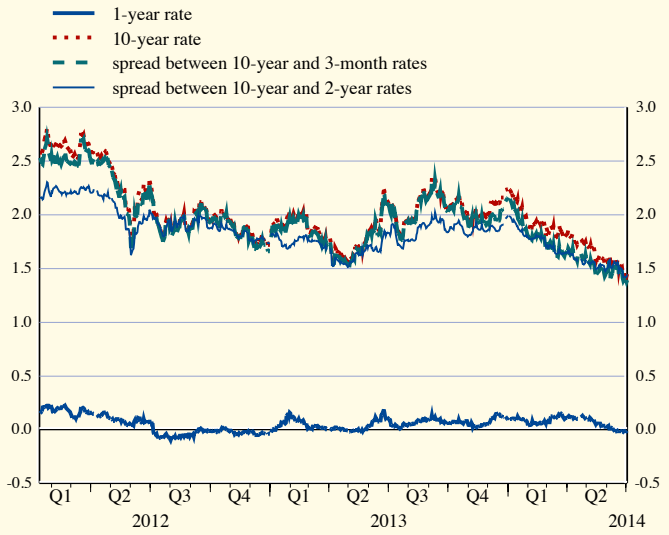
C25 Euro area spot yield curves [2)]

(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.

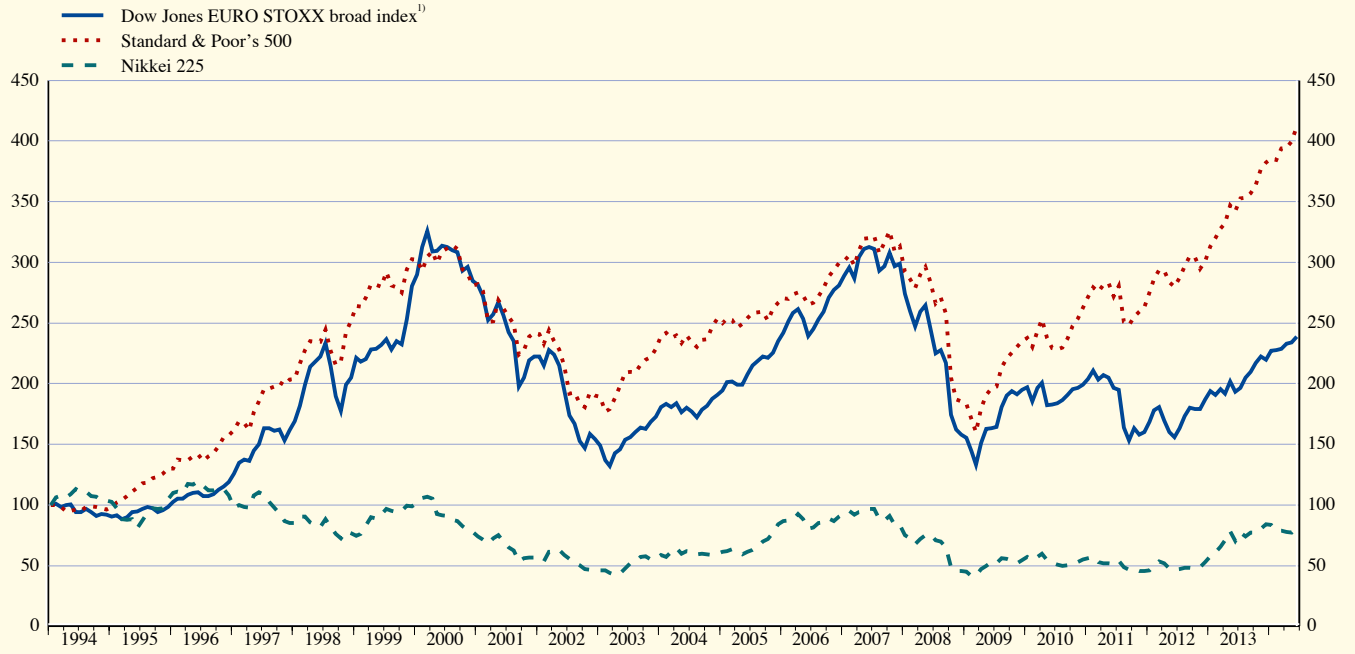
4.8 Stock market indices

(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
2011	256.0	2,611.0	493.4	158.1	351.2	311.6	152.6	349.4	222.5	301.7	358.4	432.7	1,267.6	9,425.4
2012	239.7	2,411.9	503.7	151.9	385.7	307.2	122.1	330.2	219.2	235.9	268.5	523.3	1,379.4	9,102.6
2013	281.9	2,794.0	586.3	195.0	468.2	312.8	151.5	402.7	274.1	230.6	253.4	629.4	1,643.8	13,577.9
2013 Q2	271.8	2,696.1	574.6	188.6	458.8	303.7	141.5	383.0	259.3	226.1	239.3	653.6	1,609.5	13,629.3
Q3	282.1	2,782.3	581.1	197.7	477.6	312.1	150.4	406.2	277.3	224.0	245.3	631.3	1,674.9	14,127.7
Q4	304.9	3,017.6	620.6	211.9	492.2	325.7	169.9	442.8	301.9	249.5	287.4	631.8	1,768.7	14,951.3
2014 Q1	315.9	3,090.8	639.0	218.7	500.1	323.4	182.2	461.0	306.3	262.3	293.9	640.7	1,834.9	14,958.9
Q2	326.5	3,214.0	657.3	219.5	524.2	360.3	184.5	471.9	305.3	284.9	311.9	656.5	1,900.4	14,655.0
2013 June	268.3	2,655.8	571.1	185.9	453.0	294.9	140.4	381.3	259.5	220.4	229.2	639.2	1,618.8	13,106.6
July	272.4	2,686.5	569.6	193.1	465.9	298.7	142.0	389.5	268.1	215.1	231.5	642.5	1,668.7	14,317.5
Aug.	284.2	2,803.8	581.8	198.2	482.8	314.9	153.2	407.0	276.1	223.8	245.6	636.8	1,670.1	13,726.7
Sep.	290.6	2,864.6	592.8	202.3	485.0	323.9	156.8	423.6	288.6	234.1	260.0	613.1	1,687.2	14,372.1
Oct.	301.4	2,988.9	602.2	210.0	487.3	329.2	168.4	436.3	293.4	249.6	290.6	616.5	1,720.0	14,329.0
Nov.	308.7	3,056.0	630.5	214.1	498.7	330.9	171.1	448.8	306.1	253.7	289.1	646.6	1,783.5	14,931.7
Dec.	304.7	3,010.2	631.3	211.7	490.9	316.3	170.3	443.9	307.2	245.0	282.0	633.9	1,807.8	15,655.2
2014 Jan.	314.7	3,092.4	640.7	217.4	497.9	318.8	181.3	462.3	308.2	251.3	297.4	647.6	1,822.4	15,578.3
Feb.	315.9	3,085.9	643.7	219.2	502.0	318.9	183.0	460.0	304.3	261.1	291.9	638.3	1,817.0	14,617.6
Mar.	317.0	3,094.0	632.7	219.5	500.7	332.4	182.5	460.6	306.2	275.0	292.2	635.8	1,863.5	14,694.8
Apr.	323.2	3,171.5	637.8	219.9	518.8	348.9	185.8	470.5	304.1	278.7	298.6	642.4	1,864.3	14,475.3
May	324.7	3,197.4	660.9	217.7	521.7	362.3	181.9	470.2	300.4	280.6	315.0	657.2	1,889.8	14,343.1
June	331.5	3,271.7	672.1	220.9	531.9	369.2	185.9	475.0	311.6	295.2	321.4	669.1	1,947.1	15,131.8

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 2014	100.0	100.0	81.7	57.2	42.8	100.0	12.3	7.5	26.7	10.8	42.8	87.3	12.7
	1	2	3	4	5	6	7	8	9	10	11	12	13
2010	109.8	1.6	1.0	1.8	1.4	-	-	-	-	-	-	1.6	1.7
2011	112.8	2.7	1.7	3.3	1.8	-	-	-	-	-	-	2.6	3.5
2012	115.6	2.5	1.8	3.0	1.8	-	-	-	-	-	-	2.3	3.8
2013	117.2	1.4	1.3	1.3	1.4	-	-	-	-	-	-	1.2	2.1
2013 Q2	117.5	1.4	1.3	1.5	1.3	0.1	0.5	1.6	0.1	-1.8	0.2	1.3	2.3
Q3	117.3	1.3	1.3	1.3	1.4	0.5	0.7	0.4	0.0	1.0	0.5	1.3	1.8
Q4	117.6	0.8	1.0	0.5	1.2	-0.1	0.3	-1.2	0.1	-1.1	0.1	0.7	1.4
2014 Q1	117.2	0.7	1.0	0.3	1.2	0.2	0.3	0.0	0.1	0.0	0.3	0.5	2.0
Q2	118.2	0.6	.	.	1.3	.	.	.	.	-0.3	.	.	.
2014 Jan.	116.6	0.8	1.0	0.5	1.2	0.1	0.2	-0.1	0.0	0.0	0.2	0.6	2.0
Feb.	116.9	0.7	1.1	0.3	1.3	0.1	0.0	-0.4	0.1	0.1	0.2	0.5	2.0
Mar.	118.0	0.5	0.9	0.0	1.1	-0.1	0.1	-0.5	-0.1	-0.3	0.1	0.2	2.0
Apr.	118.2	0.7	1.1	0.1	1.6	0.0	0.0	-0.1	-0.1	-0.1	0.1	0.5	2.3
May	118.1	0.5	0.8	0.0	1.1	0.0	0.1	-0.5	-0.1	-0.1	0.0	0.2	2.2
June [3]	118.2	0.5	.	.	1.3	.	.	.	.	0.2	.	.	.

	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 2014	19.8	12.3	7.5	37.5	26.7	10.8	10.5	6.2	7.3	3.1	14.7	7.2
	14	15	16	17	18	19	20	21	22	23	24	25
2010	1.1	0.9	1.3	2.2	0.5	7.4	1.8	1.5	2.3	-0.8	1.0	1.5
2011	2.7	3.3	1.8	3.7	0.8	11.9	1.8	1.4	2.9	-1.3	2.0	2.1
2012	3.1	3.1	3.0	3.0	1.2	7.6	1.8	1.5	2.9	-3.2	2.2	2.0
2013	2.7	2.2	3.5	0.6	0.6	0.6	1.7	1.5	2.4	-4.2	2.2	0.7
2013 Q2	3.1	2.1	4.8	0.6	0.8	0.3	1.6	1.3	2.5	-4.5	2.0	0.9
Q3	3.1	2.5	4.2	0.3	0.4	0.1	1.8	1.7	2.3	-4.0	2.2	0.8
Q4	1.8	2.1	1.3	-0.1	0.3	-0.9	1.7	1.4	1.8	-3.5	2.0	0.4
2014 Q1	1.4	1.8	0.7	-0.3	0.3	-1.9	1.8	1.4	1.6	-2.7	1.3	1.2
Q2	0.2	.	.	.	0.0	-0.4	.	.	.	.	.	.
2014 Jan.	1.7	2.0	1.3	-0.2	0.2	-1.2	1.7	1.4	1.6	-3.2	1.4	1.3
Feb.	1.5	1.8	0.9	-0.4	0.4	-2.3	1.8	1.4	1.8	-2.4	1.5	1.2
Mar.	1.0	1.7	-0.1	-0.5	0.2	-2.1	1.8	1.4	1.3	-2.4	1.1	1.2
Apr.	0.7	1.6	-0.7	-0.3	0.1	-1.2	1.8	1.4	2.5	-2.6	2.0	1.3
May	0.1	1.5	-2.1	0.0	0.0	0.0	1.9	1.4	1.4	-2.9	1.2	1.3
June [3]	-0.2	.	.	.	0.0	0.1	.	.	.	.	.	.

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 property prices

	Industrial producer prices excluding construction										Construction [1]	Residential property prices [2]	Experimental indicator of commercial property prices [2,3]
	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	78.1	72.1	29.4	20.1	22.6	2.3	20.3	27.9			
	1	2	3	4	5	6	7	8	9	10	11	12	13
2010	100.0	2.7	3.3	1.7	3.6	0.2	0.4	0.7	0.4	6.1	1.9	0.9	-0.3
2011	105.7	5.7	5.3	3.8	5.8	1.5	3.3	1.9	3.5	10.9	3.3	1.1	2.9
2012	108.6	2.8	2.0	1.4	0.7	1.0	2.5	1.6	2.6	6.6	1.6	-1.8	-0.2
2013	108.5	-0.2	-0.1	0.4	-0.6	0.6	1.7	0.7	1.8	-1.6	0.6	-2.1	-1.0
2013 Q1	109.3	1.2	0.8	1.2	0.8	0.8	2.2	0.8	2.4	0.9	0.9	-2.8	-0.9
Q2	108.3	-0.1	-0.1	0.5	-0.5	0.6	1.9	0.8	2.1	-2.0	0.4	-2.5	-1.1
Q3	108.3	-0.6	-0.3	0.3	-1.1	0.6	1.8	0.6	2.0	-2.7	0.4	-1.5	-1.0
Q4	108.0	-1.1	-0.9	-0.3	-1.7	0.5	0.9	0.6	1.0	-2.8	0.8	-1.5	-0.9
2014 Q1	107.6	-1.6	-1.1	-0.5	-1.8	0.3	0.6	0.8	0.5	-4.1	0.4	.	.
2013 Dec.	108.1	-0.7	-0.6	-0.3	-1.7	0.6	0.8	0.6	0.9	-1.8	-	-	-
2014 Jan.	107.8	-1.3	-0.9	-0.4	-1.7	0.4	0.7	0.9	0.6	-3.5	-	-	-
Feb.	107.6	-1.7	-1.3	-0.5	-1.8	0.3	0.6	0.8	0.5	-4.4	-	-	-
Mar.	107.3	-1.7	-1.2	-0.5	-1.9	0.3	0.5	0.8	0.4	-4.4	-	-	-
Apr.	107.2	-1.2	-0.5	-0.3	-1.5	0.3	0.7	0.8	0.7	-3.3	-	-	-
May	107.0	-1.0	-0.4	-0.2	-1.2	0.3	0.5	0.8	0.5	-2.8	-	-	-

3. Commodity prices and gross domestic product deflators

	Oil prices [4] (EUR per barrel)	Non-energy commodity prices						GDP deflators							
		Import-weighted [5]			Use-weighted [6]			Total (s.a.; index: 2005 = 100)	Total	Domestic demand				Exports [7]	Imports [7]
		Total	Food	Non-food	Total	Food	Non-food			Total	Private consumption	Government consumption	Gross fixed capital formation		
% of total		100.0	35.0	65.0	100.0	45.0	55.0								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2010	60.7	44.0	19.3	57.9	40.4	22.6	54.5	108.1	0.8	1.5	1.6	0.8	0.8	3.0	5.0
2011	79.7	15.9	21.3	13.6	15.0	20.0	11.8	109.4	1.2	2.0	2.4	0.8	1.5	3.6	5.8
2012	86.6	-5.2	0.2	-7.6	-1.7	5.8	-6.9	110.9	1.3	1.6	2.1	1.0	1.1	1.6	2.4
2013	81.7	-8.0	-13.4	-5.3	-7.7	-10.1	-5.8	112.5	1.5	1.1	1.2	1.2	0.3	-0.3	-1.3
2013 Q2	79.0	-8.3	-6.4	-9.2	-6.5	-3.6	-8.6	112.5	1.6	1.2	1.3	1.0	0.2	0.0	-1.2
Q3	82.5	-10.6	-22.2	-4.3	-11.4	-18.2	-5.7	112.6	1.4	1.0	1.4	1.1	0.2	-0.6	-1.6
Q4	80.3	-10.1	-18.4	-5.9	-10.9	-15.4	-7.2	112.7	1.1	0.7	0.9	1.1	0.2	-0.9	-1.9
2014 Q1	78.6	-12.9	-8.8	-14.7	-11.0	-6.7	-14.1	113.2	0.9	0.6	0.8	0.5	0.1	-1.0	-2.0
Q2	79.9	-5.7	-1.1	-8.0	-3.3	1.5	-6.9	.	.	.	.	.	.	.	.
2014 Jan.	78.8	-13.1	-14.2	-12.6	-12.3	-12.3	-12.3	-	-	-	-	-	-	-	-
Feb.	79.4	-13.1	-8.2	-15.2	-11.3	-6.7	-14.5	-	-	-	-	-	-	-	-
Mar.	77.8	-12.4	-3.9	-16.2	-9.5	-1.0	-15.5	-	-	-	-	-	-	-	-
Apr.	78.2	-7.5	0.7	-11.2	-5.3	1.6	-10.4	-	-	-	-	-	-	-	-
May	79.4	-6.9	-1.9	-9.2	-3.8	1.7	-8.0	-	-	-	-	-	-	-	-
June	82.3	-2.7	-2.0	-3.0	-0.5	1.1	-1.8	-	-	-	-	-	-	-	-

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), ECB calculations based on IPD data and national sources (column 13 in Table 2 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 sources (see http://www.ecb.europa.eu/stats/intro/html/experiment.en.html for further details).
3) Data refer to the Euro 18.
4) Brent Blend (for one-month forward delivery).
5) Refers to prices expressed in euro. Weighted according to the structure of euro area imports in the period 2004-06.
6) 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).
7) 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]											
2012	112.7	1.9	4.3	2.7	2.6	1.9	3.1	1.0	0.6	2.5	0.6	2.3
2013	114.1	1.2	1.0	1.7	1.2	0.7	2.0	1.3	-1.4	1.0	1.3	1.3
2013 Q2	113.9	1.2	1.5	2.0	1.1	1.2	1.5	0.8	-1.4	1.3	0.8	1.4
Q3	114.3	1.3	1.1	2.6	2.1	0.2	3.3	0.8	-1.0	0.4	1.2	0.8
Q4	114.2	0.7	-1.4	-0.4	0.9	-0.7	1.6	3.1	-1.5	0.0	2.1	0.8
2014 Q1	114.5	0.5	-1.4	0.5	0.9	-0.3	2.3	0.7	-0.3	1.4	0.3	0.9
	Compensation per employee											
2012	116.6	1.9	1.1	2.5	3.1	1.9	2.5	1.1	1.7	2.5	1.1	1.6
2013	118.5	1.6	2.1	2.5	1.9	0.9	1.3	1.4	1.2	1.7	1.7	0.8
2013 Q2	118.4	1.6	2.0	2.5	1.9	1.3	1.3	1.1	2.2	2.1	1.3	1.1
Q3	118.9	1.7	2.6	3.2	2.7	1.0	1.6	1.1	0.8	1.5	1.5	0.9
Q4	119.1	1.6	1.1	2.1	2.2	0.6	1.1	1.9	0.8	1.3	2.3	0.9
2014 Q1	119.6	1.3	1.0	2.0	3.7	1.3	1.6	1.3	-0.3	1.6	0.5	1.0
	Labour productivity per person employed [2]											
2012	103.5	0.0	-3.1	-0.2	0.5	-0.1	-0.6	0.1	1.1	-0.1	0.5	-0.6
2013	103.9	0.4	1.1	0.8	0.6	0.3	-0.7	0.1	2.7	0.7	0.4	-0.5
2013 Q2	104.0	0.4	0.5	0.5	0.8	0.0	-0.2	0.4	3.7	0.8	0.5	-0.3
Q3	104.1	0.5	1.4	0.6	0.6	0.7	-1.6	0.3	1.9	1.0	0.3	0.1
Q4	104.3	0.9	2.5	2.5	1.3	1.3	-0.5	-1.2	2.3	1.3	0.2	0.1
2014 Q1	104.4	0.8	2.5	1.5	2.8	1.6	-0.6	0.6	0.0	0.2	0.2	0.1
	Compensation per hour worked											
2012	119.3	2.6	2.9	3.6	4.9	2.6	3.1	1.6	2.0	2.6	1.2	2.6
2013	121.6	1.9	2.1	2.2	2.6	1.4	1.4	1.4	1.6	2.1	1.9	1.3
2013 Q2	121.4	1.6	1.9	1.5	1.8	1.5	1.0	0.6	2.1	2.3	1.4	1.4
Q3	121.9	1.8	1.9	2.1	2.4	1.3	1.9	0.6	1.9	2.0	1.7	1.2
Q4	122.0	1.4	-0.1	1.0	2.1	0.7	0.8	1.0	1.0	1.5	2.3	0.4
2014 Q1	122.8	0.8	-0.4	0.3	2.4	0.9	1.7	1.1	-0.4	1.5	0.9	-0.7
	Hourly labour productivity [2]											
2012	106.5	0.8	-2.1	0.9	2.0	0.7	0.1	0.5	1.9	0.2	0.7	0.1
2013	107.2	0.7	0.6	0.5	1.1	0.7	-0.6	0.2	3.3	1.1	0.6	0.0
2013 Q2	107.1	0.3	-0.3	-0.3	0.2	0.3	-0.4	-0.3	3.7	0.4	0.5	0.0
Q3	107.3	0.7	0.7	-0.4	0.3	1.4	-1.2	0.0	2.5	1.7	0.6	0.3
Q4	107.5	0.7	1.7	1.5	1.2	1.2	-1.1	-1.9	3.1	2.0	0.2	-0.2
2014 Q1	107.9	0.4	1.9	-0.2	1.6	1.2	-0.7	0.2	1.6	0.5	0.6	-1.3

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
2012	108.7	1.9	1.9	1.8	2.4	2.4	2.1	2.2
2013	110.3	1.5	1.8	0.9	2.1	0.9	1.2	1.8
2013 Q2	114.2	1.2	1.5	0.5	1.8	0.9	1.1	1.7
Q3	107.4	1.2	1.4	0.7	1.6	0.0	1.1	1.7
Q4	116.8	1.6	2.0	0.4	1.6	1.2	1.0	1.7
2014 Q1	103.7	0.9	1.5	-0.8	0.7	1.9	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)								
2010	9,185.8	9,065.0	5,282.7	2,019.9	1,741.2	21.1	120.8	3,793.9	3,673.1
2011	9,444.0	9,315.2	5,427.3	2,032.6	1,796.6	58.7	128.8	4,186.7	4,057.9
2012	9,505.4	9,259.5	5,464.4	2,041.9	1,744.9	8.4	245.9	4,362.6	4,116.7
2013	9,602.5	9,271.4	5,496.2	2,069.8	1,698.5	6.9	331.2	4,410.3	4,079.2
2013 Q1	2,385.7	2,311.4	1,367.7	516.3	422.8	4.6	74.3	1,085.5	1,011.2
Q2	2,400.9	2,311.8	1,371.7	517.1	422.8	0.2	89.1	1,107.0	1,017.9
Q3	2,405.8	2,326.3	1,377.7	519.5	425.8	3.3	79.6	1,105.5	1,026.0
Q4	2,415.5	2,325.5	1,380.4	517.0	430.8	-2.7	90.0	1,118.6	1,028.6
2014 Q1	2,429.6	2,345.0	1,385.4	522.4	430.6	6.5	84.6	1,116.7	1,032.1
	percentage of GDP								
2013	100.0	96.6	57.2	21.6	17.7	0.1	3.4	-	-
	Chain-linked volumes (prices for the previous year)								
	quarter-on-quarter percentage changes								
2013 Q1	-0.2	-0.2	-0.2	0.2	-1.6	-	-	-0.8	-0.8
Q2	0.3	-0.1	0.2	0.0	0.1	-	-	2.3	1.5
Q3	0.1	0.5	0.1	0.3	0.5	-	-	0.1	1.1
Q4	0.3	-0.1	0.1	-0.3	0.9	-	-	1.4	0.6
2014 Q1	0.2	0.5	0.2	0.7	0.2	-	-	0.2	0.8
	annual percentage changes								
2010	1.9	1.2	1.0	0.6	-0.4	-	-	11.6	10.0
2011	1.6	0.7	0.3	-0.1	1.6	-	-	6.5	4.5
2012	-0.7	-2.2	-1.3	-0.6	-4.0	-	-	2.5	-0.9
2013	-0.4	-0.9	-0.7	0.1	-2.9	-	-	1.4	0.4
2013 Q1	-1.1	-2.0	-1.4	-0.2	-5.3	-	-	0.2	-1.7
Q2	-0.6	-1.3	-0.7	0.1	-3.4	-	-	1.6	0.0
Q3	-0.3	-0.4	-0.4	0.6	-2.4	-	-	1.0	0.8
Q4	0.5	0.2	0.2	0.2	-0.1	-	-	3.0	2.5
2014 Q1	0.9	0.9	0.5	0.7	1.7	-	-	4.0	4.1
	contributions to quarter-on-quarter percentage changes in GDP; percentage points								
2013 Q1	-0.2	-0.2	-0.1	0.0	-0.3	0.2	0.0	-	-
Q2	0.3	-0.1	0.1	0.0	0.0	-0.2	0.4	-	-
Q3	0.1	0.5	0.1	0.1	0.1	0.3	-0.4	-	-
Q4	0.3	-0.1	0.0	-0.1	0.2	-0.2	0.4	-	-
2014 Q1	0.2	0.5	0.1	0.1	0.0	0.2	-0.3	-	-
	contributions to annual percentage changes in GDP; percentage points								
2010	1.9	1.2	0.6	0.1	-0.1	0.6	0.7	-	-
2011	1.6	0.7	0.2	0.0	0.3	0.3	0.9	-	-
2012	-0.7	-2.2	-0.8	-0.1	-0.8	-0.5	1.5	-	-
2013	-0.4	-0.9	-0.4	0.0	-0.5	0.0	0.5	-	-
2013 Q1	-1.1	-2.0	-0.8	0.0	-1.0	-0.1	0.8	-	-
Q2	-0.6	-1.3	-0.4	0.0	-0.6	-0.3	0.7	-	-
Q3	-0.3	-0.4	-0.3	0.1	-0.4	0.2	0.1	-	-
Q4	0.5	0.2	0.1	0.0	0.0	0.1	0.3	-	-
2014 Q1	0.9	0.9	0.3	0.1	0.3	0.1	0.1	-	-

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)											
2010	8,242.3	137.1	1,581.8	499.2	1,552.3	370.8	438.7	919.2	827.5	1,615.1	300.6	943.4
2011	8,468.0	142.0	1,643.3	502.0	1,593.2	374.5	440.1	965.5	859.6	1,639.7	308.1	975.9
2012	8,525.3	144.6	1,643.8	492.1	1,606.2	370.0	433.8	982.2	877.3	1,661.6	313.6	980.2
2013	8,610.9	144.0	1,660.7	478.1	1,622.3	358.1	440.0	1,004.8	895.7	1,686.9	320.3	991.7
2013 Q1	2,140.1	36.1	412.3	120.2	402.3	90.4	109.0	249.1	220.8	420.6	79.3	245.6
Q2	2,150.3	36.3	415.3	119.0	404.8	90.1	110.7	250.2	223.4	420.9	79.7	250.5
Q3	2,157.4	35.7	415.6	119.4	407.4	88.9	110.4	251.7	225.3	422.2	80.7	248.4
Q4	2,168.5	36.0	419.8	120.1	409.0	88.8	110.1	253.8	226.4	423.4	81.0	247.0
2014 Q1	2,177.3	36.7	418.1	120.6	410.1	88.7	112.6	254.2	226.8	427.7	81.8	252.3
	percentage of value added											
2013	100.0	1.7	19.3	5.6	18.8	4.2	5.1	11.7	10.4	19.6	3.7	-
	Chain-linked volumes (prices for the previous year)											
	quarter-on-quarter percentage changes											
2013 Q1	-0.2	0.3	0.3	-1.3	-0.2	-0.2	-1.3	-0.1	0.4	-0.4	-0.3	-0.4
Q2	0.3	0.2	0.5	-0.9	0.6	0.2	-0.4	0.1	0.9	0.1	0.0	0.5
Q3	0.2	0.1	0.1	0.2	0.2	-0.7	0.6	0.3	0.3	0.1	0.0	-0.3
Q4	0.4	1.3	0.6	0.2	0.4	0.3	-0.5	0.4	0.3	0.4	0.1	-0.4
2014 Q1	0.1	1.7	-0.2	0.4	0.4	0.1	0.6	-0.2	0.2	0.1	0.2	0.8
	annual percentage changes											
2010	2.0	-2.9	9.5	-5.6	0.7	1.5	0.1	-0.1	2.6	1.1	0.4	1.4
2011	1.8	0.3	3.0	-1.6	1.7	3.6	1.6	2.1	2.7	0.9	0.4	0.1
2012	-0.5	-4.9	-1.1	-4.2	-0.9	0.6	-0.3	0.7	0.7	0.2	0.0	-1.9
2013	-0.3	-0.4	-0.6	-4.0	-0.5	-0.7	-0.6	0.8	1.0	0.1	-0.5	-1.4
2013 Q1	-0.9	-2.7	-1.6	-5.2	-1.9	-0.5	0.3	0.8	-0.1	0.2	-0.9	-2.8
Q2	-0.5	-0.9	-0.9	-4.9	-0.9	-0.3	-0.8	0.8	1.2	0.0	-0.4	-1.2
Q3	-0.2	0.5	-1.0	-3.6	-0.1	-1.3	0.0	0.8	1.3	0.2	-0.1	-0.9
Q4	0.6	1.9	1.5	-1.8	1.1	-0.5	-1.6	0.7	1.9	0.3	-0.2	-0.5
2014 Q1	1.0	3.3	1.0	-0.2	1.6	-0.2	0.3	0.6	1.7	0.8	0.3	0.6
	contributions to quarter-on-quarter percentage changes in value added; percentage points											
2013 Q1	-0.2	0.0	0.1	-0.1	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	-
Q2	0.3	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	-
Q3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Q4	0.4	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	-
2014 Q1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-
	contributions to annual percentage changes in value added; percentage points											
2010	2.0	0.0	1.7	-0.4	0.1	0.1	0.0	0.0	0.3	0.2	0.0	-
2011	1.8	0.0	0.6	-0.1	0.3	0.2	0.1	0.2	0.3	0.2	0.0	-
2012	-0.5	-0.1	-0.2	-0.2	-0.2	0.0	0.0	0.1	0.1	0.0	0.0	-
2013	-0.3	0.0	-0.1	-0.2	-0.1	0.0	0.0	0.1	0.1	0.0	0.0	-
2013 Q1	-0.9	0.0	-0.3	-0.3	-0.4	0.0	0.0	0.1	0.0	0.0	0.0	-
Q2	-0.5	0.0	-0.2	-0.3	-0.2	0.0	0.0	0.1	0.1	0.0	0.0	-
Q3	-0.2	0.0	-0.2	-0.2	0.0	-0.1	0.0	0.1	0.1	0.0	0.0	-
Q4	0.6	0.0	0.3	-0.1	0.2	0.0	-0.1	0.1	0.2	0.1	0.0	-
2014 Q1	1.0	0.1	0.2	0.0	0.3	0.0	0.0	0.1	0.2	0.1	0.0	-

Sources: Eurostat and ECB calculations.

5.2 Output and demand

(annual percentage changes, unless otherwise indicated)

3. Industrial production

	Total	Industry excluding construction										Construction
		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
2011	2.2	103.5	3.4	4.7	4.8	4.2	8.5	1.0	0.7	1.0	-4.5	-2.4
2012	-3.1	100.9	-2.5	-2.7	-2.8	-4.5	-1.1	-2.4	-4.9	-2.1	-0.4	-5.4
2013	-1.1	100.2	-0.7	-0.7	-0.7	-1.1	-0.6	-0.4	-3.6	0.1	-0.8	-2.8
2013 Q2	-1.5	100.2	-1.0	-1.0	-1.1	-2.1	-0.3	-0.6	-3.9	-0.1	-1.0	-3.6
Q3	-1.1	100.2	-1.1	-1.1	-0.9	-0.8	-1.3	-0.7	-3.7	-0.4	-2.1	-1.0
Q4	1.0	100.8	1.6	1.9	2.1	2.5	2.7	0.4	-2.7	1.0	-1.3	-1.1
2014 Q1	2.1	101.0	1.2	2.9	3.0	3.3	3.8	1.5	-0.2	1.7	-8.9	6.9
2013 Dec.	1.3	101.0	1.4	1.8	2.1	3.2	2.2	-0.1	-1.6	0.2	-1.5	0.2
2014 Jan.	2.9	101.1	1.7	3.1	3.1	3.4	5.3	0.0	-0.2	0.0	-5.6	7.5
Feb.	2.7	101.2	1.8	3.7	3.7	3.9	4.1	2.9	0.6	3.2	-9.1	7.1
Mar.	1.2	100.8	0.2	2.1	2.4	2.8	2.5	1.6	-0.8	1.9	-12.2	6.4
Apr.	2.4	101.6	1.4	2.4	2.5	3.4	0.3	4.5	1.0	5.0	-6.7	8.0
	month-on-month percentage changes (s.a.)											
2013 Dec.	0.0	-	-0.3	0.1	0.1	0.5	-0.6	0.0	0.8	0.0	-2.9	2.0
2014 Jan.	0.3	-	0.1	0.3	0.3	0.5	0.5	0.1	-0.1	0.1	-1.8	1.0
Feb.	0.0	-	0.1	0.4	0.4	0.4	0.0	1.1	1.4	0.9	-1.9	0.1
Mar.	-0.6	-	-0.4	-0.6	-0.7	-0.6	-0.6	-0.6	0.0	-0.6	-0.2	-0.3
Apr.	0.9	-	0.8	0.6	0.8	0.6	-0.1	1.9	0.1	2.1	2.5	0.8

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	39.3	51.5	9.2	12.0	9.1		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2011	108.6	8.6	109.3	9.2	1.7	99.3	-0.7	-1.1	-0.3	-1.4	-0.3	-3.3	840	-0.9
2012	104.4	-3.9	108.8	-0.4	0.5	97.6	-1.7	-1.3	-1.6	-2.5	-2.8	-5.0	745	-11.1
2013	104.3	-0.1	107.2	-1.4	-0.4	96.7	-0.9	-1.0	-0.7	-1.4	-2.6	-1.0	713	-4.4
2013 Q2	103.2	-1.5	106.8	-2.0	-0.4	96.6	-1.1	-1.7	-0.5	-0.1	-2.8	-0.6	709	-7.2
Q3	105.1	1.1	107.5	-1.5	-0.1	97.2	-0.5	-0.6	-0.4	-0.4	-2.5	0.0	709	-2.2
Q4	106.2	2.7	107.8	0.3	0.0	96.7	0.1	-0.3	0.6	0.4	-1.0	0.2	744	5.3
2014 Q1	107.2	4.3	108.8	1.6	0.5	97.4	0.9	-0.3	1.9	3.6	0.6	0.8	725	5.0
2014 Jan.	107.3	5.0	109.1	2.1	0.5	97.2	0.7	-0.4	1.3	2.3	0.1	1.3	708	5.5
Feb.	107.2	4.6	108.9	2.3	0.6	97.4	1.0	0.0	1.8	2.5	1.1	0.2	737	6.0
Mar.	107.0	3.5	108.3	0.6	0.5	97.5	1.0	-0.5	2.7	6.4	0.5	0.9	731	4.0
Apr.	109.2	6.4	108.7	0.7	4.7	97.9	2.4	2.1	2.6	0.3	0.1	1.4	744	5.1
May	.	.	.	.	.	.	.	.	.	.	.	.	731	3.3
	month-on-month percentage changes (s.a.)													
2014 Jan.	-	-0.6	-	0.7	0.9	-	1.0	0.7	0.9	1.3	1.7	0.3	-	-8.5
Feb.	-	0.0	-	-0.2	0.0	-	0.2	0.3	0.7	0.8	0.2	-1.4	-	4.1
Mar.	-	-0.2	-	-0.5	0.1	-	0.1	0.3	0.0	-0.6	-0.6	0.7	-	-0.9
Apr.	-	2.1	-	0.3	0.9	-	0.4	0.4	-0.1	-1.7	-0.1	0.4	-	1.9
May	-	.	-	.	.	-	.	.	.	.	.	.	-	-1.8

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

1) For further details, see de Bondt, G.J., Dieden, H.C., Muzikarova, S. and Vincze, I., "Introducing the ECB indicator on euro area industrial new orders", *Occasional Paper Series*, No 149, ECB, Frankfurt am Main, June 2013.

2) 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]	Order books	Stocks of finished products	Production expectations		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
	1	2	3	4	5	6	7	8	9	10	11
2010	101.3	-4.5	-24.0	0.7	11.2	77.0	-14.1	-5.2	-12.3	31.1	-7.9
2011	102.2	0.2	-6.4	2.3	9.4	80.6	-14.3	-7.3	-18.0	23.0	-9.0
2012	90.8	-11.7	-24.4	6.8	-3.9	78.6	-22.1	-11.1	-27.4	38.1	-11.7
2013	93.8	-9.3	-26.0	4.7	2.8	78.3	-18.6	-8.9	-20.1	34.4	-11.2
2013 Q2	90.2	-12.7	-30.9	6.2	-0.9	77.9	-20.8	-10.1	-24.8	35.7	-12.6
Q3	95.3	-8.3	-24.9	4.6	4.4	78.4	-15.9	-7.9	-16.7	29.6	-9.2
Q4	99.1	-4.1	-18.6	2.8	9.1	79.3	-14.4	-6.3	-11.6	29.8	-9.8
2014 Q1	101.6	-3.5	-16.5	2.8	8.8	79.8	-11.2	-4.6	-7.0	23.8	-9.6
Q2	102.2	-3.6	-15.3	3.6	8.1	.	-7.7	-3.5	-2.9	16.6	-8.0
2014 Jan.	101.0	-3.8	-16.7	3.0	8.2	80.1	-11.7	-4.9	-7.6	24.6	-9.5
Feb.	101.2	-3.5	-16.3	2.4	8.3	-	-12.7	-4.8	-8.7	26.3	-11.0
Mar.	102.5	-3.3	-16.6	3.0	9.8	-	-9.3	-4.0	-4.6	20.4	-8.2
Apr.	102.0	-3.5	-15.3	3.2	8.2	79.5	-8.6	-4.1	-3.5	18.4	-8.6
May	102.6	-3.1	-14.6	3.5	8.9	-	-7.1	-3.4	-2.5	15.1	-7.4
June	102.0	-4.3	-15.9	4.1	7.1	-	-7.5	-2.9	-2.8	16.2	-8.1

	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
2010	-27.6	-38.2	-17.0	-3.3	-4.9	7.6	2.6	4.4	1.6	3.6	8.0
2011	-25.2	-33.1	-17.2	-5.3	-5.4	11.2	0.6	5.3	2.2	5.4	8.3
2012	-27.6	-34.3	-21.0	-15.1	-18.5	14.4	-12.4	-6.8	-11.8	-7.6	-1.0
2013	-30.0	-38.2	-21.7	-12.5	-18.9	9.3	-9.2	-6.1	-9.9	-8.6	0.2
2013 Q2	-31.5	-38.5	-24.3	-16.5	-24.5	11.2	-13.9	-9.9	-14.5	-13.3	-1.9
Q3	-31.0	-39.7	-22.3	-10.4	-16.4	8.7	-6.1	-5.3	-8.2	-8.6	0.8
Q4	-28.6	-37.7	-19.5	-6.8	-10.5	6.6	-3.5	-1.3	-4.2	-3.4	3.6
2014 Q1	-29.0	-39.6	-18.5	-3.0	-5.6	5.6	2.3	3.4	1.0	1.9	7.2
Q2	-30.8	-40.2	-21.3	-2.3	-3.7	6.7	3.4	3.8	2.7	1.8	7.0
2014 Jan.	-29.8	-41.3	-18.4	-3.4	-8.1	5.9	3.7	2.4	-0.6	-0.2	8.0
Feb.	-28.5	-37.5	-19.5	-3.0	-4.3	6.0	1.3	3.3	0.5	2.4	7.0
Mar.	-28.7	-39.9	-17.6	-2.5	-4.3	4.9	1.8	4.5	3.2	3.5	6.7
Apr.	-30.4	-40.0	-20.7	-2.5	-5.8	6.1	4.4	3.5	2.3	1.5	6.7
May	-30.1	-40.4	-19.7	-2.4	-3.0	7.8	3.6	3.8	3.2	2.2	5.9
June	-31.8	-40.1	-23.4	-2.1	-2.3	6.1	2.1	4.2	2.5	1.7	8.5

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

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

2) The economic sentiment indicator is composed of the industrial, services, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator a weight of 30%, the consumer confidence indicator a weight of 20% and the two other indicators a weight of 5% each. Values for the economic sentiment indicator of above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period since 1990.

3) Data are collected in January, April, July and October each year. The quarterly figures shown are averages of two successive surveys. Annual data are derived from quarterly averages.

4) The confidence indicators are calculated as simple averages of the components shown; the assessments of stocks (columns 4 and 17) and unemployment (column 10) are used with inverted signs for the calculation of confidence indicators.

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)												
2013	145,877	124,718	21,159	4,971	22,791	9,109	35,881	4,066	4,046	1,278	18,396	34,488	10,851
	percentage of total persons employed												
2013	100.0	85.5	14.5	3.4	15.6	6.2	24.6	2.8	2.8	0.9	12.6	23.6	7.4
	annual percentage changes												
2011	0.3	0.4	-0.2	-2.0	0.1	-3.7	0.7	1.3	-0.4	0.6	2.5	0.3	0.1
2012	-0.6	-0.7	-0.1	-1.9	-0.9	-4.7	-0.8	1.2	-0.4	-0.4	0.7	-0.3	0.6
2013	-0.8	-0.8	-0.9	-1.4	-1.4	-4.6	-0.8	0.0	-0.7	-1.9	0.4	-0.2	0.0
2013 Q2	-1.0	-1.0	-0.9	-1.4	-1.4	-5.6	-0.9	-0.1	-1.1	-2.8	0.4	-0.4	-0.1
Q3	-0.8	-0.8	-0.7	-0.9	-1.6	-4.2	-0.8	0.3	-0.3	-1.0	0.2	-0.2	-0.2
Q4	-0.4	-0.3	-0.7	-0.5	-0.9	-3.1	-0.3	0.1	-0.4	-1.6	0.7	0.0	-0.3
2014 Q1	0.1	0.2	-0.3	0.7	-0.5	-2.9	0.0	0.5	-0.3	0.6	1.5	0.6	0.3
	quarter-on-quarter percentage changes												
2013 Q2	-0.1	-0.1	0.1	1.6	-0.4	-1.0	0.0	0.1	-0.2	0.0	0.5	-0.1	-0.4
Q3	0.0	0.0	-0.1	-0.4	-0.4	-0.4	-0.1	-0.3	0.1	0.3	0.5	0.2	0.3
Q4	0.1	0.1	-0.1	-0.5	0.2	-0.5	0.2	0.6	-0.1	-1.2	0.1	0.3	0.1
2014 Q1	0.1	0.1	-0.2	0.0	0.1	-1.0	-0.1	0.1	0.0	1.5	0.4	0.2	0.4
Hours worked													
	levels (millions)												
2013	228,826	184,226	44,600	9,973	35,904	15,797	59,447	6,518	6,375	1,961	28,561	49,108	15,183
	percentage of total hours worked												
2013	100.0	80.5	19.5	4.4	15.7	6.9	26.0	2.8	2.8	0.9	12.5	21.5	6.6
	annual percentage changes												
2011	0.3	0.5	-0.7	-3.0	0.8	-3.8	0.4	1.4	-0.2	1.3	2.7	0.5	0.1
2012	-1.4	-1.4	-1.3	-2.9	-2.0	-6.1	-1.6	0.6	-0.9	-1.1	0.5	-0.5	-0.1
2013	-1.1	-1.1	-1.1	-1.0	-1.2	-5.0	-1.2	-0.1	-0.8	-2.4	-0.1	-0.5	-0.5
2013 Q2	-0.9	-1.0	-0.5	-0.7	-0.6	-5.1	-1.2	0.1	-0.5	-2.9	0.8	-0.4	-0.4
Q3	-0.9	-0.8	-1.4	-0.2	-0.7	-3.9	-1.4	-0.2	0.0	-1.7	-0.4	-0.4	-0.4
Q4	-0.2	-0.1	-0.7	0.2	0.0	-3.0	-0.1	0.6	0.4	-2.3	0.0	0.1	0.0
2014 Q1	0.5	0.7	-0.3	1.3	1.1	-1.8	0.4	0.5	0.1	-1.0	1.2	0.2	1.7
	quarter-on-quarter percentage changes												
2013 Q2	0.6	0.6	0.7	0.8	1.2	0.5	0.6	0.5	0.5	0.3	1.0	0.4	-0.2
Q3	-0.1	0.0	-0.2	-0.1	-0.1	-0.6	-0.1	-0.5	0.1	-1.0	0.1	0.1	0.3
Q4	0.1	0.2	-0.4	-0.1	-0.1	-0.9	0.1	0.7	-0.1	-1.5	-0.3	0.6	0.1
2014 Q1	-0.1	-0.1	-0.3	0.7	0.1	-0.7	-0.2	-0.2	-0.4	1.3	0.4	-1.0	1.5
Hours worked per person employed													
	levels (thousands)												
2013	1,569	1,477	2,108	2,006	1,575	1,734	1,657	1,603	1,576	1,535	1,553	1,424	1,399
	annual percentage changes												
2011	0.0	0.2	-0.5	-1.0	0.6	-0.1	-0.3	0.2	0.2	0.8	0.2	0.2	0.0
2012	-0.8	-0.7	-1.2	-1.0	-1.1	-1.5	-0.8	-0.7	-0.4	-0.8	-0.3	-0.2	-0.8
2013	-0.3	-0.3	-0.3	0.5	0.2	-0.5	-0.4	-0.1	0.0	-0.6	-0.4	-0.2	-0.5
2013 Q2	0.1	0.1	0.4	0.8	0.8	0.5	-0.3	0.2	0.7	-0.1	0.4	0.0	-0.3
Q3	-0.2	0.0	-0.8	0.7	0.9	0.3	-0.6	-0.4	0.3	-0.7	-0.7	-0.3	-0.2
Q4	0.2	0.2	0.0	0.7	1.0	0.1	0.1	0.5	0.7	-0.8	-0.7	0.1	0.3
2014 Q1	0.4	0.5	0.1	0.6	1.6	1.2	0.4	0.0	0.3	-1.6	-0.3	-0.4	1.4
	quarter-on-quarter percentage changes												
2013 Q2	0.7	0.7	0.6	-0.8	1.6	1.4	0.6	0.4	0.7	0.3	0.5	0.5	0.2
Q3	-0.1	0.0	-0.1	0.3	0.3	-0.2	0.0	-0.2	0.0	-1.3	-0.4	-0.1	0.0
Q4	0.0	0.0	-0.4	0.4	-0.2	-0.3	-0.1	0.1	0.0	-0.3	-0.4	0.4	0.0
2014 Q1	-0.2	-0.2	-0.1	0.7	-0.1	0.3	-0.1	-0.3	-0.4	-0.3	0.0	-1.2	1.1

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

5.3 Labour markets

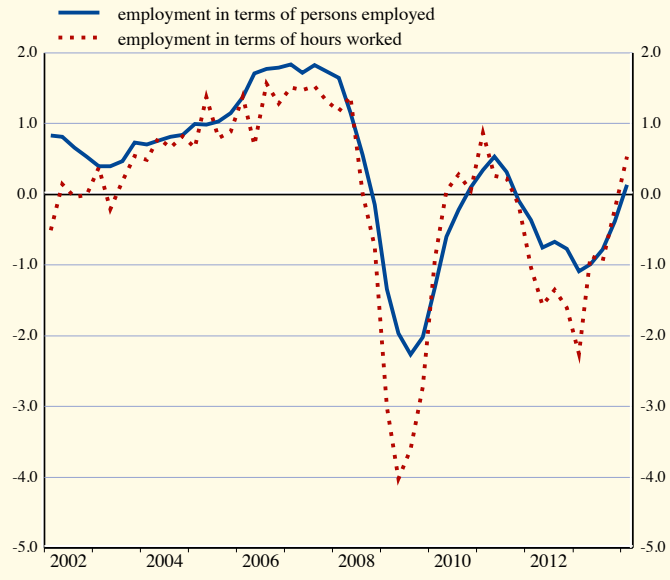
(seasonally adjusted, unless otherwise indicated)

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		79.3		20.7		54.2		45.8		
	1	2	3	4	5	6	7	8	9	10	11
2010	15.994	10.1	12.682	8.9	3.313	21.0	8.664	10.0	7.330	10.2	1.5
2011	16.061	10.1	12.823	8.9	3.238	20.9	8.590	9.9	7.471	10.4	1.7
2012	18.080	11.3	14.561	10.1	3.519	23.2	9.731	11.2	8.348	11.4	1.6
2013	19.120	11.9	15.561	10.7	3.559	23.9	10.283	11.9	8.836	12.0	1.5
2013 Q1	19.137	12.0	15.514	10.7	3.623	24.1	10.312	11.9	8.825	12.0	1.6
Q2	19.188	12.0	15.615	10.8	3.572	23.9	10.309	11.9	8.878	12.1	1.5
Q3	19.154	12.0	15.605	10.7	3.549	24.0	10.331	11.9	8.823	12.0	1.4
Q4	19.000	11.9	15.509	10.7	3.490	23.8	10.181	11.8	8.819	12.0	1.6
2014 Q1	18.772	11.7	15.326	10.6	3.446	23.7	10.106	11.7	8.667	11.8	1.7
2013 Dec.	18.874	11.8	15.407	10.6	3.467	23.7	10.115	11.7	8.759	11.9	-
2014 Jan.	18.860	11.8	15.370	10.6	3.490	23.9	10.132	11.7	8.728	11.9	-
Feb.	18.771	11.7	15.336	10.6	3.435	23.7	10.127	11.7	8.644	11.8	-
Mar.	18.686	11.7	15.272	10.5	3.414	23.6	10.058	11.7	8.628	11.8	-
Apr.	18.580	11.6	15.212	10.5	3.368	23.4	10.025	11.6	8.555	11.7	-
May	18.552	11.6	15.196	10.5	3.356	23.3	9.956	11.5	8.596	11.7	-

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.

6 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
2005	44.8	44.3	11.7	8.6	3.0	13.3	0.3	15.4	8.1	4.4	2.3	0.5	0.2	40.6
2006	45.3	45.0	12.3	8.7	3.4	13.4	0.3	15.3	8.0	4.4	2.3	0.3	0.2	41.2
2007	45.3	45.0	12.7	8.9	3.6	13.3	0.3	15.0	8.0	4.3	2.3	0.3	0.2	41.2
2008	45.1	44.8	12.5	9.1	3.2	12.9	0.3	15.3	8.1	4.4	2.3	0.2	0.2	40.8
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	40.5
2010	44.8	44.6	11.5	8.9	2.5	13.0	0.3	15.7	8.2	4.5	2.6	0.2	0.3	40.5
2011	45.3	45.0	11.9	9.1	2.7	13.1	0.3	15.7	8.2	4.5	2.6	0.3	0.3	40.9
2012	46.2	46.0	12.4	9.5	2.7	13.3	0.3	15.9	8.3	4.6	2.6	0.2	0.3	41.8
2013	46.7	46.5	12.7	9.8	2.8	13.3	0.3	16.0	8.3	4.7	2.6	0.3	0.3	42.3

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
2005	47.3	43.4	10.5	5.0	3.0	24.9	22.1	1.7	0.5	3.9	2.5	1.4	0.0	44.3
2006	46.7	42.8	10.3	5.0	2.9	24.6	21.8	1.7	0.5	3.9	2.5	1.4	0.0	43.8
2007	46.0	42.2	10.1	5.0	3.0	24.1	21.4	1.6	0.4	3.8	2.6	1.2	0.0	43.0
2008	47.2	43.3	10.3	5.2	3.0	24.8	21.9	1.6	0.4	3.9	2.6	1.3	0.0	44.2
2009	51.2	47.0	11.1	5.7	2.9	27.3	24.3	1.8	0.5	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	1.9	0.0	48.2
2011	49.5	45.9	10.6	5.5	3.0	26.8	23.8	1.7	0.4	3.5	2.4	1.2	0.0	46.4
2012	49.9	46.2	10.5	5.5	3.1	27.0	24.2	1.7	0.4	3.7	2.1	1.6	0.1	46.8
2013	49.7	46.4	10.5	5.5	2.9	27.6	24.6	1.7	0.4	3.3	2.1	1.2	0.1	46.8

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
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	5.2	1.9	2.3	7.9	12.4
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	2.0	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	22.0	10.9	5.7	5.8	2.1	2.6	8.4	13.6
2011	-4.1	-3.3	-0.7	-0.2	0.1	-1.1	21.5	10.6	5.5	5.8	2.1	2.6	8.2	13.3
2012	-3.7	-3.4	-0.3	0.0	0.0	-0.6	21.5	10.5	5.5	5.8	2.1	2.6	8.2	13.3
2013	-3.0	-2.6	-0.2	0.0	-0.2	-0.1	21.6	10.5	5.5	5.9	2.1	2.6	8.2	13.4

4. Euro area countries – deficit (-)/surplus (+) [5]

	BE	DE	EE	IE	GR	ES	FR	IT	CY	LV	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2010	-3.8	-4.2	0.2	-30.6	-10.9	-9.6	-7.0	-4.5	-5.3	-8.2	-0.8	-3.5	-5.1	-4.5	-9.8	-5.9	-7.5	-2.5
2011	-3.8	-0.8	1.1	-13.1	-9.6	-9.6	-5.2	-3.7	-6.3	-3.5	0.2	-2.7	-4.3	-2.5	-4.3	-6.4	-4.8	-0.7
2012	-4.1	0.1	-0.2	-8.2	-8.9	-10.6	-4.9	-3.0	-6.4	-1.3	0.0	-3.3	-4.1	-2.6	-6.4	-4.0	-4.5	-1.8
2013	-2.6	0.0	-0.2	-7.2	-12.7	-7.1	-4.3	-3.0	-5.4	-1.0	0.1	-2.8	-2.5	-1.5	-4.9	-14.7	-2.8	-2.1

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
2004	69.6	2.2	12.2	4.7	50.5	38.7	19.4	11.2	8.1	30.9
2005	70.5	2.4	12.3	4.4	51.4	37.0	18.8	11.3	7.0	33.5
2006	68.6	2.5	11.9	3.8	50.5	34.9	18.9	9.3	6.7	33.7
2007	66.3	2.2	11.3	3.9	48.8	32.7	17.6	8.6	6.5	33.6
2008	70.1	2.3	11.6	6.5	49.7	33.4	18.4	7.9	7.1	36.7
2009	80.0	2.5	12.8	8.3	56.5	37.4	21.6	9.2	6.6	42.6
2010	85.5	2.5	15.5	7.3	60.2	41.4	24.3	10.6	6.5	44.1
2011	87.4	2.5	15.5	7.4	62.0	43.3	24.5	11.4	7.4	44.0
2012	90.7	2.6	17.4	6.8	63.9	46.2	26.4	12.6	7.2	44.5
2013	92.6	2.6	16.9	6.3	66.8	47.1	26.5	13.5	7.1	45.5

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
2004	69.6	56.6	6.6	5.1	1.3	7.6	62.0	4.7	14.7	26.3	28.6	68.6	1.0
2005	70.5	57.1	6.7	5.2	1.4	7.7	62.8	4.5	14.8	25.8	29.9	69.4	1.1
2006	68.6	55.4	6.5	5.4	1.4	7.2	61.5	4.3	14.3	24.2	30.1	67.9	0.7
2007	66.3	53.4	6.3	5.3	1.4	7.2	59.1	4.2	14.5	23.6	28.2	65.7	0.5
2008	70.1	56.8	6.7	5.3	1.3	10.1	60.1	4.9	17.7	23.4	29.0	69.2	1.0
2009	80.0	64.8	7.7	5.8	1.7	12.1	67.9	5.0	19.5	27.3	33.2	78.8	1.2
2010	85.5	69.3	8.4	5.9	1.9	13.1	72.4	5.2	21.3	29.3	34.9	84.3	1.2
2011	87.4	70.7	8.6	5.9	2.2	12.6	74.8	6.2	20.8	30.4	36.1	85.7	1.7
2012	90.7	73.6	8.9	6.0	2.3	11.8	78.9	7.3	20.1	32.2	38.4	88.7	2.0
2013	92.6	75.9	8.5	6.0	2.2	10.8	81.8	7.4	20.3	32.7	39.6	90.7	1.9

3. Euro area countries

	BE	DE	EE	IE	GR	ES	FR	IT	CY	LV	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2010	96.6	82.5	6.7	91.2	148.3	61.7	82.7	119.3	61.3	44.5	19.5	66.0	63.4	72.5	94.0	38.7	41.0	48.8
2011	99.2	80.0	6.1	104.1	170.3	70.5	86.2	120.7	71.5	42.0	18.7	68.8	65.7	73.1	108.2	47.1	43.6	49.3
2012	101.1	81.0	9.8	117.4	157.2	86.0	90.6	127.0	86.6	40.8	21.7	70.8	71.3	74.4	124.1	54.4	52.7	53.6
2013	101.5	78.4	10.0	123.7	175.1	93.9	93.5	132.6	111.7	38.1	23.1	73.0	73.5	74.5	129.0	71.7	55.4	57.0

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
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	0.3	-0.4	1.6	-0.3	1.1	-1.4	1.9
2007	1.2	1.2	0.0	0.0	-0.1	0.0	0.3	1.0	-0.4	-0.4	-0.3	1.6
2008	5.4	5.2	0.1	0.0	0.1	0.6	2.7	2.0	1.5	1.2	-0.5	3.9
2009	7.3	7.5	-0.2	0.0	0.1	0.7	1.6	4.9	2.7	2.5	1.0	4.6
2010	7.6	7.8	-0.1	0.0	0.1	3.1	-0.7	5.2	5.0	3.3	1.6	2.6
2011	4.2	4.0	0.1	0.0	0.0	0.4	0.2	3.5	3.0	0.9	1.1	1.2
2012	3.9	5.3	-1.4	0.0	0.1	2.0	-0.5	2.2	3.1	2.1	1.2	0.7
2013	2.8	2.8	-0.1	0.1	0.0	-0.3	-0.5	3.6	1.3	0.3	1.1	1.5

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		Other changes in volume	Other [8]
				Total	Currency and deposits	Loans	Securities [9]	Shares and other equity	Privatisations	Equity injections		Exchange rate effects		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	5.4	-2.1	3.2	3.1	0.8	0.7	0.7	0.9	-0.1	0.7	0.1	0.0	0.0	0.0
2009	7.3	-6.4	1.0	1.0	0.3	0.0	0.3	0.5	-0.3	0.5	-0.2	0.0	0.0	0.1
2010	7.6	-6.2	1.4	1.8	0.0	0.5	1.0	0.2	0.0	0.2	-0.1	0.0	0.0	-0.2
2011	4.2	-4.1	0.1	-0.3	0.2	-0.2	-0.2	-0.1	-0.1	0.2	0.1	0.0	0.0	0.2
2012	3.9	-3.7	0.2	1.2	0.3	0.4	-0.1	0.6	-0.2	0.3	-1.4	0.0	0.0	0.4
2013	2.8	-3.0	-0.2	-0.5	-0.5	-0.3	-0.2	0.4	-0.1	0.4	-0.1	0.0	0.1	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 Q4	49.1	48.5	14.7	13.8	15.7	2.5	1.0	0.6	0.3	44.5
2008 Q1	42.5	42.2	10.9	12.4	14.8	2.2	1.1	0.3	0.2	38.3
Q2	45.3	44.9	12.9	12.3	15.0	2.3	1.5	0.4	0.3	40.6
Q3	43.4	43.0	12.1	12.1	15.0	2.3	0.8	0.4	0.3	39.4
Q4	48.7	48.1	13.8	13.3	16.3	2.6	1.1	0.5	0.3	43.8
2009 Q1	42.6	42.5	10.5	12.0	15.6	2.4	1.1	0.1	0.2	38.4
Q2	45.3	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	12.1	15.5	2.4	0.7	0.3	0.3	38.7
Q4	48.5	47.7	12.9	13.6	16.4	2.7	1.0	0.8	0.5	43.4
2010 Q1	42.5	42.4	10.2	12.4	15.5	2.4	0.9	0.2	0.3	38.4
Q2	45.2	44.8	11.9	12.7	15.4	2.6	1.3	0.4	0.3	40.3
Q3	43.1	42.7	10.9	12.6	15.3	2.5	0.7	0.3	0.3	39.0
Q4	48.3	47.6	13.1	13.2	16.4	2.8	1.0	0.7	0.3	43.0
2011 Q1	43.2	42.9	10.7	12.6	15.3	2.4	1.0	0.3	0.3	38.9
Q2	45.3	45.0	12.1	12.7	15.4	2.5	1.5	0.3	0.3	40.4
Q3	43.7	43.4	11.4	12.6	15.3	2.5	0.8	0.3	0.3	39.5
Q4	49.0	47.9	13.3	13.2	16.6	2.8	1.0	1.1	0.4	43.6
2012 Q1	43.7	43.5	11.0	12.9	15.4	2.4	1.0	0.3	0.2	39.5
Q2	46.2	45.9	12.6	12.9	15.6	2.6	1.4	0.3	0.3	41.3
Q3	44.6	44.2	11.9	12.7	15.5	2.5	0.7	0.4	0.3	40.4
Q4	50.2	49.5	14.0	13.6	16.9	2.9	1.0	0.7	0.3	44.9
2013 Q1	44.3	44.0	11.3	12.8	15.6	2.4	1.0	0.2	0.3	40.0
Q2	47.4	46.9	13.1	13.0	15.7	2.6	1.5	0.4	0.4	42.2
Q3	45.1	44.6	12.1	12.7	15.5	2.5	0.7	0.5	0.4	40.7
Q4	50.2	49.5	14.2	13.7	16.9	2.8	0.9	0.7	0.3	45.1

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 Q4	49.2	44.7	10.8	5.9	2.9	25.0	21.2	1.5	4.5	2.8	1.7	-0.1	2.8
2008 Q1	45.3	41.8	9.8	4.5	3.0	24.4	20.7	1.2	3.6	2.3	1.2	-2.9	0.1
Q2	45.9	42.3	10.3	5.0	3.3	23.8	20.7	1.1	3.6	2.6	1.0	-0.7	2.6
Q3	45.7	42.0	9.8	5.0	3.0	24.3	21.1	1.2	3.7	2.7	1.0	-2.4	0.6
Q4	51.3	46.7	11.3	6.3	2.9	26.3	22.2	1.4	4.6	3.0	1.6	-2.7	0.2
2009 Q1	49.3	45.4	10.7	5.1	2.8	26.9	22.9	1.3	3.9	2.6	1.2	-6.7	-3.9
Q2	50.7	46.5	11.1	5.5	3.0	26.8	23.3	1.3	4.2	2.8	1.3	-5.3	-2.3
Q3	50.0	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	54.6	49.8	11.8	6.8	2.8	28.4	24.0	1.5	4.9	3.0	1.8	-6.1	-3.3
2010 Q1	50.4	46.5	10.7	5.1	2.7	27.9	23.6	1.4	3.9	2.4	1.5	-7.9	-5.1
Q2	49.6	46.1	11.0	5.5	3.0	26.7	23.2	1.3	3.5	2.6	1.1	-4.5	-1.5
Q3	50.5	45.2	10.3	5.4	2.7	26.8	23.1	1.3	5.3	2.6	2.6	-7.4	-4.7
Q4	53.5	48.8	11.5	6.7	2.9	27.7	23.6	1.5	4.7	2.7	2.0	-5.2	-2.3
2011 Q1	48.4	45.3	10.3	5.0	2.9	27.1	23.1	1.3	3.1	2.2	1.0	-5.2	-2.4
Q2	48.5	45.3	10.7	5.3	3.2	26.1	22.8	1.2	3.3	2.3	0.9	-3.2	0.0
Q3	48.0	44.5	10.1	5.3	2.9	26.3	22.9	1.2	3.5	2.3	1.1	-4.3	-1.4
Q4	52.7	48.7	11.3	6.6	3.2	27.7	23.6	1.5	4.0	2.5	1.8	-3.8	-0.6
2012 Q1	48.1	45.4	10.2	4.9	3.0	27.3	23.2	1.2	2.7	1.9	0.8	-4.3	-1.4
Q2	49.2	45.9	10.6	5.3	3.3	26.7	23.2	1.1	3.3	2.1	1.2	-2.9	0.4
Q3	48.4	44.9	10.1	5.3	2.9	26.7	23.3	1.2	3.5	2.2	1.3	-3.8	-0.9
Q4	53.9	48.7	11.1	6.5	3.2	27.9	24.0	1.4	5.2	2.4	2.8	-3.7	-0.5
2013 Q1	48.8	46.2	10.3	5.0	2.8	28.1	23.8	1.2	2.7	1.8	1.0	-4.6	-1.8
Q2	49.5	46.1	10.5	5.4	3.1	27.2	23.5	1.1	3.4	2.0	1.4	-2.2	0.9
Q3	48.5	45.3	10.0	5.3	2.8	27.2	23.5	1.2	3.2	2.1	1.0	-3.4	-0.6
Q4	52.2	48.6	11.1	6.3	2.9	28.3	24.2	1.5	3.6	2.3	1.4	-2.1	0.9

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

6.5 Quarterly debt and change in debt [1)]

(as a percentage of GDP)

1. Euro area – Maastricht debt by financial instrument

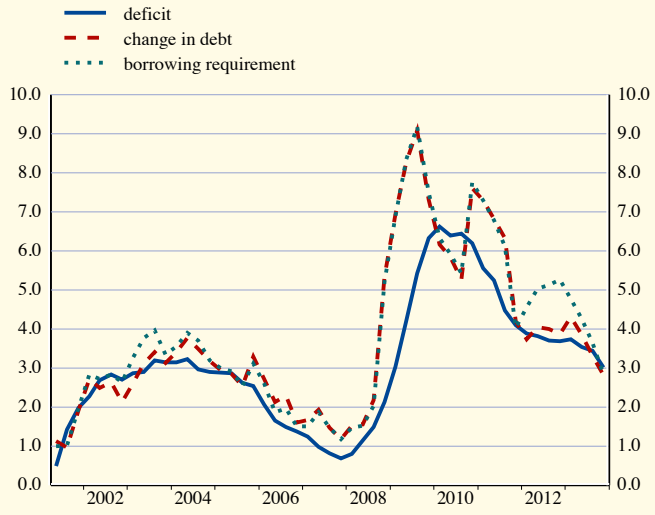
	Total	Financial instruments			
		Currency and deposits	Loans	Short-term securities	Long-term securities
	1	2	3	4	5
2011 Q1	86.4	2.5	15.4	7.4	61.1
Q2	87.2	2.5	15.1	7.5	62.2
Q3	86.9	2.5	15.3	7.8	61.3
Q4	87.4	2.5	15.5	7.4	62.0
2012 Q1	88.3	2.6	15.9	7.6	62.3
Q2	90.0	2.5	16.8	7.3	63.3
Q3	90.1	2.6	16.7	7.2	63.6
Q4	90.7	2.6	17.4	6.8	63.9
2013 Q1	92.4	2.6	17.1	7.0	65.7
Q2	93.5	2.5	17.0	6.9	67.0
Q3	92.7	2.6	16.8	6.9	66.5
Q4	92.6	2.6	16.9	6.3	66.8

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
2011 Q1	6.9	-5.2	1.7	0.8	2.1	-0.8	-0.6	0.0	0.2	0.7	6.7
Q2	5.9	-3.2	2.7	2.5	2.8	0.6	-0.3	-0.5	0.2	0.0	5.7
Q3	0.9	-4.3	-3.4	-3.8	-3.7	-0.4	0.1	0.2	0.5	-0.1	0.3
Q4	3.3	-3.8	-0.5	-0.6	-0.2	-0.3	-0.1	0.1	-0.2	0.3	3.5
2012 Q1	5.0	-4.3	0.6	3.4	4.1	-0.2	-0.5	0.0	-3.8	1.0	8.8
Q2	7.1	-2.9	4.2	4.0	1.8	1.0	0.5	0.7	-0.5	0.7	7.6
Q3	0.7	-3.8	-3.1	-2.1	-2.1	0.5	-0.6	0.1	-0.1	-0.9	0.7
Q4	2.7	-3.7	-1.0	-0.4	-2.4	0.3	0.2	1.5	-1.3	0.7	4.0
2013 Q1	6.8	-4.6	2.2	1.6	1.5	-0.6	-0.2	0.9	0.0	0.6	6.8
Q2	5.2	-2.2	3.1	3.7	3.2	0.2	0.0	0.3	-0.3	-0.3	5.5
Q3	-1.4	-3.4	-4.8	-4.3	-3.4	-0.9	0.0	0.0	0.3	-0.7	-1.7
Q4	0.8	-2.1	-1.3	-2.7	-3.1	0.2	-0.3	0.5	-0.1	1.6	0.9

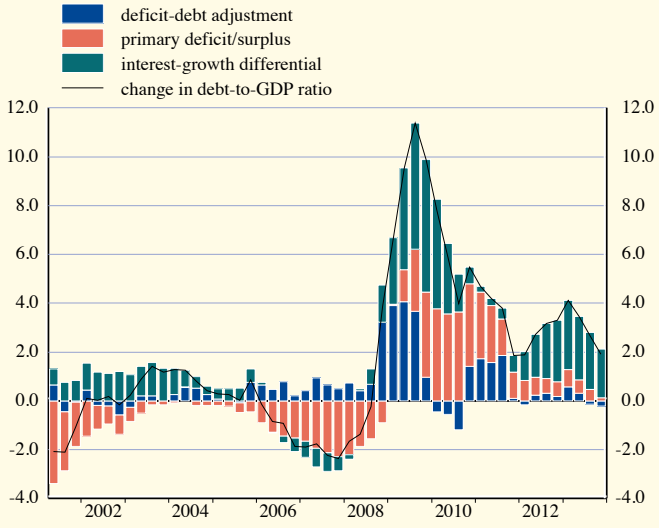
C30 Deficit, borrowing requirement and change in debt

(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

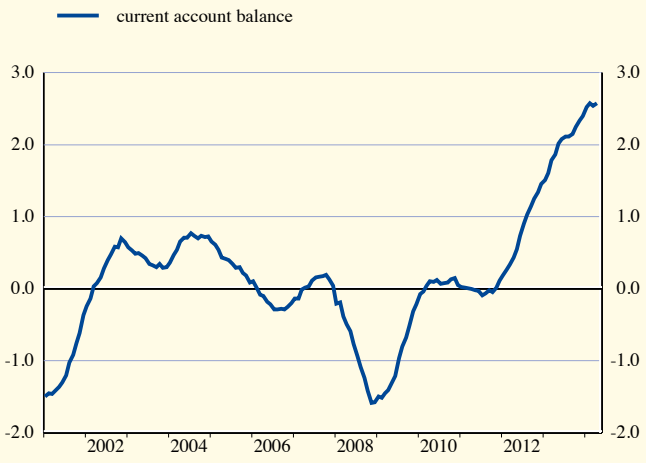
7.1 Summary balance of payments [1]

(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
2011	12.1	0.9	77.9	39.6	-106.3	10.7	22.7	-50.9	-101.7	238.6	-5.6	-172.0	-10.3	28.2
2012	133.1	89.0	95.0	56.3	-107.3	6.5	139.6	-165.0	-71.6	95.4	5.3	-179.3	-15.0	25.5
2013	227.7	165.2	113.2	70.3	-121.1	20.1	247.8	-246.9	-24.9	105.8	18.2	-341.7	-4.4	-0.9
2013 Q1	28.6	29.3	19.0	22.3	-42.0	2.1	30.7	-23.2	-25.2	2.4	8.2	-8.6	-0.1	-7.5
Q2	60.1	49.9	30.3	10.0	-30.0	5.6	65.6	-72.2	22.0	44.0	-1.9	-135.1	-1.2	6.6
Q3	51.4	38.1	33.5	14.0	-34.1	4.6	56.0	-55.9	-12.7	4.9	7.6	-52.9	-2.9	-0.1
Q4	87.6	48.0	30.5	24.0	-14.9	7.9	95.5	-95.6	-9.1	54.6	4.3	-145.1	-0.3	0.2
2014 Q1	42.4	35.6	25.2	21.6	-40.0	5.6	47.9	-40.1	-0.9	45.3	1.3	-83.6	-2.2	-7.9
2013 Apr.	15.7	16.0	8.3	1.8	-10.4	1.8	17.4	-22.1	-7.5	-6.4	-5.6	-2.5	0.0	4.7
May	13.3	16.5	9.5	-3.0	-9.7	2.7	16.0	-19.3	43.7	24.7	-8.6	-78.5	-0.6	3.3
June	31.1	17.4	12.5	11.2	-10.0	1.1	32.2	-30.8	-14.3	25.7	12.4	-54.0	-0.6	-1.4
July	25.7	18.7	13.1	5.1	-11.2	2.5	28.3	-28.6	6.9	-31.3	-2.0	-2.6	0.2	0.4
Aug.	10.2	6.7	8.1	6.9	-11.6	1.5	11.7	-6.8	-0.3	18.8	6.7	-30.0	-2.0	-5.0
Sep.	15.5	12.7	12.2	1.9	-11.3	0.5	16.0	-20.4	-19.3	17.4	2.9	-20.3	-1.1	4.5
Oct.	26.3	17.7	10.0	6.6	-8.1	3.0	29.3	-18.8	20.4	-6.4	3.8	-37.5	0.9	-10.4
Nov.	28.4	17.6	9.0	6.5	-4.7	2.3	30.7	-30.3	-19.8	57.0	-1.3	-66.4	0.2	-0.5
Dec.	32.9	12.7	11.4	10.9	-2.1	2.6	35.5	-46.5	-9.7	3.9	1.8	-41.3	-1.3	11.0
2014 Jan.	7.0	0.7	8.8	7.5	-10.0	1.0	8.0	-4.7	-9.1	19.3	-0.1	-12.1	-2.7	-3.3
Feb.	13.8	15.5	9.0	6.5	-17.3	2.7	16.5	-12.2	30.8	26.6	2.7	-73.1	0.8	-4.3
Mar.	21.6	19.3	7.4	7.6	-12.6	1.9	23.5	-23.2	-22.7	-0.5	-1.3	1.7	-0.3	-0.3
Apr.	18.7	15.7	9.4	4.4	-10.8	1.2	19.9	-20.8	-18.6	-88.4	2.9	83.5	-0.3	0.9
	12-month cumulated transactions													
2014 Apr.	244.5	171.2	120.6	72.2	-119.4	23.0	267.5	-262.5	-11.7	66.8	19.8	-330.5	-6.9	-5.0
	12-month cumulated transactions as a percentage of GDP													
2014 Apr.	2.5	1.8	1.3	0.7	-1.2	0.2	2.8	-2.7	-0.1	0.7	0.2	-3.4	-0.1	-0.1

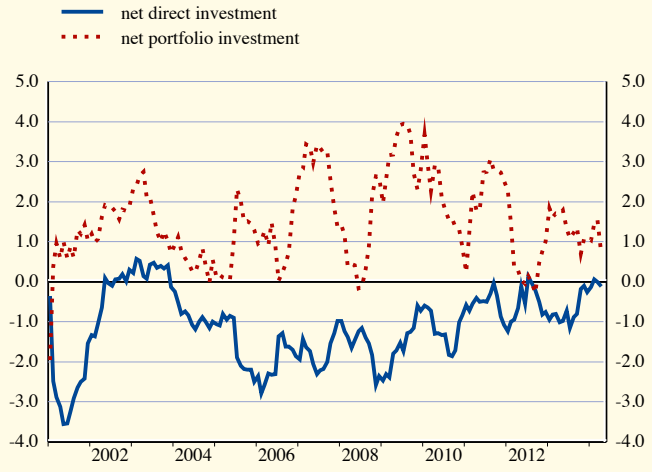
C32 Euro area b.o.p.: current account

(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)



C33 Euro area b.o.p.: direct and portfolio investment

(12-month cumulated transactions as a percentage of GDP)



Source: ECB.

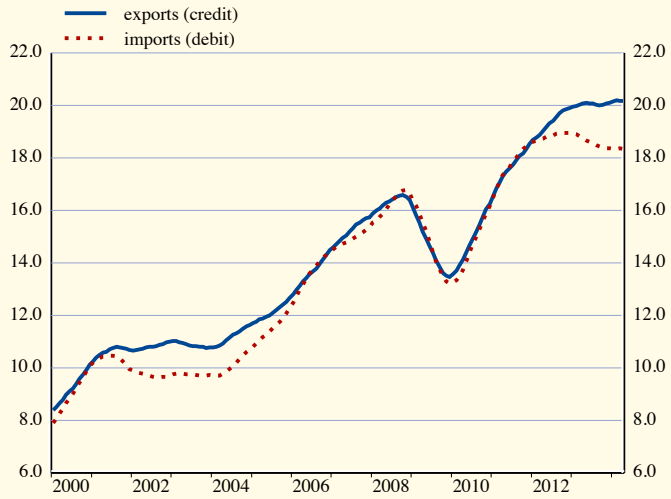
1) The sign convention is explained in the General Notes.

7.2 Current and capital accounts
(EUR billions; transactions)

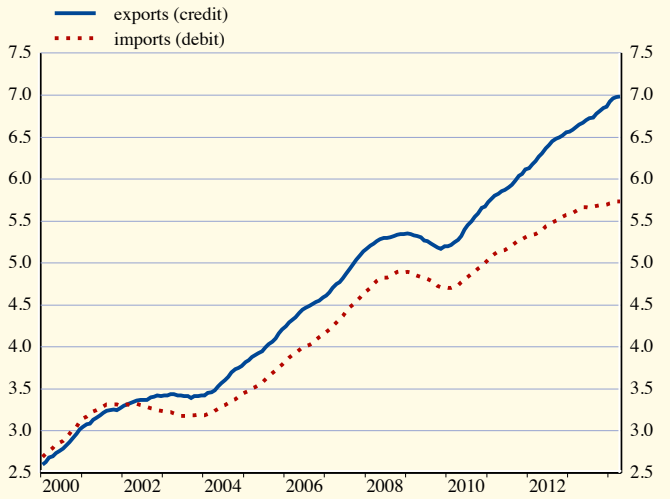
1. Summary current and capital accounts

	Current account													Capital account	
	Total			Goods		Services		Income		Current transfers					
	Credit	Debit	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
2011	3,028.7	3,016.6	12.1	1,792.9	1,792.1	590.8	512.9	549.1	509.5	95.8	6.5	202.1	27.1	25.8	15.1
2012	3,222.8	3,089.7	133.1	1,921.5	1,832.5	633.6	538.5	569.1	512.8	98.6	6.8	205.9	26.0	30.6	24.1
2013	3,247.0	3,019.3	227.7	1,935.8	1,770.6	662.9	549.7	548.6	478.3	99.7	6.7	220.8	24.4	32.4	12.3
2013 Q1	777.4	748.8	28.6	470.6	441.3	146.5	127.5	132.5	110.2	27.7	1.6	69.7	5.9	6.2	4.1
Q2	824.8	764.8	60.1	489.6	439.8	166.5	136.2	148.9	139.0	19.8	1.8	49.8	6.1	7.9	2.3
Q3	807.2	755.7	51.4	479.6	441.5	176.8	143.3	133.2	119.2	17.6	1.7	51.7	6.3	6.7	2.2
Q4	837.6	750.1	87.6	496.0	448.0	173.2	142.7	133.9	109.8	34.6	1.7	49.5	6.1	11.6	3.7
2014 Q1	786.4	744.1	42.4	476.9	441.3	155.7	130.5	125.3	103.7	28.6	.	68.6	.	8.0	2.4
2014 Feb.	257.9	244.2	13.8	157.1	141.6	49.7	40.7	39.5	33.0	11.6	-	28.9	-	3.3	0.6
Mar.	272.5	250.9	21.6	167.1	147.8	53.0	45.5	45.9	38.4	6.5	-	19.2	-	3.0	1.1
Apr.	266.8	248.1	18.7	161.6	146.0	53.4	44.0	45.9	41.4	5.9	-	16.7	-	2.1	0.9
	Seasonally adjusted														
2013 Q3	808.5	758.6	49.9	480.2	442.6	166.7	137.2	136.7	123.3	24.9	-	55.5	-	-	-
Q4	819.1	752.8	66.3	491.7	445.5	169.9	138.7	132.5	115.6	25.0	-	53.0	-	-	-
2014 Q1	817.3	750.5	66.8	490.0	444.5	170.8	138.9	130.8	112.7	25.8	-	54.3	-	-	-
2014 Feb.	273.5	251.7	21.8	164.6	149.1	57.5	45.9	43.0	38.2	8.4	-	18.4	-	-	-
Mar.	270.6	251.0	19.6	161.1	146.8	55.8	47.1	44.8	38.8	8.8	-	18.2	-	-	-
Apr.	271.5	250.0	21.5	162.1	145.2	55.9	45.9	45.8	40.6	7.6	-	18.3	-	-	-
	12-month cumulated transactions														
2014 Apr.	3,261.0	3,012.3	248.7	1,947.0	1,771.5	673.9	553.2	540.6	469.3	99.5	-	218.3	-	-	-
	12-month cumulated transactions as a percentage of GDP														
2014 Apr.	33.8	31.2	2.6	20.2	18.4	7.0	5.7	5.6	4.9	1.0	-	2.3	-	-	-

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
2011	27.4	12.8	521.7	496.7	269.2	58.8	171.1	57.3	40.4	35.2	36.2	99.5	98.2	121.9	77.7	69.0
2012	30.1	13.5	539.0	499.3	281.2	44.2	158.5	19.3	50.2	64.0	42.4	104.6	99.7	115.1	65.6	57.1
2013	29.9	13.9	518.6	464.3	268.2	46.0	143.2	36.7	45.8	58.8	44.8	104.4	99.2	107.9	60.6	49.9
2012 Q4	8.5	3.4	133.6	117.0	72.0	5.6	37.7	-11.5	13.6	17.9	7.9	20.7	24.8	27.3	15.3	13.5
2013 Q1	7.3	2.6	125.3	107.6	66.1	25.6	35.8	15.8	11.4	14.4	7.8	17.7	24.6	27.3	15.4	12.5
Q2	7.5	3.6	141.4	135.3	72.5	1.9	35.6	2.8	11.6	14.4	15.0	44.1	25.1	27.3	17.2	14.0
Q3	7.4	4.1	125.8	115.2	63.8	17.0	37.6	16.1	11.1	14.6	12.3	24.6	24.8	27.0	13.9	11.5
Q4	7.8	3.6	126.1	106.3	65.9	1.5	34.3	2.0	11.7	15.5	9.7	18.1	24.7	26.4	14.1	12.0

3. Geographical breakdown
(cumulated transactions)

2013 Q1 to 2013 Q4	Total	EU Member States outside the euro area						Brazil	Canada	China	India	Japan	Russia	Switzerland	United States	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Credits															
Current account	3,247.0	1,012.9	55.9	100.4	490.7	301.3	64.6	66.0	47.8	161.6	38.3	69.0	124.6	274.2	443.0	1,009.7
Goods	1,935.8	601.0	36.4	58.9	267.8	237.6	0.2	34.0	24.4	121.3	27.5	43.7	86.7	128.1	224.2	644.8
Services	662.9	204.1	12.8	21.1	127.8	35.5	6.8	10.8	11.0	24.8	8.3	15.1	22.0	64.4	101.6	200.9
Income	548.6	143.7	5.7	18.2	83.7	24.8	11.4	20.8	11.7	14.8	2.2	9.3	15.0	72.2	110.7	148.2
Investment income	518.6	135.8	4.8	18.1	81.9	24.1	6.9	20.8	11.6	14.7	2.2	9.2	15.0	56.5	109.2	143.6
Current transfers	99.7	64.1	1.0	2.2	11.4	3.3	46.2	0.5	0.7	0.8	0.2	1.0	0.9	9.4	6.6	15.7
Capital account	32.4	27.7	0.0	0.0	1.2	0.2	26.3	0.0	0.0	0.0	0.0	0.1	0.1	1.1	0.4	2.9
	Debits															
Current account	3,019.3	947.6	48.1	95.3	407.2	278.7	118.3	40.4	30.4	-	35.1	91.1	156.7	230.1	397.1	-
Goods	1,770.6	501.7	31.0	52.1	198.1	220.6	0.0	26.2	14.6	197.2	26.0	43.3	140.1	106.2	150.9	564.4
Services	549.7	160.3	8.3	16.5	92.8	42.4	0.3	5.3	7.3	16.2	7.3	8.9	10.9	51.2	112.2	170.1
Income	478.3	151.1	7.6	24.8	104.4	9.8	4.6	7.6	6.7	-	0.9	38.1	4.5	63.0	127.2	-
Investment income	464.3	143.7	7.5	24.7	102.8	4.2	4.6	7.5	6.5	-	0.7	38.0	4.3	62.6	126.1	-
Current transfers	220.8	134.5	1.3	1.9	11.9	5.9	113.4	1.3	1.9	2.6	0.9	0.7	1.1	9.8	6.9	61.1
Capital account	12.3	5.2	0.0	0.0	4.4	0.5	0.3	0.2	0.4	0.3	0.1	0.1	0.1	0.7	0.5	4.8
	Net															
Current account	227.7	65.3	7.8	5.2	83.5	22.5	-53.7	25.6	17.3	-	3.1	-22.1	-32.1	44.0	45.9	-
Goods	165.2	99.3	5.4	6.9	69.8	17.1	0.2	7.8	9.8	-75.9	1.6	0.4	-53.4	21.9	73.3	80.4
Services	113.2	43.8	4.6	4.6	35.0	-6.9	6.5	5.4	3.7	8.6	1.0	6.2	11.0	13.3	-10.6	30.9
Income	70.3	-7.4	-1.9	-6.6	-20.7	14.9	6.8	13.2	5.0	-	1.3	-28.9	10.5	9.2	-16.5	-
Investment income	54.3	-7.9	-2.7	-6.6	-21.0	20.0	2.4	13.3	5.1	-	1.5	-28.8	10.6	-6.1	-16.9	-
Current transfers	-121.1	-70.4	-0.3	0.3	-0.5	-2.6	-67.2	-0.8	-1.2	-1.8	-0.7	0.2	-0.2	-0.4	-0.3	-45.4
Capital account	20.1	22.6	0.0	0.0	-3.2	-0.3	26.1	-0.2	-0.4	-0.2	-0.1	0.0	0.0	0.3	-0.1	-1.9

Source: ECB.

7.3 Financial account

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

1. Summary financial account

	Total [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)													
2010	15,183.6	16,453.3	-1,269.7	165.3	179.1	-13.8	4,928.8	3,895.5	4,901.4	7,429.6	-45.0	4,807.2	5,128.2	591.2
2011	15,986.5	17,440.9	-1,454.4	169.3	184.7	-15.4	5,708.5	4,414.6	4,738.4	7,741.7	-54.8	4,927.3	5,284.5	667.1
2012	16,920.5	18,174.3	-1,253.8	178.0	191.2	-13.2	6,125.7	4,634.2	5,254.8	8,423.6	-46.9	4,897.5	5,116.5	689.4
2013 Q2	17,005.4	18,309.3	-1,303.9	178.5	192.2	-13.7	6,230.1	4,739.6	5,351.8	8,539.6	-50.4	4,909.5	5,030.0	564.3
Q3	16,961.7	18,238.3	-1,276.7	177.3	190.7	-13.3	6,181.1	4,719.8	5,453.6	8,680.2	-41.5	4,781.8	4,838.3	586.8
Q4	16,970.8	18,135.2	-1,164.4	176.7	188.9	-12.1	6,266.8	4,764.7	5,537.9	8,801.1	-38.1	4,662.1	4,569.5	542.1
	Changes to outstanding amounts													
2010	1,447.9	1,226.4	221.6	15.8	13.4	2.4	518.3	359.3	557.8	585.9	-26.7	269.7	281.2	128.8
2011	802.9	987.6	-184.7	8.5	10.5	-2.0	779.7	519.1	-163.0	312.2	-9.7	120.0	156.4	75.9
2012	934.0	733.4	200.6	9.8	7.7	2.1	417.2	219.5	516.3	681.9	7.9	-29.7	-168.0	22.3
2013	50.4	-39.0	89.4	0.5	-0.4	0.9	141.1	130.5	283.2	377.4	8.7	-235.4	-547.0	-147.3
2013 Q3	-43.7	-70.9	27.2	-1.8	-3.0	1.1	-49.1	-19.8	101.7	140.6	8.9	-127.7	-191.7	22.4
Q4	9.2	-103.1	112.3	0.4	-4.2	4.5	85.8	44.9	84.4	120.9	3.4	-119.7	-268.9	-44.7
	Transactions													
2010	639.5	626.1	13.4	7.0	6.8	0.1	352.0	274.6	131.4	211.6	-10.2	155.8	139.9	10.5
2011	660.8	609.9	50.9	7.0	6.5	0.5	500.9	399.1	-53.7	184.9	5.6	197.8	25.8	10.3
2012	579.1	414.1	165.0	6.1	4.4	1.7	410.1	338.6	194.3	289.7	-5.3	-34.9	-214.2	15.0
2013	498.1	251.2	246.9	5.2	2.6	2.6	324.2	299.2	250.2	356.0	-18.2	-62.4	-404.0	4.4
2013 Q3	32.4	-23.5	55.9	1.3	-1.0	2.3	50.4	37.7	69.1	74.1	-7.6	-82.4	-135.3	2.9
Q4	177.6	82.0	95.6	7.2	3.3	3.9	151.9	142.8	50.4	104.9	-4.3	-20.6	-165.7	0.3
2014 Q1	177.6	137.6	40.1	7.5	5.8	1.7	-21.2	-22.1	45.9	91.2	-1.3	152.0	68.5	2.2
2013 Dec.	-131.3	-177.9	46.5	-	-	-	-31.0	-40.7	20.6	24.5	-1.8	-120.4	-161.7	1.3
2014 Jan.	173.3	168.6	4.7	-	-	-	25.0	16.0	17.6	36.9	0.1	127.8	115.7	2.7
Feb.	11.8	-0.4	12.2	-	-	-	-46.5	-15.7	14.6	41.2	-2.7	47.3	-25.8	-0.8
Mar.	-7.5	-30.7	23.2	-	-	-	0.3	-22.4	13.6	13.1	1.3	-23.0	-21.4	0.3
Apr.	132.2	111.4	20.8	-	-	-	15.3	-3.3	74.9	-13.5	-2.9	44.6	128.1	0.3
	Other changes													
2009	571.4	503.0	68.4	6.4	5.6	0.8	146.5	29.8	417.6	552.1	1.1	-86.8	-78.9	93.0
2010	808.4	600.3	208.1	8.8	6.5	2.3	166.3	84.6	426.4	374.3	-16.5	113.9	141.4	118.3
2011	142.1	377.7	-235.7	1.5	4.0	-2.5	278.8	120.0	-109.3	127.2	-15.3	-77.8	130.5	65.6
2012	354.9	319.3	35.6	3.7	3.4	0.4	7.1	-119.1	322.1	392.2	13.2	5.2	46.2	7.3
	Other changes due to exchange rate changes													
2009	-49.2	-56.2	6.9	-0.6	-0.6	0.1	-5.3	5.3	-29.8	-34.3	.	-11.5	-27.2	-2.7
2010	477.9	325.2	152.7	5.2	3.5	1.7	143.4	35.0	160.0	128.7	.	161.3	161.5	13.3
2011	214.1	176.0	38.1	2.3	1.9	0.4	70.5	18.1	72.9	66.6	.	63.2	91.3	7.5
2012	-87.8	-91.6	3.8	-0.9	-1.0	0.0	-23.0	-6.0	-41.1	-37.1	.	-17.0	-48.5	-6.6
	Other changes due to price changes													
2009	618.1	491.5	126.6	6.9	5.5	1.4	147.5	29.4	423.6	462.1	1.2	.	.	45.8
2010	304.1	150.1	154.0	3.3	1.6	1.7	33.2	-0.8	185.5	150.9	-16.2	.	.	101.7
2011	-127.9	-253.3	125.4	-1.4	-2.7	1.3	-38.1	7.1	-133.7	-260.4	-15.3	.	.	59.3
2012	265.3	590.2	-324.9	2.8	6.2	-3.4	39.6	-6.5	195.6	596.7	13.2	.	.	16.9
	Other changes due to other adjustments													
2009	1.4	68.3	-66.9	0.0	0.8	-0.7	3.4	-4.6	24.0	124.5	.	-75.6	-51.6	49.7
2010	26.3	125.3	-99.1	0.3	1.4	-1.1	-10.6	50.7	80.9	95.0	.	-47.4	-20.3	3.4
2011	59.0	433.2	-374.2	0.6	4.6	-4.0	247.0	94.9	-45.7	299.3	.	-141.0	39.0	-1.2
2012	177.4	-157.3	334.7	1.9	-1.7	3.5	-9.5	-106.5	167.6	-145.7	.	22.3	94.9	-2.9
	Growth rates of outstanding amounts													
2009	-0.7	-0.5	-	.	.	.	8.8	8.8	2.4	5.7	.	-9.9	-12.5	-1.3
2010	4.5	4.0	-	.	.	.	7.7	7.5	2.9	3.0	.	3.4	2.8	2.0
2011	4.4	3.7	-	.	.	.	10.2	10.2	-1.2	2.5	.	4.2	0.6	1.6
2012	3.6	2.4	-	.	.	.	7.2	7.7	4.0	3.7	.	-0.7	-4.0	2.2
2013 Q3	1.9	0.4	-	.	.	.	4.4	4.2	5.6	5.1	.	-3.9	-9.9	1.1
Q4	3.0	1.4	-	.	.	.	5.3	6.5	4.8	4.2	.	-1.3	-7.9	0.7
2014 Q1	2.9	1.2	.	.	.	.	4.1	5.4	3.5	4.0	.	1.1	-7.1	1.1

Source: ECB.

1) Net financial derivatives are included in assets.

7.3 Financial account

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

2. Direct investment

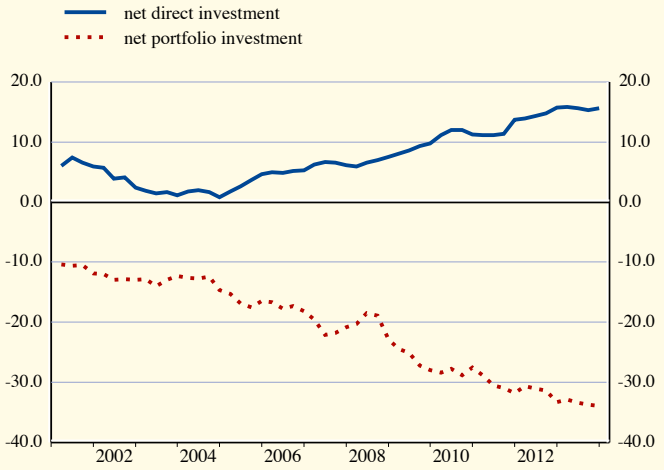
	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs		Total	Into MFIs	Into non-MFIs	Total	To MFIs	To non-MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Oustanding amounts (international investment position)													
2011	5,708.5	4,281.3	283.1	3,998.2	1,427.2	13.3	1,413.9	4,414.6	3,135.2	101.6	3,033.6	1,279.5	11.3	1,268.2
2012	6,125.7	4,562.5	288.8	4,273.8	1,563.1	12.0	1,551.1	4,634.2	3,231.7	109.2	3,122.5	1,402.5	11.3	1,391.2
2013 Q3	6,181.1	4,584.5	275.1	4,309.4	1,596.6	12.2	1,584.4	4,719.8	3,279.8	110.4	3,169.5	1,439.9	12.0	1,427.9
Q4	6,266.8	4,686.1	273.1	4,413.0	1,580.7	12.6	1,568.1	4,764.7	3,357.2	109.5	3,247.7	1,407.5	12.3	1,395.2
	Transactions													
2011	500.9	430.1	25.1	405.0	70.7	-3.2	73.9	399.1	361.9	10.5	351.4	37.3	0.6	36.6
2012	410.1	275.7	-3.1	278.8	134.4	-0.3	134.7	338.6	253.1	8.0	245.2	85.4	0.1	85.4
2013	324.2	290.7	6.7	284.1	33.4	0.9	32.5	299.2	288.8	7.5	281.2	10.5	1.3	9.2
2013 Q3	50.4	53.7	1.1	52.6	-3.3	0.1	-3.4	37.7	36.2	1.8	34.4	1.5	-0.1	1.6
Q4	151.9	180.3	4.0	176.3	-28.4	0.5	-28.9	142.8	163.8	2.2	161.7	-21.0	0.5	-21.5
2014 Q1	-21.2	-38.4	3.3	-41.7	17.2	1.0	16.1	-22.1	-25.8	2.2	-28.0	3.7	-3.6	7.2
2013 Dec.	-31.0	2.4	3.4	-1.0	-33.4	0.6	-34.0	-40.7	23.6	0.6	23.0	-64.3	0.7	-65.0
2014 Jan.	25.0	19.3	-0.4	19.8	5.7	0.4	5.2	16.0	14.9	1.2	13.7	1.1	-3.1	4.2
Feb.	-46.5	-50.8	4.2	-55.0	4.3	0.5	3.8	-15.7	-18.1	0.5	-18.6	2.4	-0.2	2.7
Mar.	0.3	-6.9	-0.4	-6.5	7.2	0.1	7.0	-22.4	-22.6	0.5	-23.0	0.2	-0.2	0.4
Apr.	15.3	7.3	1.6	5.7	8.0	-0.1	8.1	-3.3	1.8	0.6	1.1	-5.0	0.0	-5.0
	Growth rates													
2011	10.2	11.2	9.4	11.4	6.5	-20.1	6.9	10.2	12.3	10.9	12.3	3.8	0.9	3.8
2012	7.2	6.4	-1.1	7.0	9.5	-2.5	9.6	7.7	8.2	7.9	8.2	6.7	0.4	6.7
2013 Q3	4.4	3.6	0.7	3.8	7.0	4.1	7.0	4.2	5.4	6.1	5.4	1.3	1.9	1.3
Q4	5.3	6.4	2.4	6.7	2.1	7.5	2.0	6.5	9.0	7.0	9.1	0.7	11.5	0.6
2014 Q1	4.1	4.5	4.1	4.5	2.8	6.8	2.8	5.4	7.2	6.5	7.2	1.2	-25.4	1.4

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)															
2011	4,738.4	1,703.8	59.3	2.6	1,644.5	39.4	2,569.1	721.4	16.1	1,847.7	96.0	465.5	302.5	58.8	163.1	0.5
2012	5,254.8	1,952.0	70.1	2.8	1,881.8	42.5	2,840.7	674.2	15.6	2,166.5	97.8	462.1	288.0	53.8	174.1	1.4
2013 Q3	5,453.6	2,172.4	114.1	3.1	2,058.2	48.5	2,817.9	617.0	16.5	2,200.8	94.2	463.3	290.0	58.4	173.3	0.1
Q4	5,537.9	2,284.3	123.0	3.4	2,161.3	48.3	2,803.8	601.9	17.0	2,201.9	89.1	449.9	288.5	55.0	161.4	0.0
	Transactions															
2011	-53.7	-66.3	-10.7	-0.2	-55.6	-7.3	-21.8	-60.6	0.1	38.8	-2.8	34.4	26.2	10.4	8.2	0.2
2012	194.3	58.0	3.0	0.1	55.0	0.2	133.9	-38.5	-1.0	172.4	-8.4	2.4	-18.0	2.3	20.4	0.1
2013	250.2	163.4	39.8	0.5	123.6	3.6	78.9	-47.7	1.7	126.6	-6.6	7.9	13.3	14.8	-5.4	-0.7
2013 Q3	69.1	45.9	16.4	0.0	29.5	0.1	21.0	-13.0	0.7	34.0	-1.6	2.2	8.5	-2.4	-6.3	0.0
Q4	50.4	39.4	5.7	0.3	33.7	-0.8	12.6	-10.3	0.6	22.9	-4.1	-1.7	5.7	2.0	-7.3	-0.1
2014 Q1	45.9	8.8	-17.0	-0.2	25.8	.	26.2	3.9	0.5	22.2	.	10.9	-3.3	1.0	14.2	.
2013 Dec.	20.6	14.5	-1.6	0.0	16.1	-	-0.3	-4.4	0.2	4.0	-	6.4	12.0	2.5	-5.6	-
2014 Jan.	17.6	6.8	-1.2	0.0	8.1	-	2.9	3.8	0.1	-0.9	-	7.9	3.0	2.1	4.9	-
Feb.	14.6	-4.1	-19.8	-0.1	15.7	-	9.7	2.4	0.1	7.3	-	9.0	-1.2	-1.7	10.2	-
Mar.	13.6	6.1	4.0	-0.2	2.1	-	13.6	-2.3	0.3	15.9	-	-6.0	-5.2	0.6	-0.9	-
Apr.	74.9	33.1	0.8	0.0	32.3	-	29.8	5.6	0.7	24.2	-	12.0	1.1	-0.6	11.0	-
	Growth rates															
2011	-1.2	-3.9	-15.2	-7.2	-3.4	-15.9	-0.9	-7.7	-0.2	2.2	-2.9	8.4	8.6	25.5	8.0	120.3
2012	4.0	3.2	5.0	3.0	3.1	0.1	5.1	-5.4	-6.3	9.0	-8.1	0.5	-5.5	3.7	12.6	29.8
2013 Q3	5.6	9.7	73.5	5.8	7.6	13.0	4.1	-4.6	10.8	6.8	-6.0	-1.9	-4.0	37.6	2.3	-56.3
Q4	4.8	8.2	54.2	16.1	6.4	8.4	2.8	-7.2	11.3	5.9	-6.8	1.7	4.7	29.3	-3.2	-90.8
2014 Q1	3.5	5.2	11.0	4.6	4.9	.	2.5	-4.1	7.2	4.5	.	2.5	1.8	30.2	3.7	.

4. Portfolio investment liabilities

	Total	Equity			Debt instruments							
					Bonds and notes				Money market instruments			
		Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs		Total	MFIs	Non-MFIs	
								General government				General government
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts (international investment position)											
2011	7,741.7	3,074.9	562.0	2,512.9	4,222.4	1,254.8	2,967.6	1,722.8	444.4	92.4	352.0	306.8
2012	8,423.6	3,524.4	543.2	2,981.1	4,446.3	1,202.4	3,243.9	1,930.5	452.9	91.7	361.2	286.2
2013 Q3	8,680.2	3,809.0	535.2	3,273.8	4,352.4	1,119.7	3,232.7	1,924.6	518.9	130.4	388.5	314.7
Q4	8,801.1	3,964.7	536.8	3,427.9	4,368.4	1,104.1	3,264.3	1,954.0	468.0	116.6	351.4	284.2
	Transactions											
2011	184.9	64.4	18.9	45.5	165.3	-15.9	181.2	101.1	-44.8	-4.5	-40.3	-42.1
2012	289.7	164.9	-16.3	181.3	128.8	-78.9	207.6	163.6	-4.0	5.9	-10.0	-27.4
2013	356.0	236.6	-21.3	257.9	80.6	-48.5	129.1	99.1	38.8	30.9	7.9	15.2
2013 Q3	74.1	44.4	11.2	33.2	-14.2	-22.0	7.9	6.3	43.8	23.5	20.2	20.5
Q4	104.9	58.4	-7.0	65.3	90.4	9.8	80.5	62.2	-43.8	-11.0	-32.8	-29.6
2014 Q1	91.2	61.7	14.4	47.3	30.5	-16.2	46.7	.	-1.0	10.3	-11.3	.
2013 Dec.	24.5	41.5	2.0	39.5	8.4	-4.0	12.3	-	-25.3	-10.6	-14.7	-
2014 Jan.	36.9	14.8	9.7	5.1	-4.5	-7.3	2.7	-	26.7	23.2	3.5	-
Feb.	41.2	9.3	7.6	1.7	52.1	-4.5	56.6	-	-20.2	-6.9	-13.3	-
Mar.	13.1	37.6	-2.9	40.5	-17.0	-4.5	-12.6	-	-7.5	-6.0	-1.4	-
Apr.	-13.5	22.8	5.1	17.6	-1.5	-10.9	9.4	-	-34.7	-15.6	-19.2	-
	Growth rates											
2011	2.5	2.0	3.0	1.6	4.5	-1.2	7.2	6.5	-8.7	1.0	-10.2	-12.4
2012	3.7	5.2	-3.0	6.8	3.0	-6.3	7.0	9.5	-0.8	6.2	-2.7	-8.7
2013 Q3	5.1	7.4	-4.3	9.7	1.3	-5.5	3.8	4.4	25.4	60.2	16.8	14.9
Q4	4.2	6.6	-3.9	8.5	1.8	-4.0	4.0	5.2	8.4	32.2	2.1	5.1
2014 Q1	4.0	6.3	0.3	7.3	2.5	-4.3	5.1	.	-0.8	19.5	-7.0	.

Source: ECB.

7.3 Financial account

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

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)														
2011	4,927.3	36.2	35.5	0.7	3,069.9	3,008.1	61.8	162.5	6.8	116.1	30.2	1,658.7	248.5	1,217.4	520.9
2012	4,897.5	40.9	40.2	0.7	2,926.0	2,855.7	70.3	168.0	5.3	121.4	29.2	1,762.7	254.0	1,306.6	567.8
2013 Q3	4,781.8	25.2	24.5	0.7	2,848.5	2,764.3	84.3	149.1	5.0	101.9	22.7	1,759.0	246.6	1,259.1	543.1
Q4	4,662.1	16.1	15.5	0.6	2,754.5	2,723.4	31.1	156.6	4.1	109.4	26.9	1,734.9	246.3	1,259.4	538.0
	Transactions														
2011	197.8	-3.1	-3.1	0.1	51.7	21.7	29.9	4.3	-0.3	4.0	10.3	145.0	8.6	112.2	41.4
2012	-34.9	5.2	5.2	0.0	-121.0	-128.1	7.1	6.2	-1.5	6.3	-1.0	74.5	8.3	38.2	5.0
2013	-62.4	-19.8	-19.8	0.0	-53.1	-69.8	16.7	-10.7	-1.3	-11.8	-2.4	21.2	3.2	-20.7	5.9
2013 Q3	-82.4	6.2	6.2	0.0	-65.5	-88.4	22.9	-1.7	-0.1	-1.8	-1.2	-21.4	-2.2	-20.4	-12.1
Q4	-20.6	-8.3	-8.3	0.0	-12.8	-7.8	-5.0	5.9	-0.9	5.7	4.2	-5.4	1.3	-9.6	-10.8
2014 Q1	152.0	-6.7	.	.	144.3	.	.	0.5	.	.	5.3	13.9	.	.	31.9
2013 Dec.	-120.4	1.2	-	-	-92.6	-	-	-0.6	-	-	-1.7	-28.4	-	-	-34.4
2014 Jan.	127.8	-3.3	-	-	134.0	-	-	-2.0	-	-	-0.2	-0.9	-	-	7.8
Feb.	47.3	0.1	-	-	30.8	-	-	1.5	-	-	4.2	14.9	-	-	13.7
Mar.	-23.0	-3.5	-	-	-20.5	-	-	1.1	-	-	1.3	-0.1	-	-	10.5
Apr.	44.6	5.6	-	-	48.8	-	-	-2.1	-	-	-1.6	-7.8	-	-	-4.6
	Growth rates														
2011	4.2	-6.3	-6.4	8.8	1.9	0.9	76.8	2.9	-3.3	4.1	51.5	9.1	4.0	9.0	9.8
2012	-0.7	13.0	13.2	1.0	-3.9	-4.2	12.2	4.0	-22.2	5.7	-3.3	4.5	3.4	3.2	1.1
2013 Q3	-3.9	-13.1	-13.4	3.3	-5.0	-5.6	19.1	2.3	-5.7	0.2	-9.5	-2.3	-0.3	-4.8	-7.4
Q4	-1.3	-49.5	-50.4	3.2	-1.8	-2.5	23.7	-6.3	-24.0	-9.7	-8.1	1.2	1.3	-1.6	0.8
2014 Q1	1.1	-64.4	.	.	2.8	.	.	0.0	.	.	33.3	-0.5	.	.	2.8

6. Other investment liabilities

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government				Other sectors			
		Total	Loans/currency and deposits	Other liabilities	Total	Loans/currency and deposits	Other liabilities	Total	Trade credits	Loans	Other liabilities	Total	Trade credits	Loans	Other liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Outstanding amounts (international investment position)														
2011	5,284.5	410.3	407.5	2.8	3,221.8	3,154.9	66.9	229.3	0.1	222.3	6.9	1,423.2	227.2	1,014.5	181.5
2012	5,116.5	423.9	423.0	0.9	2,976.1	2,893.4	82.8	231.6	0.1	224.0	7.5	1,484.8	229.7	1,023.8	231.3
2013 Q3	4,838.3	360.7	359.2	1.6	2,740.9	2,659.9	81.0	229.6	0.2	222.8	6.6	1,507.1	229.3	1,006.6	271.3
Q4	4,569.5	340.6	340.1	0.6	2,531.2	2,512.9	18.4	222.5	0.2	215.1	7.3	1,475.1	230.5	1,003.8	240.7
	Transactions														
2011	25.8	134.8	135.0	-0.2	-289.9	-328.6	38.6	74.2	0.0	74.2	0.0	106.8	10.6	75.9	20.3
2012	-214.2	18.4	20.2	-1.8	-232.8	-250.0	17.2	2.5	0.0	1.5	1.0	-2.3	7.3	-10.0	0.4
2013	-404.0	-78.8	-78.4	-0.4	-321.6	-322.7	1.0	-4.4	0.0	-4.2	-0.2	0.8	5.2	0.2	-4.7
2013 Q3	-135.3	-10.2	-10.3	0.2	-102.0	-124.4	22.4	5.3	0.0	5.1	0.1	-28.3	0.6	-28.3	-0.7
Q4	-165.7	-17.6	-16.6	-1.0	-126.5	-123.5	-3.0	-8.9	0.0	-9.0	0.1	-12.6	2.3	-2.4	-12.5
2014 Q1	68.5	-30.1	.	.	77.7	.	.	2.0	.	.	.	18.9	.	.	.
2013 Dec.	-161.7	1.4	-	-	-149.3	-	-	-4.6	-	-	-	-9.3	-	-	-
2014 Jan.	115.7	-6.5	-	-	112.6	-	-	0.7	-	-	-	8.9	-	-	-
Feb.	-25.8	-13.3	-	-	-17.3	-	-	1.2	-	-	-	3.5	-	-	-
Mar.	-21.4	-10.4	-	-	-17.6	-	-	0.1	-	-	-	6.5	-	-	-
Apr.	128.1	1.8	-	-	93.7	-	-	-0.4	-	-	-	33.1	-	-	-
	Growth rates														
2011	0.6	50.4	51.0	.	-8.3	-9.6	90.6	48.8	.	50.9	-0.6	9.0	5.2	8.9	14.0
2012	-4.0	4.6	5.1	.	-7.2	-7.9	25.8	1.1	.	0.7	15.6	0.0	3.2	-0.9	1.4
2013 Q3	-9.9	-15.1	-15.2	.	-12.8	-13.3	9.2	-0.8	.	-0.9	1.6	-4.2	1.7	-4.5	-8.6
Q4	-7.9	-18.5	-18.5	.	-10.9	-11.2	1.8	-2.0	.	-2.0	-1.3	0.1	2.3	0.0	-0.9
2014 Q1	-7.1	-20.2	.	.	-8.1	.	.	-0.8	.	.	.	-2.8	.	.	.

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)																
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	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 Q2	564.3	315.9	346.672	51.3	31.5	164.7	5.3	7.8	151.6	0.2	133.8	17.6	0.0	0.8	27.3	-31.0	54.2
Q3	586.8	340.5	346.674	50.5	30.5	164.3	5.1	9.3	149.7	0.2	134.0	15.5	0.2	0.9	21.5	-29.4	53.6
Q4	542.0	301.9	346.566	50.1	28.9	160.0	6.6	5.7	147.4	0.2	135.8	11.4	0.3	1.0	22.5	-30.1	52.7
2014 Apr.	568.0	322.6	346.788	50.4	28.8	164.0	4.0	8.0	151.9	0.3	135.4	16.1	0.1	2.2	24.2	-32.1	52.8
May	568.7	318.6	346.720	51.0	28.7	168.2	3.6	9.0	155.8	0.3	139.9	15.5	-0.2	2.3	23.7	-32.1	53.3
	Transactions																
2011	10.3	0.0	-	-1.6	13.0	-1.2	-2.3	-8.3	9.3	0.1	15.9	-6.8	0.1	0.0	-	-	-
2012	15.0	0.0	-	-0.3	2.1	12.5	1.8	1.2	9.1	-0.4	0.4	9.1	0.4	0.7	-	-	-
2013	4.4	0.0	-	-0.6	-1.7	6.3	0.2	-2.6	9.6	0.0	15.8	-6.2	-1.0	0.4	-	-	-
2013 Q3	2.9	0.0	-	-0.2	-0.6	3.6	-0.2	1.7	2.2	0.0	4.0	-1.7	-0.1	0.0	-	-	-
Q4	0.3	0.0	-	0.4	-1.2	1.0	1.5	-3.3	2.9	0.0	6.1	-3.3	-0.1	0.1	-	-	-
2014 Q1	2.2	.	-	.	.	.	.	.	.	.	.	.	.	.	-	-	-
	Growth rates																
2010	2.0	0.0	-	-0.1	46.7	3.7	-43.3	75.9	3.5	-5.2	10.2	-24.6	-	-	-	-	-
2011	1.6	0.0	-	-3.0	83.3	-1.3	-30.0	-52.7	6.8	27.4	14.2	-45.3	-	-	-	-	-
2012	2.2	0.0	-	-0.5	7.1	8.0	41.6	15.2	6.3	-53.5	0.2	82.5	-	-	-	-	-
2013 Q3	1.1	0.0	-	-1.3	-6.2	5.8	-13.6	22.4	6.2	0.0	7.1	-0.6	-	-	-	-	-
Q4	0.7	0.0	-	-1.1	-5.5	3.8	2.2	-29.6	6.5	0.1	12.3	-33.1	-	-	-	-	-
2014 Q1	1.1	.	-	.	.	.	.	.	.	.	.	.	-	-	-	-	-

8. Gross external debt

	Total	By instrument						By sector (excluding direct investment)			
		Loans, currency and deposits	Money market instruments	Bonds and notes	Trade credits	Other debt liabilities	Direct investment: inter-company lending	General government	Eurosystem	MFIs (excluding Eurosystem)	Other sectors
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts (international investment position)										
2010	10,848.6	4,724.7	441.4	3,756.0	203.3	200.2	1,523.0	2,067.8	270.3	4,751.7	2,235.8
2011	11,972.5	4,799.2	444.4	4,222.4	227.3	258.0	2,021.1	2,258.8	410.3	4,569.0	2,713.2
2012	12,245.7	4,564.1	452.9	4,446.3	229.8	322.5	2,230.0	2,448.4	423.9	4,270.2	2,873.3
2013 Q2	12,211.3	4,451.7	483.8	4,406.0	230.5	347.8	2,291.5	2,454.0	374.2	4,134.7	2,956.9
Q3	11,982.3	4,248.5	518.9	4,352.4	229.4	360.4	2,272.7	2,468.8	360.7	3,991.0	2,889.0
Q4	11,625.6	4,071.9	468.0	4,368.4	230.7	266.9	2,219.8	2,460.8	340.6	3,751.9	2,852.6
	Outstanding amounts as a percentage of GDP										
2010	118.2	51.5	4.8	40.9	2.2	2.2	16.6	22.5	2.9	51.8	24.4
2011	126.8	50.8	4.7	44.7	2.4	2.7	21.4	23.9	4.3	48.4	28.7
2012	128.8	48.0	4.8	46.8	2.4	3.4	23.5	25.8	4.5	44.9	30.2
2013 Q2	128.0	46.7	5.1	46.2	2.4	3.6	24.0	25.7	3.9	43.3	31.0
Q3	125.2	44.4	5.4	45.5	2.4	3.8	23.8	25.8	3.8	41.7	30.2
Q4	121.0	42.4	4.9	45.5	2.4	2.8	23.1	25.6	3.5	39.0	29.7

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	EU institutions								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2012	Outstanding amounts (international investment position)														
Direct investment	1,491.5	395.5	-12.0	14.7	106.8	287.3	-1.2	107.0	80.2	-23.3	165.7	178.3	-243.2	-0.2	831.6
Abroad	6,125.7	1,724.5	33.4	173.5	1,181.7	335.9	0.1	217.3	101.6	78.8	629.1	1,434.9	627.7	0.1	1,311.5
Equity/reinvested earnings	4,562.5	1,281.2	26.8	104.2	889.3	260.9	0.0	169.9	83.3	56.5	476.9	1,016.9	512.3	0.1	965.5
Other capital	1,563.1	443.4	6.6	69.2	292.5	75.0	0.1	47.4	18.4	22.2	152.3	418.0	115.5	0.0	346.0
In the euro area	4,634.2	1,329.1	45.5	158.8	1,074.9	48.6	1.3	110.3	21.4	102.0	463.4	1,256.7	871.0	0.3	479.9
Equity/reinvested earnings	3,231.7	1,034.9	36.6	142.8	821.9	32.3	1.3	88.1	7.8	88.7	280.9	951.7	443.1	0.1	336.3
Other capital	1,402.5	294.2	8.9	16.0	253.0	16.2	0.0	22.2	13.6	13.3	182.5	304.9	427.9	0.2	143.7
Portfolio investment assets	5,254.8	1,679.6	99.5	227.4	1,046.3	118.6	187.7	102.0	61.2	215.5	131.4	1,638.6	433.5	33.2	959.8
Equity	1,952.0	394.6	17.2	48.8	314.2	14.2	0.1	39.6	57.2	106.1	117.1	621.7	237.0	0.9	377.6
Debt instruments	3,302.8	1,284.9	82.3	178.6	732.1	104.4	187.5	62.4	4.0	109.4	14.3	1,016.8	196.6	32.3	582.2
Bonds and notes	2,840.7	1,133.8	75.6	148.2	620.1	103.5	186.4	58.1	2.6	36.7	11.3	855.4	184.8	31.7	526.4
Money market instruments	462.1	151.1	6.6	30.4	112.0	0.9	1.2	4.3	1.3	72.7	3.0	161.4	11.8	0.6	55.8
Other investment	-218.9	-247.6	11.3	-26.9	-48.9	44.9	-228.0	1.9	-15.2	5.1	-33.9	58.1	49.0	-77.5	41.2
Assets	4,897.5	2,194.5	78.1	87.2	1,847.7	162.2	19.4	28.2	49.4	81.8	268.2	684.6	541.3	37.3	1,012.3
General government	168.0	65.5	1.0	4.6	43.4	1.6	14.9	1.8	3.1	0.9	1.5	11.0	3.3	30.7	50.3
MFIs	2,966.9	1,530.1	58.4	50.8	1,293.2	125.3	2.2	16.4	24.3	65.9	147.1	396.0	393.1	5.2	388.7
Other sectors	1,762.7	599.0	18.7	31.8	511.0	35.3	2.2	10.0	21.9	15.0	119.6	277.6	144.9	1.4	573.3
Liabilities	5,116.5	2,442.1	66.8	114.1	1,896.5	117.3	247.3	26.3	64.6	76.8	302.0	626.5	492.3	114.8	971.1
General government	231.6	110.5	0.3	0.9	26.3	0.2	82.8	0.1	0.0	0.1	1.1	29.6	1.2	83.7	5.2
MFIs	3,400.1	1,647.7	56.3	88.7	1,309.1	89.6	104.0	17.1	38.3	50.7	239.4	338.7	392.7	28.3	647.2
Other sectors	1,484.8	683.9	10.2	24.6	561.1	27.5	60.5	9.1	26.3	25.9	61.6	258.2	98.3	2.8	318.7
2013 Q1 to 2013 Q4	Cumulated transactions														
Direct investment	24.9	24.3	2.9	-14.5	36.9	-1.0	0.0	1.3	7.6	-2.7	21.4	-135.0	63.2	0.0	44.8
Abroad	324.2	16.5	4.7	-10.4	18.8	3.4	0.0	1.2	10.9	1.8	25.8	161.4	30.2	0.0	76.5
Equity/reinvested earnings	290.7	23.3	6.5	1.1	11.4	4.3	0.0	14.6	9.0	1.2	6.0	172.2	15.8	0.0	48.5
Other capital	33.4	-6.9	-1.9	-11.5	7.4	-0.9	0.0	-13.4	1.9	0.6	19.8	-10.9	14.3	0.0	28.0
In the euro area	299.2	-7.8	1.7	4.1	-18.1	4.5	0.0	-0.1	3.3	4.5	4.3	296.4	-33.0	0.0	31.7
Equity/reinvested earnings	288.8	-1.7	0.8	1.3	-5.6	1.8	0.0	3.6	4.0	5.2	7.0	265.7	-17.5	0.0	22.5
Other capital	10.5	-6.1	0.9	2.8	-12.5	2.7	0.0	-3.7	-0.7	-0.7	-2.7	30.7	-15.5	0.0	9.2
Portfolio investment assets	250.2	31.4	-5.4	7.3	6.0	4.3	19.3	7.9	6.6	38.8	8.7	72.4	6.8	1.2	76.3
Equity	163.4	35.7	1.2	4.5	29.6	0.5	0.0	1.2	4.6	36.0	6.5	61.1	6.8	0.0	11.5
Debt instruments	86.8	-4.3	-6.6	2.8	-23.6	3.8	19.3	6.7	1.9	2.9	2.2	11.3	0.0	1.2	64.8
Bonds and notes	78.9	13.1	-5.7	7.6	-11.4	2.2	20.4	5.3	0.5	-3.6	1.0	8.7	-9.3	1.1	61.9
Money market instruments	7.9	-17.4	-0.9	-4.8	-12.2	1.5	-1.1	1.3	1.4	6.5	1.2	2.6	9.3	0.1	2.9
Other investment	341.7	67.9	14.1	9.6	48.0	-5.1	1.4	-2.2	22.4	39.4	25.9	16.5	97.7	-9.2	83.4
Assets	-62.4	-231.0	1.8	3.8	-229.0	-8.6	1.0	-1.8	11.4	38.0	11.2	24.2	56.7	1.6	27.2
General government	-10.7	-1.3	-0.3	-1.5	0.0	-0.6	1.1	0.0	-0.1	-0.3	-0.1	-4.4	-0.7	0.2	-4.0
MFIs	-72.9	-220.8	-2.0	-0.4	-209.1	-8.9	-0.3	1.7	11.5	33.3	2.7	21.9	61.3	1.1	14.3
Other sectors	21.2	-8.9	4.2	5.7	-19.9	1.0	0.1	-3.5	0.0	5.0	8.5	6.8	-3.9	0.3	16.8
Liabilities	-404.0	-298.9	-12.2	-5.8	-277.1	-3.5	-0.4	0.4	-11.0	-1.3	-14.7	7.7	-40.9	10.9	-56.2
General government	-4.4	-4.1	0.2	0.3	-6.5	0.0	1.9	0.0	0.0	0.0	0.4	-8.5	-0.2	8.7	-0.6
MFIs	-400.4	-264.7	-12.4	-6.5	-236.0	-6.0	-3.7	0.0	-12.0	-0.3	-16.5	-2.2	-46.8	2.4	-60.5
Other sectors	0.8	-30.1	-0.1	0.5	-34.6	2.6	1.4	0.4	1.0	-1.1	1.4	18.4	6.0	-0.2	4.9

Source: ECB.

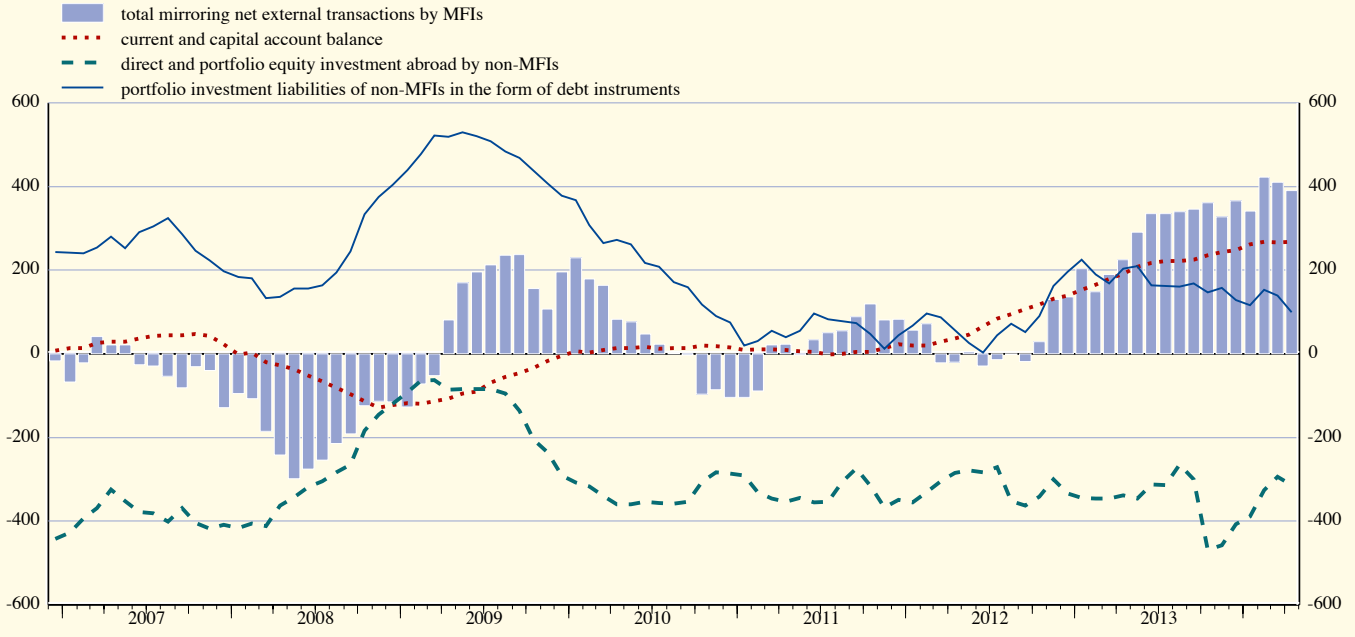
7.4 Monetary presentation of the balance of payments [1]

(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
2011	82.6	22.6	-479.1	387.4	55.7	-47.0	44.7	44.6	-149.3	180.7	-5.6	27.8
2012	136.4	139.9	-413.5	330.2	-55.0	-193.4	181.4	196.0	-81.2	1.4	5.2	25.5
2013	365.2	248.5	-316.6	290.0	-123.6	-121.3	258.9	128.5	-10.7	-3.3	18.1	-3.3
2013 Q1	27.7	30.8	-52.4	23.6	-50.1	-55.2	76.0	24.8	-34.8	63.7	8.3	-6.9
Q2	148.9	65.9	-67.6	90.5	-10.3	-22.8	84.7	27.3	1.6	-22.5	-1.9	3.8
Q3	53.8	56.3	-49.2	35.9	-29.5	-27.7	32.8	28.1	22.9	-23.0	7.6	-0.4
Q4	134.8	95.4	-147.4	140.0	-33.7	-15.6	65.4	48.4	-0.4	-21.5	4.1	0.2
2014 Q1	73.2	47.9	25.6	-20.7	-25.8	-36.4	47.3	35.4	-14.4	20.9	1.3	-7.9
2013 Apr.	9.0	17.6	-21.7	14.5	-18.4	-27.2	16.0	30.4	-19.6	20.3	-5.6	2.8
May	84.7	16.0	-13.0	56.4	-6.4	-10.1	30.6	30.9	-10.0	-5.0	-8.7	4.0
June	55.2	32.3	-32.8	19.6	14.5	14.5	38.1	-34.0	31.2	-37.7	12.4	-2.9
July	12.5	28.5	-7.5	12.7	-13.2	-12.7	-0.6	9.5	10.3	-12.3	-2.0	-0.4
Aug.	28.3	11.8	-28.0	28.0	2.2	-1.1	9.2	0.9	8.2	-4.6	6.7	-5.0
Sep.	13.0	16.1	-13.8	-4.8	-18.6	-13.9	24.1	17.7	4.4	-6.1	2.9	5.0
Oct.	21.6	29.2	-158.7	178.6	-13.7	-5.7	7.1	-1.8	-0.2	-5.9	3.8	-11.1
Nov.	33.8	30.7	-23.7	3.4	-3.9	-11.5	18.8	52.4	-29.3	-1.7	-1.4	-0.1
Dec.	79.5	35.4	35.0	-42.1	-16.1	1.5	39.6	-2.3	29.1	-13.8	1.8	11.3
2014 Jan.	9.2	8.0	-25.0	17.9	-8.1	-4.0	5.1	6.2	2.9	9.6	-0.1	-3.3
Feb.	50.3	16.5	51.2	-16.0	-15.7	-17.4	1.7	43.3	-16.4	4.8	2.7	-4.3
Mar.	13.6	23.5	-0.6	-22.6	-2.1	-15.0	40.5	-14.0	-1.0	6.6	-1.3	-0.3
Apr.	-11.0	19.9	-13.8	-3.9	-32.3	-35.2	17.6	-9.8	9.9	32.7	2.9	0.9
	12-month cumulated transactions											
2014 Apr.	390.7	267.9	-230.7	227.3	-113.1	-110.4	231.8	99.0	39.2	-33.7	19.6	-6.1

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)												
2012	7.6	1.8	1,880.6	934.2	386.5	516.8	1,522.8	1,794.1	1,152.0	243.4	373.0	1,092.8	360.8
2013	1.0	-3.1	1,896.0	932.3	384.7	532.1	1,536.8	1,737.2	1,097.4	235.9	373.5	1,075.6	336.7
2013 Q2	1.8	-3.1	474.8	232.4	97.3	132.2	384.7	433.9	275.6	59.0	92.0	267.7	84.7
Q3	0.2	-1.9	472.0	231.6	95.1	133.4	383.1	436.3	275.2	60.1	94.2	270.3	84.4
Q4	1.0	-2.4	473.9	231.6	96.2	133.8	386.4	430.2	268.0	57.9	95.5	270.6	80.6
2014 Q1	1.3	0.1	479.3	234.9	95.0	136.3	389.2	435.2	271.4	60.1	95.2	276.2	77.8
2013 Nov.	-1.9	-4.9	158.7	77.4	32.2	44.7	128.8	142.9	88.0	19.7	32.1	90.1	26.2
Dec.	3.8	1.1	156.8	76.1	31.6	44.2	128.2	142.1	88.3	18.8	31.7	89.5	26.4
2014 Jan.	1.2	-2.6	158.7	78.7	31.5	45.7	128.2	145.1	91.5	19.9	31.4	91.4	26.8
Feb.	3.4	0.3	160.7	79.2	31.8	45.7	131.4	145.5	90.2	20.2	32.0	92.9	25.2
Mar.	-0.6	2.8	160.0	77.1	31.8	44.9	129.6	144.6	89.7	20.0	31.8	92.0	25.7
Apr.	-1.5	-2.7	159.6	.	.	.	130.0	143.8	.	.	.	92.0	.
	Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)												
2012	3.5	-3.2	111.9	110.2	117.1	111.7	111.9	99.5	100.8	98.0	96.8	99.2	99.6
2013	1.2	-0.6	113.2	111.2	115.6	114.8	113.0	98.9	100.0	95.1	97.0	98.4	98.2
2013 Q2	1.6	-1.2	113.1	110.6	116.3	114.1	112.9	98.9	100.9	93.6	95.5	97.4	101.4
Q3	1.7	1.8	113.2	111.2	114.2	115.3	113.0	99.4	100.2	97.2	97.8	99.1	98.1
Q4	1.7	1.2	113.3	111.3	115.4	114.5	113.3	99.4	99.6	94.9	99.0	99.6	95.3
2014 Q1	1.8	1.7	114.8	113.2	114.2	116.6	114.0	99.6	99.8	97.0	98.5	101.3	93.2
2013 Oct.	2.3	0.9	113.7	112.7	117.3	115.6	114.1	100.3	101.7	94.4	98.8	100.3	98.0
Nov.	-1.4	-1.4	114.0	111.6	116.2	114.8	113.4	99.3	98.3	98.1	99.9	99.8	94.7
Dec.	4.5	4.6	112.2	109.5	112.8	113.2	112.4	98.4	98.7	92.2	98.3	98.7	93.1
2014 Jan.	1.4	-1.2	113.7	113.6	113.4	116.8	112.4	99.8	100.8	97.9	97.3	100.8	96.4
Feb.	3.9	1.7	115.6	114.3	115.0	117.8	115.7	99.7	99.4	97.3	99.1	102.2	89.8
Mar.	0.3	4.8	115.0	111.6	114.3	115.3	114.0	99.4	99.3	95.9	99.1	101.0	93.3

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	Manufacturing	Total (index: 2010 = 100)	Total	Intermediate goods	Capital goods	Consumer goods	Energy	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
2012	106.1	2.2	0.9	1.8	2.3	9.4	2.2	111.2	3.4	0.2	1.6	3.2	8.0	2.1
2013	105.0	-1.0	-1.5	-0.2	0.8	-7.9	-0.9	108.2	-2.7	-2.4	-1.9	0.0	-5.5	-1.7
2013 Q3	105.0	-1.4	-1.8	-0.6	0.5	-9.3	-1.3	108.1	-3.3	-3.2	-2.6	-0.8	-5.3	-2.5
Q4	104.3	-1.4	-2.1	-0.4	0.4	-8.2	-1.3	106.8	-3.2	-3.1	-2.1	-0.8	-5.6	-2.3
2014 Q1	104.1	-1.6	-1.8	-0.3	0.0	-9.2	-1.3	106.0	-3.6	-3.0	-2.3	-0.4	-7.3	-2.3
2013 Nov.	104.3	-1.4	-2.1	-0.4	0.3	-8.3	-1.3	107.0	-3.2	-3.3	-1.9	-0.8	-5.9	-2.3
Dec.	104.2	-1.2	-2.0	-0.4	0.4	-4.6	-1.0	106.7	-2.7	-3.1	-1.8	-0.8	-4.2	-2.0
2014 Jan.	104.2	-1.4	-1.6	-0.2	0.0	-7.9	-1.1	106.4	-3.0	-2.7	-1.9	-0.3	-6.0	-2.0
Feb.	104.2	-1.5	-1.6	0.0	0.2	-11.0	-1.2	106.3	-3.4	-2.6	-1.8	-0.1	-7.7	-1.9
Mar.	103.9	-1.8	-2.2	-0.5	-0.2	-8.8	-1.5	105.3	-4.2	-3.6	-3.1	-0.9	-8.2	-2.9
Apr.	104.0	-1.3	-1.8	-0.6	-0.2	-3.4	-1.1	105.1	-3.1	-3.3	-3.4	-0.8	-4.1	-2.5

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						China	Japan			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Exports (f.o.b.)														
2012	1,880.6	34.2	59.5	230.0	249.3	92.2	116.4	59.5	223.7	440.6	120.6	44.6	126.5	97.4	151.3
2013	1,896.0	35.2	59.4	239.3	254.8	88.7	110.7	60.3	221.4	443.8	122.0	43.9	130.2	97.6	154.4
2012 Q4	469.3	8.6	14.5	58.1	61.7	23.2	28.5	15.2	53.8	110.9	29.0	11.2	32.5	24.7	37.7
2013 Q1	475.2	8.8	14.6	58.1	62.8	23.6	28.0	15.5	55.4	110.8	29.5	11.0	34.4	24.7	38.5
Q2	474.8	8.8	14.7	59.2	62.7	22.8	27.4	15.6	55.1	110.4	30.0	10.7	33.1	24.9	40.1
Q3	472.0	8.9	15.0	60.0	64.2	21.6	27.8	14.7	55.4	110.2	31.2	11.1	31.7	24.6	38.0
Q4	473.9	8.8	15.1	61.9	65.2	20.7	27.5	14.6	55.5	112.4	31.3	11.0	31.0	23.5	37.7
2014 Q1	479.3	8.9	15.0	63.2	67.7	20.4	26.8	14.6	57.9	112.0	32.0	11.1	33.1	23.4	36.2
2013 Nov.	158.7	3.0	5.1	20.9	21.8	6.9	9.2	5.1	18.7	37.7	10.6	3.7	10.3	7.7	12.4
Dec.	156.8	2.9	4.9	20.4	21.4	6.7	8.8	4.7	18.2	37.4	10.3	3.7	10.5	7.6	13.3
2014 Jan.	158.7	3.1	5.1	20.8	22.8	7.0	9.3	5.0	18.7	37.1	10.7	3.9	10.6	7.8	11.3
Feb.	160.7	3.0	5.0	21.7	22.6	6.8	8.9	4.9	19.5	37.7	10.8	3.7	11.6	8.1	10.8
Mar.	160.0	2.9	4.9	20.7	22.2	6.6	8.6	4.8	19.7	37.2	10.4	3.5	10.8	7.6	14.0
Apr.	159.6	.	.	.	.	6.8	9.1	4.7	19.4	37.9	10.6	3.6	10.6	7.5	.
	Percentage share of total exports														
2013	100.0	1.9	3.1	12.6	13.4	4.7	5.8	3.2	11.7	23.4	6.4	2.3	6.9	5.1	8.1
	Imports (c.i.f.)														
2012	1,794.1	29.0	53.1	167.4	232.7	144.8	82.3	34.5	151.2	540.6	214.3	49.2	157.5	89.8	111.2
2013	1,737.2	30.0	53.7	164.1	238.9	144.8	81.8	35.8	149.1	509.7	204.3	43.6	141.1	80.3	108.0
2012 Q4	440.8	7.2	12.9	41.6	58.0	36.6	20.2	8.7	35.9	130.6	51.4	11.4	40.3	21.6	27.1
2013 Q1	436.8	7.6	13.3	41.7	58.6	37.4	20.0	8.9	35.5	126.8	52.0	11.1	37.7	20.5	28.8
Q2	433.9	7.4	13.5	41.1	58.8	35.6	20.6	8.8	37.3	127.9	50.5	10.9	36.3	20.0	26.6
Q3	436.3	7.8	13.7	40.9	60.5	36.5	20.7	8.9	38.0	127.9	50.8	10.7	34.6	20.1	26.7
Q4	430.2	7.3	13.2	40.4	61.0	35.3	20.4	9.1	38.3	127.0	51.0	10.9	32.5	19.7	25.9
2014 Q1	435.2	7.5	13.4	40.5	62.3	35.1	21.1	9.2	37.0	129.5	53.3	10.6	32.5	19.4	27.7
2013 Nov.	142.9	2.4	4.5	13.5	20.5	11.4	6.8	3.1	12.9	41.8	16.9	3.6	10.5	6.4	9.2
Dec.	142.1	2.3	4.3	13.6	20.1	12.1	6.7	3.1	12.3	42.2	17.5	3.7	10.6	6.7	8.1
2014 Jan.	145.1	2.6	4.6	13.3	20.8	11.9	6.7	3.1	12.4	43.0	17.4	3.6	11.1	6.5	9.1
Feb.	145.5	2.5	4.4	13.5	20.9	11.6	7.1	3.0	12.5	42.7	17.8	3.5	10.7	6.3	10.2
Mar.	144.6	2.4	4.5	13.7	20.6	11.6	7.2	3.1	12.2	43.9	18.2	3.5	10.7	6.5	8.4
Apr.	143.8	.	.	.	.	11.8	7.1	3.1	12.3	41.5	17.2	3.4	10.4	6.6	.
	Percentage share of total imports														
2013	100.0	1.7	3.1	9.4	13.8	8.3	4.7	2.1	8.6	29.3	11.8	2.5	8.1	4.6	6.2
	Balance														
2012	86.5	5.2	6.4	62.6	16.7	-52.7	34.1	25.0	72.5	-100.0	-93.6	-4.6	-31.1	7.6	40.1
2013	158.8	5.2	5.8	75.2	15.9	-56.1	29.0	24.5	72.4	-65.9	-82.2	0.3	-10.9	17.3	46.3
2012 Q4	28.4	1.4	1.6	16.5	3.6	-13.5	8.3	6.4	17.9	-19.7	-22.4	-0.2	-7.8	3.1	10.6
2013 Q1	38.4	1.2	1.3	16.4	4.2	-13.8	8.0	6.6	19.9	-16.1	-22.4	0.0	-3.3	4.2	9.8
Q2	40.9	1.4	1.2	18.1	3.9	-12.8	6.9	6.8	17.8	-17.5	-20.5	-0.2	-3.2	4.8	13.4
Q3	35.7	1.1	1.3	19.2	3.7	-14.9	7.1	5.7	17.4	-17.8	-19.6	0.5	-2.9	4.5	11.3
Q4	43.7	1.5	1.9	21.5	4.2	-14.6	7.0	5.4	17.2	-14.6	-19.7	0.1	-1.5	3.8	11.8
2014 Q1	44.1	1.4	1.6	22.7	5.3	-14.7	5.7	5.5	20.9	-17.5	-21.4	0.4	0.6	4.1	8.5
2013 Nov.	15.9	0.6	0.6	7.5	1.3	-4.5	2.4	2.0	5.8	-4.1	-6.3	0.1	-0.2	1.2	3.2
Dec.	14.7	0.5	0.6	6.7	1.3	-5.4	2.1	1.6	5.9	-4.8	-7.2	0.0	-0.1	1.0	5.2
2014 Jan.	13.6	0.5	0.5	7.5	2.0	-4.9	2.6	1.9	6.4	-5.9	-6.6	0.3	-0.5	1.2	2.2
Feb.	15.1	0.4	0.6	8.2	1.7	-4.8	1.8	1.9	7.0	-5.0	-7.0	0.2	0.9	1.8	0.6
Mar.	15.4	0.5	0.5	7.0	1.6	-5.0	1.4	1.7	7.5	-6.7	-7.8	-0.1	0.2	1.0	5.7
Apr.	15.8	.	.	.	.	-4.9	1.9	1.6	7.1	-3.6	-6.6	0.2	0.2	0.9	.

Source: Eurostat.

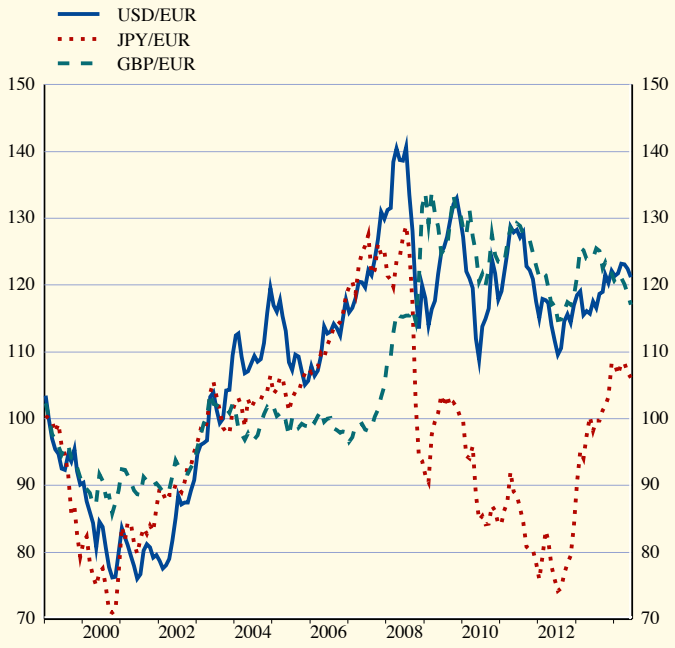
8 EXCHANGE RATES

8.1 Effective exchange rates [1]
(period averages; index: 1999 Q1=100)

	EER-20						EER-39	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM [2]	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2011	103.4	100.7	97.5	95.0	106.2	96.8	112.2	97.7
2012	97.9	95.6	93.2	89.8	101.1	91.6	107.1	92.9
2013	101.7	98.9	96.7	93.4	103.6	93.8	112.0	96.2
2013 Q2	100.8	98.3	96.0	93.1	104.3	94.5	110.6	95.0
Q3	101.9	99.2	96.9	93.5	104.9	95.2	112.9	96.8
Q4	103.1	100.0	97.8	94.3	100.1	91.0	114.7	97.8
2014 Q1	103.9	100.7	98.2	95.5	102.4	93.3	116.6	99.1
Q2	103.8	100.1	98.2	.	.	.	116.0	97.9
2013 June	101.6	98.9	96.5	-	-	-	112.0	96.1
July	101.5	98.9	96.5	-	-	-	112.0	96.2
Aug.	102.2	99.5	97.1	-	-	-	113.4	97.3
Sep.	102.0	99.1	96.9	-	-	-	113.3	97.0
Oct.	102.8	99.7	97.6	-	-	-	114.2	97.4
Nov.	102.6	99.5	97.4	-	-	-	114.2	97.3
Dec.	103.9	100.7	98.5	-	-	-	115.8	98.6
2014 Jan.	103.4	100.3	97.8	-	-	-	115.9	98.6
Feb.	103.6	100.4	97.9	-	-	-	116.3	98.9
Mar.	104.6	101.3	98.9	-	-	-	117.5	99.6
Apr.	104.5	101.0	98.8	-	-	-	117.0	99.0
May	103.8	100.1	98.3	-	-	-	116.1	97.8
June	103.0	99.1	97.6	-	-	-	115.1	96.8
	Percentage change versus previous month							
2014 June	-0.8	-1.0	-0.8	-	-	-	-0.8	-1.0
	Percentage change versus previous year							
2014 June	1.4	0.2	1.1	-	-	-	2.8	0.7

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-19 trading partner group.

8.2 Bilateral exchange rates

(period averages; units of national currency per euro)

	Bulgarian lev	Czech koruna	Danish krone	Croatian kuna	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
2011	1.9558	24.590	7.4506	7.4390	3.4528	279.37	4.1206	4.2391	9.0298	0.86788	2.3378
2012	1.9558	25.149	7.4437	7.5217	3.4528	289.25	4.1847	4.4593	8.7041	0.81087	2.3135
2013	1.9558	25.980	7.4579	7.5786	3.4528	296.87	4.1975	4.4190	8.6515	0.84926	2.5335
2013 Q4	1.9558	26.658	7.4593	7.6290	3.4528	297.43	4.1853	4.4506	8.8575	0.84074	2.7537
2014 Q1	1.9558	27.442	7.4625	7.6498	3.4528	307.93	4.1843	4.5023	8.8569	0.82787	3.0372
Q2	1.9558	27.446	7.4628	7.5992	3.4528	305.91	4.1665	4.4256	9.0517	0.81471	2.8972
2013 Dec.	1.9558	27.521	7.4602	7.6365	3.4528	300.24	4.1760	4.4635	8.9597	0.83639	2.8276
2014 Jan.	1.9558	27.485	7.4614	7.6353	3.4528	302.48	4.1799	4.5205	8.8339	0.82674	3.0297
Feb.	1.9558	27.444	7.4622	7.6574	3.4528	310.20	4.1741	4.4918	8.8721	0.82510	3.0184
Mar.	1.9558	27.395	7.4638	7.6576	3.4528	311.49	4.1987	4.4933	8.8666	0.83170	3.0629
Apr.	1.9558	27.450	7.4656	7.6267	3.4528	307.37	4.1853	4.4620	9.0329	0.82520	2.9393
May	1.9558	27.437	7.4641	7.5952	3.4528	304.58	4.1800	4.4237	9.0298	0.81535	2.8736
June	1.9558	27.450	7.4588	7.5770	3.4528	305.87	4.1352	4.3930	9.0914	0.80409	2.8808
	Percentage change versus previous month										
2014 June	0.0	0.0	-0.1	-0.2	0.0	0.4	-1.1	-0.7	0.7	-1.4	0.3
	Percentage change versus previous year										
2014 June	0.0	6.6	0.0	1.2	0.0	3.4	-3.5	-1.9	4.7	-5.6	15.1

	Australian dollar	Brazilian real	Canadian dollar	Chinese yuan renminbi	Hong Kong dollar	Indian rupee	Indonesian rupiah	Israeli shekel	Japanese yen	Malaysian ringgit
	12	13	14	15	16	17	18	19	20	21
2011	1.3484	2.3265	1.3761	8.9960	10.8362	64.8859	12,206.51	4.9775	110.96	4.2558
2012	1.2407	2.5084	1.2842	8.1052	9.9663	68.5973	12,045.73	4.9536	102.49	3.9672
2013	1.3777	2.8687	1.3684	8.1646	10.3016	77.9300	13,857.50	4.7948	129.66	4.1855
2013 Q4	1.4662	3.0931	1.4275	8.2903	10.5522	84.4048	15,682.97	4.7994	136.48	4.3633
2014 Q1	1.5275	3.2400	1.5107	8.3576	10.6287	84.5794	16,179.21	4.7892	140.80	4.5184
Q2	1.4699	3.0583	1.4950	8.5438	10.6297	81.9776	15,935.34	4.7517	140.00	4.4352
2013 Dec.	1.5243	3.2133	1.4580	8.3248	10.6254	84.7631	16,455.73	4.8019	141.68	4.4517
2014 Jan.	1.5377	3.2437	1.4884	8.2368	10.5586	84.5099	16,471.94	4.7569	141.47	4.5005
Feb.	1.5222	3.2581	1.5094	8.3062	10.6012	84.9503	16,270.18	4.8043	139.35	4.5194
Mar.	1.5217	3.2187	1.5352	8.5332	10.7283	84.2990	15,785.89	4.8087	141.48	4.5361
Apr.	1.4831	3.0864	1.5181	8.5984	10.7107	83.3624	15,801.66	4.8010	141.62	4.4989
May	1.4755	3.0512	1.4951	8.5658	10.6456	81.4318	15,830.12	4.7600	139.74	4.4337
June	1.4517	3.0388	1.4728	8.4698	10.5365	81.2046	16,167.87	4.6966	138.72	4.3760
	Percentage change versus previous month									
2014 June	-1.6	-0.4	-1.5	-1.1	-1.0	-0.3	2.1	-1.3	-0.7	-1.3
	Percentage change versus previous year									
2014 June	3.9	6.2	8.3	4.7	2.9	5.4	24.1	-1.9	8.0	5.5

	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
	22	23	24	25	26	27	28	29	30	31	32
2011	17.2877	1.7600	7.7934	60.260	40.8846	1.7489	10.0970	1,541.23	1.2326	42.429	1.3920
2012	16.9029	1.5867	7.4751	54.246	39.9262	1.6055	10.5511	1,447.69	1.2053	39.928	1.2848
2013	16.9641	1.6206	7.8067	56.428	42.3370	1.6619	12.8330	1,453.91	1.2311	40.830	1.3281
2013 Q4	17.7331	1.6439	8.2375	59.354	44.2920	1.7006	13.8224	1,445.53	1.2294	43.151	1.3610
2014 Q1	18.1299	1.6371	8.3471	61.468	48.0425	1.7379	14.8866	1,465.34	1.2237	44.722	1.3696
Q2	17.8171	1.5923	8.2049	60.464	47.9415	1.7178	14.4616	1,410.80	1.2192	44.510	1.3711
2013 Dec.	17.8278	1.6659	8.4053	60.552	45.0628	1.7244	14.2234	1,446.99	1.2245	44.323	1.3704
2014 Jan.	17.9964	1.6450	8.3927	61.263	46.0304	1.7327	14.8242	1,453.94	1.2317	44.822	1.3610
Feb.	18.1561	1.6466	8.3562	61.238	48.2554	1.7295	14.9820	1,462.51	1.2212	44.568	1.3659
Mar.	18.2447	1.6199	8.2906	61.901	49.9477	1.7513	14.8613	1,479.99	1.2177	44.765	1.3823
Apr.	18.0485	1.6049	8.2506	61.646	49.2978	1.7345	14.5815	1,441.28	1.2189	44.657	1.3813
May	17.7620	1.5957	8.1513	60.258	47.8403	1.7189	14.2995	1,407.13	1.2204	44.686	1.3732
June	17.6516	1.5769	8.2149	59.543	46.7509	1.7008	14.5094	1,385.45	1.2181	44.195	1.3592
	Percentage change versus previous month										
2014 June	-0.6	-1.2	0.8	-1.2	-2.3	-1.1	1.5	-1.5	-0.2	-1.1	-1.0
	Percentage change versus previous year										
2014 June	3.4	-5.5	6.1	5.1	9.6	2.4	9.8	-7.5	-1.1	8.7	3.1

Source: ECB.

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	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10
	HICP									
2012	2.4	3.5	2.4	3.4	3.2	5.7	3.7	3.4	0.9	2.8
2013	0.4	1.4	0.5	2.3	1.2	1.7	0.8	3.2	0.4	2.6
2013 Q4	-1.0	1.1	0.4	0.6	0.5	0.7	0.6	1.3	0.3	2.1
2014 Q1	-1.8	0.3	0.4	0.1	0.3	0.4	0.6	1.3	0.0	1.8
2014 Mar.	-2.0	0.3	0.2	-0.1	0.4	0.2	0.6	1.3	-0.4	1.6
Apr.	-1.3	0.2	0.5	-0.1	0.3	-0.2	0.3	1.6	0.3	1.8
May	-1.8	0.5	0.3	0.4	0.1	0.0	0.3	1.3	0.1	1.5
	General government deficit (-)/surplus (+) as a percentage of GDP									
2011	-2.0	-3.2	-1.9	-7.8	-5.5	4.3	-5.1	-5.5	0.2	-7.6
2012	-0.8	-4.2	-3.8	-5.0	-3.2	-2.1	-3.9	-3.0	-0.6	-6.1
2013	-1.5	1.5	-0.8	-4.9	-2.2	-2.2	-4.3	-2.3	-1.1	-5.8
	General government gross debt as a percentage of GDP									
2011	16.3	41.4	46.4	52.0	38.3	82.1	56.2	34.7	38.6	84.3
2012	18.4	46.2	45.4	55.9	40.5	79.8	55.6	38.0	38.3	89.1
2013	18.9	46.0	44.5	67.1	39.4	79.2	57.0	38.4	40.6	90.6
	Long-term government bond yield as a percentage per annum; period average									
2013 Dec.	3.43	2.20	1.89	5.10	3.69	5.78	4.42	5.29	2.39	2.50
2014 Jan.	3.56	2.43	1.86	5.11	3.42	5.60	4.42	5.22	2.37	2.48
Feb.	3.58	2.28	1.67	4.78	3.33	6.03	4.47	5.35	2.23	2.37
Mar.	3.54	2.20	1.61	4.51	3.33	5.83	4.25	5.31	2.16	2.34
Apr.	3.44	2.00	1.57	4.41	3.26	5.56	4.10	5.15	2.06	2.30
May	3.18	1.73	1.47	4.31	2.98	5.01	3.80	4.72	1.88	2.27
	3-month interest rate as a percentage per annum; period average									
2013 Dec.	0.97	0.38	0.26	1.01	0.40	3.00	2.67	2.33	1.01	0.52
2014 Jan.	0.96	0.37	0.28	0.95	0.41	2.99	2.70	1.88	0.95	0.52
Feb.	0.89	0.37	0.27	0.88	0.41	2.99	2.71	3.29	0.94	0.52
Mar.	0.83	0.37	0.29	0.86	0.41	3.24	2.71	2.83	0.93	0.52
Apr.	0.83	0.37	0.31	0.83	0.41	2.94	2.72	2.74	0.91	0.53
May	0.83	0.37	0.35	0.87	0.41	2.55	2.72	2.62	0.92	0.53
	Real GDP									
2012	0.6	-1.0	-0.4	-2.2	3.7	-1.7	2.0	0.5	0.9	0.3
2013	0.9	-0.9	0.4	-0.9	3.3	1.1	1.6	3.5	1.6	1.7
2013 Q3	0.9	-1.0	0.7	-0.4	2.4	1.8	2.0	4.2	0.6	1.8
Q4	1.2	1.1	0.7	-0.6	3.4	2.9	2.5	5.1	3.0	2.7
2014 Q1	1.2	2.5	1.5	-0.6	3.0	3.2	3.5	4.0	1.8	3.1
	Current and capital account balance as a percentage of GDP									
2012	0.5	0.0	6.0	0.2	2.0	3.5	-1.5	-3.0	5.8	-3.6
2013	3.1	0.5	7.4	1.3	3.7	6.8	1.0	1.2	6.2	-4.1
2013 Q3	11.5	1.2	8.7	25.1	3.0	7.3	0.2	1.2	6.8	-6.1
Q4	-2.7	1.1	8.8	-6.7	3.8	8.5	1.1	0.5	5.2	-4.9
2014 Q1	1.6	10.0	4.1	-16.0	2.6	7.0	0.8	5.2	6.8	.
	Gross external debt as a percentage of GDP									
2012	94.6	62.0	181.8	102.7	75.4	129.6	71.0	75.3	191.2	390.6
2013	93.5	71.0	176.8	105.3	67.1	120.3	70.2	68.6	196.9	354.4
2013 Q3	93.9	64.6	174.4	103.0	69.5	122.9	72.8	71.9	197.4	363.4
Q4	93.5	71.0	176.8	105.3	67.1	120.3	70.2	68.6	196.9	354.4
2014 Q1	95.2	70.1	172.1	107.5	70.6	123.1	69.4	65.4	202.8	.
	Unit labour costs									
2012	4.4	3.3	1.5	-0.2	1.9	2.5	1.5	4.5	2.9	2.6
2013	5.2	-0.1	1.1	1.4	3.8	3.9	0.1	2.5	0.8	1.3
2013 Q3	3.8	1.4	0.9	0.1	4.9	3.5	0.3	1.4	1.4	2.0
Q4	1.9	.	0.8	1.8	2.7	3.3	-3.8	0.9	-0.8	.
2014 Q1	1.4	.	0.2	-5.5	4.5	3.0	.	1.3	1.1	.
	Standardised unemployment rate as a percentage of labour force (s.a.)									
2012	12.3	7.0	7.5	15.9	13.4	10.9	10.1	7.1	8.0	7.9
2013	12.9	7.0	7.0	17.2	11.8	10.2	10.3	7.3	8.0	7.5
2013 Q4	12.9	6.7	6.8	17.4	11.2	9.2	10.0	7.3	8.0	7.1
2014 Q1	12.3	6.6	6.8	17.2	11.6	8.0	9.9	7.2	8.1	6.7
2014 Mar.	12.1	6.6	6.5	17.1	11.7	7.9	9.8	7.2	8.0	6.6
Apr.	11.9	6.4	6.5	16.6	11.2	7.9	9.7	7.1	8.1	.
May	11.9	6.3	6.5	16.3	11.0	.	9.6	7.3	7.8	.

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

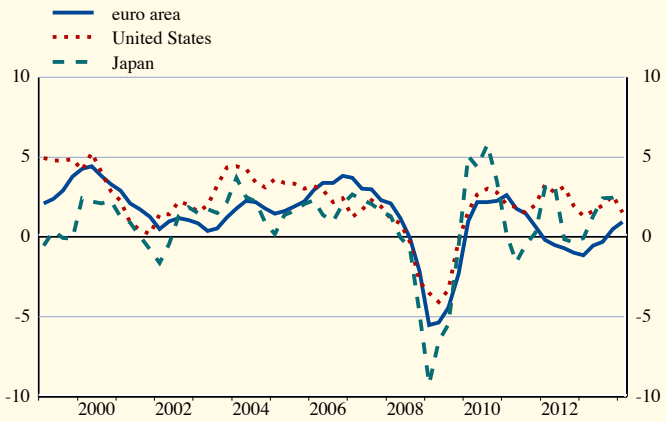
9.2 Economic and financial developments in the United States and Japan

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs [1]	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force [2] (s.a.)	Broad money [3]	3-month interbank deposit rate [4]	10-year zero coupon government bond yield; [4] end of period	Exchange rate [5] as national currency per euro	Government deficit (-)/ surplus (+) as a % of GDP	Govern-ment debt [6] as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
	United States										
2010	1.6	-1.2	2.5	6.6	9.6	2.5	0.34	3.57	1.3257	-12.2	79.2
2011	3.2	2.0	1.8	3.6	8.9	7.3	0.34	2.10	1.3920	-10.7	83.1
2012	2.1	1.1	2.8	4.4	8.1	8.6	0.43	1.88	1.2848	-9.3	86.5
2013	1.5	1.1	1.9	2.9	7.4	6.8	0.27	3.27	1.3281	-6.4	88.2
2013 Q2	1.4	2.0	1.6	2.7	7.5	7.1	0.28	2.82	1.3062	-5.7	87.2
Q3	1.6	1.9	2.0	2.7	7.2	6.6	0.26	2.91	1.3242	-7.0	86.9
Q4	1.2	-1.1	2.6	3.2	7.0	6.1	0.24	3.27	1.3610	-5.7	88.2
2014 Q1	1.4	1.2	1.5	2.5	6.7	6.0	0.24	2.97	1.3696	-6.1	.
Q2	.	.	.	.	.	.	0.23	2.74	1.3711	.	.
2014 Feb.	1.1	-	-	2.6	6.7	6.4	0.24	2.90	1.3659	-	-
Mar.	1.5	-	-	3.3	6.7	6.0	0.23	2.97	1.3823	-	-
Apr.	2.0	-	-	3.4	6.3	6.2	0.23	2.87	1.3813	-	-
May	2.1	-	-	3.9	6.3	6.6	0.23	2.69	1.3732	-	-
June	.	-	-	.	.	.	0.23	2.74	1.3592	-	-
	Japan										
2010	-0.7	-4.8	4.7	15.6	5.1	2.8	0.23	1.18	116.24	-8.3	186.7
2011	-0.3	0.8	-0.4	-2.8	4.6	2.7	0.19	1.00	110.96	-8.8	202.9
2012	0.0	-1.4	1.4	0.6	4.3	2.5	0.19	0.84	102.49	-8.7	211.0
2013	0.4	-0.8	1.5	-0.8	4.0	3.6	0.15	0.95	129.66	.	.
2013 Q2	-0.3	-0.6	1.3	-3.1	4.0	3.5	0.16	1.02	129.07	.	.
Q3	0.9	-1.9	2.4	2.2	4.0	3.8	0.15	0.88	131.02	.	.
Q4	1.4	-1.0	2.4	5.9	3.9	4.3	0.14	0.95	136.48	.	.
2014 Q1	1.5	.	2.8	8.3	3.6	3.9	0.14	0.84	140.80	.	.
Q2	.	.	.	.	.	.	0.13	0.72	140.00	.	.
2014 Feb.	1.5	-	-	7.1	3.6	4.0	0.14	0.81	139.35	-	-
Mar.	1.6	-	-	7.4	3.6	3.6	0.14	0.84	141.48	-	-
Apr.	3.4	-	-	3.8	3.6	3.5	0.14	0.81	141.62	-	-
May	3.7	-	-	0.8	3.5	3.3	0.14	0.75	139.74	-	-
June	.	-	-	.	.	.	0.13	0.72	138.72	-	-

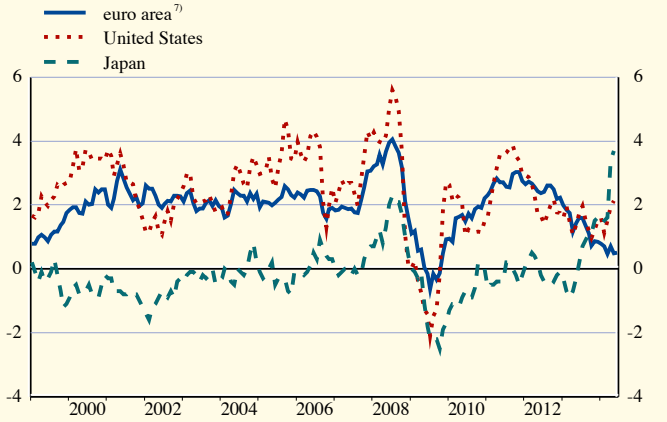
C41 Real gross domestic product

(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) HICP 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:

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

As a base, the index is set equal to 100 in December 2008. The growth rate a_t for month t, corresponding to the change in the 12 months ending in month t, can be calculated using either of the following two formulae:

$$l) \quad a_t = \left[\prod_{i=0}^{11}\left(1 + {N_{t-i}^M}/{L_{t-1-i}}\right) - 1\right] \times 100$$

$$m) \quad a_t = \left({I_t}/{I_{t-12}} - 1\right) \times 100$$

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:

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

where I_t is the index of notional stocks as at month t. Likewise, for the year ending in month t, the average growth rate is calculated as:

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

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values, and the calculations are based on financial transactions, which exclude reclassifications, revaluations and any other changes that do not arise from transactions. Exchange rate variations are not included, as all quoted shares covered are denominated in euro.

SEASONAL ADJUSTMENT OF SECURITIES ISSUES STATISTICS [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) $$a_t = \left[\prod_{i=0}^{5}\left(1 + {}^{N^M_{t-i}}\!/_{L_{t-1-i}}\right) - 1\right] \times 100$$

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 2 July 2014.

Unless otherwise indicated, all data series relate to the group of 18 countries that are members of the euro area (the Euro 18) for the whole time series. For interest rates, monetary statistics, the HICP and reserve assets (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), euro area statistical series take into account the changing composition of the euro area.

The composition of the euro area has changed a number of times over the years. When the euro was introduced in 1999, the euro area comprised the following 11 countries (the Euro 11): Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Greece then joined in 2001, forming the Euro 12. Slovenia joined in 2007, forming the Euro 13; Cyprus and Malta joined in 2008, forming the Euro 15; Slovakia joined in 2009, forming the Euro 16; and Estonia joined in 2011, forming the Euro 17. Latvia joined in 2014, bringing the number of euro area countries to 18. From October 2012, the euro area statistics also include the European Stability Mechanism, an international organisation resident in the euro area for statistical purposes.

EURO AREA SERIES WITH A FIXED COMPOSITION

Aggregated statistical series for fixed compositions of the euro area relate to a given fixed composition for the whole time series, regardless of the composition at the time to which the statistics relate. For example, aggregated series are calculated for the Euro 18 for all years, despite the fact that the euro area has only had this composition since 1 January 2014. Unless otherwise indicated, the ECB's Monthly Bulletin provides statistical series for the current composition.

EURO AREA SERIES WITH A CHANGING COMPOSITION

Aggregated statistical series with a changing composition take into account the composition of the euro area at the time to which the statistics relate. For example, euro area statistical series with a changing composition aggregate the data of the Euro 11 for the period up to the end of 2000, the Euro 12 for the period from 2001 to the end of 2006, and so on. With this approach, each individual statistical series covers all of the various compositions of the euro area.

For the HICP, as well as statistics based on the balance sheet of the MFI sector ("monetary statistics"), rates of change are compiled from chain-linked indices, with the new composition introduced by the linking factor at the point of enlargement. Thus, if a country joins the euro

area in January of a given year, the factors contributing to the chain-linked indices relate to the previous composition of the euro area up to and including December of the previous year, and the enlarged composition of the euro area thereafter. For further details on monetary statistics, refer to the "Manual on MFI balance sheet statistics", available in the "Statistics" section of the ECB's website.

Given that the composition of the European currency unit (ECU) does not coincide with the former currencies of the countries that have adopted the single currency, pre-1999 amounts originally expressed in the participating currencies and converted into ECU at current ECU exchange rates are affected by movements in the currencies of EU Member States that have not adopted the euro. To avoid this effect on the monetary statistics, pre-1999 data [1] are expressed in units converted from national currencies at the irrevocable euro exchange rates established on 31 December 1998. Unless otherwise indicated, price and cost statistics before 1999 are based on data expressed in national currency terms.

Methods of aggregation and/or consolidation (including cross-country consolidation) have been used where appropriate.

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

The group "Other EU Member States" comprises Bulgaria, the Czech Republic, Denmark, Croatia, Lithuania, Hungary, Poland, Romania, Sweden and the United Kingdom.

In most cases, the terminology used within the tables follows international standards, such as those contained in the European System of Accounts 1995 and the IMF Balance of Payments Manual. Transactions refer to voluntary exchanges (measured directly or derived), while flows also encompass changes in outstanding amounts owing to price and exchange rate changes, write-offs and other changes.

In the tables, the wording "up to (x) years" means "up to and including (x) years".

OVERVIEW

Developments in key indicators for the euro area are summarised in an overview table.

MONETARY POLICY STATISTICS

Section 1.4 shows statistics on minimum reserve and liquidity factors. Maintenance periods for minimum reserve requirements start every month on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting for which the monthly assessment of the monetary policy stance is scheduled. They end on the day preceding the corresponding settlement day in the following month. Annual/quarterly observations refer to averages for the last reserve maintenance period of the year/quarter.

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 statistical reporting requirements laid down in the ECB Guideline of 31 July 2009 on government finance statistics (ECB/2009/20)[13]. Harmonised data provided by the NCBs are regularly updated. The annual deficit and debt data for the euro area aggregates may therefore differ from those published by the European Commission. The quarterly euro area aggregates in Sections 6.4 and 6.5 are compiled by the ECB on the basis of Eurostat and national data.

Section 6.1 presents annual figures on general government revenue and expenditure on the basis of definitions laid down in Commission Regulation (EC) No 1500/2000 of 10 July 2000[14] amending the ESA 95. Section 6.2 shows details of general government gross consolidated debt at nominal value in line with the Treaty provisions on the excessive deficit procedure. Sections 6.1 and 6.2 include government deficit/surplus and debt data for the individual euro area countries as reported to the Commission under Council Regulation (EU) No 679/2010, owing to their importance within the framework of the Stability and Growth Pact. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit – the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents non-seasonally adjusted quarterly figures on general government revenue and expenditure on the basis of definitions laid down in Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002 on quarterly non-financial accounts for general government[15]. Section 6.5 presents quarterly figures on gross consolidated government debt, the deficit-debt adjustment and the government borrowing requirement. These figures are compiled using data provided by the Member States under Regulation (EC) No 501/2004 and Regulation (EC) No 222/2004 and data provided by the NCBs.

EXTERNAL TRANSACTIONS AND POSITIONS

The concepts and definitions used in balance of payments and international investment position (i.i.p.) statistics (Sections 7.1 to 7.4) are generally in line with the IMF Balance of Payments

13 OJ L 228. 1.9.2009, p. 25.
14 OJ L 172, 12.7.2000, p. 3.
15 OJ L 179, 9.7.2002, p. 1.

Manual (fifth edition, October 1993), the ECB Guideline of 16 July 2004 on the statistical reporting requirements of the ECB (ECB/2004/15)[16] and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)[17]. Additional information regarding the methodologies and sources used in the euro area b.o.p. and i.i.p. statistics can be found in the ECB publication entitled "European Union balance of payments/international investment position statistical methods" (May 2007) and in the reports of the Task Force on Portfolio Investment Collection Systems (June 2002), the Task Force on Portfolio Investment Income (August 2003) and the Task Force on Foreign Direct Investment (March 2004), all of which can be downloaded from the ECB's website. In addition, a report by the ECB/European Commission (Eurostat) Task Force on Quality looking at balance of payments and international investment position statistics (June 2004) is available on the website of the Committee on Monetary, Financial and Balance of Payments Statistics (www.cmfb.org). The annual quality report on the euro area b.o.p./i.i.p., which is based on the Task Force's recommendations and follows the basic principles of the ECB Statistics Quality Framework published in April 2008, is available on the ECB's website.

On 9 December 2011 the ECB Guideline on the statistical requirements of the European Central Bank in the field of external statistics (ECB/2011/23)[18] was adopted by the Governing Council of the ECB. This legal act lays down new reporting requirements in the field of external statistics, which mainly reflect methodological changes introduced in the sixth edition of the IMF's Balance of Payments and International Investment Position Manual (BPM6). The ECB will begin publishing the euro area's b.o.p., i.i.p. and international reserves statistics in accordance with Guideline ECB/2011/23 and the BPM6 in 2014, with backdata. The tables in Sections 7.1 and 7.4 follow the sign convention in the IMF Balance of Payments Manual – i.e. surpluses in the current account and the capital account have a plus sign, while in the financial account a plus sign denotes an increase in liabilities or a decrease in assets. In the tables in Section 7.2, both credit and debit transactions are presented with a plus sign. Furthermore, as of the February 2008 issue of the Monthly Bulletin, the tables in Section 7.3 have been restructured in order to allow the data on the balance of payments, the international investment position and related growth rates to be presented together; in the new tables, transactions in assets and liabilities that correspond to increases in positions are shown with a plus sign.

The euro area b.o.p. is compiled by the ECB. Recent monthly figures should be regarded as provisional. Data are revised when figures for the following month and/or the detailed quarterly b.o.p. are published. Earlier data are revised periodically or as a result of methodological changes in the compilation of the source data.

Table 1 in Section 7.2 also contains seasonally adjusted data for the current account. Where appropriate, the adjustment also covers working day, leap year and/or Easter-related effects. Table 3 in Section 7.2 and Table 9 in Section 7.3 present a breakdown of the euro area b.o.p. and i.i.p. vis-à-vis major partner countries, both individually and as a group, distinguishing between EU Member States outside the euro area and countries or areas outside the European Union. The breakdown also shows transactions and positions vis-à-vis EU institutions and international organisations (which, with the exception of the ECB and the European Stability Mechanism, are considered to be outside the euro area for statistical purposes, regardless of their physical location) as well as offshore centres. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives or international reserves. In addition, separate data

16 OJ L 354, 30.11.2004, p. 34.
17 OJ L 159, 20.6.2007, p. 48.
18 OJ L 65, 3.3.2012, p. 1.

are not provided for investment income payable to Brazil, mainland China, India or Russia. The geographical breakdown is described in the article entitled "Euro area balance of payments and international investment position vis-à-vis main counterparts" in the February 2005 issue of the Monthly Bulletin.

The data on the euro area b.o.p. financial account and i.i.p. in Section 7.3 are based on transactions and positions vis-à-vis non-residents of the euro area, regarding the euro area as a single economic entity (see also Box 9 in the December 2002 issue of the Monthly Bulletin, Box 5 in the January 2007 issue of the Monthly Bulletin and Box 6 in the January 2008 issue of the Monthly Bulletin). The i.i.p. is valued at current market prices, with the exception of direct investment, where book values are used for unquoted shares, and other investment (e.g. loans and deposits). The quarterly i.i.p. is compiled on the basis of the same methodological framework as the annual i.i.p. As some data sources are not available on a quarterly basis (or are available with a delay), the quarterly i.i.p. is partly estimated on the basis of financial transactions, asset prices and foreign exchange developments.

Table 1 in Section 7.3 summarises the i.i.p. and financial transactions in the euro area b.o.p. The breakdown of the change in the annual i.i.p. is obtained by applying a statistical model to i.i.p. changes other than transactions, using information from the geographical breakdown and currency composition of assets and liabilities, as well as price indices for different financial assets. In this table, columns 5 and 6 refer to direct investment by resident units abroad and direct investment by non-resident units in the euro area.

In Table 5 in Section 7.3, the breakdown into "loans" and "currency and deposits" is based on the sector of the non-resident counterpart – i.e. assets vis-à-vis non-resident banks are classified as deposits, whereas assets vis-à-vis other non-resident sectors are classified as loans. This breakdown follows the distinction made in other statistics, such as the MFI consolidated balance sheet, and conforms to the IMF Balance of Payments Manual.

The outstanding amounts for the Eurosystem's international reserves and related assets and liabilities are shown in Table 7 of Section 7.3. These figures are not fully comparable with those in the Eurosystem's weekly financial statement owing to differences in coverage and valuation. The data in Table 7 are in line with the recommendations for the template on international reserves and foreign currency liquidity. By definition, the assets included in the Eurosystem's international reserves take account of the changing composition of the euro area. Before countries join the euro area, the assets of their national central banks are included in portfolio investment (in the case of securities) or other investment (in the case of other assets). Changes in the gold holdings of the Eurosystem (column 3) are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999, which was updated on 27 September 2009. More information on the statistical treatment of the Eurosystem's international reserves can be found in a publication entitled "Statistical treatment of the Eurosystem's international reserves" (October 2000), which can be downloaded from the ECB's website. The website also contains more comprehensive data in accordance with the template on international reserves and foreign currency liquidity.

The euro area's gross external debt statistics in Table 8 of Section 7.3 represent outstanding actual (rather than contingent) liabilities vis-à-vis non-euro area residents that require the payment of principal and/or interest by the debtor at one or more points in the future. Table 8 shows a breakdown of gross external debt by instrument and institutional sector.

Section 7.4 contains a monetary presentation of the euro area balance of payments, showing the transactions by non-MFIs that mirror the net external transactions by MFIs. Included in the transactions by non-MFIs are b.o.p. transactions for which a sectoral breakdown is not available. These concern the current and capital accounts (column 2) and financial derivatives (column 11). An up-to-date methodological note on the monetary presentation of the euro area balance of payments is available in the "Statistics" section of the ECB's website. See also Box 1 in the June 2003 issue of the Monthly Bulletin.

Section 7.5 shows data on euro area external trade in goods. The source is Eurostat. Value data and volume indices are seasonally and working day-adjusted. The breakdown by product group in columns 4 to 6 and 9 to 11 of Table 1 in Section 7.5 is in line with the classification contained in the Broad Economic Categories and corresponds to the basic classes of goods in the System of National Accounts. Manufactured goods (columns 7 and 12) and oil (column 13) are in line with the SITC Rev. 4 definition. The geographical breakdown (Table 3 in Section 7.5) shows major trading partners both individually and in regional groups. China excludes Hong Kong. On account of differences in definitions, classification, coverage and time of recording, external trade data, in particular for imports, are not fully comparable with the goods item in the b.o.p. statistics (Sections 7.1 and 7.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of imported goods in external trade data.

Industrial import prices and industrial producer export prices (or industrial output prices for the non-domestic market) shown in Table 2 in Section 7.5 were introduced by Regulation (EC) No 1158/2005 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) No 1165/98, which is the principal legal basis for short-term statistics. The industrial import price index covers industrial products imported from outside the euro area under sections B to E of the Statistical Classification of Products by Activity in the European Economic Community (CPA) and all institutional import sectors except households, governments and non-profit institutions. It reflects the cost, insurance and freight price excluding import duties and taxes, and refers to actual transactions in euro recorded at the point when ownership of the goods is transferred. The industrial producer export prices cover all industrial products exported directly by euro area producers to the extra-euro area market under sections B to E of NACE Revision 2. Exports from wholesalers and re-exports are not covered. The indices reflect the free on board price expressed in euro and calculated at the euro area frontier, including any indirect taxes except VAT and other deductible taxes. Industrial import prices and industrial producer export prices are available by Main Industrial Grouping as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007. For more details, see Box 11 in the December 2008 issue of the Monthly Bulletin.

EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate indices for the euro, which are calculated by the ECB on the basis of weighted averages of the euro's bilateral exchange rates against the currencies of the selected trading partners of the euro area. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with those trading partners in the periods 1995-1997, 1998-2000, 2001-2003, 2004-2006 and 2007-2009 and are calculated to account for third-market effects. The EER indices are obtained by chain-linking the indicators based on each of these five sets of trade weights at the end of each three-year period. The base period of the resulting EER index is the first quarter of 1999. The EER-20 group of trading partners is composed of the 10 non-euro area EU Member States plus Australia, Canada, China, Hong Kong, Japan, Norway,

Singapore, South Korea, Switzerland and the United States. The EER-19 group excludes Croatia. The EER-39 group comprises the EER-20 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-19.

For more detailed information on the calculation of the EERs, see the relevant methodological note and ECB Occasional Paper No 134 ("Revisiting the effective exchange rates of the euro" by Martin Schmitz, Maarten De Clercq, Michael Fidora, Bernadette Lauro and Cristina Pinheiro, June 2012), which can be downloaded from the ECB's website.

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

DEVELOPMENTS OUTSIDE THE EURO AREA

Statistics on other EU Member States (Section 9.1) follow the same principles as data relating to the euro area. However, data shown in this table on current and capital accounts and gross external debt follow the respective national concept and do not include special-purpose vehicles. The data for the United States and Japan contained in Section 9.2 are obtained from national sources.

ANNEXES

CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM[1]

12 JANUARY 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

9 FEBRUARY 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also approves specific national eligibility criteria and risk control measures for the temporary acceptance in a number of countries of additional credit claims as collateral in Eurosystem credit operations.

8 MARCH, 4 APRIL AND 3 MAY 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

6 JUNE 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 15 January 2013, notably to continue its fixed rate tender procedures with full allotment.

5 JULY 2012

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

2 AUGUST 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively.

1 The chronology of monetary policy measures taken by the Eurosystem between 1999 and 2011 can be found in the ECB's Annual Report for the respective years.

6 SEPTEMBER 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively. It also decides on the modalities for undertaking Outright Monetary Transactions (OMTs) in secondary markets for sovereign bonds in the euro area.

4 OCTOBER AND 8 NOVEMBER 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively.

6 DECEMBER 2012

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 9 July 2013, notably to continue its fixed rate tender procedures with full allotment.

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

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively.

2 MAY 2013

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

6 JUNE, 4 JULY, 1 AUGUST, 5 SEPTEMBER AND 2 OCTOBER 2013

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.50%, 1.00% and 0.00% respectively.

7 NOVEMBER 2013

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 0.25%, starting from the operation to be settled on 13 November 2013. In addition, it decides to decrease the interest rate on the marginal lending facility by 25 basis points to 0.75%, with effect from 13 November 2013, and to keep the interest rate on the deposit facility unchanged at 0.00%. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 7 July 2015, notably to continue its fixed rate tender procedures with full allotment.

5 DECEMBER 2013, 9 JANUARY, 6 FEBRUARY, 6 MARCH, 3 APRIL AND 8 MAY 2014

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.25%, 0.75% and 0.00% respectively.

5 JUNE 2014

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations (MROs) by 10 basis points to 0.15%, starting from the operation to be settled on 11 June 2014. In addition, it decides to decrease the interest rate on the marginal lending facility by 35 basis points to 0.40% and the interest rate on the deposit facility by 10 basis points to -0.10%, both with effect from 11 June 2014. It also decides to adopt further non-standard measures, notably: (i) to conduct a series of targeted longer-term refinancing operations (TLTROs) maturing in September 2018 to support bank lending to the non-financial private sector, with an interest rate fixed over the life of each operation at the rate on the Eurosystem's main refinancing operations prevailing at the time of take-up, plus a fixed spread of 10 basis points; (ii) to continue conducting the MROs as fixed rate tender procedures with full allotment at least until the end of the reserve maintenance period ending in December 2016; (iii) to conduct the three-month longer-term refinancing operations (LTROs) to be allotted before the end of the reserve maintenance period ending in December 2016 as fixed rate tender procedures with full allotment; (iv) to suspend the weekly fine-tuning operation sterilising the liquidity injected under the Securities Markets Programme; (v) to intensify preparatory work related to outright purchases in the ABS market.

3 JULY 2014

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.15%, 0.40% and -0.10% 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:

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- Annual Report
- Convergence Report
- Monthly Bulletin

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- 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.

Excess liquidity: the amount of central bank reserves held by banks in excess of the aggregate needs of the banking system, which are determined by reserve requirements and autonomous factors.

External trade in goods: exports and imports of goods with countries outside the euro area, measured in terms of value and as indices of volume and unit value. External trade statistics are not comparable with the exports and imports recorded in the national accounts, as the latter include both intra-euro area and extra-euro area transactions, and also combine goods and services. Nor are they fully comparable with the goods item in b.o.p. statistics. Besides methodological adjustments, the main difference is that imports in external trade statistics are recorded including insurance and freight services, whereas they are recorded free on board in the goods item in the b.o.p. statistics.

Financial account: a b.o.p. account that covers transactions between residents and non-residents in direct investment, portfolio investment, other investment, financial derivatives and reserve assets.

Financial accounts: part of the system of national (or euro area) accounts showing the financial positions (stocks or balance sheets), financial transactions and other changes of the different institutional sectors of an economy by type of financial asset.

Financial vehicle corporation (FVC): an entity whose principal activity is to carry out securitisation transactions. An FVC typically issues marketable securities that are offered for sale to the general public, or sold in the form of private placements. These securities are backed by a portfolio of assets (typically loans) which are held by the FVC. In some cases, a securitisation transaction may involve a number of FVCs, where one FVC holds the securitised assets and another issues the securities backed by those assets.

Fixed rate tender: a tender procedure in which the interest rate is specified in advance by the central bank and in which participating counterparties bid the amount of money they wish to transact at the fixed interest rate.

Fixed rate full-allotment tender procedure: a tender procedure in which the interest rate is pre-specified by the central bank (fixed rate) and in which counterparties bid the amount of money they want to transact at that rate, knowing in advance that all their bids will be satisfied (full allotment).

Forward guidance: communication by a central bank on the orientation of monetary policy with respect to the future path of policy interest rates.

General government: a sector defined in the ESA 95 as comprising resident entities that are engaged primarily in the production of non-market goods and services intended for individual and collective consumption and/or in the redistribution of national income and wealth. Included are central, regional and local government authorities as well as social security funds. Excluded are government-owned entities that conduct commercial operations, such as public enterprises.

Gross domestic product (GDP): the value of an economy's total output of goods and services less intermediate consumption, plus net taxes on products and imports. GDP can be broken down by

output, expenditure or income components. The main expenditure aggregates that make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and imports and exports of goods and services (including intra-euro area trade).

Gross external debt: the outstanding amount of an economy's actual (i.e. non-contingent) current liabilities that require payment of principal and/or interest to non-residents at some point in the future.

Harmonised Index of Consumer Prices (HICP): a measure of the development of consumer prices that is compiled by Eurostat and harmonised for all EU Member States.

Hourly labour cost index: a measure of labour costs, including gross wages and salaries (in cash and in kind, including bonuses) and other labour costs (employers' social contributions plus employment-related taxes paid by the employer minus subsidies received by the employer), per hour actually worked (including overtime).

Implied volatility: the expected volatility (i.e. standard deviation) in the rates of change of the price of an asset (e.g. a share or a bond). It can be derived from the asset's price, maturity date and exercise price of its options, as well as from a riskless rate of return, using an option pricing model such as the Black-Scholes model.

Income account: a b.o.p. account that covers two types of transactions with non-residents, namely (i) those involving compensation of employees that is paid to non-resident workers (e.g., cross-border, seasonal, and other short-term workers) and (ii) those involving investment income receipts and payments on external financial assets and liabilities, with the latter including receipts and payments on direct investment, portfolio investment and other investment, as well as receipts on reserve assets.

Index of negotiated wages: a measure of the direct outcome of collective bargaining in terms of basic pay (i.e. excluding bonuses) at the euro area level. It refers to the implied average change in monthly wages and salaries.

Industrial producer prices: factory-gate prices (transportation costs are not included) of all products sold by industry, excluding construction, on the domestic markets of the euro area countries, excluding imports.

Industrial production: the gross value added created by industry at constant prices.

Inflation: an increase in the general price level, e.g. in the consumer price index.

Inflation-indexed government bonds: debt securities issued by the general government, the coupon payments and principal of which are linked to a specific consumer price index.

Insurance corporations and pension funds: financial corporations and quasi-corporations that are engaged primarily in financial intermediation as the consequence of the pooling of risks.

International investment position (i.i.p.): the value and composition of an economy's outstanding net financial claims on (or financial liabilities to) the rest of the world.

International reserves: external assets readily available to and controlled by monetary authorities for directly financing or regulating the magnitude of payment imbalances through intervention in exchange markets. The international reserves of the euro area comprise non-euro-denominated claims on non-euro area residents, gold, special drawing rights and the reserve positions in the IMF which are held by the Eurosystem.

Investment funds (except money market funds): financial institutions that pool capital raised from the public and invest it in financial and non-financial assets. See also MFIs.

Job vacancies: a collective term covering newly created jobs, unoccupied jobs or jobs about to become vacant in the near future, for which the employer has recently taken active steps to find a suitable candidate.

Key ECB interest rates: the interest rates, set by the Governing Council, which reflect the monetary policy stance of the ECB. They are the rates at the main refinancing operations, on the marginal lending facility and on the deposit facility.

Labour force: the sum total of persons in employment and the number of unemployed.

Labour productivity: the output that can be produced with a given input of labour. It can be measured in several ways, but is commonly measured as GDP (volume) divided by either total employment or total hours worked.

Liquidity-absorbing operation: an operation through which the Eurosystem absorbs liquidity in order to reduce excess liquidity, or to create a shortage of liquidity. Such operations can be conducted by issuing debt certificates or fixed-term deposits.

Longer-term refinancing operation (LTRO): an open market operation with a maturity of more than one week that is executed by the Eurosystem in the form of a reverse transaction. The regular monthly operations have a maturity of three months. During the financial market turmoil that started in August 2007, supplementary operations with maturities ranging from one maintenance period to 36 months were conducted, the frequency of which varied.

M1: a narrow monetary aggregate that comprises currency in circulation plus overnight deposits held with MFIs and central government (e.g. at the post office or treasury).

M2: an intermediate monetary aggregate that comprises M1 plus deposits redeemable at a period of notice of up to and including three months (i.e. short-term savings deposits) and deposits with an agreed maturity of up to and including two years (i.e. short-term time deposits) held with MFIs and central government.

M3: a broad monetary aggregate that comprises M2 plus marketable instruments, in particular repurchase agreements, money market fund shares and units, and debt securities with a maturity of up to and including two years issued by MFIs.

Main refinancing operation (MRO): a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a weekly standard tender and normally have a maturity of one week.

Marginal lending facility: a standing facility of the Eurosystem enabling eligible counterparties, on their own initiative, to receive overnight credit from the NCB in their jurisdiction at a pre-specified rate in the form of a reverse transaction. The rate on loans extended within the scope of the marginal lending facility normally provides an upper bound for overnight market interest rates.

Maximum bid rate: the upper limit to the interest rates at which counterparties may submit bids in variable rate liquidity-absorbing tender operations.

MFI credit to euro area residents: MFI loans granted to non-MFI euro area residents (including general government and the private sector) and MFI holdings of securities (shares, other equity and debt securities) issued by non-MFI euro area residents.

MFI interest rates: the interest rates that are applied by resident credit institutions and other MFIs, excluding central banks and money market funds, to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area.

MFI longer-term financial liabilities: deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued by euro area MFIs with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

MFI net external assets: the external assets of the euro area MFI sector (such as gold, foreign currency banknotes and coins, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the euro area MFI sector (such as non-euro area residents' deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

MFIs (monetary financial institutions): financial institutions which together form the money-issuing sector of the euro area. These include (i) the Eurosystem, (ii) resident credit institutions (as defined in EU law), (iii) other financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities, as well as electronic money institutions that are principally engaged in financial intermediation in the form of issuing electronic money, and (iv) money market funds, i.e. collective investment undertakings that invest in short-term and low-risk instruments.

Minimum bid rate: the lower limit to the interest rates at which counterparties may submit bids in variable rate liquidity-providing tender operations.

Open market operation: a financial market operation executed on the initiative of the central bank. These operations include reverse transactions, outright transactions as well as the issuance of fixed-term deposits or debt certificates or foreign exchange swaps. The open market operations can be liquidity providing or liquidity absorbing.

Other investment: an item in the b.o.p. and the i.i.p. that covers the financial transactions/positions with non-residents in trade credits, deposits and loans, and other accounts receivable and payable.

Portfolio investment: euro area residents' net transactions and/or positions in securities issued by non-residents of the euro area ("assets") and non-residents' net transactions and/or positions in securities issued by euro area residents ("liabilities"). Included are equity securities and debt

securities (bonds and notes, and money market instruments). Transactions are recorded at the effective price paid or received, less commissions and expenses. To be regarded as a portfolio asset, ownership in an enterprise must be equivalent to less than 10% of the ordinary shares or voting power.

Price stability: as defined by the Governing Council, a year-on-year increase in the HICP for the euro area of below 2%. The Governing Council has also made it clear that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term.

Purchasing power parity (PPP): the rate at which one currency is converted into another so as to equalise the purchasing power of the two currencies by eliminating the differences in the price levels prevailing in the countries concerned. In their simplest form, PPPs show the ratio of the prices in national currency of the same good or service in different countries.

Reference value for M3 growth: the annual growth rate of M3 that is deemed to be compatible with price stability over the medium term.

Reserve requirement: the requirement for institutions to hold minimum reserves with the central bank over a maintenance period. Compliance with the requirement is determined on the basis of the average of the daily balances in the reserve accounts over the maintenance period.

Reverse transaction: an operation whereby the NCB buys or sells assets under a repurchase agreement or conducts credit operations against collateral.

Securitisation: a transaction or scheme whereby an asset or a pool of cash flow-producing assets, often consisting of loans (mortgages, consumer loans, etc.), is transferred from an originator (usually a credit institution) to a financial vehicle corporation (FVC). The FVC effectively converts these assets into marketable securities by issuing debt instruments with principal and interest serviced through the cash flows produced by the asset pool.

Structural fiscal balance (general government): the actual budget balance corrected for cyclical factors (i.e. the cyclically adjusted balance) and one-off fiscal measures.

Survey of Professional Forecasters (SPF): a quarterly survey that has been conducted by the ECB since 1999 to collect macroeconomic forecasts on euro area inflation, real GDP growth and unemployment from a panel of experts affiliated to financial and non-financial organisations based in the EU.

Unit labour costs: a measure of total labour costs per unit of output calculated for the euro area as the ratio of total compensation per employee to labour productivity (defined as GDP (volume) per person employed).

Variable rate tender: a tender procedure where the counterparties bid both the amount of money they wish to transact with the central bank and the interest rate at which they wish to enter into the transaction.

Volatility: the degree of fluctuation in a given variable.

Write-down: a downward adjustment to the value of loans recorded in the balance sheets of MFIs when it is recognised that the loans have become partly unrecoverable.

Write-off: the removal of the value of loans from the balance sheets of MFIs when the loans are considered to be totally unrecoverable.

Yield curve: a graphical representation of the relationship between the interest rate or yield and the residual maturity at a given point in time for sufficiently homogenous debt securities with different maturity dates. The slope of the yield curve can be measured as the difference between the interest rates or yield at two selected maturities.

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