

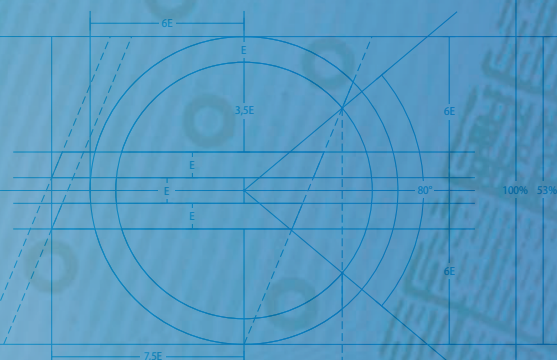


EUROPEAN CENTRAL BANK

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# Contents

## Update on economic and monetary developments

Summary	3
1 External environment	5
2 Financial developments	7
3 Economic activity	9
4 Prices and costs	10
5 Money and credit	12

## Boxes

1 Why has growth in emerging market economies slowed?	15
2 Does consumer confidence predict private consumption?	18
3 Recent developments in extra-euro area trade: the role of emerging market economies	20
4 Has underlying inflation reached a turning point?	23
5 The impact of negative short-term rates on the money market fund industry	27

## Article

Real convergence in the euro area: evidence, theory and policy implications	30
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<b>Statistics</b>	<b>S1</b>
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# Update on economic and monetary developments

## Summary

Following some loss of momentum in early 2015, the global economy is expected to resume its modest recovery path, with notable differences across regions. In the United States and the United Kingdom there are signs of a rebound in activity, while in Japan available indicators suggest a softening in the growth outlook, after a strong first quarter. In China, recent data indicate a rebound in economic expansion in the second quarter, but the fall in equity prices has increased uncertainty. The momentum in global trade remains weak, mostly owing to declining trade in emerging market economies. Global headline inflation remains low, as it is held down by earlier energy price declines.

The latest developments in the euro area financial markets have been marked by increased volatility, primarily on account of heightened uncertainty regarding the negotiations between Greece and its official creditors. While euro area equity prices have generally risen since early June, some pronounced oscillations were recorded in recent weeks. At the same time, euro area long-term government bond yields remained, overall, broadly unchanged and stayed at levels higher than the recent historical lows of mid-April. Differentials with respect to German yields declined in Italy, Spain and Portugal and remained broadly stable overall across the remaining euro area countries, excluding Greece. The euro exchange rate weakened in effective terms.

Euro area quarterly real GDP growth in the first quarter of 2015 was confirmed at 0.4%. Growth was driven by domestic demand on the back of robust contributions from private consumption and now also from investment. The latest survey data, up to June, remain consistent with a continuation of the moderate growth trend in the second quarter. Looking ahead, the economic recovery is expected to broaden further. Domestic demand should be supported by the ECB's monetary policy measures and their favourable impact on financial conditions, as well as by the progress made with fiscal consolidation and structural reforms. Moreover, low oil prices should continue to bolster households' real disposable income and corporate profitability, thus supporting private consumption and investment. Furthermore, demand for euro area exports should benefit from improvements in price competitiveness.

Inflation bottomed out at the beginning of the year and has moved back into positive territory in recent months. Annual HICP inflation declined slightly in June, to 0.2% from 0.3% in May. On the basis of the available information and current oil futures prices, it is expected to remain low in the months ahead and rise towards the end of the year, partly on account of base effects linked to the fall in oil prices in late 2014. Supported by the expected economic recovery, the impact of the lower euro

exchange rate and the assumption embedded in oil futures markets of somewhat higher oil prices in the years ahead, inflation rates are expected to pick up further during 2016 and 2017.

Narrow and broad money dynamics continue to be robust. In a low interest rate environment, portfolio substitution is driving broad money growth, and overnight deposits continue to make a sizeable contribution to M3 growth. Loan dynamics have improved further but remain weak, in particular for loans to non-financial corporations. Bank lending rates have declined further, and the most recent euro area bank lending survey points to further improvements in lending conditions and credit demand. Also, fragmentation in terms of credit demand in individual countries decreased and the targeted longer-term refinancing operations helped to improve the terms and conditions for credit supply. Overall, the monetary policy measures put in place by the ECB since June 2014 are providing visible support for improvements both in borrowing conditions for firms and households and in credit flows across the euro area.

Based on its regular economic and monetary analyses and in line with the Governing Council's forward guidance, at its meeting on 16 July 2015, the Governing Council decided to keep the key ECB interest rates unchanged. Regarding non-standard monetary policy measures, the asset purchase programmes continue to proceed smoothly. The Governing Council also reaffirmed its previous assessment that there is a need to maintain a steady monetary policy course, where the full implementation of all monetary policy measures will provide the necessary support to the euro area economy and lead to a sustained return of inflation rates towards levels below, but close to, 2% in the medium term.

Looking ahead, the Governing Council will continue to closely monitor the situation in financial markets, as well as the potential implications for the monetary policy stance and for the outlook for price stability. If any factors were to lead to an unwarranted tightening of monetary policy, or if the outlook for price stability were to materially change, the Governing Council would respond to such a situation by using all the instruments available within its mandate.

## 1 External environment

**Following a slowdown in the pace of expansion in early 2015, the global economy is expected to resume its modest recovery path.** The latest surveys suggest a steady growth momentum in the second quarter of 2015. The global composite output Purchasing Managers' Index (PMI), excluding the euro area, dipped slightly in June (see Chart 1), to below its long-term average. In quarterly terms, the index recorded a modest decline in the second quarter of 2015 compared with the previous quarter. Quarterly output growth remained solid in advanced economies, particularly in the United States and the United Kingdom. PMIs in the emerging market economies (EMEs) continued to weigh on the global index, reflecting the ongoing slowdown in EME growth caused by both cyclical and structural factors (see Box 1). Meanwhile, other short-term indicators point to some resilience in global activity. The Ifo World Economic Climate index increased further in the second quarter of 2015 and the OECD composite leading indicators also continue to suggest overall steady growth momentum.

**Momentum in global trade remains weak, but the latest PMI export orders indicators suggest that this could be a trough.** The volume of world merchandise imports declined by 1.1% in April 2015 on a three-month-on-three-month basis, slightly less than in March (see Chart 2). The divergence between advanced economies and emerging market economies, observed for activity, is mirrored in trade developments, with the recent weak momentum caused by decreasing import volumes in emerging markets, particularly in Asia. While the momentum in trade growth also slowed somewhat in advanced economies, it remained solid overall.

**Chart 1**  
Global composite output PMI

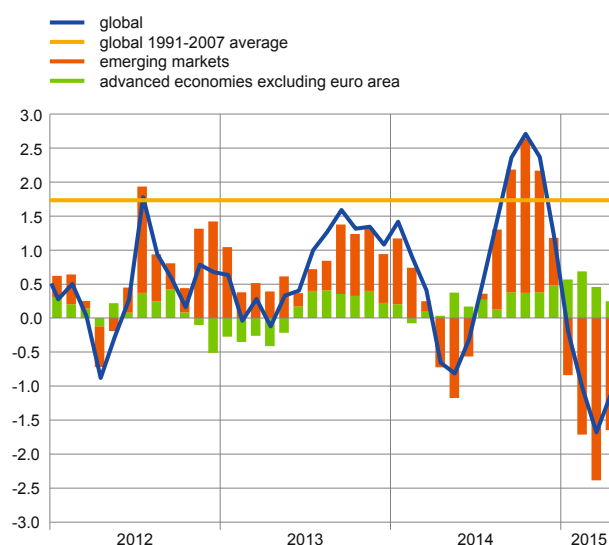
(diffusion index)



Sources: Markit and ECB.  
Notes: The latest observation refers to June 2015. "Global excluding euro area: long-term average" refers to the period from 1999 onwards. Emerging markets are Brazil, China, India and Russia. Advanced economies are Japan, the United States and the United Kingdom.

**Chart 2**  
Merchandise import growth

(three-month-on-three-month percentage changes; percentage point contributions; seasonally adjusted)



Sources: CPB and ECB calculations.  
Note: The latest observation refers to April 2015.

**Global headline inflation remains low, restrained by base effects from earlier energy price declines.** Annual OECD inflation increased slightly in May to 0.6%, driven by a slower annual decline in energy prices than in the previous month. Excluding food and energy, annual OECD inflation remained low and stable at 1.6%. Developments in consumer price inflation among major non-OECD countries diverged considerably, with annual inflation increasing further in Brazil, while declining in Russia (from elevated levels), China and India.

**US activity shows signs of a rebound, after stalling at the start of 2015.** The decline in real GDP (at -0.04% quarter on quarter) in the first quarter of 2015 turned out smaller than previously estimated. The soft patch was mainly the result of cold weather, port disruptions caused by labour disputes, the impact of an earlier US dollar appreciation and a sharp decline in investment in the energy sector. Recent indicators are consistent with a rebound in GDP growth in the second quarter. In particular, the recent rise in consumer confidence bodes well for a pick-up in consumer spending growth, as households may increasingly begin spending the income windfall from earlier declines in oil prices. The underlying labour market momentum also remains robust, as reflected in solid job creation in June. At the same time, inflation remained low, reflecting past declines in oil prices and the US dollar appreciation. The annual headline CPI was flat in May, after four months at zero or negative values. Excluding food and energy, inflation edged down slightly, reflecting declines in both goods and services inflation.

**Available indicators suggest a renewed softening in the growth outlook in Japan following the strong pick-up at the start of the year, while inflation remains low.** GDP growth gained traction in the first quarter of 2015, with real GDP increasing by 1.0% quarter on quarter, mostly supported by a pick-up in private capital investment and a large contribution from the change in inventories. The short-term indicators for May were rather soft, with both industrial production and real exports falling, and growth in real consumption remaining weaker than in the first quarter. Meanwhile, the Bank of Japan's Tankan survey for June 2015 signalled an improvement in business confidence among both manufacturing and non-manufacturing firms compared with March. Annual CPI inflation rates remained low, with annual headline inflation at 0.5% in May, and inflation excluding food and energy at 0.4%. On the policy side, the Bank of Japan announced a "New Framework for Monetary Policy Meetings" (effective from January 2016) intended to enhance transparency.

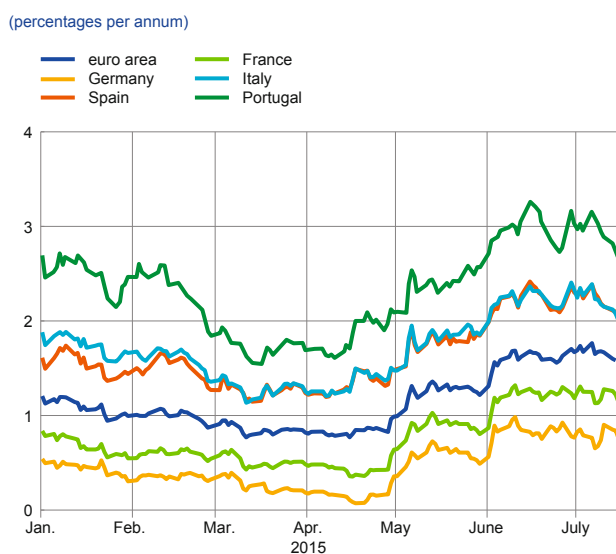
**Economic growth slowed down in the United Kingdom at the beginning of 2015 and is expected to rebound in the second quarter of the year.** Real GDP growth decelerated to 0.4% in the first quarter, from 0.8% in the last quarter of 2014, mainly as a result of a sharp fall in the contribution of net exports. However, domestic demand continued to support growth. The composite PMI and industrial production data suggest that growth should accelerate in the second quarter of the year. The unemployment rate edged up to 5.6% in the three months up to May 2015, while earnings growth accelerated. Annual CPI inflation continues to hover around its historical low on the back of low energy and food prices.

**In China, after a slowdown in the pace of expansion at the start of the year, real GDP growth rebounded, but the recent equity market correction has increased uncertainty.** Following subdued growth in real GDP of 1.4%, quarter on quarter, in the first quarter of this year, GDP growth rebounded to 1.7% in the second quarter. This was supported by the recent monetary fiscal stimulus measures. At the same time, pockets of weakness persist, as housing investment remained lacklustre and imports weak. Uncertainty regarding China's growth outlook and financial stability has increased somewhat following the sharp correction in equity markets observed over the past month, which followed very rapid increases in previous months.

## 2 Financial developments

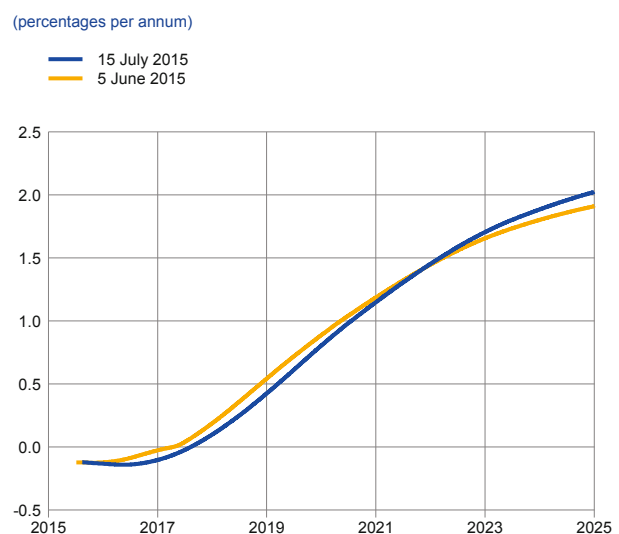
**Between early June and mid-July, long-term government bond yields in the euro area remained, overall, broadly unchanged, standing some 75 basis points, on average, higher than the historic lows recorded around mid-April.** Developments in interest rates were rather uneven between early June and mid-July. In early June, long-term AAA-rated government bond yields rose significantly (see Chart 3). The increase in this period may have been associated with somewhat higher long-term inflation expectations, among other factors. Adverse developments in sovereign bond market liquidity were also reportedly associated with higher yields in this period. Between 10 June and mid-July, average ten-year AAA-rated euro area government bond yields declined to around 1%, with some wider swings at times of heightened market concerns about the outcome of the Greek referendum. Differentials with respect to German yields declined in Italy, Spain and Portugal and remained broadly stable overall across the remaining euro area countries, excluding

**Chart 3**  
Ten-year sovereign bond yields in selected euro area countries



Sources: Thomson Reuters and ECB calculations.  
 Note: Euro area denotes the GDP-weighted average of ten-year sovereign bond yields.

**Chart 4**  
EONIA forward rates



Sources: Thomson Reuters and ECB calculations.



Greece. At the short end of the maturity spectrum, a large number of euro area countries continued to record negative yields, and yields declined further in some cases, leading to a steepening of the sovereign yield curves in those countries.

**EONIA forward rates rose for maturities longer than six years between early June and mid-July.** Over that period, the EONIA stood at -12 basis points, on average, and traded in a tight corridor around this value. At maturities below six years, the EONIA forward rates decreased further over the review period, but they rose along the maturity spectrum, increasing by 11 basis points at the ten-year maturity, leading to a steepening of the money market yield curve (see Chart 4). While EONIA remained stable from 5 June to 15 July, excess liquidity increased by €115 billion to €429 billion. The increase in excess liquidity was due to purchases within the expanded asset purchase programme, as well as an allotment of €74 billion in the fourth targeted longer-term refinancing operation (TLTRO) on 18 June, which was somewhat above market expectations. At the end of the second quarter, on 30 June 2015, EONIA spiked by 6 basis points owing to increased demand for liquidity at the quarter end. The spike equalled only half of the increase recorded at the end of the previous quarter, reflecting the increase in excess liquidity since then.

**Between 5 June and 15 July European stock markets rose overall, with the broad-based Euro Stoxx equity price index up by almost 3%.** The upward trend of euro area equities was mostly concentrated between 5 and 26 June; in this period, the Euro Stoxx equity price index gained by around 3%, while equity prices in the United States, measured by the Standard and Poor's 500 equity index, rose by slightly more than half a percentage point. In this period, the increases in euro area equity prices were larger in the financial sector than for industrial firms. By contrast, and primarily on account of the uncertainty that surrounded the outcome of the Greek referendum, equity prices recorded sizeable declines in the euro area in late June and in the first week of July, of around 8.5% and 7% in the financial and non-financial sectors respectively. Over the same period, equity prices also declined in the United States, but to a much lesser extent, i.e. by around 1% in both sectors. The declines in equity prices in this period were accompanied by rising uncertainty, as measured by implied volatility of equity indices, which rose by around 6 percentage points in the two economic areas. Tensions eased in the aftermath of the Greek referendum, with implied equity market volatility declining below the values prevailing in early June in both economic areas, and equity indices edging backwards to their relative peaks of late June.

**The euro weakened in effective terms in the wake of developments in Greece and the associated heightened uncertainty.** Following a period of broad-based strengthening between mid-April and early June, the euro exchange rate remained broadly stable until late June. Thereafter, the euro depreciated in effective terms against the background of increased uncertainty triggered by developments in Greece. Overall, the euro weakened by 1.5% in trade-weighted terms between 5 June and 15 July. In bilateral terms, the euro depreciated by 1.9% against the US dollar in the same period. The euro also depreciated vis-à-vis the pound sterling, the Japanese yen, the Swiss franc and the currencies of emerging market economies. In contrast, it appreciated against most central and eastern European currencies, as well as the currencies of commodity-exporting countries. In view of

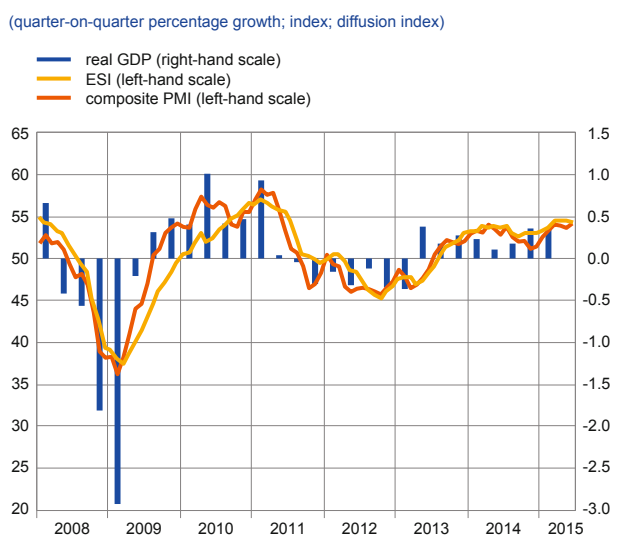


increasing uncertainty and concerns about a strengthening of the Swedish krona, in early July Sveriges Riksbank decided to take further monetary policy easing measures.

### 3 Economic activity

**The euro area recovery remains on track.** The latest data show that real GDP rose by 0.4%, quarter on quarter, in the first quarter of 2015 (see Chart 5). Domestic demand continued to be the main driver of output growth. While growth has been

**Chart 5**  
Euro area real GDP, the ESI and the composite PMI



Sources: Eurostat, European Commission, Markit and ECB.  
 Notes: The ESI is normalised with the mean and standard deviation of the PMI.  
 The latest observations are for the first quarter of 2015 for real GDP and for June 2015 for the ESI and PMI.

mainly supported by private consumption in recent quarters, there are now some encouraging signs that private investment is also picking up. At the same time, inventory developments provided a small positive contribution to growth in the first quarter, while net trade made a negative contribution as import growth outpaced export growth. In the first quarter of this year euro area real GDP stood 2.1% above the trough it reached in the first quarter of 2013, but 1.5% below the pre-crisis peak recorded in the first quarter of 2008.

**Overall, the latest data are consistent with continued economic expansion in the second quarter of this year.** Industrial production excluding

construction declined by 0.4%, month on month, in May 2015. As a result, in the first two months of the second quarter production stood 0.2% below its average level in the first quarter. However, in April construction production stood 0.2% above the level recorded in the first quarter. In addition, recent developments in capital goods production point to a further rise in euro area investment in the second quarter, while those in retail trade and new passenger

car registrations are in line with a continued robust increase in private consumption. At the same time, trade data for April point to continued export growth, albeit at a more moderate pace compared with previous months. While the contribution of emerging economies to extra-euro area export growth has declined, euro area exports are currently supported by robust demand from the United States and other advanced economies (see Box 3). Overall, these developments are in line with the expectations of a broadening of the recovery in the period ahead.

**More timely survey data, covering the whole of the second quarter, confirm broadly unchanged growth rates in the short term.** The composite output

Purchasing Managers' Index (PMI) and the European Commission's Economic Sentiment Indicator (ESI) improved in the second quarter of this year (see Chart 5). In June both indicators stood at levels above their respective long-term averages. Moreover, although consumer confidence has recently shown some signs of a stabilisation, it still stands well above its long-term average level (see also Box 2). In addition, in the second quarter of 2015 credit standards on loans to enterprises

continued to ease, according to the most recent round of the bank lending survey, albeit at a slower rate, thereby supporting the recovery in loan growth and investment activities. Survey data on export developments, available to June, are in line with the hard data on trade and signal continued export growth in the second quarter. Nevertheless, the slight decline in the PMI for new export orders points to more subdued export dynamics in the period ahead.

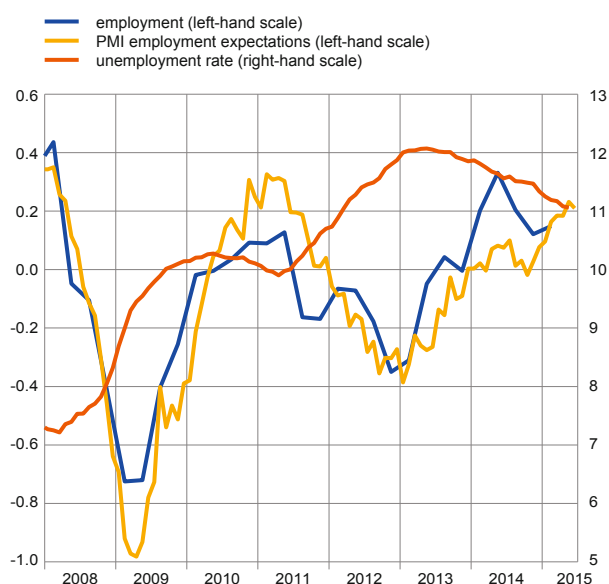
**Labour markets are improving gradually.** Employment increased further, rising by 0.1%, quarter on quarter, in the first quarter of 2015 (see Chart 6). As a result, employment stood 0.8% above the level recorded one year earlier. This represents

the highest annual increase since the second quarter of 2008. The unemployment rate for the euro area, which started to decline in mid-2013, declined further in the second quarter of 2015 and stood at 11.1% in May. More timely information gained from survey results points to a somewhat faster pace of improvement in labour markets in the period ahead.

**Chart 6**

**Euro area employment, PMI employment expectations and unemployment**

(quarter-on-quarter percentage growth; index; percentages of the labour force)



Sources: Eurostat, Markit and ECB.

Notes: The PMI is expressed as a deviation from 50 divided by 10. The latest observations are for the first quarter of 2015 for employment, June 2015 for the PMI and May 2015 for unemployment.

**Looking beyond the short term, the recent fall in oil prices should support economic growth, and particularly domestic demand, via gains in households' real disposable income and corporate profitability.** Domestic demand should be further

supported by the ECB's monetary policy measures and their favourable impact on financial conditions, as well as by the progress made with fiscal consolidation and structural reforms. Furthermore, demand for euro area exports should benefit from the global recovery and from improvements in price competitiveness. However, the ongoing slowdown in emerging market economies continues to weigh on the global outlook, while economic growth in the euro area is likely to continue to be dampened by the necessary balance sheet adjustments in a number of sectors and the sluggish pace of implementation of structural reforms. The results of the latest round of the ECB's Survey of Professional

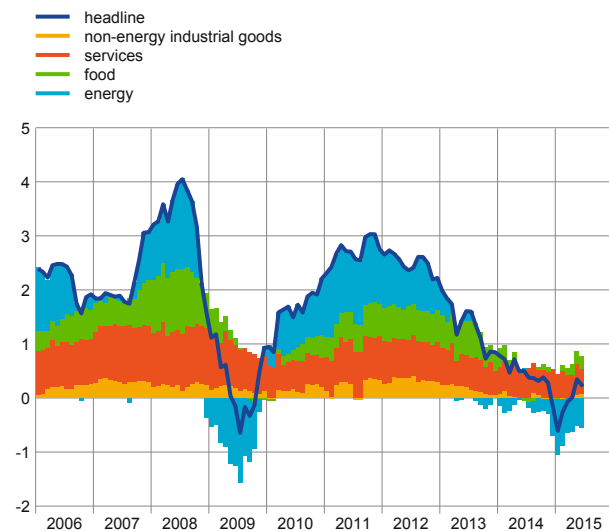
Forecasters (see [www.ecb.europa.eu/stats/prices/indic/forecast/html/index.en.html](http://www.ecb.europa.eu/stats/prices/indic/forecast/html/index.en.html)) show that private sector GDP growth forecasts remain virtually unchanged compared with the previous round. At the same time, unemployment expectations have been revised somewhat downwards.

## 4 Prices and costs

**Inflation in the euro area has stabilised at low positive levels.** According to Eurostat, euro area HICP inflation declined slightly to 0.2% in June 2015, from 0.3% in May (see Chart 7), owing mainly to temporary calendar effects in the services component, which pushed up inflation in May and compressed it in June. This development is also reflected in HICP inflation excluding energy and food, which decreased marginally to 0.8% in June, from 0.9% in May.

**Chart 7**  
Contribution of components to euro area headline  
HICP inflation

(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB calculations.  
Note: The latest observation is for June 2015.

**Looking beyond movements in individual months, underlying inflation has risen more recently.**

Nonetheless, there is still some uncertainty as to whether the uptick in HICP inflation excluding energy and food (a measure of underlying inflation) from its historical low of 0.6% in April implies a turning point, as it conceals factors of both a more persistent and temporary nature (see also Box 4). Some factors, such as the indirect effects of the declines in oil prices, are still exerting downward pressure on underlying HICP inflation. However, once these lagged effects have faded, the pass-through of the euro's depreciation since May 2014 to non-energy consumer prices should provide a more solid foundation for a pick-up in underlying inflation.

**The pass-through of the weaker euro to consumer prices is corroborated by the strong growth in import prices, but pipeline price pressures remain weak on the domestic front.**

While year-on-year growth in import prices for non-food consumer goods and for intermediate goods was relatively strong at 4.8% and 3.0% in May respectively, producer prices for domestic sales were still declining. The fall in oil

and non-oil commodity prices registered in June suggests that there will be renewed downward pressure on producer prices in intermediate goods industries in the coming months. At the later stages of the production and pricing chain, producer prices had not yet picked up in May, with year-on-year producer price inflation for non-food consumer goods standing at 0.0%, and for consumer food at -1.4%. By contrast, survey indicators point to some pipeline pressures at the end of the pricing chain: according to data from the Purchasing Managers' Index (PMI) survey, input prices of non-food retailers increased for the fourth month in a row.

**The latest data on labour costs and profit margins suggest that domestic price pressures have stabilised for the time being.**

Euro area annual wage growth showed an increase from the fourth quarter of 2014 to the first quarter of 2015, rising from 1.3% to 1.5% when measured in terms of compensation per employee, and from 1.1% to 1.6% when measured in terms of hours worked. Growth in compensation per employee converged with growth in negotiated wages, implying little impact from wage drift elements such as bonuses. Sectoral information shows that the increase in the annual growth rate of compensation per employee was attributable to a higher contribution from the services sector, more than offsetting a lower contribution from the industrial sector. As productivity grew at a stronger rate than compensation per employee, growth in unit labour costs decreased slightly in the first quarter of 2015. At the same time, profit growth (measured in terms of gross operating surplus) strengthened, reflecting the impact of the ongoing improvement in real GDP growth and a pick-up in the rate of growth in profits per unit of output (a measure of profit margins). As a result of labour cost and profit margin developments, annual growth

## Chart 8 Market-based measures of inflation expectations

(annual percentage changes)



Sources: Thomson Reuters and ECB calculations.  
Note: The latest observation is for 14 July 2015.

in the GDP deflator, which is indicative of domestic inflationary pressures, increased marginally in the first quarter of 2015.

**On the basis of the information available and current oil futures prices, annual HICP inflation is expected to remain low in the months ahead and to rise only towards the end of the year, inter alia on account of base effects associated with the fall in oil prices in late 2014.** Supported by the expected economic recovery, the impact of the lower euro exchange rate and the assumption embedded in oil futures markets of somewhat higher oil prices in the years ahead, inflation rates are expected to pick up further during 2016 and 2017.

**Both survey and market-based measures of long-term inflation expectations in the euro area are in line with the ECB's objective of price stability.** The results of the ECB Survey of Professional Forecasters (SPF) for the third quarter of 2015 (i.e. the most recent SPF) imply an upward revision of forecasters' short-term inflation expectations for 2015 and 2016 by 0.1

percentage point, up to 0.2% and 1.3% respectively, but unchanged expectations for 2017, at 1.6% (see <http://www.ecb.europa.eu/stats/prices/indic/forecast/html/index.en.html>). Longer-term inflation expectations for five years ahead have edged up further, standing at 1.9%. Market-based measures suggest that inflation expectations, as measured by inflation-linked swap rates, had initially risen in June for maturities between two and ten years (see Chart 8). However, in late June and the first half of July they declined to below the values prevailing from early June. Meanwhile, the five-year forward five years ahead inflation-linked swap rate stood at 1.82% in mid-July, 5 basis points higher than in early June.

## 5 Money and credit

**Monetary dynamics remain robust.** After the strong increase of 5.3% in April, the annual growth rate of M3 stood at 5.0% in May (see Chart 9). M3 growth continues to be driven by strong M1 dynamics, whose annual growth rate picked up further in May, to stand at 11.2%, compared with 10.5% in April. The robust growth of overnight deposits can be explained by the low opportunity costs of holding the most liquid instruments. Overall, the robust annual growth of M1 is consistent with the continuation of the economic recovery in the euro area.

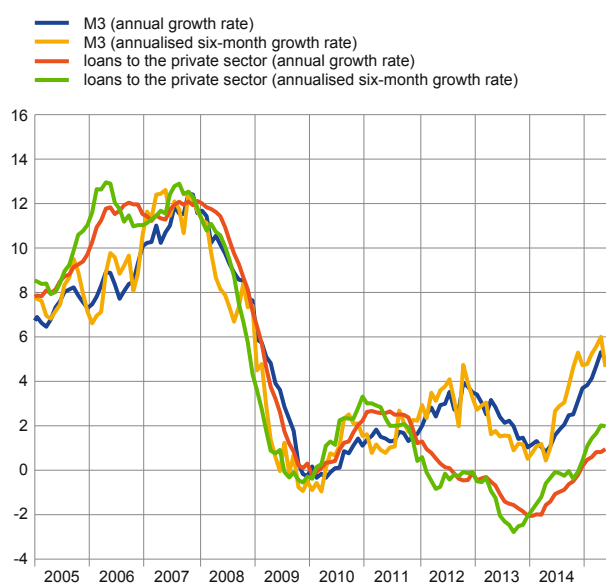
**Overnight deposits made a sizeable contribution to M3 growth.** The generally low remuneration of monetary assets and a flat yield curve are encouraging money holders to put their money in overnight deposits within M3. By contrast, as recent

data show, short-term deposits other than overnight deposits are contracting. The growth rate of marketable instruments (i.e. M3 minus M2), which has a small weight in M3, continued to be positive and stood at 5.0%. It reflects a recovery in the flows of money market fund (MMF) shares/units that has been observed since mid-2014, coinciding with an improvement in their returns relative to other short-term assets with similar characteristics (see Box 5). In addition, growth of monetary financial institution (MFI) debt securities in the money-holding sector with a maturity of up to two years has accelerated since the start of 2015.

**Portfolio substitution is driving broad money growth.** An assessment of the counterparts of M3 shows that its dynamics have been driven mainly by shifts away from longer-term financial liabilities and, to a lesser extent, by a declining – but still positive – flow into the net external assets of MFIs. In addition, credit to the private sector made a positive contribution to M3 growth after being the main drag on money growth in previous years. The annual contraction in the longer-term financial liabilities of MFIs (excluding capital and reserves) held by the money-holding sector gained further momentum, standing at -6.8% in May (compared with -5.7% in the first quarter of 2015). Its strong contribution to M3 growth specifically reflects the flat yield curve and, in part, the substitution by MFIs of longer-term debt securities with TLTRO funds. The support to annual M3 growth from net external assets has continued to decrease. Compared with its peak in mid-2014, the contribution from the MFI sector’s net external asset position decreased further in May, but remains positive, supported by the sizeable surplus in the current account. The slowdown mainly reflects growing net portfolio outflows from the euro area in the light of purchases made in the context of the public sector purchase programme (PSPP), which has favoured portfolio rebalancing towards non-euro area investment instruments.

**Chart 9**  
M3 and loans to the private sector

(annual rate of growth and annualised six-month growth rate)



Source: ECB.

Note: The latest observation is for May 2015.

**Loan dynamics have improved, but remain weak, in particular for loans to NFCs.**

The annual growth rate of MFI loans to the private sector increased slightly in May, to 1.0% (see Chart 9). The gradual improvement in credit dynamics was visible across households and firms. The annual growth of loans to households increased marginally in May, to 1.4%, thus exceeding the average rate of 0.5% observed since summer 2012. The annual growth of MFI loans to non-financial corporations (NFCs) (adjusted for sales and securitisation) increased further, standing at 0.1% in May (compared with the trough of -3.2% in February 2014). Despite these positive trends, the consolidation of bank balance sheets and further deleveraging needs in some economic sectors and banking jurisdictions continue to curb credit dynamics.

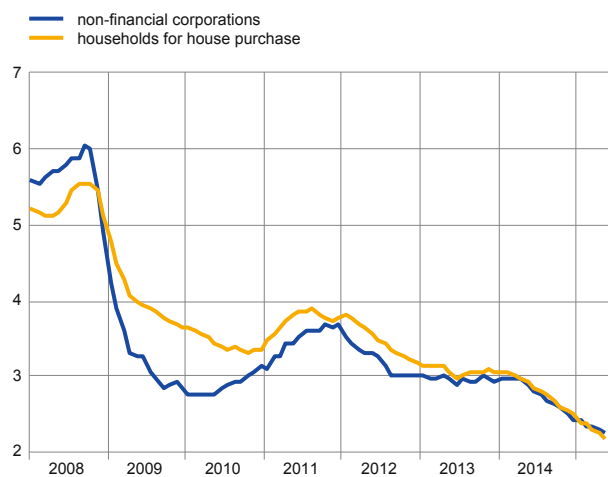
**Bank lending rates declined further, despite the correction in bond markets in May (see Chart 10).**

The ECB’s accommodative monetary policy stance, a strengthened balance sheet situation and receding fragmentation in financial markets in general have

## Chart 10

### Composite bank lending rates for NFCs and households

(percentages per annum)



Source: ECB.

Note: The indicator for the composite bank lending rates is calculated by aggregating short and long-term rates using a 24-month moving average of new business volumes.

supported a decline in banks' composite funding costs, which have stabilised at close to historically low levels. For example, the costs of deposit funding for euro area banks stood at 0.48% in May. Recourse to market-based financing moderated in the same month. Net issuance of debt securities by MFIs remained negative, while the ongoing contraction of balance sheets and strengthening of banks' capital base as well as the TLTROs are reducing the need for banks to seek funding via issuing debt securities. Since the announcement of the credit easing package in June 2014, banks have been progressively passing on the decline in their funding costs in the form of lower lending rates. Rates on loans to NFCs declined further in May (the composite bank lending rates for euro area NFCs fell to 2.24%, compared with 2.79% in June 2014). In addition, rates on loans to households for house purchase declined in May (the composite bank lending rates for households for house purchase stood at 2.18%, compared with 2.87% in June 2014).

The overall nominal cost of external financing for euro area NFCs increased somewhat in May, after stabilising at historically low levels. Both the cost of equity and the cost of market-based debt increased in May and June, the latter following the re-pricing in the government bond market (see Section 2).

**The July 2015 euro area bank lending survey points to further improvements in lending conditions** (see survey at: <https://www.ecb.europa.eu/stats/money/surveys/lend/html/index.en.html>). In the second quarter of 2015, banks continued to ease (in net terms) credit standards for loans in all categories (to NFCs and to households for housing and consumer credit) in net terms. However, from a historical perspective credit standards still remain tight. The net easing for NFCs was driven by stronger competitive pressures among banks as well as the decline in the cost of bank funds and improved MFI balance sheet conditions. In addition, the survey points to a pick-up in demand for loans in all categories. In this context, the low general level of interest rates was an important driver of demand for loans, but fixed investment contributed as well to the increased demand for loans to NFCs.



# Box 1

## Why has growth in emerging market economies slowed?

### Growth in emerging market economies (EMEs) has slowed since 2010.

Aggregate annual EME GDP growth is expected to fall from over 7% in 2010 to around 4% this year – well below the pace of expansion in the early 2000s.

The slowdown has been broad-based: growth in 21 of the 23 largest EMEs has

been lower, on average, in the past three years than before the global financial crisis. In some countries, growth has slowed substantially (see chart). EMEs play an important role in driving the global economy and as partners for euro area trade. A stronger emerging market slowdown would therefore weigh on global and euro area growth. This box discusses the factors behind the slowdown in economic growth in EMEs. These factors include the combination of a structural growth moderation in some of the larger countries and cyclical factors such as spillovers from weaknesses in advanced economies, changing external financing conditions and domestic policy tightening.

**One component of the recent slowdown has been structural.** Potential growth in EMEs was on a rising trend prior to the global financial crisis – driven by strong capital accumulation and productivity gains, as well as favourable demographic trends – but has since slowed.

### The factors underlying the trends in potential output growth differ across countries.

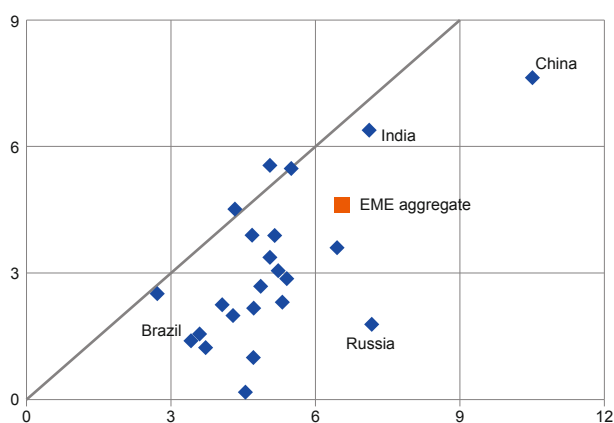
In China, capital accumulation has moderated after years of strong investment, a result of which has been some excess capacity and resource misallocation, weighing on productivity. At the same time, the working-age population has been in decline since 2011. The Chinese authorities have emphasised the need to rebalance the economy to ensure long-term growth sustainability. In Russia, unfavourable demographic trends are also weighing on potential growth. In addition, lower energy prices and international sanctions have reinforced long-standing obstacles to higher investment and growth, such as infrastructure bottlenecks and a poor business climate, which have led to capital outflows over many years. In Brazil, potential growth has deteriorated as lower commodity prices have hit key exports. Moreover, low productivity has been reinforced by regulations on infrastructure investment and limited structural reforms. In India, by contrast, potential growth has been more resilient as the new government has taken measures to support activity, for example

### Chart

#### GDP growth in emerging market economies

(annual percentage changes)

x-axis: average GDP growth, 2000-07  
y-axis: average GDP growth, 2012-14



Source: Haver Analytics.

Notes: The sample includes Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hong Kong, Hungary, India, Indonesia, Malaysia, Mexico, Poland, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey and Venezuela. The EME aggregate is a GDP-weighted average of these countries.



by accelerating public infrastructure investment, adopting an inflation-targeting framework, removing price-distorting subsidies and initiating policies to improve the business climate.<sup>1</sup> Demographic trends also remain supportive of higher growth.

**Cyclical factors, including weakness in the external environment, have also been responsible for slowing EME growth.** Growth in advanced economies has been sluggish in the wake of the global financial crisis. Together with moderating growth in China, this has contributed to growth in global trade that has been below historical norms since 2011,<sup>2</sup> dampening economic activity in EMEs as a consequence. More recently, some commodity-exporting EMEs have suffered a considerable deterioration in their terms of trade as a result of falling prices of raw materials, with particularly sharp declines in the prices of energy products and industrial metals. By contrast, commodity-importing EMEs have benefited from lower energy prices.

**Domestic policy tightening has also weighed on growth in some countries.** In the immediate aftermath of the global financial crisis, EMEs benefited from domestic policy support. Led by a strong expansion of investment spending in China, fiscal policies were expansionary. Monetary policies were also accommodative, and low real interest rates supported rapid credit growth in several EMEs. More recently, however, some central banks have raised interest rates in the light of rising inflationary pressure following the depreciation of their currencies. Similarly, fiscal policies have tightened in some EMEs as the authorities have sought to rebuild buffers that were eroded after the crisis.

**By contrast, the external financing environment has remained supportive of growth in EMEs.** Global funding conditions for EMEs have been generally favourable since the global financial crisis as central banks in advanced economies have pursued accommodative policies, keeping interest rates low and engaging in large-scale asset purchases. As a result, capital flows to EMEs have remained buoyant in the post-crisis period, with the exception of periods of higher risk aversion during the euro area sovereign debt crisis and in 2013 following speculation about the monetary policy intentions of the Federal Reserve System.

**However, prospective monetary tightening in the United States is likely to affect the global financing environment and may pose risks for the economic outlook in EMEs.** In the past, episodes of US financial tightening and US dollar appreciation have typically been associated with a rise in financial turbulence in EMEs. Compared with the situation in previous crises, however, most EMEs now have stronger macroeconomic frameworks and more flexible exchange rate regimes. However, speculation during 2013 about US monetary policy normalisation led to a sharp sell-off in EME assets. Exchange rates weakened rapidly in some countries, particularly those with external fragilities such as large current account deficits or a strong reliance on external funding. One risk is that rising external debt, especially increased US dollar liabilities, could leave some EMEs vulnerable to a sustained deterioration in global funding conditions.

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<sup>1</sup> See the box entitled “The rise to prominence of India’s economy”, *Economic Bulletin*, Issue 4, ECB, June 2015.

<sup>2</sup> See the article entitled “Understanding the weakness in world trade”, *Economic Bulletin*, Issue 3, ECB, April 2015.

**Overall, EME growth is expected to remain more moderate than before the global financial crisis and risks remain on the downside.** Less accommodative domestic and global financing conditions suggest that growth in EMEs will continue at the more subdued pace of recent years. Potential growth has also slowed, despite some promising reform efforts in several EMEs. Looking ahead, one risk is that these cyclical and structural headwinds to economic activity may have an even larger effect than currently anticipated. EMEs play a significant role in the global economy – in purchasing power parity terms they account for 60% of global GDP and since 2000 they have contributed on average three-quarters of global growth. A stronger emerging market slowdown would therefore act as a large drag on global and euro area growth (see Box 5).

## Box 2

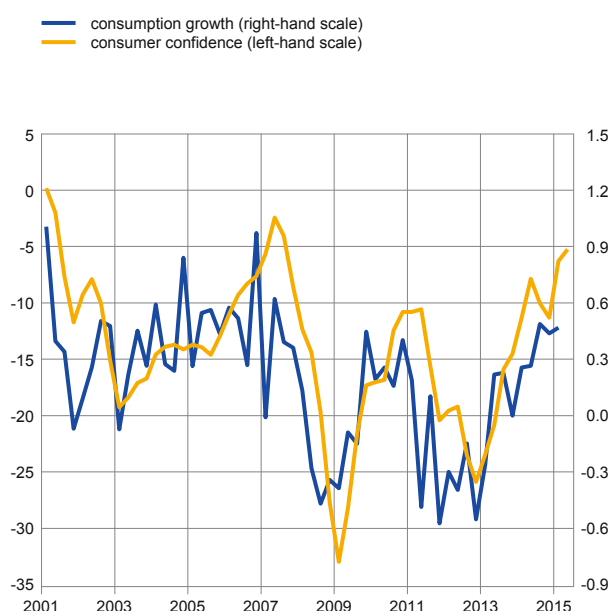
# Does consumer confidence predict private consumption?

**Euro area consumer confidence has increased sharply since the end of 2014.** Despite its recent weakening, euro area consumer confidence remains high (see Chart A). The surge in consumer confidence seems to be related to improving labour market conditions, as well as higher real disposable income as a result of lower energy prices.<sup>1</sup>

**There is evidence that consumer confidence leads consumption growth.** The consumer confidence indicator is closely related to contemporaneous and future quarterly consumption growth (see Chart B). While this relationship does not imply causation, it nonetheless shows that consumer confidence is a good indicator for assessing consumption developments.

**Chart A**  
Consumer confidence and consumption growth

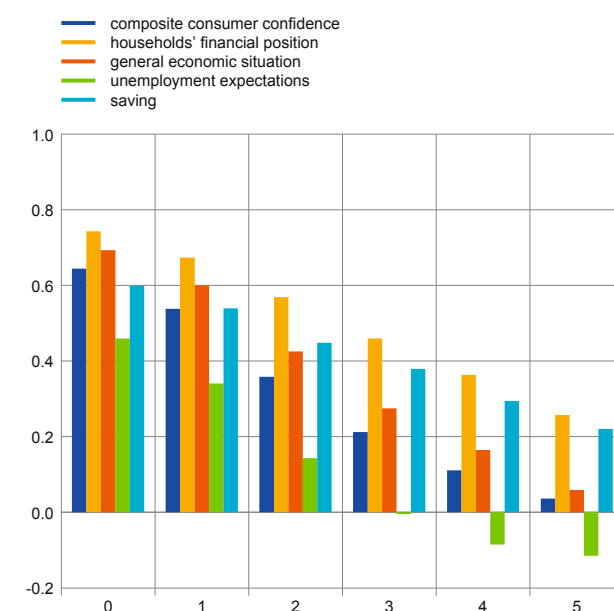
(quarterly percentage changes; balances of responses)



Sources: European Commission, Eurostat and ECB staff calculations.  
 Notes: Latest observation for consumer confidence refers to the second quarter of 2015 and for consumption growth the first quarter of 2015.

**Chart B**  
Correlation between consumer confidence and current and future consumption growth

(x-axis: quarters ahead of future consumption growth)



Sources: European Commission and ECB staff calculations.  
 Notes: The correlations are computed using quarterly consumption growth and balances of responses. The sample period is 1996-2014.

<sup>1</sup> See "What has been driving consumer confidence?", *Economic Bulletin*, Issue 3, ECB, 2015.

**Some questions underlying the consumer confidence indicator predict consumption growth in fact better than the indicator itself.**<sup>2,3</sup> The correlation of the question on respondents' personal financial situation with future consumption growth is significantly higher than that of the overall confidence indicator, especially at several quarters ahead (see Chart B). It does indeed seem intuitive that the "micro" questions on respondents' personal situation give a better prediction of consumption growth, as respondents should typically be better informed about their personal situation than the general macroeconomic situation. Chart B shows that the correlations between the "micro" questions and consumption growth remain relatively strong even at several quarters ahead.

**Empirical evidence suggests that changes in consumer confidence are mainly a reflection of information that is also included in standard determinants of consumption.** There are, broadly speaking, two contrasting views about the role of confidence in macroeconomics ("animal spirits" versus "news"). The first view posits that autonomous fluctuations in beliefs have a causal effect on economic activity ("animal spirits view"). The second view of confidence suggests that the correlation between measures of consumer confidence and subsequent consumption growth arises because confidence measures contain fundamental information about the current and future states of the economy ("news view"), which is also reflected in other macroeconomic variables. The available evidence for the euro area mainly supports the second view, namely that the predictive power of consumer confidence reflects information that is also available in standard determinants of consumption. However, as some of these determinants can only be observed with a lag, consumer confidence and its sub-components may indeed provide useful information for future consumption.<sup>4</sup>

**Consumer confidence can be an important leading indicator due to its timeliness in providing information about current and future consumption growth.** The indicator is usually available several weeks before data on key determinants of consumption (e.g. disposable income) become available. Monitoring consumer confidence can therefore be useful for policymakers.

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<sup>2</sup> The four questions that are used to compute the consumer confidence indicator are those that relate to consumers' expectations about unemployment, the general economic situation, their personal financial situation and their personal saving ability over the next 12 months. Because responses relating to unemployment and the general economic situation vary to a much greater extent, they are given much more weight in the consumer confidence indicator. Therefore it cannot be ruled out that certain questions in the European Commission's consumer survey are better for predicting future consumption growth than the consumer confidence indicator.

<sup>3</sup> See Jonsson, A. and Lindén, S., "The quest for the best consumer confidence indicator", *European Economy – Economic Papers*, No 372, 2009; and *Evaluation of the Joint Harmonised EU Programme of Business and Consumer Surveys*, European Commission, 2012.

<sup>4</sup> See "Confidence indicators and economic developments", *Monthly Bulletin*, ECB, January 2013.

## Box 3

# Recent developments in extra-euro area trade: the role of emerging market economies

**Over the past 15 years extra-euro area trade has played an increasingly important role.**

During the early 2000s trade between the euro area countries accounted for the majority of total euro area trade. Therefore, trade was largely reliant on domestic developments in the euro area. Since the mid-2000s, however, euro area trade has become more dependent on global developments owing to the increase in the share of extra-euro area trade in total euro area trade, which stood at more than 55% in the first quarter of 2015 (see Chart A). This reflects the fast pace of globalisation since 2000 and the accession of further countries to the World Trade Organization, notably China, which has opened up new markets for euro area exporters.

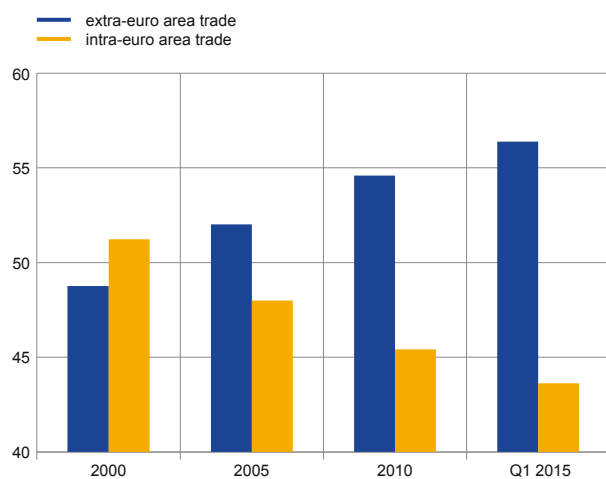
**Unlike euro area domestic demand, foreign demand has rebounded quickly since the crisis.**

Since 2009 domestic demand in the euro area has been dampened by private sector balance sheet adjustments, bank deleveraging and credit constraints, as well as tight financing conditions in some euro area countries. Furthermore, the sovereign debt crisis in 2012 led to increased uncertainty and had adverse effects on consumer confidence and investment spending. Owing to these adverse factors, domestic demand, although increasing, had still not returned to its pre-crisis levels in the first quarter of 2015. In contrast, euro area foreign demand rebounded quickly after the crisis (see Chart B) and is now around 25% higher than

**Chart A**

### Intra and extra-euro area trade

(percentage shares of total euro area trade)

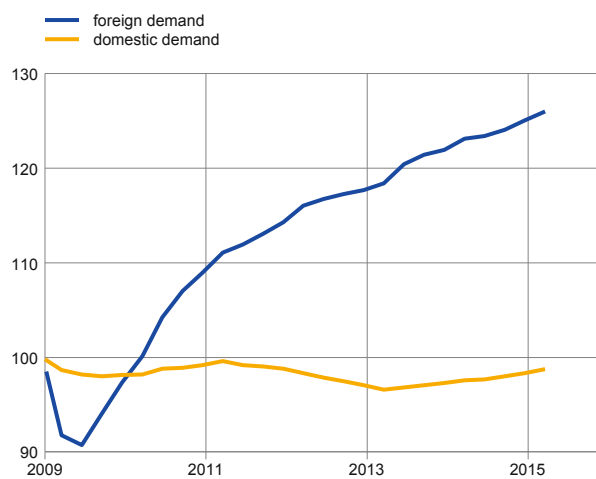


Sources: Eurostat and ECB calculations.  
Notes: Trade refers to both imports and exports.

**Chart B**

### Foreign and domestic demand

(index: Q4 2008 = 100)

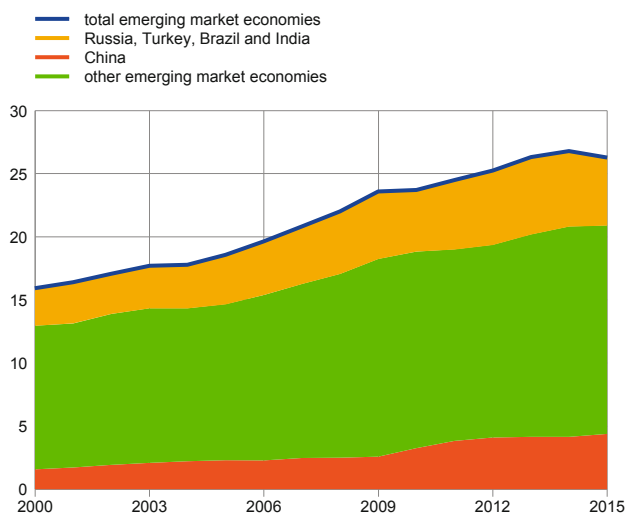


Sources: Eurostat and ECB calculations.

## Chart C

### Exports to emerging economies

(percentage shares of total euro area exports)



Sources: International Monetary Fund (Direction of Trade Statistics) and ECB calculations.

the level recorded at the end of 2008. However, the rate of increase in euro area foreign demand has moderated somewhat since early 2011, in line with slower global trade growth.

**Euro area exports to emerging economies have been steadily increasing.** Extra-euro area exports are to a large extent destined to advanced economies in the European Union or to other European countries. In addition, around 14% of extra-euro area trade is with the United States. Over time the share of emerging economies in total euro area exports has steadily increased, rising from 16% in 2000 to just above 25% in 2011 (see Chart C). Since then this share has been broadly stable at around 26%. Among the emerging market economies, China is the main destination of extra-euro area exports, followed by Russia and Turkey.

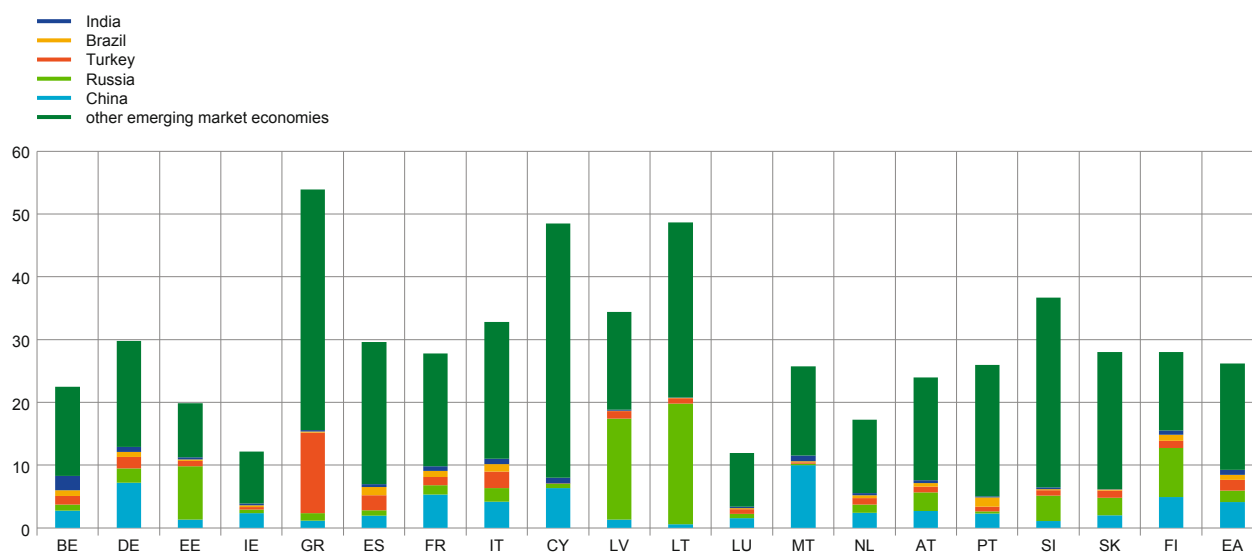
**The share in euro area exports of the five main trading partners among the emerging economies is around 10%.** Thus, at the euro area and individual

country levels, exposure to the export markets of the five most important trading partners among the group of emerging economies (China, Russia, Turkey, Brazil and India) is non-negligible (see Chart D). This is particularly the case for the Baltic countries, Finland and Greece. For the Baltic countries and Finland, trade with Russia constitutes around 10% of their total exports. In the case of Greece, exports to Turkey account for 13% of total exports. For these economies, a further slowdown affecting some of their main emerging market trading partners could reduce exports

## Chart D

### Exposure to emerging market economies via exports

(percentage shares of total exports in value terms in Q4 2014)

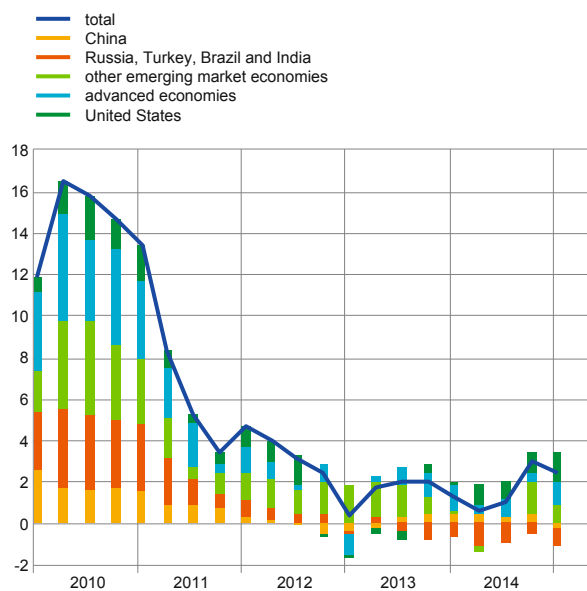


Sources: International Monetary Fund (Direction of Trade Statistics) and ECB calculations.

## Chart E

### Extra-euro area exports

(year-on-year growth; percentage point contributions to growth)



Sources: Eurostat and ECB calculations.

and hence slow their own growth. However, the extent of such a slowdown in these euro area countries would also depend on domestic conditions, as well as the resilience of their exporting industries.

#### Recently the contribution of emerging economies to extra-euro area export growth has declined.

Since late 2013 the five main trading partners among the group of emerging economies have made a negative contribution to extra-euro area export growth, notably owing to the continued weakness in Russia and Brazil. In the first quarter of 2015 China's contribution to extra-euro area export growth turned negative (see Chart E). While growth in the emerging economies has slowed, advanced economies, such as the United States and the United Kingdom, have increased their imports from the euro area, as domestic demand in these countries has rebounded somewhat. As a consequence, the share of extra-euro area exports to the United States has increased during the last three years, rising from 12% in 2012 to 14% in the first few months of 2015. Nonetheless, the increase in demand

from the United States and other advanced economies has not fully offset the slower pace of growth in emerging economies since the beginning of 2015. The latest data for April 2015 point to a continued weak performance of exports to China, Russia and Brazil. At the same time, the United States continued to support extra-euro area export growth in April.

**With the slowdown in emerging economies, the euro area will have to rely on advanced economies to drive export growth in the near term.**

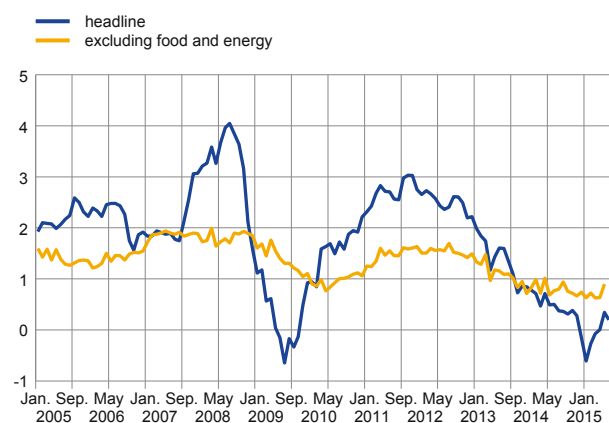


## Box 4

# Has underlying inflation reached a turning point?

**Chart A**  
Euro area HICP inflation

(annual percentage changes)



Sources: Eurostat and ECB calculations.

**The turnaround in headline HICP inflation since February 2015 has thus far been mainly due to energy and food prices, but more recently inflation excluding these components has also risen.** For HICP inflation excluding food and energy (HICPX), which is often used to gauge underlying developments in inflation, the turnaround is, however, less clear. HICPX stood at 0.8% in June, slightly down from 0.9% in May but up from its all-time low of 0.6% in March and April (see Chart A). This box looks at the recent uptick in HICPX and at a range of other indicators to assess whether they suggest an upturn in underlying inflation.

**The latest higher HICPX figures reflect a combination of persistent and temporary factors.** Persistent factors are those that determine a sustained change in inflation, while temporary ones are those that cause only a transient movement in inflation, for instance owing to

calendar effects. Reviewing the two types of factor is important in identifying evidence of a turning point. Some of these factors can be reviewed at the level of overall HICPX, while for others it is useful to look at the more granular data within HICPX, as different components tend to have different exposures to persistent and temporary factors.

**Strong oil price movements can blur the signal for HICPX owing to their indirect effects.** Such indirect effects along the production and pricing chains affect items in both the non-energy industrial goods component and the services component of HICPX. Strong swings in oil prices can then imply movements in HICPX that would not reflect a generalised and sustainable movement in underlying inflation. According to previous studies<sup>1</sup>, indirect effects on HICPX stemming from oil price changes typically peak only in the second year after a shock and so have a much more gradual impact than the direct effects. At the current juncture, it is therefore likely that the sharp decline in oil prices seen until January 2015 is still exerting a downward impact on HICPX; and unlikely that the partial reversal of this decline in recent months has already pushed up HICPX. This means that the slightly higher HICPX figures for May and June were not due to any potential temporary upward impacts stemming from oil prices.

**Non-energy industrial goods inflation has increased steadily over recent months, reflecting an upturn in its less volatile components.** Previously observed upticks in non-energy industrial goods inflation have often been driven

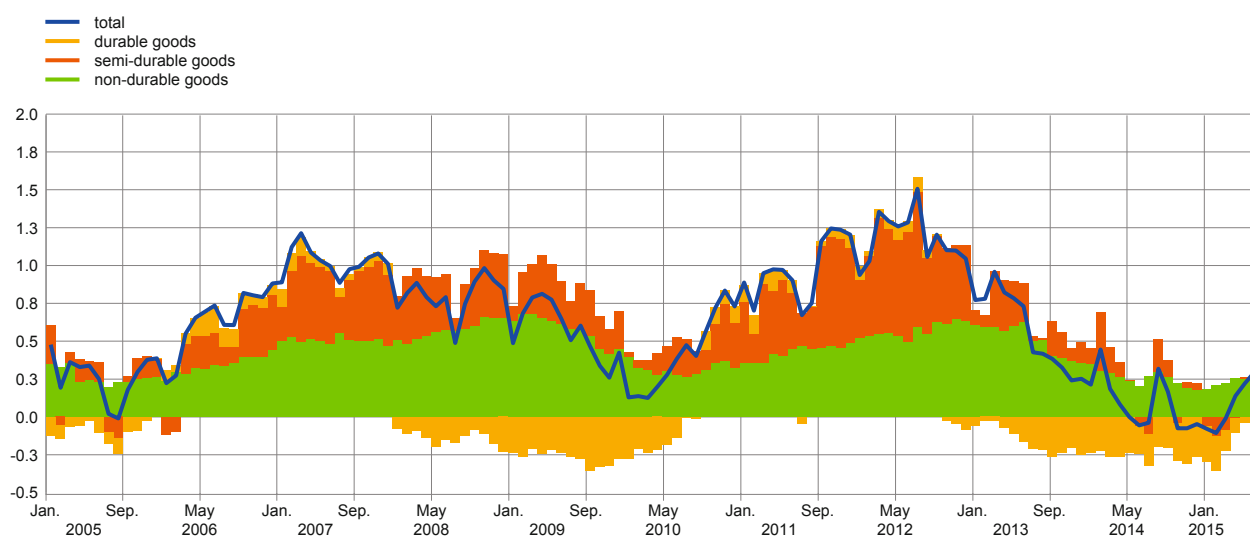
<sup>1</sup> See, for example, Task Force of the Monetary Policy Committee of the ESCB, "Energy Markets and the Euro Area Macroeconomy", *Occasional Paper Series*, No 113, ECB, Frankfurt am Main, June 2010.

by temporary movements in semi-durable goods prices related to changes in the timing or intensity of clothing sales periods from one year to the next (e.g. as in February and August 2014). However, the most recent upturn has seen increases in each of the past four months (from -0.1% in February 2015 to 0.3% in June) and has been relatively broad-based across the components of non-energy industrial goods inflation (see Chart B). The durable goods component has risen the most (by 1 percentage point since November 2014), driven in particular by items such as car and furniture prices. These increases are consistent with the rise in the consumption of durable goods observed over recent quarters and with the sharp increase in import prices for non-food consumer goods. The latter development has followed the depreciation of the euro over recent quarters and particularly since the start of the year, with further lagged upward effects anticipated.

## Chart B

### HICP non-energy industrial goods inflation and its components

(annual percentage changes; percentage points)



Sources: Eurostat and ECB calculations.

Note: Data are adjusted for statistical changes in the calculation of seasonal products introduced in 2010 and 2011.

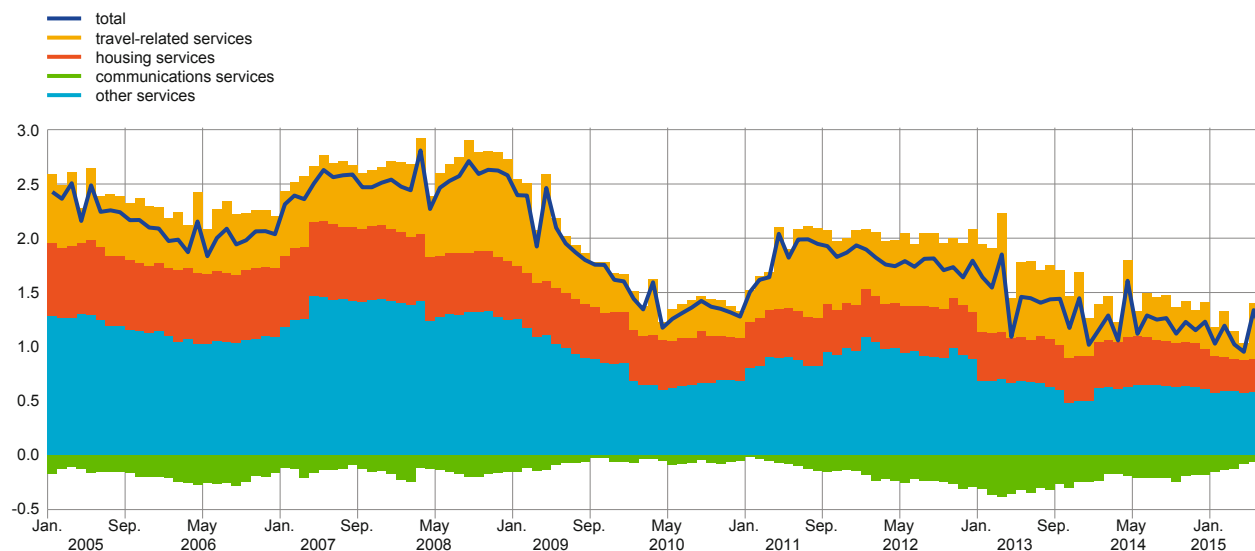
**By contrast, recent movements in services inflation have reflected only volatility, with no sign of a pick-up in the more persistent part.** This also reflects the fact that components with typically more persistent developments are showing diverging trends. Communication services inflation has become significantly less negative over the last three quarters, broadly offsetting a protracted downward trend in inflation related to housing services. A large block of remaining items bundled under the component “other” has remained broadly stable at low levels of inflation for the past 18 months. The more volatile items, i.e. those related to travel services, were behind the blip in services inflation in May 2015, as prices for services such as airfares and package holidays were strongly influenced by the different timing of the Whitsun holiday in 2015 compared with 2014 (see Chart C).

**Short-term measures of HICPX have shown a more sustained increase, but given past volatility provide only weak evidence of a turning point.** Identifying turning points by looking at annual rates of change instead of month-on-month

## Chart C

### HICP services inflation and its components

(annual percentage changes; percentage points)

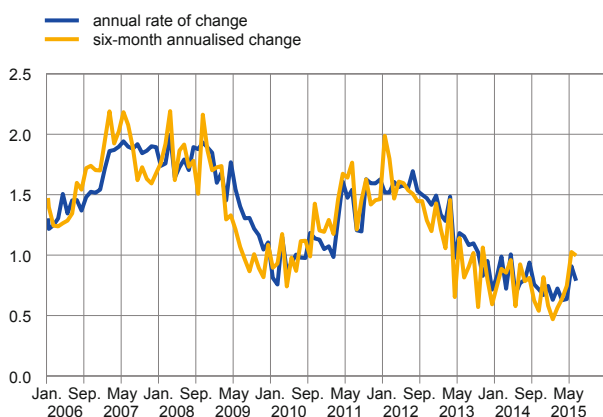


Sources: Eurostat and ECB calculations.

## Chart D

### Short-term measures of HICP inflation excluding food and energy

(annual percentage changes; six-month annualised percentage changes)



Sources: Eurostat and ECB calculations.

Note: Annualised growth rates are based on seasonally adjusted data.

changes in seasonally adjusted data carries the risk that an upturn in the price level may only become evident with a delay. However, as month-on-month changes tend to be very volatile and thus cannot provide clear signals, an intermediate measure, such as the six-month annualised change in HICPX, could provide both timely and clearer signals. This measure shows a relatively persistent increase since the start of the year, but still reveals considerable volatility, making it difficult to conclude that the recent upturn relates to a true cyclical turning point (see Chart D). One way to assess this more formally is to apply a measure typically used for assessing the business cycle, the “months for cyclical dominance” measure.<sup>2</sup> Applied to the six-month annualised changes in HICPX, this measure suggests that, on average, developments in a certain direction should be observed for seven to eight months in order for the signal from the cyclical component to dominate over the short-term noise in

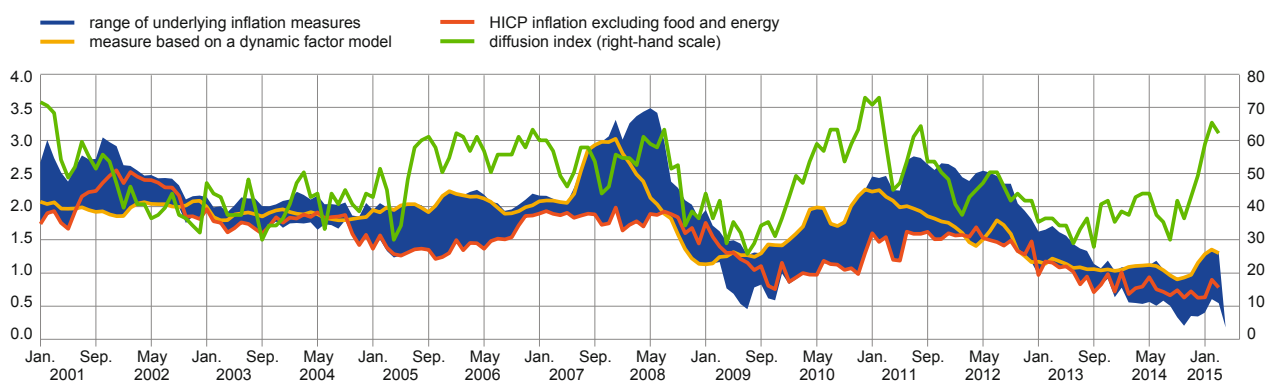
the series. This implies that the recent upturn needs to be viewed with some caution, especially given the recent above-mentioned calendar effects.

**Other measures of underlying inflation have also increased in line with HICPX and some have shown significant increases over recent months.** HICPX still includes volatile components, such as package holidays, which make it difficult to

<sup>2</sup> For a more detailed explanation of how “months for cyclical dominance” measures are calculated, see the box entitled “Identifying cyclical signals from euro area economic indicators”, *Monthly Bulletin*, ECB, May 2012.

## Chart E Measures of underlying inflation

(annual percentage changes; share)



Sources: Eurostat and ECB calculations.

Note: The diffusion index is calculated as the share of individual HICP items which have seen an increase in their annual rate of change over the past three months.

identify the signal at a certain point in time. To see whether the upturn in HICPX is more generalised, it is important to cross-check against developments in other measures of underlying inflation. In addition to measures which permanently exclude the same items, some other measures exclude items based on statistical criteria (i.e. trimmed means which take out the impact of individual items with the highest and lowest inflation rates) or make use of econometric techniques to extract the common component across the set of individual price series. Looking at a broad set of such measures, all indicators<sup>3</sup> stood at higher levels in June 2015 than in March 2015 (see Chart E). Furthermore, two other measures increased significantly from their levels at the start of the year. The first is based on a dynamic factor model, which captures the common and persistent factors in inflation rates across countries and HICP items<sup>4</sup> and has historically shown leading properties for HICPX. Another measure is a diffusion index, which tries to capture the extent to which changes in the inflation rate are broad-based rather than due to a limited number of items. This indicator shows that, compared with January 2015, there has been a significant increase in the unweighted share of HICP items that have seen an increase in their annual rate of change over the previous three months.

**Overall, available measures and indicators for underlying inflation have risen from their low levels, in line with the path of HICPX envisaged in the latest Eurosystem staff macroeconomic projections.** These projections foresee a gradual strengthening in HICPX during the course of 2015, reflecting the impact of the declining slack in the economy on wages and profits, together with the lower euro exchange rate and indirect effects from the assumed increases in commodity prices. Nevertheless, on the basis of the out-turns observed so far, it remains too early to identify a turning point in underlying inflation from a statistical point of view. More data are required for the signal for such a turning point to become strong enough.

<sup>3</sup> Permanent exclusion-based measures comprise: HICP inflation excluding energy, HICP inflation excluding unprocessed food and energy, HICP inflation excluding food and energy; statistical exclusion-based measures comprise: 10%, 30% trimmed means and the median (100% trimmed mean).

<sup>4</sup> This indicator is derived from the methodology introduced in Cristadoro, R., Forni, M., Reichlin, L. and Veronese, G., "A Core Inflation Indicator for the Euro Area", *Journal of Money, Credit and Banking*, No 37, 2005, pp. 539-560.

## Box 5

# The impact of negative short-term rates on the money market fund industry

**The prolonged period of low – and recently negative – short-term interest rates poses challenges for the money market fund (MMF) industry.<sup>1</sup>** However, while low returns dampen demand for these funds and reduce the overall size of the industry, conditions seem to have stabilised since the middle of 2014, with holdings of MMF shares in M3 showing positive flows. This box provides an overview of recent developments in the sector and analyses changes in the returns of these funds in the context of the low interest rate environment.

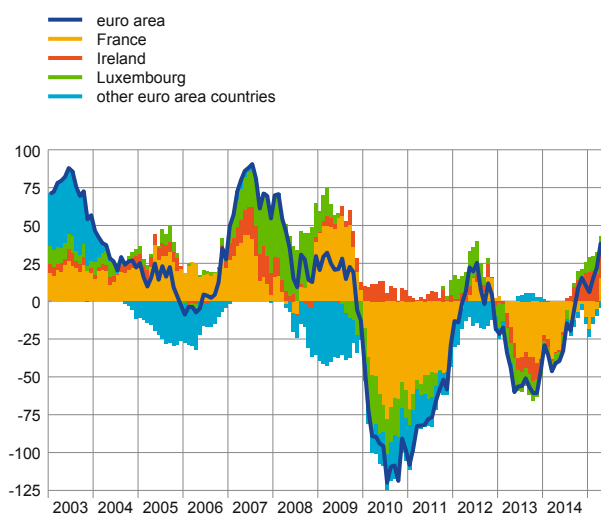
**The issuance of shares/units by euro area MMFs to the euro area money-holding sector has increased since mid-2014 following a long decline.**

Chart A shows that annual flows of money market fund shares issued to the euro area money-holding sector increased from –€33 billion at the end of June 2014 to €32 billion by the end of May 2015. The chart focuses on developments in France, Ireland and Luxembourg, as these countries account for over 95% of the total assets of all MMFs in the euro area. The chart shows that annual flows have generally increased in all countries since mid-2014 and have been positive on aggregate since the beginning of 2015, adding support to the growth of M3.

**Chart A**

Shares/units issued by euro area money market funds included in M3

(EUR billions; annual flows; euro area non-MFIs excluding central government sector)

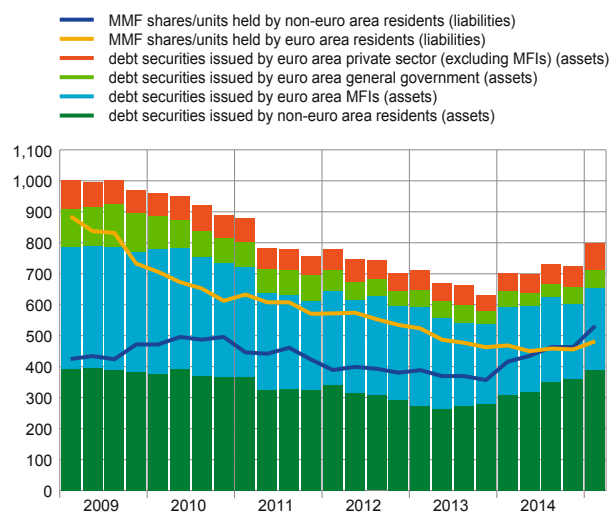


Source: ECB.  
Note: The latest observation is for May 2015.

**Chart B**

Assets and liabilities of euro area money market funds by counterparty sector and area

(EUR billions; outstanding amounts)



Source: ECB.  
Notes: The bars denote MMFs' holdings of debt securities, while the lines denote MMFs' liabilities. The latest observation is for the first quarter of 2015.

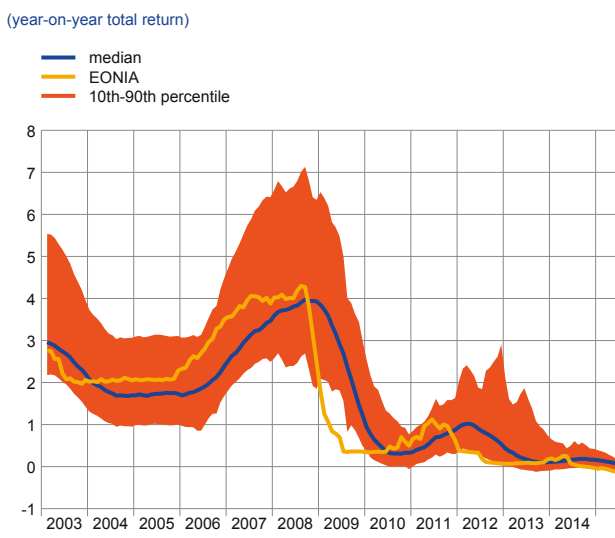
<sup>1</sup> The ECB defines a money market fund as a collective investment undertaking that primarily invests in money market instruments and/or other transferable debt instruments with a residual maturity of up to one year, and/or that pursues a rate of return that approaches the interest rates on money market instruments.

**Of the main assets and liabilities of MMFs resident in the euro area, the issuance of shares to non-residents in the second half of 2014 was greater than that to residents and also coincided with an increase in MMFs' holdings of external debt securities over this period (see Chart B).** MMFs in Ireland and Luxembourg are mostly focused on non-euro area residents, while in France the industry carries out a predominantly domestic intermediation function. MMFs' holdings of debt securities issued by euro area MFIs declined from €280 billion at the end of the second quarter of 2014 to €263 billion by the end of the first quarter of 2015. While this is broadly in line with the decreased overall MFI issuance of debt securities over this period, the current share of MMFs' holdings of outstanding MFI debt (around 6%) remains below the levels seen up to 2010 (around 8%), indicating that the relevance of MMFs for the funding of euro area MFIs has diminished.

**The contraction in the MMF industry since 2009 coincides with the decrease in returns offered on these funds over the period (see Chart C).** While the median return is still slightly positive, a substantial proportion of MMFs are yielding negative returns. By the end of June 2015 22% of the funds showed negative returns, but these funds only accounted for around 5% of the total assets, suggesting that larger funds tend to offer higher returns.

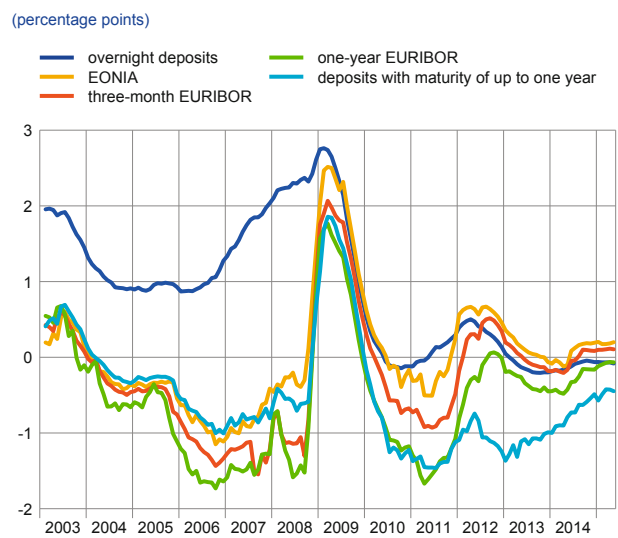
**The median return has remained relatively stable since the end of 2013 and has in fact increased in comparison with the interest rates on similar investment opportunities.** For instance, since the introduction of negative deposit rates in the middle of 2014, MMF returns have been higher than the EONIA and the three-month EURIBOR, and the difference between MMF returns and interest rates on deposits with a maturity of up to one year has decreased steadily since 2013 (see Chart D).

**Chart C**  
Total returns of euro area money market funds



Sources: Bloomberg, ECB and ECB calculations.  
 Notes: The sample includes 518 funds, all of them denominated in euro. Total returns take account of the price appreciation and dividends reinvested. The latest observation is for June 2015.

**Chart D**  
Returns of euro area money market funds relative to other interest rates

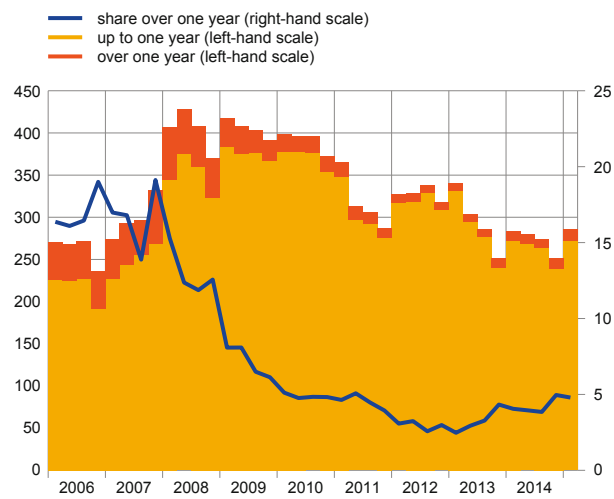


Sources: Bloomberg, ECB and ECB calculations.  
 Notes: Expressed as the median total returns of euro area money market funds less the respective interest rate. The latest observation is for May 2015.

## Chart E

### MMFs' holdings of debt securities with an original maturity of up to and over one year

(EUR billions; percentage share of total holdings)



Source: ECB.

Note: The latest observation is for the first quarter of 2015.

### There is no clear evidence that MMFs have sought to increase returns by extending the maturity of their investments.

Chart E shows the share of securities held with an original maturity of over one year as a percentage of total holdings. These broad data do not permit an in-depth analysis of changes in the residual life or maturity of MMFs' holdings, but they can give some indication of the trends in the types of securities they hold. The chart shows that euro area MMFs decreased their share of holdings of debt securities with a maturity of over one year from 2008 to 2013, when the share increased marginally. However, since the second half of 2014, after the ECB's deposit facility rate turned negative, there has been no major change with respect to the original maturity of the debt securities they hold. It is important to remember that there are regulations on the weighted average life of securities that MMFs are permitted to hold, and their ability to adjust the maturity of their holdings can therefore be limited. Overall, there has not been a

perceptible increase in the original maturity of MMF holdings since the deposit facility rate turned negative.

### In conclusion, the environment remains challenging for the euro area MMF industry, though developments appear to have stabilised.

However, the relevance of MMFs for euro area MFI funding has diminished. Recent increases in issuance, and correspondingly in assets, are predominantly driven by non-euro area counterparties. The stabilisation in issuance vis-à-vis euro area residents is likely to be due to the relatively steady returns on these funds over the past year, especially in the context of declining interest rates on comparable investment opportunities. An analysis of the original maturity of the debt securities that MMFs hold indicates no obvious change. This would suggest that MMFs have weathered the low interest rate environment by taking advantage of the ongoing adjustment in relative prices and returns across the board, rather than by changing their business model.



## Article

# Real convergence in the euro area: evidence, theory and policy implications

An important lesson from the euro area sovereign debt crisis is that the need for sound economic policies does not end once a country has adopted the euro. There are no automatic mechanisms to ensure that the process of nominal convergence which occurs before adoption of the euro produces sustainable real convergence thereafter. The global financial crisis that started in 2008 has showed that some countries participating in Economic and Monetary Union (EMU) had severe weaknesses in their structural and institutional set-up. This has resulted in a large and protracted fall in real per capita income levels in these countries since 2008.

While there has been real convergence in the European Union (EU) as a whole since 1999 owing to the catching up of central and eastern European (CEE) economies, there has been no process of real convergence among the 12 countries that adopted the euro in 1999 and 2001. This lack of convergence is related to several factors, notably weak institutions, structural rigidities, weak productivity growth and insufficient policies to address asset price booms. Against this background, several factors appear crucial for ensuring real convergence in EMU: macroeconomic stability, and sound fiscal policy in particular; a high degree of flexibility in product and labour markets; favourable conditions for an efficient use of capital and labour in the economy, supporting total factor productivity (TFP) growth; economic integration within the euro area; and a more active use of national policy tools to prevent asset price and credit boom-bust cycles.

## 1 Introduction

**While the concept of convergence has many dimensions, this article focuses on real convergence measured by real GDP per capita.**<sup>1</sup> Sustainable real convergence is the process whereby the GDP per capita levels of lower-income economies catch up with those of higher-income economies on a durable basis. For convergence to be sustainable, long-term potential per capita growth must be consistent with an expansion of demand. Indeed, GDP growth that results from external factors such as a strong global demand shock, or a more benign shock such as the decline in interest spreads that occurred upon the launch of the euro, may prove to be unsustainable if not matched by higher growth potential.

**In the literature on economic growth, real convergence is captured by the two complementary concepts of beta convergence ( $\beta$ -convergence) and sigma convergence ( $\sigma$ -convergence).** The first type of convergence occurs when lower-

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<sup>1</sup> The convergence criteria laid down by the Treaty on the Functioning of the European Union (Maastricht criteria), which measure nominal convergence, fall beyond the scope of this article.

income economies grow faster than higher-income economies, i.e. they experience a process of catching up. This is usually measured in terms of relative GDP per capita in purchasing power standards (PPS). The second concept refers to a reduction in the dispersion of income levels across economies. Real convergence requires that lower-income countries can grow faster in a sustainable manner than higher-income countries, with their income levels converging toward those of higher-income countries as a result. As such, real convergence mainly pertains to the  $\beta$ -dimension of convergence, with  $\sigma$ -convergence being a by-product; sustainable convergence is the key precondition for economies that are catching up to be resilient to shocks.

### **Sustainable real convergence supports the smooth functioning of Monetary Union over the medium term.**

First, achieving sustainable real convergence by means of sound national economic policies is important to support the economic and social cohesion of EMU, especially since euro area countries do not share fiscal transfer mechanisms similar to those in the US federal budget. While the Structural Funds and the Cohesion Fund – the financial instruments of EU regional policy – aim to narrow the development disparities among regions and Member States, they are more limited in scope than similar instruments in a federal state. Second, the sustainability of real convergence is important because for some euro area economies the process of catching up tends to drive up their inflation differential vis-à-vis the euro area average over the medium term. In a monetary union, this is usually associated with a lowering of real interest rates in the economies that are catching up, since short-term nominal interest rates are determined by the central bank's policy rate. Given this essential feature of monetary policy in a single currency area, great importance needs to be attached to fiscal and macroprudential policies that tame macro-financial cycles and ensure stability, so as to prevent countries becoming exposed to boom-bust cycles. A greater degree of cyclical divergence within the euro area would complicate the conduct of the single monetary policy.

### **This article reviews the mechanisms and incentives that have so far hampered sustainable real convergence among euro area countries.**

Section 2 presents some evidence of real convergence since the start of EMU, Section 3 discusses the reasons for the lack of sustainable real convergence in some euro area economies that adopted the euro at an early stage, Section 4 focuses on the key role of TFP growth in the convergence process, Section 5 examines the policies that could help bring about sustainable real convergence, and Section 6 concludes.

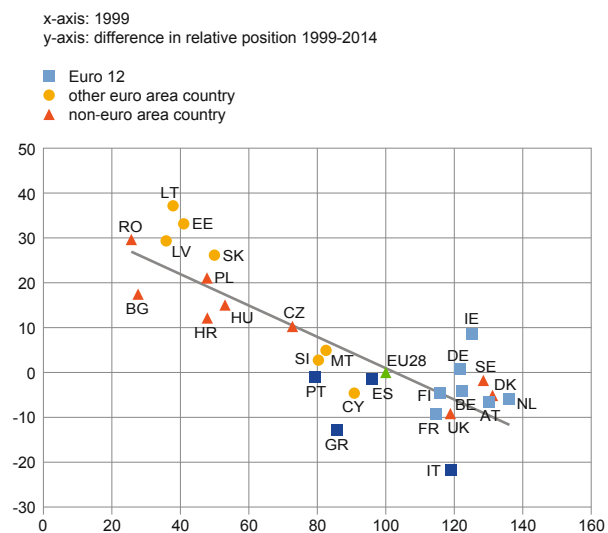
## 2 Evidence of real convergence

### **Between 1999 and 2014 some degree of real convergence took place among the 28 countries that now make up the EU (the EU28).**

As shown in Chart 1, both non-euro area EU countries (orange triangles) and countries that adopted the euro after 2002 (yellow circles) performed better over the period 1999 to 2014 than the rest of the EU countries, i.e. the 12 countries (Euro 12) that adopted the euro

**Chart 1**  
**GDP growth per capita relative to the EU28**

(GDP per capita in PPS; EU28=100)



Sources: European Commission and ECB staff calculations.

Notes: Luxembourg is excluded because GDP per capita computations are distorted by the high number of cross-border workers. The dark blue squares represent those of the catching up economies in the Euro 12 that showed no convergence over this period (Greece, Spain and Portugal), and Italy, the Euro 12 country with the largest divergence.

before 2002 (blue squares). Estonia, Latvia, Lithuania, Romania and Slovakia have recorded the highest degree of convergence among the EU countries so far, followed by other countries in the CEE region.<sup>2</sup>

**Little real convergence has taken place among the euro area economies since the establishment of the euro, despite initial expectations that the single currency would act as a catalyst for faster real convergence.** There is no clear relationship between relative GDP per capita levels in 1999 and their relative growth between 1999 and 2014. In fact, looking at the period as a whole, there is some evidence of divergence among the early adopters of the euro, given that over 15 years a number of relatively low-income countries have maintained (Spain and Portugal) or even increased (Greece) their income gaps with respect to the average. Moreover, Italy, initially a higher-income country, recorded the worst performance, suggesting substantial divergence from the high-income group.

While the crisis following the collapse of Lehman Brothers can partly explain the divergence observed in these countries, more deep-rooted factors were also at

play. Ireland, for example, in spite of its severe financial crisis in the period 2008-12, shows some improvement, remaining among the higher-income countries.

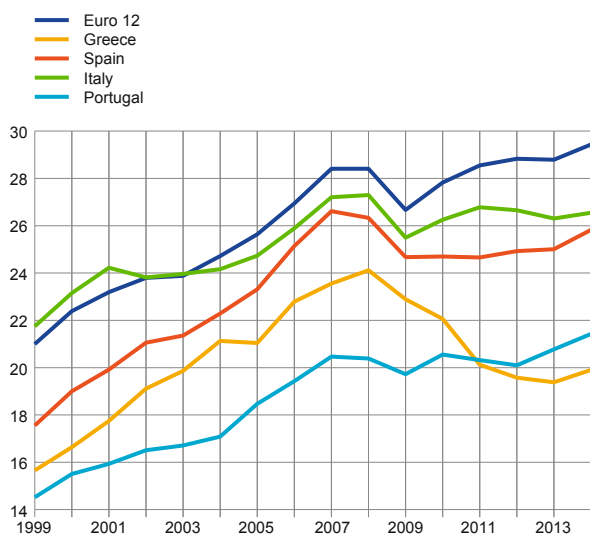
**Focusing on pre- and post-crisis sub-periods, there was some temporary convergence before 2007 among the Euro 12.** Before the global financial crisis there was faster growth in Greece and Spain than in the rest of the euro area. This catching up process was rapidly reversed over the period 2008-13, when these economies underwent a severe recession. In the case of Portugal, there is limited evidence of even temporary convergence in the pre-crisis period. Among the high-income countries, Italy's growth underperformed the euro area average over almost the whole period, leading to increased divergence (see Chart 2).

**Similarly, in terms of income dispersion, there is some evidence of convergence among the EU28, but little evidence as regards the Euro 12.** Dispersion of per capita income levels has increased overall for the Euro 12, after a temporary narrowing between 2006 and 2008 (see Chart 3). Some convergence in terms of reduced income dispersion is detected when looking at the EU28 as a whole, thanks to the catching up of CEE economies. However, the pace of the reduction of income dispersion seems to have slowed during the crisis period, i.e. since 2008.

<sup>2</sup> The stronger convergence performance of CEE countries deserves a deeper analysis, which is beyond the scope of this article. However, the increase in the economic integration of these countries within the EU over the sample period could explain part of their convergence performance. Some evidence of the positive effects of EU membership on relatively low-income countries, largely thanks to a greater degree of economic integration, is given in Crespo Cuaresma, J., Ritzberger-Grünwald, D. and Silgoner, M.A., "Growth convergence and EU membership", *Applied Economics*, Vol. 40, No 5, 2008, pp. 643-656.

**Chart 2****Real GDP per capita in the Euro 12**

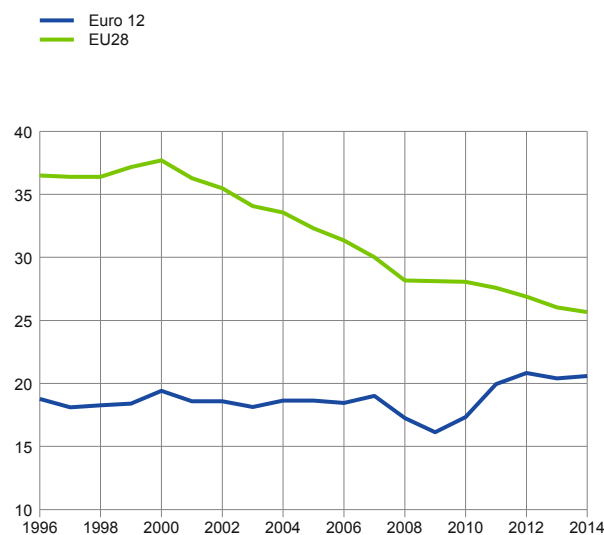
(GDP per capita in 1,000 PPS)



Sources: European Commission and ECB staff calculations.

**Chart 3****Standard deviation of GDP per capita**

(GDP per capita in 1,000 PPS)

Sources: European Commission and ECB staff calculations.  
Note: Luxembourg is excluded (see the note to Chart 1).

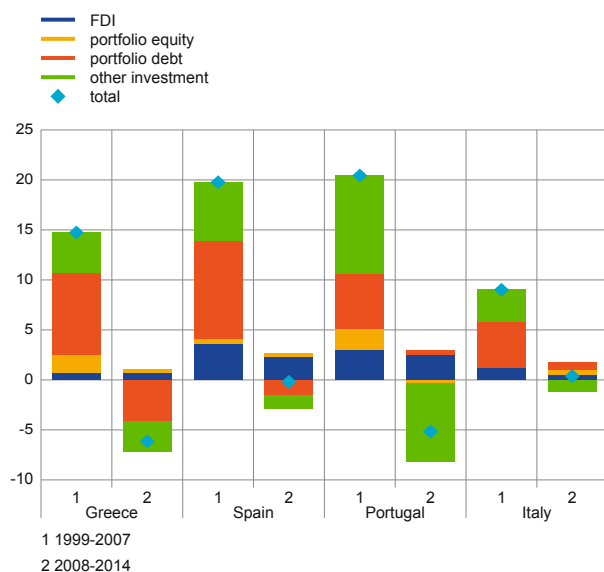
### 3 Reasons for the lack of real convergence

**At the start of EMU many observers expected that deeper monetary and financial integration would trigger faster real convergence.** As theory would predict (see Box 1), gross private capital inflows in the pre-crisis years were sizeable

in those Euro 12 countries with per capita income levels significantly below the euro area average, including Greece, Portugal and, to a lesser extent, Spain. In the case of Italy, capital inflows were much lower (see Chart 4), as with most other high-income countries. Capital inflows to these countries mainly consisted of investment in debt instruments and banking flows, whereas inward foreign direct investment (FDI) was less significant. In principle, private capital flowing to lower-income euro area countries should have supported productivity gains and sustainable long-term increases in income levels in these countries. When the global financial crisis started, the amount of external private financing began to fall, and continued to decline substantially over the crisis period.

**Chart 4****Gross private capital flows to Greece, Spain, Portugal and Italy**

(cumulated flows in percentages of GDP)

Source: ECB.  
Note: The item "other investment" excludes flows to the government and national central bank.

**The lack of sustainability in the process of real convergence in the pre-crisis years was mainly due to the combination of three factors.** First, institutional conditions in some countries were not supportive of business innovation and underlying productivity growth. Second, structural rigidities and a lack of effective competition (especially in the non-tradable sector)

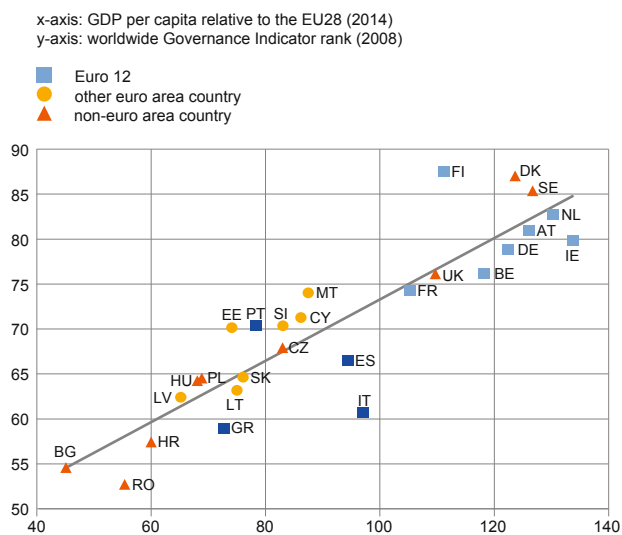
contributed to a misallocation of capital. This in turn prevented the supply potential of the economy from catching up with demand. Third, the sharp drop in real interest rates favoured exuberant credit growth and pushed up demand, engendering misguided expectations about future income.<sup>3</sup>

**First, as regards institutional factors, the quality of domestic institutions and governance affects economies' per capita income growth.** Countries with a higher ranking in terms of governance tend to exhibit higher income levels. The euro area countries that did not show convergence (or even diverged) in the pre-crisis years (Greece, Spain, Italy and Portugal) are also the countries with the lowest ranking in terms of governance in the Euro 12 (see Chart 5). This low ranking reflects a combination of factors including the effectiveness of government, the quality of the regulatory environment and the size of the informal economy. All these factors have a significant bearing on long-term growth.

**Second, countries with structural rigidities were hit particularly hard during the global financial crisis, which contributed to the sharp reversal of convergence during this period.** Some Euro 12 countries (especially Greece and Portugal) had very rigid product and labour markets before the crisis (see Chart 6).

**Chart 5**  
Worldwide Governance Indicator rank and GDP per capita

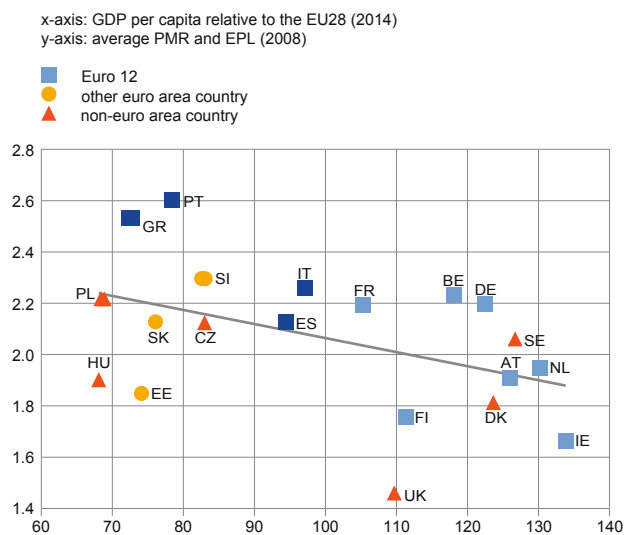
(GDP per capita in PPS; EU28=100)



Sources: World Bank and Eurostat.  
Notes: Worldwide Governance Indicators are the composite rank of average positions in six broad dimensions: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. Luxembourg is excluded (see the note to Chart 1). The dark blue squares represent those of the catching up economies in the Euro 12 that showed no convergence over this period (Greece, Spain and Portugal), and Italy, the Euro 12 country with the largest divergence.

**Chart 6**  
Structural rigidities and GDP per capita

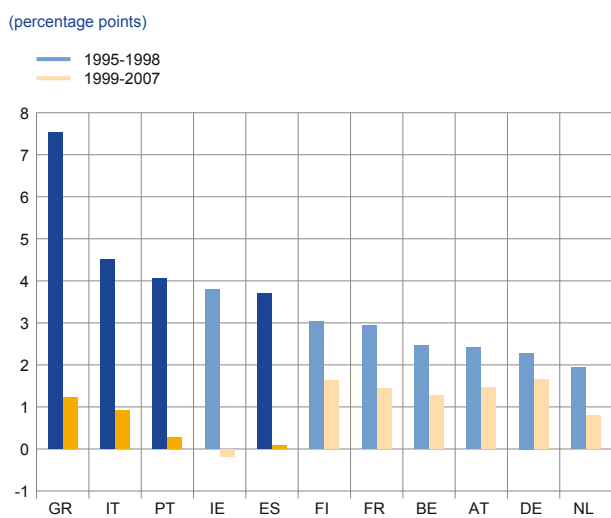
(GDP per capita in PPS; EU28=100)



Sources: European Commission and Organisation for Economic Co-operation and Development (OECD).  
Notes: The OECD product market regulation (PMR) indicators cover formal regulations in state control of business enterprises, legal and administrative barriers to entrepreneurship, and barriers to international trade and investment. The larger the value, the more rigid the regulations. The OECD employment protection legislation (EPL) indicators are synthetic indicators of the strictness of protection against individual and collective dismissals for workers with a regular contract. The summary indicators are obtained by factor analysis, in which each component is weighted according to the overall variance of the data. PMR and EPL data were unavailable for 2008 for Bulgaria, Croatia, Cyprus, Latvia, Lithuania, Malta and Romania. Luxembourg is excluded (see the note to Chart 1). The dark blue squares represent those of the catching up economies in the Euro 12 that showed no convergence over this period (Greece, Spain and Portugal), and Italy, the Euro 12 country with the largest divergence.

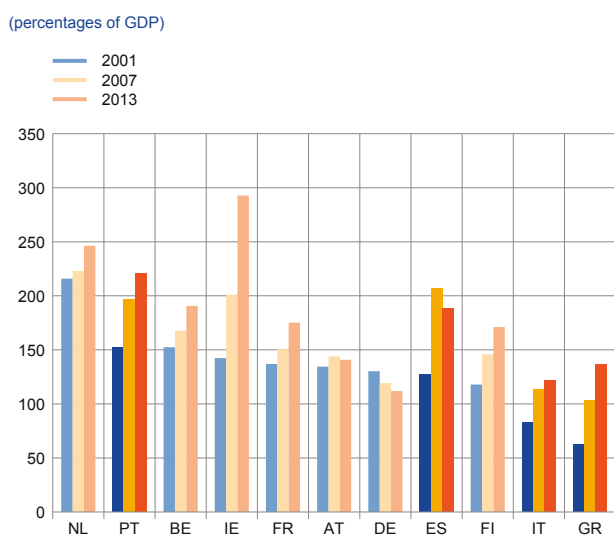
<sup>3</sup> See Borio, C., "The financial cycle and macroeconomics: what have we learnt?", *BIS Working Papers*, No 395, December 2012.

**Chart 7**  
Real three-month money market rates in the Euro 12



Sources: European Commission and ECB staff calculations.  
Notes: Nominal three-month money market rates are HICP-adjusted. The darker coloured columns represent those of the catching up economies in the Euro 12 that showed no convergence over this period (Greece, Spain and Portugal), and Italy, the Euro 12 country with the largest divergence.

**Chart 8**  
Private sector debt in the Euro 12



Sources: European Commission and ECB staff calculations.  
Notes: Private sector debt is the sum of the unconsolidated debt of households and non-financial corporations. The darker coloured columns represent those of the catching up economies in the Euro 12 that showed no convergence over this period (Greece, Spain and Portugal), and Italy, the Euro 12 country with the largest divergence.

In the labour market, these rigidities included a high degree of employment protection and wage bargaining systems that were not supportive of flexible wage adjustments. In the product markets, several sectors, including network industries, were sheltered from competition, which slowed down the adjustment of profit mark-ups during the crisis. The rigidities that hampered the adjustment of wages and prices significantly lengthened the process of reallocating labour and capital from crisis-hit sectors (e.g. construction) to faster growing sectors and increased the costs of the adjustment in terms of unemployment and income losses.

**Third, in the pre-crisis years, a credit-driven domestic demand boom and erroneous expectations about future economic growth prospects masked the weak growth potential in a number of countries.** Compared with the average

of the pre-euro area years (between 1995 and 1998), real interest rates dropped very sharply, especially in the southern euro area countries, and also in Ireland (see Chart 7). The substantial drop in real interest rates in these economies was a result of two factors: (i) substantial convergence in nominal interest rates before and after the introduction of the euro, and (ii) a rise in inflation in these countries above the euro area average during the early years of EMU.<sup>4</sup> Moreover, the credit-driven domestic demand boom that continued for many years led to an overestimation of growth potential in a number of countries, particularly in Greece and Spain. As a result, fiscal policy was too pro-cyclical during the boom years, as budgets were based on the assumption that the high revenues generated by unsustainable domestic demand would continue to be generated in the years to come. With the onset of the severe crisis, fiscal revenues dropped sharply in a context of insufficient fiscal buffers, resulting in a rapid increase of public debt.

**The excessive private sector credit growth in some countries led to rising debt levels in the corporate and/or household sector.** Ireland, Spain and, to

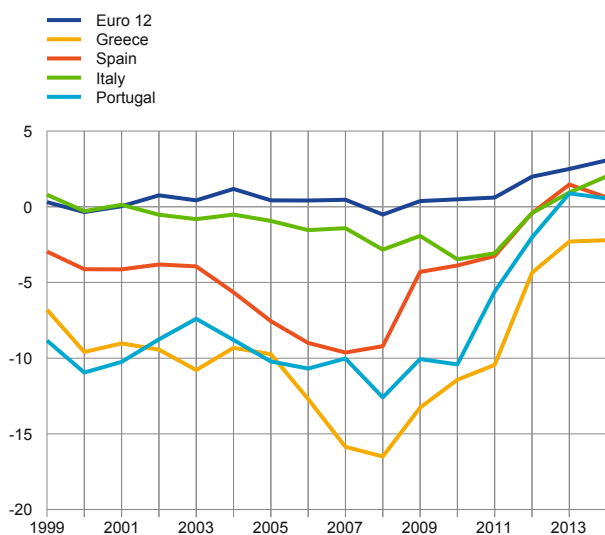
a lesser extent, Greece and Portugal recorded a substantial increase in private sector indebtedness (see Chart 8). The risks related to the sharp credit growth and increasing indebtedness were insufficiently addressed by the national authorities.

<sup>4</sup> For a more detailed explanation, see the article entitled "Monetary policy and inflation differentials in a heterogeneous currency area", *Monthly Bulletin*, ECB, Frankfurt am Main, May 2005.

## Chart 9

### Current account balances in the Euro 12

(percentages of GDP)



Source: European Commission.

In particular, macroprudential tools to limit excessive borrowing were either not used or were too weak to dampen credit growth sufficiently in these economies.

#### **Excessive growth of credit and domestic demand also led to the accumulation of very large external imbalances in the pre-crisis years.**

The current account deficit increased significantly over the pre-crisis years in Greece, Spain and Portugal. In Italy, a higher-income country, the current account deficit remained moderate (see Chart 9). Large cumulative current account imbalances in economies that are catching up are not necessarily problematic if the accumulation of large foreign liabilities is later matched by current account surpluses. If such current account deficits finance productivity-enhancing investments that lead to higher export revenues in the future, a temporary increase in current account deficits can turn out to be sustainable. However, the convergence pattern of these euro area countries did not meet this condition in

the pre-crisis period, since the accumulation of capital was heavily biased towards low-productivity, non-tradable sectors. While the expansion of external imbalances in Spain mainly reflected excessive investment in some segments of the private sector (particularly construction), in Greece overspending in the public sector was the main contributor to the gap between savings and investment. In Portugal low public and private savings played a significant role.

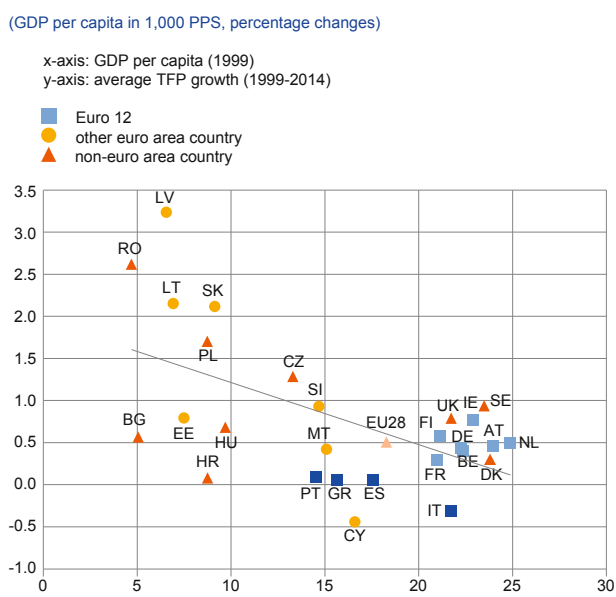
## 4 The role of productivity growth in the convergence process

**The financial flows channelled to the low-income countries failed to generate productivity convergence in the pre-crisis period.** TFP measures the efficiency with which labour and capital inputs are used in the production process and is a key driver of convergence (see Box 1). As a group, the EU28 countries with lower income levels tended to exhibit higher TFP growth, supporting the convergence process (see Chart 10). However, this was mostly due to CEE countries. In fact, Euro 12 countries with higher initial income levels even tended, on average, to experience higher TFP growth than the lower-income euro area countries.<sup>5</sup> The labour productivity growth of some economies that are catching up, especially Greece, Spain and Portugal, was disappointing. In Italy TFP growth largely underperformed the euro area average and was among the lowest in the EU28.

<sup>5</sup> For a review of the role of TFP and the lack of convergence in the euro area, see “Catching-up processes in the euro area”, *Quarterly report on the euro area*, Vol.12, No 1, European Commission, March 2013, pp. 7-18.

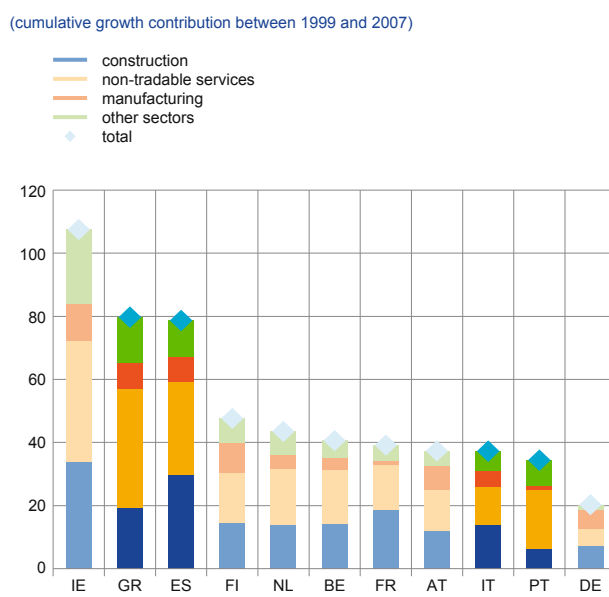


**Chart 10**  
GDP per capita and average TFP growth



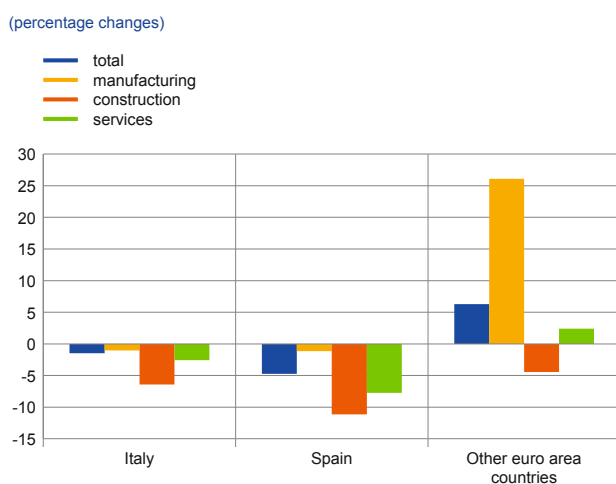
Sources: European Commission and ECB staff calculations.  
 Notes: Luxembourg is excluded (see the note to Chart 1). The dark blue squares represent those of the catching up economies in the Euro 12 that showed no convergence over this period (Greece, Spain and Portugal), and Italy, the Euro 12 country with the largest divergence.

**Chart 11**  
Breakdown of growth in value added by sector in the Euro 12



Sources: European Commission, based on EU KLEMS and ECB staff calculations.  
 Notes: No data are available for Luxembourg. For Belgium and Portugal, growth is computed between 1999 and 2006, since no observation is available for 2007. "Construction" includes real estate activities. "Non-tradable services" refers to distribution/wholesale, hotels, and community/social services. "Other sectors" refers to agriculture and mining, electricity, transport, and financial intermediation. The darker colour columns represent the catching up euro area economies (EA12) with no convergence (Greece, Spain and Portugal) and Italy, the EA12 country with the largest divergence over this period.

**Chart 12**  
TFP growth by sector in the Euro 12



Sources: European Commission, based on the EU KLEMS database, and ECB staff calculations.  
 Notes: No data are available for Greece and Portugal. "Other euro area countries" refers to Belgium, Germany, France, the Netherlands, Austria and Finland. "Total" includes other sectors, such as agriculture and mining, electricity, transport, and financial intermediation. The 2007 value for Belgium is extrapolated from 2006. Aggregates are unweighted.

**The weak overall TFP performance reflected in part the sectoral growth composition in some countries.** After the introduction of the euro, capital was increasingly channelled towards sectors with low marginal product of capital, i.e. weak productivity, but high rents.<sup>6</sup> Such sectors typically included non-tradable (services) sectors that were largely sheltered from competition, including distribution and network industries. The main reason for the much larger increase in value added in the pre-crisis years in Greece and Spain than in other Euro 12 countries (excluding Ireland) was a shift of resources towards non-tradable (services) sectors, including construction in the case of Spain. In Portugal, where growth was subdued even before the crisis, the non-tradable (services) sector also played a larger role in the increase in value added. In Italy, the sectoral value added composition was broadly similar to that of other large euro area countries (see Chart 11).

<sup>6</sup> According to Acemoglu and Robinson, the ultimate explanation for excessive rents is economic and political institutions that are not sufficiently "inclusive", and possibly even "extractive", in nature. See Acemoglu, D. and Robinson, J. A., *Why Nations Fail*, Profile Books, 2012.

**In some euro area countries TFP growth was also disappointing in the tradable sector.** As well as the allocation of capital to low-productivity sectors, it appears that in certain economies even potentially high-productivity sectors showed a weak productivity performance. In Spain and Italy, for instance, TFP growth in the period 1999-2007 was not only weaker in the services and construction sectors compared with the average of other euro area countries, but also in the manufacturing sector (see Chart 12). This suggests more widespread weaknesses in the business environments of these countries in the pre-crisis years, which is one of the factors that prevented them from realising their full capacity for innovation.<sup>7</sup>

## Box 1

The conceptual framework behind economic growth and the key role of TFP in convergence

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**This box explains how the theory of economic growth has corroborated the key roles of TFP and technology in the convergence process through time.** This is done by considering two classes of models: (i) those assuming an exogenous technology path, and (ii) those that introduce endogeneity into the technology path.

**In the first class of models, referred to as neoclassical models, the level of technology determines the effectiveness of the production process.** Solow<sup>8</sup>, in his seminal paper, assumes that both population and technology grow at an exogenous rate, whereas the stock of capital is determined by savings. The larger the existing stock of physical capital in the economy, the larger the amount of savings that is needed to offset depreciation and keep capital at its current level. Eventually the economy will reach a point at which there are just enough savings to maintain capital at its current level. In this steady state, capital per unit of effective labour will no longer increase and all relevant per capita variables will grow at the rate of technological progress.

**The Solow model's explanation for different growth rates among countries is that countries have different stocks of physical capital and are therefore at different points on their balanced growth paths.** One of the crucial assumptions of the Solow model is that the marginal return to capital decreases, which means the more capital there is in the economy, the smaller the benefit from adding another unit of it. Consequently, if the economy has a small stock of capital, the benefits from increased investment are high.

**Thus, according to Solow's model it is the high expected return on investment in capital-“poor” economies that motivates capital flows from rich to poor countries.** The increased investment causes the economy to move upwards on the balanced growth path: this is the so-called “catching up” phenomenon. As a consequence, economies converge towards the same steady state level of income. This convergence is conditional on economic agents across countries having identical preferences and on all other features of economies also being identical. The resultant theory of conditional convergence implies that if there are persistent differences

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<sup>7</sup> For an overview of the role of sectoral productivity developments as regards convergence in the euro area, see Sondermann, D., “Productivity in the euro area: any evidence of convergence?”, *Working Paper Series*, No 1431, ECB, Frankfurt am Main, April 2012.

<sup>8</sup> Solow, R., “A contribution to the theory of economic growth”, *Quarterly Journal of Economics*, Vol. 70, No 1, 1956, pp. 65-94.

across countries in preferences and other institutional features, divergence is possible not only in terms of levels of income, but also in terms of growth rates.

**The empirical evidence has cast some doubts on the validity of the Solow model for explaining the observed speed of convergence across the world.** In reality, neither differences in capital stocks nor capital flows that are high enough to account for the variation of income levels in the world can be observed. Barro and Sala-i-Martin<sup>9</sup> investigated the convergence hypothesis for both US states and an international sample of countries. Even though they were able to find evidence of convergence in both samples, they showed their empirical estimate of the speed of convergence of 2% per year to be much lower than the level theory would suggest.

**While the neoclassical theory provides an appealing theoretical framework, in practice it does not provide an explanation of the sources of convergence outside the very narrow “conditional” theory.** Differences in the effectiveness of production factors and varying speeds of technological progress could be one explanation for income differences across countries. However, by not being able to explain where differences in the level of these important variables come from or how progress can be created, the theory fails to explain how income convergence can be generated. Because the behaviour of individuals already results in the best possible outcome in these types of model, and because the growth rate is determined exogenously, it is also impossible for economic policy to improve a country’s growth performance, for example by providing incentives to save and invest.

**To overcome this problem, the second class of models introduces endogeneity into the technological process by explicitly modelling innovation and learning.** Two general approaches can be distinguished: (i) the modelling of increased productivity through increasing returns to production factors (either capital or labour), and (ii) the explicit modelling of research and development (R&D) activities as a separate sector of the economy.

**Increasing returns to production can be introduced by assuming that human capital, like physical capital, can be increased through investment.** Uzawa<sup>10</sup> and Lucas<sup>11</sup> explicitly include human capital as a factor of production in their frameworks: investment in human capital corresponds to the time individuals spend in education. A better qualified workforce is assumed to have a positive influence on the rest of the economy (a so-called externality), which increases growth. One conclusion of neoclassical theory was that capital will flow from rich to poor countries and contribute to the catching up process in countries where capital is scarce. Since human capital, i.e. a country’s workforce and its knowledge, is not as mobile as physical capital and is less likely to move abroad, models that include human capital as a growth factor can help to explain why persistent differences in income growth performance can be observed across countries. Endogenous growth models are therefore much better suited to providing input into policy decisions.

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<sup>9</sup> Barro, R.J. and Sala-i-Martin, X., “Convergence”, *Journal of Political Economy*, Vol. 100, No 2, 1992, pp. 223-251.

<sup>10</sup> Uzawa, H., “On a two-sector model of economic growth II”, *Review of Economic Studies*, Vol. 30, No 2, 1963, pp. 105-118.

<sup>11</sup> Lucas, R.E., “On the mechanics of economic development”, *Journal of Monetary Economics*, Vol. 22, Issue 1, 1988, pp. 3-42.

**An alternative way to endogenously create growth, and for convergence to be explained in a theoretical model, is by “producing” innovation in a separate sector of the economy.** The

introduction of such an R&D sector allowed Romer<sup>12</sup> to explain how permanent growth is possible. Like investment in human capital, increased research activities lift the level of knowledge and technological advancement not only for the individual research facility but for the economy as a whole and therefore have a positive influence on economic growth. To overcome the income difference and catch up with more advanced economies, poorer countries need a high rate of technological growth.

**All in all, the endogenous growth models seem to better explain the observed speed of convergence across the world and allow policy-makers to design strategies that can boost TFP.** According to these models, efforts towards a better-qualified workforce, increased R&D spending, openness and competition promote productivity, the dissemination of new technological developments and, therefore, economic growth and convergence.

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## 5 How sustainable real convergence can be achieved

**Against the background of the above evidence of lacking real convergence within the Euro 12, this section reviews the ways in which economic policies could foster sustainable convergence and resilience to negative shocks.**<sup>13</sup>

The analysis of the evidence for and causes of the lack of convergence shows that three main conditions need to be met to achieve sustainable convergence: (i) macroeconomic stability must be maintained, (ii) the affected economies must increase their degree of economic flexibility, and (iii) conditions for TFP growth must be improved.

**The first condition for sustainable real convergence is macroeconomic stability.**

The previous section showed how domestic institutions and structural features contributed to the accumulation of imbalances in a group of euro area countries, leading to an increasing gap between demand growth and supply-side potential. Since the crisis, the euro area countries subject to an EU-IMF financial adjustment programme have made progress in restoring their macroeconomic balances and have also implemented significant structural reforms. In most of these countries, the current account imbalances have largely disappeared. This has partly reflected a marked adjustment in unit labour costs. Fiscal balances have also improved substantially compared with the very high fiscal deficit-to-GDP ratios observed during the crisis years. However, stock imbalances, such as high external, private and public sector debt, still remain very high in many countries. In order to fully overcome these legacies of the crisis, it is important to consolidate the competitiveness gains achieved during the crisis and to maintain a stability-oriented fiscal policy stance that ensures that public indebtedness returns to sustainable levels in the coming years.

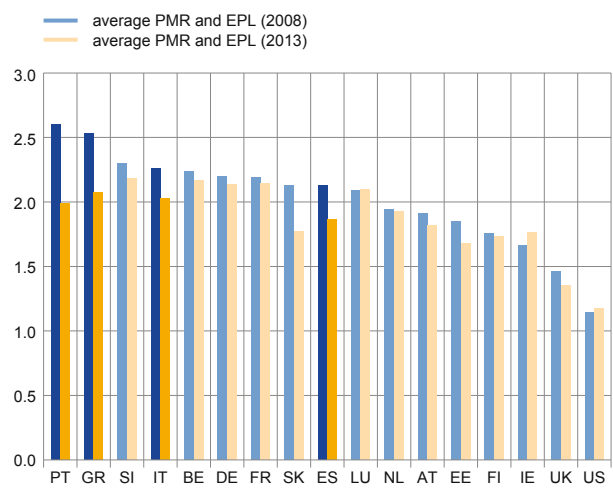
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<sup>12</sup> Romer, P., “Increasing returns and long-run growth”, *Journal of Political Economy*, Vol. 94, No 5, 1986, pp. 1002-1037.

<sup>13</sup> The role and impact on growth of structural reforms in the euro area is reviewed in the article entitled “Progress with structural reforms across the euro area and their possible impacts”, *Economic Bulletin*, ECB, Frankfurt am Main, Issue 2, 2015, pp. 59-71.

**Chart 13**

Product market regulation (PMR) and employment protection legislation (EPL)



Sources: ECB staff calculations and OECD.  
Notes: See the notes to Chart 6 regarding the OECD PMR and EPL indicators. For the United States, no PMR data are available for 2013, thus only EPL is shown. The darker coloured columns represent those of the catching up economies in the Euro 12 that showed no convergence over this period (Greece, Spain and Portugal), and Italy, the Euro 12 country with the largest divergence.

**The second condition for sustainable convergence is increased economic flexibility that can contribute to a correction of the pre-crisis misallocation of capital.** As shown in the previous

section, some of the countries with lower income per capita levels (e.g. Greece, Spain and Portugal) have suffered from particularly high levels of rigidity in their product and labour markets. During the crisis period such rigidities increased the economic costs of the adjustment and led to a sharper fall in potential growth than in other countries. A key step for ensuring a sustainable growth model in the euro area economies with a need to converge is the elimination of the deep structural deficiencies that caused the widespread misallocation of capital and labour prior to the crisis.

This can be reinforced through measures that increase competition in the markets for goods, services and labour (see Box 2). While the countries subject to financial assistance programmes have since the onset of the crisis implemented significant reforms that have narrowed the gap in economic flexibility compared with other euro area countries (see Chart 13), further

efforts are needed to close even this gap, let alone bring them up to the level of the countries with the most flexible product and labour markets worldwide.

**The third condition for sustainable convergence is the achievement of higher TFP growth.** As seen in Section 4, there was a tendency towards weak (or even falling) TFP in some of the lower-income euro area countries before the crisis, even in high-productivity sectors (e.g. manufacturing). Country-specific domestic policies should foster the main drivers of TFP by focusing on three main policy areas:

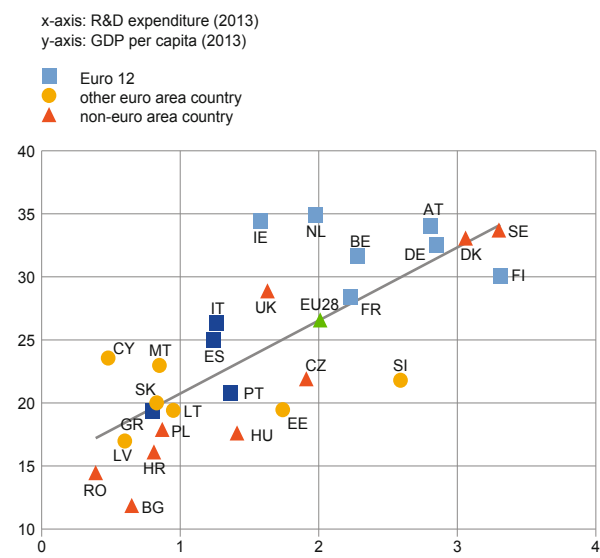
(i) improving the quality of labour, e.g. by increasing the proportion of highly skilled workers, (ii) improving the quality of capital by fostering the adoption of innovation and technology, and (iii) creating an institutional framework that supports innovation in businesses.<sup>14</sup>

**Productivity is clearly linked to the quality of labour.** During the first years of EMU the misallocation of resources towards low-productivity sectors created an increased demand for low-skilled workers in some economies that are catching up. This had a negative impact on human capital by creating misguided incentives for leaving education early. Well-targeted active labour market policies may help to gradually channel the active labour force to more technologically advanced sectors.

<sup>14</sup> For more on the main drivers of TFP in the euro area, see the article entitled “The drivers of total factor productivity in catching-up economies”, *Quarterly report on the euro area*, European Commission, Vol.13, Issue 1, April 2014, pp. 7-19.

**Chart 14**  
R&D expenditure and GDP per capita in 2013

(R&D expenditure as a percentage of GDP; GDP per capita in 1,000 PPS)



Sources: European Commission and Eurostat  
Notes: For Ireland, R&D expenditure refers to 2012, as no value was available for 2013. Luxembourg is excluded (see the note to Chart 1). The dark blue squares represent those of the catching up economies in the Euro 12 that showed no convergence over this period (Greece, Spain and Portugal), and Italy, the Euro 12 country with the largest divergence.

**TFP performance is also clearly linked to investment in information and communications technology (ICT) sectors and in technological progress that increases growth potential.** Economic theory says that increased research activities increase the level of knowledge and technological advancement for the economy as a whole and therefore have a positive influence on real convergence (see Box 1). Countries that spend more on R&D tend to exhibit higher income levels (see Chart 14).

**Sound domestic institutions are essential for attracting investment in human capital and FDI, and for the creation of new firms.** Incentives for private sector innovation may not be effective if firms have to operate in an environment where there are heavy domestic regulatory burdens, inefficient public administration and judicial systems, or insufficient measures against corruption, or where they have to compete with a large informal economy. Both EU-wide and domestic policies must improve public governance conditions, fight corruption and create the conditions for firms to operate smoothly and efficiently.

**Greater economic integration should also support the convergence process.**

Financial market integration contributed to the channelling of capital flows to lower-income euro area countries before the crisis. However, owing to delays in the completion of the single market for services at the European level, many domestic barriers to competition remain largely in place in services sectors, particularly in Greece, Spain and Portugal, as well as in Italy. Completing the Single Market by removing the remaining regulatory barriers in sectors sheltered from competition would promote a more efficient allocation of capital and speed up the diffusion of new technologies, in particular in the lower-income euro area countries that have more closed services markets. There is also a clear role for common European policies to play in removing the remaining cross-country sectoral barriers by deepening the Single Market. As explained in more detail in Box 2, the Single Market is far from being completed.

**Capital market integration should contribute to a more efficient allocation of capital.**

As shown in Section 3, capital flows to lower-income euro area countries before the crisis were mainly of the debt-creating type. At the same time, equity flows, which are potentially more conducive to higher productivity growth, were fairly low, reflecting in part the underdeveloped nature of capital market integration in the euro area. The development of a capital markets union and a situation where equity provides a greater share of financing is needed to improve the allocation of capital among the euro area economies (see also Box 2).<sup>15</sup>

<sup>15</sup> For the role of the financial sector in fostering real convergence in the euro area, see also Praet, P., "The financial cycle and real convergence in the euro area", speech at the Annual Hyman P. Minsky Conference on the State of the US and World Economies, Washington D.C., 10 April 2014.



## Box 2

### The role of the Single Market

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**The Single Market is a pillar of Europe's economic integration.** Since 1993 the objective of the Single Market has been to guarantee the free movement of people, goods, services and capital. Over the past two decades or so it has been continuously modified to keep pace with more recent developments, such as the growing importance of the services sector and the digital economy. The Single Market aims to enhance competition within Europe, facilitate an efficient allocation of resources and allow European companies to compete in global markets.

**By reducing obstacles to trade, labour mobility and competition, and by favouring technological diffusion, the Single Market should support real convergence in the euro area.**

Countries with a specialisation in industries with increasing economies of scale should derive more benefit from the Single Market, as there is greater scope to improve efficiency in these industries; this also applies to countries with more protected sectors, as the benefit of liberalisation will be greater for them. A more integrated euro area will lead to more resilient economies and foster sustainable growth, particularly in countries that have shown greater vulnerabilities during the crisis. Some features of the Single Market that can foster sustainable convergence in the euro area still require further improvement. This box focuses on the free movement of services, labour and capital.

**While progress on the free movement of goods has been significant, the exchange of services across national borders is still lagging behind.** Even though services account for over 70% of the EU economy, the services sector shows much less trade integration than the goods market. Although this is partially due to the non-tradable nature of some services, there are still non-negligible barriers as regards tradable services.

**The EU Services Directive of 2006 specifically targets trade and competition in the services sector.** Its objective is to reduce product regulations that constitute barriers to cross-border trade in services, especially for small and medium-sized enterprises. An evaluation of the success of the Directive conducted by the European Commission in 2012 revealed promising results (see Monteagudo et al.<sup>16</sup>). The implementation of the Directive is seen leading to the greatest improvements in countries with many and/or high barriers, in particular, Greece, Spain, Italy and Portugal (see Chart). Removing barriers allows enterprises from lower-income countries to compete in foreign markets and facilitates the exchange of ideas and technology.

**Estimations of the impact of the Services Directive on GDP growth show a positive EU-wide effect of around 0.8%.<sup>17</sup>** Country-specific effects depend on the degree to which the Directive has been implemented, as well as on the importance of the various sectors for individual economies. For those EU economies that are more behind in services sector regulation than others, the benefits can

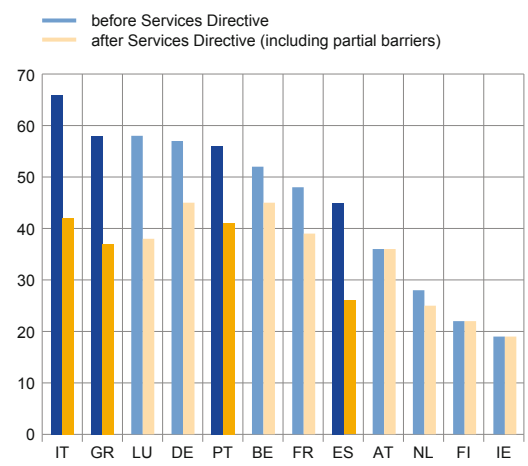
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<sup>16</sup> Monteagudo, J. et al., "The economic impact of the Services Directive: A first assessment following implementation", *European Economy Economic Papers*, No 456, European Commission, Brussels, 2012.

<sup>17</sup> "Report from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of Regions and the European Investment Bank. A single market for growth and jobs: an analysis of progress made and remaining obstacles in the Member States", *Contribution to the Annual Growth Survey 2014*, European Commission, Brussels, November 2013.

## Chart

Effect of the EU Services Directive on the number of cross-border barriers



Sources: Montegudo et al. and ECB staff calculations.

Note: The darker coloured columns represent those of the catching up economies in the Euro 12 that showed no convergence over this period (Greece, Spain and Portugal), and Italy, the Euro 12 country with the largest divergence.

be particularly large, as shown by a positive effect of 1% and 1.4% of GDP in Greece and Spain respectively. In a scenario where all barriers to trade and services are completely abolished, additional GDP gains of up to 1.6% could be realised. Fully eliminated barriers would have the further beneficial effect of increasing productivity by a figure in the range of 5% (Portugal) to 7% (Greece).

**Another key element of the Single Market is labour mobility.** EU citizens have the right of free movement, i.e. the right to live and work in any EU country and to be treated equally by local employers. As mentioned in Box 1, labour mobility can contribute to convergence by moving human capital and skills, but, more importantly, it can also be an important shock absorbing mechanism in the face of country-specific or sectoral shocks. Over the last

decade, intra-EU labour mobility has been driven mainly by income and wage differentials between the eastern and western Member States. More recently, it has also been driven by the growing differences in labour market performance, especially between euro area countries.

**During the crisis, there was a rise in labour inflows into the more resilient economies, such as Germany and Austria.** However, the scale of these flows has been relatively small. In fact, while labour mobility is an area where a significant number of policies have been implemented at the EU level, it is still well behind US standards. In response to the sharp rise in unemployment resulting from the protracted crisis, there have been a number of policies aimed at removing obstacles to labour mobility, such as the new EU Directive on professional qualifications (in force from January 2016), the creation of a pan-European job search network (EURES) in 2014 and the new Directive on supplementary pension rights in 2014.

**Finally, the single market for capital appears far from complete.** Important steps in the creation of a single capital market were the Payment Services Directive in 2007, which laid out the harmonisation of payment services, and the Single Euro Payments Area (SEPA). The latest step in capital markets integration is the capital markets union, announced by the European Commission at the beginning of 2015,<sup>18</sup> which is aimed at further integration of financial markets, improved access to finance for firms and the creation of more investment opportunities for European households and enterprises. Well-functioning capital markets will also facilitate the mobilisation of private financing in the context of the Investment Plan for Europe, launched in November 2014.

<sup>18</sup> "Building a Capital Markets Union", *Green Paper*, No 63, European Commission, Brussels, February 2015.



**While CEE countries have been catching up to the EU average over the past 15 years, progress towards real convergence among the 12 countries that formed the euro area in its initial years has been disappointing.** Experience has shown that initial convergence can unravel quickly in the face of exogenous shocks if it is not underpinned by a sound institutional framework and structural conditions that are conducive to productivity growth.

**The crisis has shown that large capital flows to low-income countries can only contribute to sustainable real convergence if resources are efficiently allocated in the economy.** One of the key factors that ensure success in a monetary union is a sufficiently flexible economy where price signals allow resources to be properly channelled towards high-productivity sectors. It is equally important to complement the single monetary policy with counter-cyclical fiscal and macroprudential tools at the national level in order to address at an early stage the risk of boom-bust cycles in euro area economies that are catching up.

**Pursuing sustainable convergence is mainly a national responsibility.** However, efforts at the national level should be complemented by structural reforms at the European level aimed at deepening the Single Market. Deepening the Single Market would allow country-specific shocks, especially to low-income countries, to be better absorbed. This is particularly important for the capital markets union, where substantial and swift progress is still needed.

# Statistics

## Contents

1 External environment	S 2
2 Financial developments	S 3
3 Economic activity	S 8
4 Prices and costs	S 14
5 Money and credit	S 18
6 Fiscal developments	S 23

## Further information

ECB statistics can be accessed from the Statistical Data Warehouse (SDW):	<a href="http://sdw.ecb.europa.eu/">http://sdw.ecb.europa.eu/</a>
Data from the statistics section of the Economic Bulletin are available from the SDW:	<a href="http://sdw.ecb.europa.eu/reports.do?node=1000004813">http://sdw.ecb.europa.eu/reports.do?node=1000004813</a>
A comprehensive Statistics Bulletin can be found in the SDW:	<a href="http://sdw.ecb.europa.eu/reports.do?node=1000004045">http://sdw.ecb.europa.eu/reports.do?node=1000004045</a>
Methodological definitions can be found in the General Notes to the Statistics Bulletin:	<a href="http://sdw.ecb.europa.eu/reports.do?node=10000023">http://sdw.ecb.europa.eu/reports.do?node=10000023</a>
Details on calculations can be found in the Technical Notes to the Statistics Bulletin:	<a href="http://sdw.ecb.europa.eu/reports.do?node=10000022">http://sdw.ecb.europa.eu/reports.do?node=10000022</a>
Explanations of terms and abbreviations can be found in the ECB's statistics glossary:	<a href="http://www.ecb.europa.eu/home/glossary/html/glossa.en.html">http://www.ecb.europa.eu/home/glossary/html/glossa.en.html</a>

## Conventions used in the tables

-	data do not exist/data are not applicable
.	data are not yet available
...	nil or negligible
(p)	provisional
s.a.	seasonally adjusted
n.s.a.	non-seasonally adjusted

# 1 External environment

## 1.1 Main trading partners, GDP and CPI

	GDP <sup>1)</sup> (period-on-period percentage changes)						CPI (annual percentage changes)						
	G20	United States	United Kingdom	Japan	China	Memo item: euro area	OECD countries		United States	United Kingdom (HICP)	Japan	China	Memo item: euro area <sup>2)</sup> (HICP)
							Total	excluding food and energy					
	1	2	3	4	5	6	7	8	9	10	11	12	13
2012	3.0	2.3	0.7	1.7	7.8	-0.8	2.3	1.8	2.1	2.8	0.0	2.6	2.5
2013	3.2	2.2	1.7	1.6	7.7	-0.4	1.6	1.6	1.5	2.6	0.4	2.6	1.4
2014	3.3	2.4	3.0	-0.1	7.4	0.8	1.7	1.8	1.6	1.5	2.7	2.0	0.4
2014 Q3	0.9	1.2	0.7	-0.5	1.9	0.2	1.8	1.9	1.8	1.5	3.4	2.0	0.4
Q4	0.8	0.5	0.8	0.3	1.5	0.4	1.4	1.8	1.2	0.9	2.5	1.5	0.2
2015 Q1	0.7	0.0	0.4	1.0	1.3	0.4	0.6	1.7	-0.1	0.1	2.3	1.2	-0.3
Q2	.	.	.	.	.	.	.	.	.	0.0	.	.	0.2
2015 Jan.	.	.	.	.	.	.	0.5	1.8	-0.1	0.3	2.4	0.8	-0.6
Feb.	.	.	.	.	.	.	0.6	1.7	0.0	0.0	2.2	1.4	-0.3
Mar.	.	.	.	.	.	.	0.6	1.7	-0.1	0.0	2.3	1.4	-0.1
Apr.	.	.	.	.	.	.	0.4	1.6	-0.2	-0.1	0.6	1.5	0.0
May	.	.	.	.	.	.	0.6	1.6	0.0	0.1	0.5	1.2	0.3
June	.	.	.	.	.	.	.	.	.	0.0	.	.	0.2

Sources: Eurostat (col. 3, 6, 10, 13); BIS (col. 2, 4, 9, 11, 12); OECD (col. 1, 5, 7, 8).

1) Quarterly data seasonally adjusted; annual data unadjusted.

2) Data refer to the changing composition of the euro area.

## 1.2 Main trading partners, Purchasing Managers' Index and world trade

	Purchasing Managers' Surveys (diffusion indices; s.a.)									Merchandise imports <sup>1)</sup>		
	Composite Purchasing Managers' Index					Memo item: euro area	Global Purchasing Managers' Index <sup>2)</sup>			Global	Advanced economies	Emerging market economies
	Global <sup>2)</sup>	United States	United Kingdom	Japan	China		Manufacturing	Services	New export orders			
	1	2	3	4	5	6	7	8	9	10	11	12
2012	52.6	54.4	52.0	49.9	50.9	47.2	50.2	51.9	48.5	3.9	2.5	4.8
2013	53.4	54.8	56.8	52.6	51.5	49.7	52.3	52.7	50.7	3.5	-0.2	5.6
2014	54.3	57.3	57.9	50.9	51.1	52.7	53.4	54.1	51.5	3.7	3.4	3.8
2014 Q3	55.7	59.8	58.5	51.3	52.2	52.8	54.1	56.2	52.0	2.8	1.4	3.6
Q4	53.4	55.6	56.3	50.9	51.4	51.5	52.8	53.6	50.8	1.5	1.7	1.4
2015 Q1	54.0	56.9	57.4	50.4	51.5	53.3	53.3	54.3	50.7	-2.5	1.7	-4.7
Q2	53.4	55.9	57.2	51.3	51.1	53.9	51.3	54.1	49.6	.	.	.
2015 Jan.	53.1	54.4	56.7	51.7	51.0	52.6	53.1	53.1	51.0	-0.4	2.1	-1.7
Feb.	54.0	57.2	56.6	50.0	51.8	53.3	53.4	54.2	50.7	-1.3	2.6	-3.4
Mar.	55.0	59.2	58.9	49.4	51.8	54.0	53.3	55.5	50.2	-2.5	1.7	-4.7
Apr.	54.2	57.0	58.3	50.7	51.3	53.9	51.4	55.1	49.5	-1.8	0.9	-3.3
May	53.5	56.0	55.8	51.6	51.2	53.6	51.6	54.0	49.1	.	.	.
June	52.6	54.6	57.4	51.5	50.6	54.2	50.8	53.2	50.3	.	.	.

Sources: Markit (col. 1-9); CPB Netherlands Bureau for Economic Policy Analysis and ECB calculations (col. 10-12).

1) Global and advanced economies exclude the euro area. Annual and quarterly data are period-on-period percentages; monthly data are 3-month-on-3-month percentages. All data are seasonally adjusted.

2) Excluding the euro area.

## 2 Financial developments

### 2.1 Money market interest rates

(percentages per annum; period averages)

	Euro area <sup>1)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
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
2014	0.09	0.13	0.21	0.31	0.48	0.23	0.13
2014 Dec.	-0.03	0.02	0.08	0.18	0.33	0.24	0.11
2015 Jan.	-0.05	0.01	0.06	0.15	0.30	0.25	0.10
Feb.	-0.04	0.00	0.05	0.13	0.26	0.26	0.10
Mar.	-0.05	-0.01	0.03	0.10	0.21	0.27	0.10
Apr.	-0.07	-0.03	0.00	0.07	0.18	0.28	0.10
May	-0.11	-0.05	-0.01	0.06	0.17	0.28	0.10
June	-0.12	-0.06	-0.01	0.05	0.16	0.28	0.10

Source: ECB.

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

### 2.2 Yield curves

(End of period; rates in percentages per annum; spreads in percentage points)

	Spot rates					Spreads			Instantaneous forward rates			
	Euro area <sup>1), 2)</sup>					Euro area <sup>1), 2)</sup>	United States	United Kingdom	Euro area <sup>1), 2)</sup>			
	3 months	1 year	2 years	5 years	10 years	10 years - 1 year	10 years - 1 year	10 years - 1 year	1 year	2 years	5 years	10 years
	1	2	3	4	5	6	7	8	9	10	11	12
2012	0.06	-0.04	-0.01	0.58	1.72	1.76	1.61	1.48	-0.09	0.17	1.84	3.50
2013	0.08	0.09	0.25	1.07	2.24	2.15	2.91	2.66	0.18	0.67	2.53	3.88
2014	-0.02	-0.09	-0.12	0.07	0.65	0.74	1.95	1.45	-0.15	-0.11	0.58	1.77
2014 Dec.	-0.02	-0.09	-0.12	0.07	0.65	0.74	1.95	1.45	-0.15	-0.11	0.58	1.77
2015 Jan.	-0.15	-0.18	-0.14	-0.02	0.39	0.58	1.50	1.04	-0.13	-0.10	0.34	1.15
Feb.	-0.21	-0.25	-0.20	-0.08	0.37	0.62	1.80	1.45	-0.16	-0.17	0.31	1.19
Mar.	-0.21	-0.25	-0.22	-0.08	0.26	0.51	1.69	1.19	-0.20	-0.20	0.29	0.81
Apr.	-0.28	-0.26	-0.21	0.03	0.42	0.68	1.81	1.39	-0.22	-0.08	0.46	1.05
May	-0.24	-0.25	-0.23	0.06	0.61	0.85	1.87	1.32	-0.25	-0.14	0.68	1.46
June	-0.27	-0.26	-0.23	0.19	0.95	1.21	2.09	1.52	-0.25	-0.10	1.08	2.09

Source: ECB.

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

2) ECB calculations based on underlying data provided by EuroMTS and ratings provided by Fitch Ratings.

### 2.3 Stock market indices

(index levels in points; period averages)

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main industry indices										Standard & Poor's 500	Nikkei 225
	Broad index	50	Basic materials	Consumer services	Consumer goods	Oil and gas	Financials	Industrials	Technology	Utilities	Telecoms	Health care		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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
2014	318.7	3,145.3	644.3	216.6	510.6	335.5	180.0	452.9	310.8	279.2	306.7	668.1	1,931.4	15,460.4
2014 Dec.	320.1	3,159.8	651.0	225.2	532.6	288.5	176.0	446.1	330.1	284.7	335.3	687.6	2,054.3	17,541.7
2015 Jan.	327.4	3,207.3	671.1	237.8	564.9	285.0	173.3	464.2	339.0	278.3	343.8	724.2	2,028.2	17,274.4
Feb.	353.2	3,453.8	731.3	254.2	624.8	314.0	185.5	498.7	361.1	286.9	376.8	768.6	2,082.2	18,053.2
Mar.	373.9	3,655.3	787.2	268.9	666.9	313.5	198.9	524.1	386.2	292.9	389.2	824.6	2,080.4	19,197.6
Apr.	383.3	3,733.8	798.2	275.7	678.6	331.0	204.9	535.7	394.2	299.5	395.0	861.4	2,094.9	19,767.9
May	373.4	3,617.9	765.0	268.9	662.1	326.5	199.3	522.4	389.5	294.0	389.2	827.6	2,111.9	19,974.2
June	364.0	3,521.8	743.2	265.5	647.4	310.3	194.5	504.7	385.0	283.0	380.7	820.4	2,099.3	20,403.8

Source: ECB.

## 2 Financial developments

### 2.4 MFI interest rates on loans to and deposits from households (new business) <sup>1), 2)</sup>

(Percentages per annum; period average, unless otherwise indicated)

	Deposits				Revolving loans and overdrafts	Extended credit card credit	Loans for consumption			Loans to sole proprietors and unincorporated partnerships	Loans for house purchase				Composite cost-of-borrowing indicator	
	Over-night	Redeemable at notice of up to 3 months	With an agreed maturity of:				By initial period of rate fixation	APRC <sup>3)</sup>	By initial period of rate fixation				APRC <sup>3)</sup>			
			Up to 2 years	Over 2 years					Floating rate and up to 1 year		Over 1 year	Floating rate and up to 1 year		Over 1 and up to 5 years		Over 5 and up to 10 years
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2014 June	0.27	1.05	1.32	1.74	7.42	17.17	5.45	6.61	6.94	3.20	2.66	2.85	2.89	3.09	3.13	2.87
July	0.24	1.01	1.30	1.75	7.26	17.02	5.55	6.54	6.90	3.09	2.63	2.75	2.81	2.99	3.05	2.79
Aug.	0.24	0.93	1.21	1.66	7.26	16.99	5.55	6.52	6.86	3.09	2.56	2.74	2.73	2.87	2.98	2.75
Sep.	0.23	0.92	1.19	1.70	7.32	17.05	5.37	6.49	6.84	2.92	2.50	2.69	2.63	2.83	2.89	2.68
Oct.	0.22	0.92	1.10	1.65	7.15	16.94	5.42	6.43	6.84	2.92	2.43	2.63	2.56	2.79	2.82	2.61
Nov.	0.21	0.89	1.02	1.66	7.12	17.10	5.60	6.48	6.83	2.96	2.43	2.53	2.52	2.73	2.79	2.55
Dec.	0.22	0.86	0.96	1.58	7.08	17.05	5.07	6.14	6.45	2.73	2.43	2.52	2.54	2.69	2.77	2.50
2015 Jan.	0.21	0.84	1.01	1.95	7.11	17.07	5.30	6.30	6.64	2.79	2.32	2.54	2.45	2.42	2.71	2.40
Feb.	0.20	0.82	0.98	1.53	7.07	17.00	5.23	6.23	6.64	2.79	2.08	2.47	2.33	2.50	2.59	2.38
Mar.	0.18	0.80	0.89	1.37	7.07	17.00	5.20	5.98	6.35	2.73	2.12	2.45	2.28	2.42	2.55	2.31
Apr.	0.17	0.77	0.88	1.15	6.98	16.96	4.93	5.94	6.28	2.68	2.03	2.39	2.17	2.38	2.51	2.25
May <sup>(p)</sup>	0.17	0.80	0.84	1.09	6.93	17.07	5.20	6.03	6.45	2.67	2.04	2.33	2.09	2.30	2.43	2.18

Source: ECB.

1) Data refer to the changing composition of the euro area.

2) Including non-profit institutions serving households.

3) Annual percentage rate of charge (APRC).

### 2.5 MFI interest rates on loans to and deposits from non-financial corporations (new business) <sup>1), 2)</sup>

(Percentages per annum; period average, unless otherwise indicated)

	Deposits			Revolving loans and overdrafts	Other loans by size and initial period of rate fixation									Composite cost-of-borrowing indicator
	Over-night	With an agreed maturity of:			up to EUR 0.25 million			over EUR 0.25 and up to 1 million			over EUR 1 million			
		Up to 2 years	Over 2 years		Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 year	Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 year	Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 year	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2014 June	0.31	0.59	1.52	3.88	4.29	4.37	3.78	2.68	3.26	3.05	1.94	2.74	2.68	2.79
July	0.28	0.59	1.49	3.76	4.32	4.31	3.63	2.65	3.29	2.93	1.90	2.42	2.69	2.76
Aug.	0.28	0.49	1.63	3.71	4.18	4.28	3.55	2.56	3.20	2.83	1.74	2.43	2.56	2.68
Sep.	0.26	0.51	1.53	3.69	4.02	4.04	3.53	2.46	3.02	2.75	1.80	2.38	2.41	2.65
Oct.	0.25	0.50	1.43	3.61	4.01	3.94	3.54	2.44	2.92	2.69	1.73	2.26	2.49	2.58
Nov.	0.25	0.44	1.20	3.54	3.79	3.87	3.42	2.38	2.84	2.61	1.72	2.18	2.25	2.49
Dec.	0.24	0.43	1.29	3.44	3.72	3.74	3.27	2.35	2.79	2.47	1.73	2.18	2.10	2.43
2015 Jan.	0.23	0.44	1.28	3.43	3.82	3.84	2.98	2.32	2.83	2.04	1.65	2.04	2.17	2.43
Feb.	0.22	0.35	1.09	3.37	3.59	3.71	3.12	2.24	2.71	2.37	1.51	2.00	2.14	2.34
Mar.	0.21	0.33	1.14	3.33	3.49	3.65	3.13	2.16	2.68	2.31	1.63	2.11	1.98	2.34
Apr.	0.19	0.31	0.95	3.27	3.48	3.57	2.95	2.19	2.65	2.25	1.62	1.93	2.03	2.30
May <sup>(p)</sup>	0.19	0.30	0.96	3.21	3.39	3.49	2.95	2.16	2.49	2.22	1.57	1.85	2.03	2.24

Source: ECB.

1) Data refer to the changing composition of the euro area.

2) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector.

## 2 Financial developments

### 2.6 Debt securities issued by euro area residents, by sector of the issuer and initial maturity

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

	Outstanding amounts							Gross issues <sup>1)</sup>						
	Total	MFIs (including Euro- system)	Non-MFI corporations			General government		Total	MFIs (including Euro- system)	Non-MFI corporations			General government	
			Financial corporations other than MFIs	FVCs	Non- financial corporations	Central govern- ment	Other general govern- ment			Financial corporations other than MFIs	FVCs	Non- financial corporations	Central govern- ment	Other general govern- ment
Short-term														
2012	1,426	581	146	-	75	558	66	703	491	37	-	52	103	21
2013	1,247	477	122	-	67	529	53	508	314	30	-	44	99	21
2014	1,312	545	120	-	58	538	50	410	219	34	-	39	93	25
2014 Dec.	1,312	545	120	-	58	538	50	342	191	24	-	27	66	34
2015 Jan.	1,388	599	127	-	66	543	54	378	186	28	-	33	94	36
Feb.	1,400	606	134	-	70	534	56	351	162	37	-	30	83	39
Mar.	1,420	604	137	-	71	543	66	373	162	45	-	35	89	42
Apr.	1,410	601	134	-	80	533	62	350	158	37	-	38	82	35
May	1,393	591	133	-	80	530	59	324	141	36	-	36	78	33
Long-term														
2012	15,204	4,815	3,167	-	840	5,758	624	255	98	45	-	16	84	12
2013	15,107	4,405	3,087	-	919	6,069	627	222	70	39	-	16	89	9
2014	15,119	4,040	3,158	-	992	6,286	643	219	65	43	-	16	85	10
2014 Dec.	15,119	4,040	3,158	-	992	6,286	643	131	42	38	-	11	29	10
2015 Jan.	15,220	4,058	3,202	-	1,002	6,316	642	261	80	48	-	8	113	13
Feb.	15,264	4,038	3,209	-	1,015	6,356	646	207	64	21	-	18	86	17
Mar.	15,348	4,026	3,247	-	1,032	6,399	644	285	84	62	-	17	112	10
Apr.	15,275	4,000	3,212	-	1,034	6,389	641	221	70	33	-	21	87	10
May	15,354	3,982	3,234	-	1,037	6,462	640	185	49	41	-	6	85	4

Source: ECB.

1) For the purpose of comparison, annual data refer to the average monthly figure over the year.

### 2.7 Growth rates and outstanding amounts of debt securities and listed shares

(EUR billions; percentage changes)

	Debt securities							Listed shares			
	Total	MFIs (including Eurosystem)	Non-MFI corporations			General government		Total	MFIs	Financial corporations other than MFIs	Non- financial corporations
			Financial corporations other than MFIs	FVCs	Non- financial corporations	Central government	Other general government				
Outstanding amount											
2012	16,629.8	5,396.0	3,312.5	.	914.8	6,316.1	690.4	4,597.1	404.7	617.9	3,574.5
2013	16,354.2	4,881.8	3,209.3	.	985.6	6,597.8	679.8	5,638.0	569.1	751.0	4,317.9
2014	16,431.2	4,585.7	3,278.4	.	1,050.5	6,823.7	693.0	5,949.0	591.0	787.8	4,570.2
2014 Dec.	16,431.2	4,585.7	3,278.4	.	1,050.5	6,823.7	693.0	5,949.0	591.0	787.8	4,570.2
2015 Jan.	16,608.5	4,657.3	3,328.6	.	1,068.0	6,859.1	695.5	6,422.8	573.0	836.0	5,013.9
Feb.	16,664.0	4,643.6	3,343.7	.	1,084.8	6,890.5	701.4	6,855.5	650.5	899.6	5,305.4
Mar.	16,768.7	4,630.5	3,383.8	.	1,102.8	6,941.5	710.1	7,055.7	688.7	933.3	5,433.7
Apr.	16,685.7	4,600.6	3,346.2	.	1,113.6	6,921.8	703.6	6,959.7	683.8	908.3	5,367.7
May	16,747.0	4,572.2	3,366.9	.	1,116.2	6,992.2	699.6	6,983.8	675.4	901.5	5,406.8
Growth rate											
2012	1.3	-1.8	-0.3	.	14.3	2.5	6.1	0.9	4.9	2.0	0.4
2013	-1.4	-8.9	-3.4	.	8.1	4.5	-1.1	0.9	7.2	0.2	0.3
2014	-0.7	-7.9	0.2	.	4.9	3.1	1.2	1.5	7.2	1.6	0.8
2014 Dec.	-0.7	-7.9	0.2	.	4.9	3.1	1.2	1.5	7.2	1.6	0.8
2015 Jan.	-0.7	-7.8	0.6	.	3.0	3.2	1.8	1.5	6.9	1.5	0.7
Feb.	-0.9	-7.6	0.6	.	4.4	2.4	0.7	1.4	6.8	1.2	0.7
Mar.	-0.2	-7.1	2.1	.	5.3	2.6	1.8	1.5	6.8	1.4	0.8
Apr.	-0.3	-6.8	1.7	.	6.7	2.1	1.9	1.4	6.8	1.1	0.8
May	-0.8	-7.2	0.0	.	5.7	2.1	1.4	1.3	5.8	1.4	0.7

Source: ECB.

## 2 Financial developments

### 2.8 Effective exchange rates <sup>1)</sup>

(period averages; index: 1999 Q1=100)

	EER-19						EER-38	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM <sup>2)</sup>	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2012	97.9	95.8	93.1	89.4	100.9	91.9	107.2	93.2
2013	101.7	99.2	96.5	92.8	104.2	95.4	112.2	96.5
2014	102.3	98.9	96.5	92.9	104.8	96.2	114.8	97.0
2014 Q3	101.7	98.2	95.9	92.2	104.3	95.8	113.8	95.9
Q4	99.6	96.1	94.2	90.5	102.0	93.9	112.6	94.5
2015 Q1	93.7	90.4	89.4	85.6	95.9	88.0	106.9	89.3
Q2	92.0	88.8	88.2	.	.	.	104.8	87.4
2015 Jan.	95.9	92.4	91.1	-	-	-	109.3	91.3
Feb.	94.0	90.7	89.8	-	-	-	107.4	89.7
Mar.	91.4	88.2	87.4	-	-	-	104.2	87.0
Apr.	90.5	87.4	86.9	-	-	-	102.8	85.8
May	92.3	89.2	88.5	-	-	-	105.1	87.6
June	93.1	89.9	89.1	-	-	-	106.4	88.7
	<i>Percentage change versus previous month</i>							
2015 June	0.8	0.9	0.8	-	-	-	1.2	1.2
	<i>Percentage change versus previous year</i>							
2015 June	-9.7	-9.7	-8.3	-	-	-	-7.6	-8.8

Source: ECB.

1) For a definition of the trading partner groups and other information see the General Notes to the Statistics Bulletin.

2) ULCM-deflated series are available only for the EER-19 trading partner group.

### 2.9 Bilateral exchange rates

(period averages; units of national currency per euro)

	Chinese renminbi	Croatian kuna	Czech koruna	Danish krone	Hungarian forint	Japanese yen	Polish zloty	Pound sterling	Romanian leu	Swedish krona	Swiss franc	US Dollar
	1	2	3	4	5	6	7	8	9	10	11	12
2012	8.105	7.522	25.149	7.444	289.249	102.492	4.185	0.811	4.4593	8.704	1.205	1.285
2013	8.165	7.579	25.980	7.458	296.873	129.663	4.197	0.849	4.4190	8.652	1.231	1.328
2014	8.186	7.634	27.536	7.455	308.706	140.306	4.184	0.806	4.4437	9.099	1.215	1.329
2014 Q3	8.173	7.623	27.619	7.452	312.242	137.749	4.175	0.794	4.4146	9.205	1.212	1.326
Q4	7.682	7.665	27.630	7.442	308.527	142.754	4.211	0.789	4.4336	9.272	1.205	1.250
2015 Q1	7.023	7.681	27.624	7.450	308.889	134.121	4.193	0.743	4.4516	9.380	1.072	1.126
Q2	6.857	7.574	27.379	7.462	306.100	134.289	4.088	0.721	4.4442	9.300	1.041	1.105
2015 Jan.	7.227	7.688	27.895	7.441	316.500	137.470	4.278	0.767	4.4874	9.417	1.094	1.162
Feb.	7.096	7.711	27.608	7.450	306.884	134.686	4.176	0.741	4.4334	9.490	1.062	1.135
Mar.	6.762	7.647	27.379	7.459	303.445	130.410	4.126	0.724	4.4339	9.245	1.061	1.084
Apr.	6.686	7.590	27.439	7.466	299.429	128.935	4.018	0.721	4.4155	9.325	1.038	1.078
May	6.916	7.559	27.397	7.461	306.327	134.748	4.081	0.721	4.4477	9.304	1.039	1.115
June	6.959	7.572	27.307	7.460	311.960	138.740	4.159	0.721	4.4671	9.272	1.045	1.121
	<i>Percentage change versus previous month</i>											
2015 June	0.6	0.2	-0.3	0.0	1.8	3.0	1.9	-0.1	0.4	-0.3	0.6	0.6
	<i>Percentage change versus previous year</i>											
2015 June	-17.8	-0.1	-0.5	0.0	2.0	0.0	0.6	-10.4	1.7	2.0	-14.2	-17.5

Source: ECB.



## 2 Financial developments

### 2.10 Euro area balance of payments, financial account

(EUR billions, unless otherwise indicated; outstanding amounts at end of period; transactions during period)

	Total <sup>1)</sup>			Direct investment		Portfolio investment		Net financial derivatives	Other investment		Reserve assets	Memo: Gross external debt
	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities		Assets	Liabilities		
	1	2	3	4	5	6	7	8	9	10	11	12
<i>Outstanding amounts (international investment position)</i>												
2014 Q2	18,472.2	19,741.3	-1,269.2	7,542.8	5,630.5	5,960.8	9,449.4	-70.3	4,532.2	4,661.5	506.8	11,426.2
Q3	19,220.1	20,468.0	-1,247.8	7,797.7	5,900.7	6,306.2	9,713.4	-55.7	4,652.3	4,853.9	519.7	11,836.4
Q4	19,351.7	20,748.8	-1,397.1	7,568.9	5,998.8	6,509.3	9,915.2	-43.6	4,782.7	4,834.7	534.4	11,869.4
2015 Q1	21,087.3	22,381.9	-1,294.5	8,204.4	6,331.7	7,270.9	10,995.3	-21.0	5,029.9	5,054.9	603.1	12,632.8
<i>Outstanding amounts as a percentage of GDP</i>												
2015 Q1	207.6	220.4	-12.7	80.8	62.3	71.6	108.3	-0.2	49.5	49.8	5.9	124.4
<i>Transactions</i>												
2014 Q2	185.1	97.6	87.5	-3.6	-5.7	144.4	176.3	9.8	34.1	-72.9	0.4	-
Q3	209.6	119.2	90.5	69.1	44.7	104.1	19.8	20.3	17.5	54.7	-1.3	-
Q4	57.8	-3.2	61.0	56.1	73.5	93.2	-2.7	10.2	-104.7	-74.0	2.9	-
2015 Q1	504.8	513.7	-8.8	159.7	74.7	129.0	260.3	27.3	182.8	178.7	6.0	-
2014 Nov.	174.1	112.0	62.1	46.7	31.5	55.1	34.8	1.2	70.0	45.7	1.0	-
Dec.	-131.1	-90.7	-40.4	-22.2	22.7	27.2	-1.3	2.6	-140.1	-112.1	1.4	-
2015 Jan.	337.8	429.2	-91.4	56.5	67.3	53.8	133.7	7.1	218.8	228.2	1.5	-
Feb.	93.9	107.5	-13.6	51.1	18.9	29.9	76.0	9.7	-1.1	12.6	4.2	-
Mar.	73.2	-23.0	96.2	52.1	-11.5	45.3	50.5	10.5	-35.0	-62.0	0.3	-
Apr.	112.8	130.8	-18.1	7.2	21.2	34.1	-17.4	4.2	72.2	127.1	-4.9	-
<i>12-month cumulated transactions</i>												
2015 Apr.	948.4	730.1	218.3	259.6	188.2	461.6	420.1	69.0	155.5	121.8	2.7	-
<i>12-month cumulated transactions as a percentage of GDP</i>												
2015 Apr.	9.3	7.2	2.1	2.6	1.9	4.5	4.1	0.7	1.5	1.2	0.0	-

Source: ECB.

1) Net financial derivatives are included in total assets.

## 3 Economic activity

### 3.1 GDP and expenditure components

(quarterly data seasonally adjusted; annual data unadjusted)

	GDP											
	Total	Domestic demand								External balance		
		Total	Private consumption	Government consumption	Gross fixed capital formation			Changes in inventories	Total	Exports	Imports	
					Total construction	Total machinery	Intellectual property products					
1	2	3	4	5	6	7	8	9	10	11	12	
<i>Current prices (EUR billions)</i>												
2012	9,840.1	9,581.2	5,544.4	2,065.4	1,979.3	1,035.7	580.8	358.0	-7.9	258.9	4,288.9	4,030.0
2013	9,931.7	9,598.4	5,571.9	2,094.9	1,940.4	1,006.3	568.9	360.3	-8.8	333.2	4,362.7	4,029.5
2014	10,103.5	9,729.9	5,651.1	2,127.7	1,970.9	1,001.8	591.8	372.2	-19.7	373.5	4,494.4	4,120.8
2014 Q2	2,520.6	2,428.2	1,409.4	530.1	490.8	249.4	147.4	92.7	-2.1	92.4	1,118.1	1,025.6
Q3	2,531.5	2,437.5	1,416.6	534.2	493.2	249.1	149.2	93.7	-6.5	94.0	1,135.0	1,041.0
Q4	2,544.9	2,444.2	1,423.4	534.3	496.4	251.0	150.0	94.1	-9.8	100.7	1,142.1	1,041.4
2015 Q1	2,564.9	2,458.3	1,425.2	538.8	500.1	252.1	151.9	94.8	-5.8	106.6	1,144.3	1,037.6
<i>as a percentage of GDP</i>												
2014	100.0	96.3	55.9	21.1	19.5	9.9	5.9	3.7	-0.2	3.7	-	-
<i>Chain-linked volumes (prices for the previous year)</i>												
<i>quarter-on-quarter percentage changes</i>												
2014 Q2	0.1	0.0	0.3	0.2	-0.5	-1.8	1.0	0.7	-	-	1.3	1.3
Q3	0.2	0.3	0.5	0.2	0.1	-0.7	1.1	0.8	-	-	1.4	1.7
Q4	0.4	0.4	0.4	0.1	0.4	0.7	0.0	0.2	-	-	0.8	0.8
2015 Q1	0.4	0.6	0.5	0.6	0.8	0.6	1.3	0.5	-	-	0.6	1.2
<i>annual percentage changes</i>												
2012	-0.8	-2.3	-1.3	-0.1	-3.7	-4.2	-5.1	1.2	-	-	2.7	-0.7
2013	-0.4	-0.7	-0.6	0.2	-2.4	-3.3	-1.7	-0.3	-	-	2.0	1.3
2014	0.8	0.9	1.0	0.6	1.2	-1.3	4.5	2.8	-	-	3.8	4.1
2014 Q2	0.8	1.0	0.8	0.6	1.2	-1.5	4.9	2.8	-	-	3.2	3.8
Q3	0.8	0.6	1.0	0.6	0.6	-2.9	4.8	3.5	-	-	4.1	3.9
Q4	0.9	1.0	1.5	0.7	0.5	-1.5	2.5	2.7	-	-	4.1	4.6
2015 Q1	1.0	1.3	1.7	1.1	0.8	-1.3	3.4	2.2	-	-	4.2	5.1
<i>contributions to quarter-on-quarter percentage changes in GDP; percentage points</i>												
2014 Q2	0.1	0.0	0.2	0.0	-0.1	-0.2	0.1	0.0	-0.1	0.1	-	-
Q3	0.2	0.3	0.3	0.0	0.0	-0.1	0.1	0.0	-0.1	-0.1	-	-
Q4	0.4	0.3	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	-	-
2015 Q1	0.4	0.6	0.3	0.1	0.2	0.1	0.1	0.0	0.1	-0.2	-	-
<i>contributions to annual percentage changes in GDP; percentage points</i>												
2012	-0.8	-2.3	-0.7	0.0	-0.8	-1.8	-1.3	0.2	-0.8	1.4	-	-
2013	-0.4	-0.7	-0.4	0.0	-0.5	-1.4	-0.4	0.0	0.1	0.4	-	-
2014	0.8	0.8	0.5	0.1	0.2	-0.5	1.0	0.4	-0.1	0.0	-	-
2014 Q2	0.8	0.9	0.4	0.1	0.2	-0.2	0.3	0.1	0.1	-0.1	-	-
Q3	0.8	0.6	0.6	0.1	0.1	-0.3	0.3	0.1	-0.2	0.2	-	-
Q4	0.9	0.9	0.8	0.2	0.1	-0.2	0.1	0.1	-0.1	-0.1	-	-
2015 Q1	1.0	1.2	0.9	0.2	0.2	-0.1	0.2	0.1	-0.1	-0.2	-	-

Sources: Eurostat and ECB calculations.

## 3 Economic activity

### 3.2 Value added by economic activity

(quarterly data seasonally adjusted; annual data unadjusted)

	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
<b>Current prices (EUR billions)</b>												
2012	8,845.3	151.3	1,728.4	467.2	1,675.9	410.3	439.1	1,016.3	924.6	1,717.9	314.4	994.8
2013	8,924.2	154.5	1,740.7	460.1	1,684.8	407.2	440.6	1,032.5	937.1	1,748.0	318.7	1,007.5
2014	9,068.0	148.9	1,763.9	461.3	1,709.3	410.9	450.0	1,054.0	960.2	1,784.1	325.2	1,035.5
2014 Q2	2,261.4	38.0	440.2	115.0	425.5	102.6	113.2	262.9	239.0	444.1	80.9	259.3
Q3	2,272.1	36.9	442.6	114.6	428.6	102.9	112.8	263.8	240.9	447.6	81.6	259.4
Q4	2,283.3	35.8	445.7	115.7	431.6	103.2	112.1	265.6	242.9	448.7	82.0	261.6
2015 Q1	2,306.1	36.6	449.7	116.7	437.6	103.9	113.8	266.9	245.2	453.1	82.5	258.9
<i>as a percentage of value added</i>												
2014	100.0	1.6	19.5	5.1	18.9	4.5	5.0	11.6	10.6	19.7	3.6	-
<b>Chain-linked volumes (prices for the previous year)</b>												
<i>quarter-on-quarter percentage changes</i>												
2014 Q2	0.0	-0.1	0.0	-1.6	-0.1	0.6	-0.3	0.3	0.4	0.1	-0.2	1.1
Q3	0.2	0.9	0.0	-1.0	0.4	0.8	0.4	0.2	0.6	0.1	0.6	-0.4
Q4	0.2	-2.1	0.2	0.7	0.5	0.1	-0.2	0.3	0.4	0.2	0.1	1.3
2015 Q1	0.4	1.4	0.3	0.5	0.9	0.7	0.5	0.1	0.7	0.1	0.1	-0.2
<i>annual percentage changes</i>												
2012	-0.6	-3.0	-0.5	-5.9	-1.3	2.5	0.7	0.0	-0.9	0.2	-0.6	-2.6
2013	-0.3	2.5	-0.5	-2.9	-0.5	-0.1	-1.7	1.0	0.2	0.0	-0.4	-1.2
2014	0.9	3.7	0.4	-0.7	1.3	1.8	-0.5	1.3	1.5	0.7	0.7	0.7
2014 Q2	0.8	4.3	0.3	-0.6	1.1	1.9	-0.6	1.3	1.2	0.8	0.4	0.4
Q3	0.8	4.8	0.4	-1.9	1.1	2.2	-0.1	1.3	1.5	0.7	0.6	0.3
Q4	0.8	0.2	0.1	-1.3	1.3	1.6	0.2	1.3	2.0	0.5	0.8	1.6
2015 Q1	0.9	0.1	0.6	-1.5	1.7	2.2	0.5	0.9	2.0	0.5	0.6	1.9
<i>contributions to quarter-on-quarter percentage changes in value added; percentage points</i>												
2014 Q2	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Q3	0.2	0.0	0.0	-0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	-
Q4	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-
2015 Q1	0.4	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	-
<i>contributions to annual percentage changes in value added; percentage points</i>												
2012	-0.6	0.0	-0.1	-0.3	-0.3	0.1	0.0	0.0	-0.1	0.0	0.0	-
2013	-0.3	0.0	-0.1	-0.2	-0.1	0.0	-0.1	0.1	0.0	0.0	0.0	-
2014	0.9	0.1	0.1	0.0	0.2	0.1	0.0	0.1	0.2	0.1	0.0	-
2014 Q2	0.8	0.1	0.1	0.0	0.2	0.1	0.0	0.2	0.1	0.2	0.0	-
Q3	0.8	0.1	0.1	-0.1	0.2	0.1	0.0	0.2	0.2	0.1	0.0	-
Q4	0.8	0.0	0.0	-0.1	0.3	0.1	0.0	0.1	0.2	0.1	0.0	-
2015 Q1	0.9	0.0	0.1	-0.1	0.3	0.1	0.0	0.1	0.2	0.1	0.0	-

Sources: Eurostat and ECB calculations.

## 3 Economic activity

### 3.3 Employment <sup>1)</sup>

(quarterly data seasonally adjusted; annual data unadjusted)

	Total	By employment status		By economic activity									
		Employees	Self-employed	Agriculture, forestry and fishing	Manufacturing, energy and utilities	Construction	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Persons employed</b>													
<i>as a percentage of total persons employed</i>													
2012	100.0	84.9	15.1	3.4	15.4	6.4	24.8	2.7	2.7	1.0	12.7	23.8	7.0
2013	100.0	85.0	15.0	3.4	15.3	6.2	24.8	2.7	2.7	1.0	12.8	24.0	7.1
2014	100.0	85.1	14.9	3.4	15.2	6.0	24.9	2.7	2.7	1.0	13.0	24.0	7.1
<i>annual percentage changes</i>													
2012	-0.5	-0.5	-0.1	-1.1	-0.6	-4.5	-0.6	1.0	-0.5	0.2	0.7	-0.1	0.6
2013	-0.7	-0.7	-0.8	-1.2	-1.5	-4.3	-0.5	-0.1	-1.2	-0.9	0.2	0.0	0.0
2014	0.6	0.8	-0.4	0.9	-0.1	-1.8	0.8	1.1	-0.9	0.7	2.0	0.7	0.6
2014 Q2	0.6	0.8	-0.5	0.7	-0.1	-1.9	0.9	0.9	-1.3	0.6	2.1	0.7	0.2
Q3	0.7	1.0	-0.5	0.5	0.1	-1.3	1.0	1.3	-0.9	0.9	2.1	0.7	0.7
Q4	0.9	1.1	-0.5	0.6	0.3	-1.5	0.9	1.4	-0.6	0.9	2.5	0.7	1.8
2015 Q1	0.8	1.0	-0.2	0.1	0.4	-0.1	1.1	1.2	-0.7	1.5	2.5	0.5	0.4
<b>Hours worked</b>													
<i>as a percentage of total hours worked</i>													
2012	100.0	80.0	20.0	4.4	15.7	7.2	25.8	2.8	2.8	1.0	12.4	21.5	6.3
2013	100.0	80.0	20.0	4.4	15.7	6.9	25.9	2.8	2.7	1.0	12.5	21.7	6.4
2014	100.0	80.2	19.8	4.4	15.6	6.7	25.9	2.8	2.7	1.0	12.7	21.8	6.3
<i>annual percentage changes</i>													
2012	-1.8	-1.8	-1.5	-2.1	-2.2	-7.0	-2.1	0.5	-1.3	-0.8	-0.5	-0.6	-0.4
2013	-1.3	-1.3	-1.2	-1.5	-1.7	-5.6	-1.1	-0.3	-1.6	-1.9	-0.5	-0.5	-0.8
2014	0.6	0.9	-0.3	0.8	0.4	-1.4	0.8	1.0	-1.3	0.2	2.0	0.9	0.2
2014 Q2	0.4	0.7	-0.8	0.2	-0.4	-1.9	0.7	0.9	-2.0	0.0	1.9	0.9	0.1
Q3	0.6	1.0	-0.9	0.3	0.3	-1.6	0.9	1.0	-1.5	-0.2	2.0	0.8	0.1
Q4	1.1	1.3	0.2	1.8	0.9	-0.7	1.0	1.4	-1.3	1.3	2.7	0.9	1.6
2015 Q1	0.6	0.8	-0.3	1.2	0.4	-0.2	0.6	0.8	-1.3	2.0	2.1	0.4	0.5
<b>Hours worked per person employed</b>													
<i>annual percentage changes</i>													
2012	-1.3	-1.3	-1.4	-1.0	-1.6	-2.6	-1.5	-0.5	-0.7	-1.0	-1.1	-0.6	-1.0
2013	-0.6	-0.7	-0.4	-0.4	-0.2	-1.3	-0.6	-0.3	-0.4	-1.0	-0.8	-0.5	-0.8
2014	0.1	0.1	0.1	-0.1	0.5	0.3	0.0	-0.1	-0.3	-0.5	-0.1	0.2	-0.4
2014 Q2	-0.2	-0.1	-0.3	-0.5	-0.3	0.0	-0.2	0.0	-0.7	-0.7	-0.3	0.1	-0.1
Q3	-0.1	0.0	-0.3	-0.2	0.2	-0.3	-0.1	-0.3	-0.6	-1.1	-0.1	0.1	-0.6
Q4	0.2	0.2	0.6	1.1	0.6	0.7	0.1	0.0	-0.7	0.3	0.2	0.2	-0.2
2015 Q1	-0.2	-0.1	0.0	1.1	0.0	-0.1	-0.5	-0.4	-0.5	0.5	-0.4	-0.1	0.2

Sources: Eurostat and ECB calculations.

1) Data for employment are based on the ESA 2010.

## 3 Economic activity

### 3.4 Labour force, unemployment and job vacancies

(seasonally adjusted, unless otherwise indicated)

	Labour force, millions <sup>1)</sup>	Under-employment, % of labour force <sup>1)</sup>	Unemployment											Job vacancy rate <sup>2)</sup>
			Total		Long-term unemployment, % of labour force <sup>1)</sup>	By age				By gender				
			Millions	% of labour force		Adult		Youth		Male		Female		
						Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
% of total in 2013			100.0		81.3		18.7		53.6		46.4			
2012	159.193	3.9	18.186	11.4	5.3	14.626	10.1	3.560	23.6	9.758	11.3	8.428	11.5	1.6
2013	159.334	4.6	19.213	12.0	5.9	15.618	10.7	3.596	24.3	10.297	11.9	8.916	12.1	1.5
2014	160.315	4.6	18.598	11.6	6.1	15.192	10.4	3.406	23.6	9.896	11.4	8.702	11.8	1.7
2014 Q2	160.077	4.6	18.632	11.6	6.1	15.208	10.4	3.424	23.7	9.931	11.5	8.701	11.8	1.6
Q3	160.475	4.4	18.502	11.5	5.9	15.115	10.4	3.387	23.6	9.790	11.3	8.712	11.8	1.6
Q4	160.966	4.6	18.357	11.4	6.1	15.049	10.3	3.309	23.1	9.729	11.2	8.629	11.6	1.8
2015 Q1	160.084	4.7	17.974	11.2	5.9	14.741	10.1	3.234	22.7	9.557	11.1	8.417	11.4	1.7
2014 Dec.	-	-	18.205	11.3	-	14.933	10.2	3.272	22.9	9.660	11.2	8.545	11.5	-
2015 Jan.	-	-	18.066	11.3	-	14.814	10.1	3.253	22.8	9.619	11.1	8.447	11.4	-
Feb.	-	-	17.954	11.2	-	14.724	10.1	3.231	22.6	9.541	11.0	8.413	11.4	-
Mar.	-	-	17.902	11.2	-	14.684	10.1	3.218	22.6	9.512	11.0	8.390	11.3	-
Apr.	-	-	17.761	11.1	-	14.592	10.0	3.169	22.3	9.405	10.9	8.356	11.3	-
May	-	-	17.726	11.1	-	14.590	10.0	3.136	22.1	9.409	10.9	8.317	11.2	-

Sources: Eurostat and ECB calculations.

1) Not seasonally adjusted.

2) The job vacancy rate is equal to the number of job vacancies divided by the sum of the number of occupied posts and the number of job vacancies, expressed as a percentage.

### 3.5 Short-term business statistics

	Industrial production					Construction production	ECB indicator on industrial new orders	Retail sales				New passenger car registrations	
	Total (excluding construction)		Main Industrial Groupings					Total	Food, beverages, tobacco	Non-food	Fuel		
	Manufacturing	Inter-mediate goods	Capital goods	Consumer goods	Energy								
1	2	3	4	5	6	7	8	9	10	11	12	13	
% of total in 2010	100.0	86.0	33.6	29.2	22.5	14.7	100.0	100.0	100.0	39.3	51.5	9.1	100.0
annual percentage changes													
2012	-2.4	-2.6	-4.5	-1.0	-2.5	-0.1	-4.9	-3.7	-1.6	-1.3	-1.5	-5.0	-11.1
2013	-0.7	-0.7	-1.0	-0.6	-0.4	-0.8	-3.2	-0.1	-0.8	-0.9	-0.6	-0.9	-4.4
2014	0.8	1.7	1.2	1.8	2.6	-5.5	1.6	3.2	1.3	0.3	2.4	0.3	3.7
2014 Q2	0.9	1.7	1.4	0.9	3.5	-5.2	3.0	3.6	1.4	1.2	2.0	-0.3	3.9
Q3	0.6	1.2	0.5	1.4	1.9	-3.1	-1.2	2.3	0.8	-0.3	2.0	-0.5	4.1
Q4	0.3	0.9	-0.4	0.9	2.6	-3.3	-0.6	2.8	2.1	0.7	3.1	1.4	1.6
2015 Q1	1.6	1.1	-0.1	1.1	2.3	4.6	-1.4	1.1	2.2	1.0	3.3	2.2	9.0
2014 Dec.	0.7	1.3	0.2	1.9	1.6	-1.9	-2.2	3.0	3.2	2.1	4.0	2.7	0.0
2015 Jan.	0.6	0.2	-0.3	0.4	0.3	2.6	0.7	0.5	2.5	2.1	3.1	2.7	11.0
Feb.	1.9	1.2	-0.4	1.4	2.4	6.9	-3.5	0.7	2.4	0.9	3.6	3.2	8.1
Mar.	2.1	1.9	0.3	1.3	4.0	4.5	-1.9	2.0	1.8	0.1	3.2	0.8	8.2
Apr.	0.9	0.9	0.0	2.2	-0.1	0.7	0.0	2.6	2.7	1.5	3.8	2.6	6.5
May	1.6	2.4	2.2	4.1	0.1	-4.2	.	.	2.4	1.7	3.4	0.7	6.8
month-on-month percentage changes (s.a.)													
2014 Dec.	0.6	0.6	1.1	1.1	-0.3	1.0	0.3	2.5	0.5	0.3	0.6	1.8	4.9
2015 Jan.	0.1	-0.2	0.0	-0.1	-0.6	1.5	1.1	-2.2	0.3	0.8	0.4	0.7	1.9
Feb.	1.0	1.0	0.0	0.7	2.2	1.3	-1.5	0.0	0.0	-0.7	0.6	-0.8	-0.1
Mar.	-0.4	-0.3	0.0	-0.3	0.3	-1.6	0.6	1.3	-0.4	-0.5	-0.3	-1.0	-0.2
Apr.	0.0	0.3	0.1	0.5	-0.4	-1.3	0.3	1.8	0.7	1.3	0.3	0.3	0.7
May	-0.4	0.0	0.1	1.0	-0.9	-3.2	.	.	0.2	0.4	0.4	-0.7	-1.5

Sources: Eurostat, ECB calculations, ECB experimental statistics (col. 8) and European Automobile Manufacturers Association (col. 13).

## 3 Economic activity

### 3.6 Opinion surveys

(seasonally adjusted)

	European Commission Business and Consumer Surveys (percentage balances, unless otherwise indicated)							Purchasing Managers' Surveys (diffusion indices)				
	Economic sentiment indicator (long-term average = 100)	Manufacturing industry		Consumer confidence indicator	Construction confidence indicator	Retail trade confidence indicator	Service industries		Purchasing Managers' Index (PMI) for manufacturing	Manufacturing output	Business activity for services	Composite output
		Industrial confidence indicator	Capacity utilisation (%)				Services confidence indicator	Capacity utilisation (%)				
	1	2	3	4	5	6	7	8	9	10	11	12
1999-13	100.2	-6.1	80.9	-12.8	-13.8	-8.7	6.6	-	51.0	52.4	52.9	52.7
2012	90.5	-11.6	78.9	-22.0	-27.7	-15.0	-6.5	86.5	46.2	46.3	47.6	47.2
2013	93.8	-9.1	78.7	-18.7	-29.2	-12.2	-5.4	87.1	49.6	50.6	49.3	49.7
2014	101.6	-3.9	80.4	-10.1	-27.4	-3.2	4.8	87.7	51.8	53.3	52.5	52.7
2014 Q3	101.2	-4.6	80.4	-10.0	-27.3	-3.9	4.5	87.7	50.9	51.6	53.2	52.8
Q4	100.8	-4.5	80.8	-11.3	-24.3	-5.1	5.3	87.9	50.4	51.2	51.7	51.5
2015 Q1	102.6	-4.0	81.0	-6.3	-24.9	-1.6	5.6	88.1	51.4	52.6	53.6	53.3
Q2	103.7	-3.2	.	-5.3	-24.9	-0.1	7.6	.	52.3	53.4	54.1	53.9
2015 Jan.	101.5	-4.5	81.0	-8.5	-25.3	-2.7	5.3	87.8	51.0	52.1	52.7	52.6
Feb.	102.3	-4.6	-	-6.7	-25.1	-1.3	5.3	-	51.0	52.1	53.7	53.3
Mar.	103.9	-2.9	-	-3.7	-24.2	-0.8	6.1	-	52.2	53.6	54.2	54.0
Apr.	103.8	-3.2	81.1	-4.6	-25.5	-0.8	7.0	88.4	52.0	53.4	54.1	53.9
May	103.8	-3.0	-	-5.6	-25.0	1.5	7.9	-	52.2	53.3	53.8	53.6
June	103.5	-3.4	-	-5.6	-24.2	-1.1	7.9	-	52.5	53.6	54.4	54.2

Sources: European Commission (Directorate-General for Economic and Financial Affairs) (col. 1-8) and Markit (col. 9-12).

### 3.7 Summary accounts for households and non-financial corporations

(current prices, unless otherwise indicated; not seasonally adjusted)

	Households							Non-financial corporations					
	Saving ratio (gross) <sup>1)</sup>	Debt ratio	Real gross disposable income	Financial investment	Non-financial investment (gross)	Net worth <sup>2)</sup>	Housing wealth	Profit share <sup>3)</sup>	Saving ratio (net)	Debt ratio <sup>4)</sup>	Financial investment	Non-financial investment (gross)	Financing
	Percentage of gross disposable income (adjusted)	Annual percentage changes					Percentage of net value added	Percentage of GDP	Annual percentage changes				
	1	2	3	4	5	6	7	8	9	10	11	12	13
2011	13.0	95.5	-0.1	1.9	1.8	0.5	1.1	33.6	3.8	.	3.3	10.1	2.0
2012	12.6	97.5	-1.8	1.7	-4.6	0.7	-2.2	31.0	1.9	133.3	1.5	-6.2	1.0
2013	12.7	96.0	-0.5	1.6	-3.5	0.4	-2.2	30.6	3.2	132.2	2.1	-1.7	1.1
2014 Q2	12.6	95.4	0.4	1.5	-0.2	3.0	-0.1	30.9	3.3	133.2	2.3	2.0	1.1
Q3	12.7	94.9	1.7	1.6	-0.7	2.7	0.4	31.5	3.2	132.9	1.8	1.9	0.8
Q4	12.7	94.8	1.3	1.8	-0.5	2.6	1.0	32.2	2.6	133.4	1.9	0.9	1.1
2015 Q1	12.7	94.3	2.2	2.1	-0.1	.	.	.	2.7	134.9	2.3	1.0	1.6

Sources: ECB and Eurostat.

1) Based on four-quarter cumulated sums of both saving and gross disposable income (adjusted for the change in the net equity of households in pension fund reserves).

2) Financial assets (net of financial liabilities) and non-financial assets. Non-financial assets consist mainly of housing wealth (residential structures and land). They also include non-financial assets of unincorporated enterprises classified within the household sector.

3) The profit share uses net entrepreneurial income, which is broadly equivalent to current profits in business accounting.

4) Based on the outstanding amount of loans, debt securities, trade credits and pension scheme liabilities.

## 3 Economic activity

### 3.8 Euro area balance of payments, current and capital accounts

(EUR billions; seasonally adjusted unless otherwise indicated; transactions)

	Current account											Capital account <sup>1)</sup>	
	Total			Goods		Services		Primary income		Secondary income		Credit	Debit
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit		
1	2	3	4	5	6	7	8	9	10	11	12	13	
2014 Q2	829.9	784.0	45.9	488.3	431.4	170.7	153.2	147.9	139.5	23.0	59.8	7.6	3.4
Q3	835.8	778.1	57.7	491.2	428.7	175.5	157.9	144.9	136.3	24.2	55.2	6.8	2.6
Q4	842.7	784.9	57.8	505.3	430.4	177.9	164.6	135.6	130.8	24.0	59.1	12.8	5.3
2015 Q1	865.3	783.6	81.7	509.0	432.6	182.1	165.6	149.2	127.1	25.0	58.3	8.4	4.5
2014 Nov.	280.4	265.7	14.8	168.0	143.9	59.3	54.9	45.4	46.3	7.8	20.5	3.7	1.1
Dec.	281.7	261.2	20.5	167.8	143.1	60.4	55.8	45.5	42.4	8.0	19.8	5.8	3.0
2015 Jan.	282.9	255.1	27.9	166.7	139.8	59.6	54.0	48.2	42.5	8.5	18.7	2.3	1.5
Feb.	287.7	260.5	27.2	170.5	142.9	60.7	55.6	48.0	41.9	8.5	20.2	2.6	1.2
Mar.	294.7	268.1	26.7	171.8	149.9	61.9	56.0	53.0	42.7	8.0	19.4	3.5	1.8
Apr.	286.0	263.7	22.3	171.9	141.5	59.6	56.3	46.5	44.5	8.0	21.5	2.4	1.3
<i>12-month cumulated transactions</i>													
2015 Apr.	3,385.0	3,135.5	249.5	2,003.8	1,721.8	710.5	647.4	573.5	531.6	97.1	234.7	35.9	16.1
<i>12-month cumulated transactions as a percentage of GDP</i>													
2015 Apr.	33.3	30.9	2.5	19.7	16.9	7.0	6.4	5.6	5.2	1.0	2.3	0.4	0.2

1) The capital account is not seasonally adjusted.

### 3.9 Euro area external trade in goods <sup>1)</sup>, values and volumes by product group <sup>2)</sup>

(seasonally adjusted, unless otherwise indicated)

	Total (n.s.a.)		Exports (f.o.b.)					Imports (c.i.f.)					
	Exports	Imports	Total			Memo item: Manu- facturing	Total			Memo items:			
			Intermediate goods	Capital goods	Consumption goods		Intermediate goods	Capital goods	Consumption goods	Manu- facturing	Oil		
1	2	3	4	5	6	7	8	9	10	11	12	13	
<i>Values (EUR billions; annual percentage changes for columns 1 and 2)</i>													
2014 Q2	0.6	0.3	480.9	234.6	95.9	137.7	394.8	437.7	271.1	61.0	99.1	281.6	77.5
Q3	2.9	0.4	486.1	236.1	96.8	139.5	397.7	439.4	269.6	61.9	100.9	287.5	73.3
Q4	4.5	-0.2	498.1	237.1	102.3	145.0	409.2	434.6	260.0	63.2	102.2	292.3	66.1
2015 Q1	5.0	0.4	503.7	240.2	103.2	148.5	419.7	439.8	256.4	68.0	107.1	309.6	58.5
2014 Nov.	1.1	-1.8	166.7	79.4	34.2	48.9	136.2	145.8	86.5	21.2	33.8	96.6	21.6
Dec.	8.4	1.4	165.6	78.2	34.2	48.0	137.5	142.7	84.7	20.7	34.4	98.6	21.2
2015 Jan.	-0.7	-6.0	163.8	78.4	33.9	47.6	135.8	142.3	82.6	22.1	34.8	99.6	19.3
Feb.	4.3	-0.1	168.5	80.4	34.9	49.6	140.9	145.9	85.2	22.8	35.4	103.2	19.0
Mar.	10.9	7.4	171.4	81.4	34.4	51.3	143.0	151.6	88.6	23.1	36.9	106.8	20.2
Apr.	8.8	2.8	173.4	.	.	.	143.3	149.1	.	.	.	102.0	.
<i>Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)</i>													
2014 Q2	0.7	2.3	114.6	113.1	113.8	116.9	115.4	101.5	101.5	98.6	103.0	103.9	92.2
Q3	1.2	2.1	114.5	112.6	114.3	116.4	114.7	101.5	101.2	100.0	102.9	104.4	88.7
Q4	2.9	1.7	117.2	113.5	119.2	121.0	116.7	101.8	101.8	98.3	101.8	103.7	97.2
2015 Q1	2.4	3.7	117.2	114.3	118.1	121.8	117.6	104.1	104.8	101.2	103.3	106.4	111.4
2014 Nov.	-0.6	-0.7	117.4	113.7	119.2	122.6	116.5	102.3	100.8	101.4	100.7	103.3	93.0
Dec.	7.5	5.0	117.2	113.1	118.5	120.5	117.4	102.0	103.0	94.6	102.8	104.3	106.5
2015 Jan.	-1.6	-1.0	115.8	112.8	117.7	119.7	115.2	103.2	103.5	101.8	102.0	104.3	117.4
Feb.	1.5	3.5	117.5	114.8	120.0	121.8	118.6	103.6	104.6	102.6	102.0	106.3	109.6
Mar.	6.8	8.5	118.2	115.3	116.7	124.0	119.1	105.5	106.2	99.3	106.0	108.4	107.1
Apr.	.	.	.	.	.	.	.	.	.	.	.	.	.

Sources: ECB and Eurostat.

1) Differences between ECB's b.o.p. goods (Table 3.8) and Eurostat's trade in goods (Table 3.9) are mainly due to different definitions.

2) Product groups as classified in the Broad Economic Categories.



## 4 Prices and costs

### 4.1 Harmonised Index of Consumer Prices <sup>1)</sup> (annual percentage changes, unless otherwise indicated)

	Total					Total (s.a.; percentage change vis-à-vis previous period)						Memo item: Administered prices	
	Index: 2005 = 100	Total		Goods	Services	Total	Processed food	Unpro- cessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Adminis- tered prices
		Total excluding food and energy											
	1	2	3	4	5	6	7	8	9	10	11	12	13
% of total in 2015	100.0	100.0	69.7	56.5	43.5	100.0	12.2	7.5	26.3	10.6	43.5	87.1	12.9
2012	115.6	2.5	1.5	3.0	1.8	-	-	-	-	-	-	2.3	3.8
2013	117.2	1.4	1.1	1.3	1.4	-	-	-	-	-	-	1.2	2.1
2014	117.7	0.4	0.8	-0.2	1.2	-	-	-	-	-	-	0.2	1.9
2014 Q3	117.7	0.4	0.8	-0.3	1.2	0.1	0.2	0.2	0.0	-0.4	0.4	0.2	1.6
Q4	117.8	0.2	0.7	-0.6	1.2	-0.2	0.0	0.5	0.0	-3.0	0.2	-0.1	1.7
2015 Q1	116.8	-0.3	0.7	-1.4	1.1	-0.3	0.2	0.5	0.1	-4.2	0.2	-0.5	1.2
Q2	118.4	0.2	0.8	-0.5	1.1	0.5	0.3	0.6	0.2	2.4	0.4	0.1	0.9
2015 Jan.	115.9	-0.6	0.6	-1.8	1.0	-0.3	0.0	0.2	0.0	-3.2	0.0	-0.9	1.3
Feb.	116.6	-0.3	0.7	-1.4	1.2	0.3	0.1	0.6	0.0	1.6	0.3	-0.5	1.2
Mar.	117.9	-0.1	0.6	-0.9	1.0	0.2	0.1	-0.1	0.1	1.7	0.0	-0.3	1.1
Apr.	118.2	0.0	0.6	-0.7	1.0	0.1	0.2	0.4	0.1	0.1	0.0	-0.1	0.9
May	118.5	0.3	0.9	-0.4	1.3	0.3	0.0	0.2	0.1	0.9	0.3	0.3	1.0
June	118.5	0.2	0.8	-0.4	1.1	0.0	0.1	-0.1	0.0	-0.1	0.0	0.1	0.9

	Goods						Services					
	Food (including alcoholic beverages and tobacco)			Industrial goods			Housing	Transport	Communi- cation	Recreation and personal	Miscel- laneous	
	Total	Processed food	Unpro- cessed food	Total	Non-energy industrial goods	Energy	Rents					
	14	15	16	17	18	19	20	21	22	23	24	25
% of total in 2015	19.7	12.2	7.5	36.9	26.3	10.6	10.7	6.4	7.3	3.1	14.8	7.5
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
2014	0.5	1.2	-0.8	-0.5	0.1	-1.9	1.7	1.4	1.7	-2.8	1.5	1.3
2014 Q3	-0.1	1.0	-2.0	-0.4	0.1	-1.8	1.7	1.3	1.7	-3.1	1.5	1.3
Q4	0.3	0.7	-0.3	-1.1	-0.1	-3.6	1.6	1.4	1.6	-2.6	1.4	1.4
2015 Q1	0.3	0.5	0.1	-2.3	-0.1	-7.7	1.3	1.3	1.4	-1.9	1.3	1.2
Q2	1.1	0.7	1.8	-1.4	0.2	-5.3	1.2	1.2	1.2	-0.9	1.4	1.2
2015 Jan.	-0.1	0.4	-0.8	-2.8	-0.1	-9.3	1.4	1.4	1.4	-2.1	1.1	1.2
Feb.	0.5	0.5	0.4	-2.4	-0.1	-7.9	1.3	1.3	1.5	-1.9	1.6	1.3
Mar.	0.6	0.6	0.7	-1.7	0.0	-6.0	1.2	1.2	1.4	-1.7	1.1	1.3
Apr.	1.0	0.7	1.3	-1.6	0.1	-5.8	1.2	1.3	0.7	-1.2	1.2	1.2
May	1.2	0.6	2.1	-1.2	0.2	-4.8	1.2	1.2	1.6	-0.8	1.8	1.3
June	1.1	0.7	1.9	-1.3	0.3	-5.1	1.2	1.2	1.2	-0.8	1.3	1.1

Sources: Eurostat and ECB calculations.

1) Data refer to the changing composition of the euro area.

## 4 Prices and costs

### 4.2 Industry, construction and property prices

(annual percentage changes, unless otherwise indicated)

	Industrial producer prices excluding construction									Con- struction	Residential property prices <sup>1), 2)</sup>	Experimental indicator of commercial property prices <sup>1), 2)</sup>	
	Total (index: 2010 = 100)	Total		Industry excluding construction and energy					Energy				
		Manu- facturing	Total	Intermediate goods	Capital goods	Consumer goods							
						Total	Food, beverages and tobacco	Non- food					
1	2	3	4	5	6	7	8	9	10	11	12	13	
% of total in 2010	100.0	100.0	78.0	72.1	29.3	20.0	22.7	13.8	8.9	27.9			
2012	108.7	2.8	2.0	1.4	0.7	1.0	2.5	3.5	0.9	6.6	1.5	-1.7	-0.2
2013	108.5	-0.2	-0.1	0.4	-0.6	0.6	1.7	2.6	0.3	-1.6	0.3	-2.0	-1.7
2014	106.9	-1.5	-0.9	-0.3	-1.1	0.4	0.1	-0.2	0.3	-4.4	0.3	0.2	1.2
2014 Q2	107.1	-1.1	-0.3	-0.2	-1.2	0.3	0.5	0.4	0.3	-3.1	0.2	0.1	0.8
Q3	106.8	-1.4	-0.6	-0.1	-0.6	0.5	-0.1	-0.5	0.3	-4.5	0.4	0.4	2.1
Q4	106.0	-1.9	-1.6	-0.3	-0.7	0.6	-0.6	-1.2	0.2	-5.8	0.2	0.7	2.9
2015 Q1	104.5	-2.8	-2.6	-0.6	-1.5	0.7	-0.7	-1.3	0.2	-8.4	0.3	1.0	.
2014 Dec.	105.2	-2.7	-2.5	-0.4	-1.0	0.6	-0.7	-1.4	0.2	-8.3	-	-	-
2015 Jan.	104.0	-3.5	-3.4	-0.7	-1.6	0.7	-0.9	-1.5	0.1	-10.5	-	-	-
Feb.	104.6	-2.8	-2.6	-0.7	-1.7	0.7	-0.8	-1.4	0.3	-8.1	-	-	-
Mar.	104.9	-2.3	-1.9	-0.5	-1.2	0.7	-0.6	-1.1	0.2	-6.7	-	-	-
Apr.	104.8	-2.1	-1.8	-0.4	-0.8	0.8	-0.8	-1.4	0.1	-6.4	-	-	-
May	104.8	-2.0	-1.5	-0.3	-0.6	0.7	-0.8	-1.4	0.0	-6.4	-	-	-

Sources: Eurostat, ECB calculations, and ECB calculations based on MSCI data and national sources (col. 13).

1) Data refer to the Euro 19.

2) Experimental data based on non-harmonised sources (see <http://www.ecb.europa.eu/stats/intro/html/experiment.en.html> for further details).

### 4.3 Commodity prices and GDP deflators

(annual percentage changes, unless otherwise indicated)

	GDP deflators							Oil prices (EUR per barrel)	Non-energy commodity prices (EUR)								
	Total (s.a.; index: 2010 = 100)	Total	Domestic demand				Exports <sup>1)</sup>		Imports <sup>1)</sup>	Import-weighted <sup>2)</sup>			Use-weighted <sup>2)</sup>				
			Total	Private consump- tion	Govern- ment consump- tion	Gross fixed capital formation				Total	Food	Non-food	Total	Food	Non-food		
																3	4
% of total									100.0	35.0	65.0	100.0	45.0	55.0			
2012	102.4	1.3	1.5	1.9	0.8	1.2	1.9	2.5	86.6	-7.2	0.2	-10.5	-3.1	5.8	-9.1		
2013	103.7	1.3	0.9	1.1	1.2	0.4	-0.3	-1.3	81.7	-9.0	-13.4	-6.9	-8.3	-10.1	-6.9		
2014	104.6	0.9	0.5	0.4	1.0	0.4	-0.7	-1.7	74.5	-8.8	-1.6	-12.1	-4.6	0.7	-8.7		
2014 Q3	104.7	0.9	0.5	0.3	1.1	0.5	-0.5	-1.5	78.0	-6.2	-1.7	-8.3	-2.1	0.2	-3.8		
Q4	104.9	0.9	0.3	0.2	0.9	0.6	-0.5	-1.9	61.5	-5.5	6.2	-10.8	1.3	9.3	-4.7		
2015 Q1	105.3	1.0	0.0	-0.2	0.7	0.5	-0.5	-2.9	49.0	-0.4	8.7	-4.9	5.6	11.6	0.7		
Q2	.	.	.	.	.	.	.	.	57.4	-0.5	2.1	-2.0	4.0	5.7	2.6		
2015 Jan.	-	-	-	-	-	-	-	-	42.8	-1.3	13.6	-8.2	5.7	16.8	-2.5		
Feb.	-	-	-	-	-	-	-	-	52.0	-0.8	8.4	-5.4	4.7	10.5	0.1		
Mar.	-	-	-	-	-	-	-	-	52.4	1.0	4.6	-1.0	6.2	7.9	4.7		
Apr.	-	-	-	-	-	-	-	-	56.6	-1.4	3.4	-4.0	4.9	7.8	2.4		
May	-	-	-	-	-	-	-	-	58.9	-0.1	-0.3	-0.1	3.8	3.3	4.2		
June	-	-	-	-	-	-	-	-	56.7	-0.1	3.2	-1.9	3.4	5.9	1.1		

Sources: Eurostat, ECB calculations and Thomson Reuters (col. 9).

1) Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.

2) Import-weighted: weighted according to 2004-06 average import structure; use-weighted: weighted according to 2004-06 average domestic demand structure.

## 4 Prices and costs

### 4.4 Price-related opinion surveys

(seasonally adjusted)

	European Commission Business and Consumer Surveys (percentage balances)					Purchasing Managers' Surveys (diffusion indices)			
	Selling price expectations (for next three months)				Consumer price trends over past 12 months	Input prices		Prices charged	
	Manu- facturing	Retail trade	Services	Construction		Manu- facturing	Services	Manu- facturing	Services
	1	2	3	4	5	6	7	8	9
1999-13	4.8	-	-	-1.8	34.0	57.7	56.7	-	49.9
2012	2.7	8.1	2.1	-12.7	38.6	52.7	55.1	49.9	47.9
2013	-0.3	1.7	-1.2	-17.1	29.8	48.5	53.8	49.4	47.8
2014	-0.8	-1.4	1.2	-17.6	14.3	49.6	53.5	49.7	48.2
2014 Q3	-0.7	-1.8	0.9	-16.9	11.7	51.2	53.7	49.8	48.4
Q4	-2.1	-4.4	2.8	-15.7	7.9	48.7	52.6	49.0	47.1
2015 Q1	-5.5	-0.7	1.4	-17.0	-2.4	45.8	52.5	48.8	47.6
Q2	-1.1	3.3	3.0	-15.5	-0.8	54.7	54.4	50.4	49.0
2015 Jan.	-6.0	-3.2	-0.3	-17.1	-0.1	42.0	50.9	48.1	46.5
Feb.	-5.8	0.5	2.0	-17.7	-3.4	44.7	52.4	48.6	47.6
Mar.	-4.6	0.6	2.4	-16.3	-3.8	50.7	54.2	49.7	48.6
Apr.	-2.7	2.8	2.3	-17.7	-2.0	52.4	53.6	50.1	48.9
May	-0.6	2.4	2.6	-13.7	-0.6	56.0	55.4	50.0	49.3
June	0.0	4.7	4.2	-15.0	0.1	55.7	54.1	51.0	48.9

Sources: European Commission (Directorate-General for Economic and Financial Affairs) and Markit.

### 4.5 Labour cost indices

(annual percentage changes, unless otherwise indicated)

	Total (index: 2012 = 100)	Total	By component		For selected economic activities		Memo item: Indicator of negotiated wages <sup>1)</sup>
			Wages and salaries	Employers' social contributions	Business economy	Mainly non-business economy	
	1	2	3	4	5	6	7
% of total in 2012	100.0	100.0	74.6	25.4	69.3	30.7	
2012	100.0	2.0	2.0	2.1	2.4	1.3	2.2
2013	101.4	1.3	1.5	1.0	1.2	1.6	1.8
2014	102.6	1.2	1.3	0.9	1.2	1.3	1.7
2014 Q2	106.3	1.5	1.5	1.4	1.6	1.3	1.8
Q3	100.5	1.4	1.5	1.3	1.3	1.8	1.7
Q4	107.9	1.2	1.1	1.3	1.1	1.3	1.7
2015 Q1	97.6	2.2	2.2	2.1	2.3	1.9	1.4

Sources: Eurostat and ECB calculations.

1) Experimental data based on non-harmonised sources (see <http://www.ecb.europa.eu/stats/intro/html/experiment.en.html> for further details).

## 4 Prices and costs

### 4.6 Unit labour costs, compensation per labour input and labour productivity

(annual percentage changes, unless otherwise indicated; quarterly data seasonally adjusted; annual data unadjusted)

	Total (index: 2010 =100)	Total	By economic activity									
			Agriculture, forestry and fishing	Manu- facturing, energy and utilities	Con- struction	Trade, transport, accom- modation and food services	Information and commu- nication	Finance and insurance	Real estate	Professional, business and support services	Public ad- ministration, education, health and social work	Arts, enter- tainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12
Unit labour costs												
2012	102.5	1.9	2.2	1.8	3.8	2.4	0.0	0.0	1.3	3.7	0.6	3.1
2013	103.8	1.3	0.2	1.8	0.1	1.0	0.8	2.6	-1.9	1.2	1.7	1.7
2014	105.0	1.2	-3.8	1.8	0.5	0.7	1.2	1.0	0.5	2.1	1.3	1.0
2014 Q2	104.8	1.1	-4.7	1.8	0.3	0.9	0.9	0.9	0.2	2.4	1.1	1.2
Q3	105.3	1.3	-4.8	1.8	1.2	1.0	1.0	0.6	1.2	2.3	1.3	1.1
Q4	105.5	1.3	-0.7	2.3	1.1	0.7	1.7	0.9	0.4	2.1	1.5	1.5
2015 Q1	105.8	1.2	1.3	1.7	2.0	0.5	0.4	0.0	3.5	2.5	1.6	0.9
Compensation per employee												
2012	103.6	1.5	0.3	1.9	2.3	1.7	1.5	1.2	1.1	2.1	0.9	1.9
2013	105.3	1.6	3.9	2.8	1.6	1.0	0.7	2.0	-0.1	1.1	1.7	1.4
2014	106.8	1.4	-1.1	2.3	1.6	1.2	2.0	1.4	1.0	1.6	1.3	1.1
2014 Q2	106.7	1.3	-1.3	2.1	1.7	1.1	1.8	1.7	0.9	1.5	1.2	1.4
Q3	107.1	1.3	-0.7	2.1	0.6	1.1	1.9	1.3	1.6	1.7	1.3	1.0
Q4	107.6	1.3	-1.1	2.2	1.2	1.1	1.9	1.8	0.8	1.5	1.4	0.5
2015 Q1	108.2	1.5	1.3	1.9	0.5	1.2	1.4	1.3	2.9	2.0	1.6	1.1
Labour productivity per person employed												
2012	101.1	-0.4	-1.9	0.1	-1.4	-0.7	1.5	1.2	-0.2	-1.5	0.3	-1.1
2013	101.4	0.3	3.7	1.0	1.5	0.1	-0.1	-0.6	1.9	-0.1	0.0	-0.3
2014	101.7	0.3	2.7	0.5	1.1	0.5	0.8	0.4	0.5	-0.5	0.0	0.1
2014 Q2	101.8	0.2	3.5	0.4	1.3	0.3	1.0	0.8	0.7	-0.9	0.0	0.2
Q3	101.7	0.1	4.3	0.3	-0.6	0.1	0.9	0.7	0.4	-0.6	0.0	-0.1
Q4	102.0	0.0	-0.5	-0.2	0.1	0.4	0.2	0.9	0.3	-0.5	-0.1	-1.1
2015 Q1	102.2	0.2	-0.1	0.2	-1.4	0.7	0.9	1.3	-0.6	-0.5	0.0	0.2
Compensation per hour worked												
2012	104.8	2.9	2.3	3.5	5.1	3.4	2.0	1.7	1.7	3.2	1.4	2.9
2013	107.2	2.3	4.2	3.0	3.0	1.8	1.0	2.5	1.4	2.1	2.2	2.1
2014	108.6	1.3	-0.9	1.8	1.3	1.2	1.9	1.7	1.1	1.5	1.1	1.3
2014 Q2	108.4	1.4	-0.6	2.5	1.7	1.3	1.7	2.2	1.5	1.4	0.9	0.9
Q3	108.8	1.3	-0.6	1.9	0.6	1.2	1.7	1.7	1.3	1.4	1.2	1.4
Q4	109.0	1.1	-1.5	1.6	0.7	0.9	1.5	2.5	0.3	1.3	1.1	0.5
2015 Q1	109.9	1.6	1.0	2.0	0.4	1.6	1.1	2.0	2.7	2.2	1.7	0.6
Hourly labour productivity												
2012	102.3	0.9	-0.9	1.7	1.2	0.7	2.1	2.0	0.8	-0.4	0.9	-0.1
2013	103.3	1.0	4.1	1.2	2.8	0.6	0.2	-0.1	2.9	0.7	0.5	0.5
2014	103.5	0.2	2.9	0.0	0.8	0.5	0.9	0.7	1.0	-0.4	-0.2	0.5
2014 Q2	103.6	0.4	4.1	0.7	1.4	0.4	1.0	1.5	1.4	-0.6	-0.1	0.3
Q3	103.4	0.2	4.5	0.1	-0.3	0.2	1.2	1.4	1.5	-0.5	-0.1	0.5
Q4	103.4	-0.2	-1.6	-0.7	-0.6	0.3	0.2	1.6	0.0	-0.7	-0.3	-0.8
2015 Q1	103.9	0.4	-1.2	0.2	-1.3	1.2	1.3	1.8	-1.1	-0.1	0.1	0.0

Sources: Eurostat and ECB calculations.

## 5 Money and credit

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

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

	M3											12
	M2						M3-M2					
	M1		M2-M1				Repos	Money market fund shares	Debt securities with a maturity of up to 2 years			
	Currency in circulation	Overnight deposits	Deposits with an agreed maturity of up to 2 years	Deposits redeemable at notice of up to 3 months								
1	2	3	4	5	6	7	8	9	10	11		
	Outstanding amounts											
2012	863.4	4,244.0	5,107.5	1,803.3	2,081.5	3,884.8	8,992.3	125.0	483.1	180.6	788.7	9,780.9
2013	908.8	4,482.6	5,391.4	1,691.2	2,123.2	3,814.4	9,205.8	120.0	417.7	86.5	624.3	9,830.0
2014	967.3	4,948.4	5,915.7	1,605.5	2,129.5	3,735.1	9,650.8	122.2	427.4	105.9	655.5	10,306.3
2014 Q2	931.5	4,627.3	5,558.9	1,671.1	2,131.2	3,802.3	9,361.2	129.7	409.3	65.6	604.5	9,965.7
Q3	948.2	4,745.2	5,693.4	1,647.5	2,136.6	3,784.1	9,477.5	122.4	419.1	68.8	610.4	10,087.8
Q4	967.3	4,948.4	5,915.7	1,605.5	2,129.5	3,735.1	9,650.8	122.2	427.4	105.9	655.5	10,306.3
2015 Q1	993.7	5,174.3	6,168.0	1,529.2	2,133.5	3,662.7	9,830.7	125.9	436.5	98.0	660.4	10,491.1
2014 Dec.	967.3	4,948.4	5,915.7	1,605.5	2,129.5	3,735.1	9,650.8	122.2	427.4	105.9	655.5	10,306.3
2015 Jan.	984.8	5,057.3	6,042.2	1,580.5	2,120.7	3,701.1	9,743.3	119.5	438.6	103.0	661.1	10,404.5
Feb.	992.4	5,106.6	6,099.0	1,536.0	2,123.4	3,659.4	9,758.5	132.4	443.1	108.9	684.3	10,442.8
Mar.	993.7	5,174.3	6,168.0	1,529.2	2,133.5	3,662.7	9,830.7	125.9	436.5	98.0	660.4	10,491.1
Apr.	1,003.3	5,187.9	6,191.2	1,518.2	2,150.9	3,669.0	9,860.3	130.9	450.8	104.7	686.4	10,546.7
May <sup>(p)</sup>	1,006.7	5,263.7	6,270.4	1,486.5	2,157.1	3,643.5	9,913.9	112.1	442.9	94.9	649.8	10,563.8
	Transactions											
2012	20.0	289.5	309.5	-36.0	114.9	78.9	388.5	-16.9	-20.2	-18.5	-55.7	332.8
2013	45.3	245.8	291.1	-111.1	43.9	-67.2	223.9	-12.0	-48.8	-62.8	-123.6	100.3
2014	58.0	369.5	427.4	-92.7	3.5	-89.3	338.1	0.8	10.8	14.0	25.5	363.6
2014 Q2	6.7	61.7	68.5	2.3	5.8	8.1	76.6	12.4	-4.3	-7.6	0.5	77.1
Q3	16.7	109.1	125.7	-27.1	5.1	-22.0	103.8	-8.1	10.0	3.4	5.3	109.1
Q4	19.1	125.2	144.4	-41.8	-9.1	-50.9	93.5	-0.5	11.1	19.9	30.5	124.0
2015 Q1	25.2	189.9	215.2	-63.9	4.8	-59.1	156.1	2.4	4.9	-9.2	-1.9	154.2
2014 Dec.	10.8	12.7	23.5	-14.2	-10.5	-24.7	-1.2	-6.3	-4.6	17.5	6.5	5.4
2015 Jan.	16.4	82.0	98.3	-34.9	-8.3	-43.2	55.1	-3.5	7.1	-4.1	-0.5	54.6
Feb.	7.6	47.6	55.2	-19.2	2.7	-16.5	38.6	12.8	4.4	7.0	24.2	62.8
Mar.	1.3	60.4	61.7	-9.7	10.3	0.7	62.3	-6.9	-6.6	-12.1	-25.6	36.7
Apr.	9.6	35.2	44.8	-9.2	3.8	-5.5	39.3	5.4	14.3	7.7	27.3	66.7
May <sup>(p)</sup>	3.4	71.6	75.0	-33.0	6.1	-26.9	48.1	-19.0	-7.9	-10.1	-37.0	11.1
	Growth rates											
2012	2.4	7.3	6.4	-1.9	5.9	2.1	4.5	-11.6	-3.9	-9.9	-6.6	3.5
2013	5.2	5.8	5.7	-6.2	2.1	-1.7	2.5	-9.5	-10.4	-37.8	-16.2	1.0
2014	6.4	8.2	7.9	-5.5	0.2	-2.3	3.7	0.7	2.6	20.3	4.1	3.7
2014 Q2	5.6	5.4	5.4	-4.6	0.5	-1.8	2.4	5.1	-7.5	-28.8	-8.7	1.6
Q3	6.0	6.2	6.2	-3.9	0.3	-1.5	3.0	9.7	-1.1	-26.8	-4.1	2.5
Q4	6.4	8.2	7.9	-5.5	0.2	-2.3	3.7	0.7	2.6	20.3	4.1	3.7
2015 Q1	7.3	10.6	10.0	-7.8	0.3	-3.3	4.6	5.2	5.3	12.4	5.7	4.7
2014 Dec.	6.4	8.2	7.9	-5.5	0.2	-2.3	3.7	0.7	2.6	20.3	4.1	3.7
2015 Jan.	7.7	9.2	8.9	-6.7	-0.1	-3.0	4.0	-4.7	1.3	13.0	1.2	3.8
Feb.	7.9	9.4	9.1	-7.3	0.0	-3.2	4.1	0.5	3.4	22.3	4.8	4.1
Mar.	7.3	10.6	10.0	-7.8	0.3	-3.3	4.6	5.2	5.3	12.4	5.7	4.7
Apr.	8.2	10.9	10.5	-8.2	0.5	-3.3	4.9	7.4	9.0	41.9	11.9	5.3
May <sup>(p)</sup>	8.3	11.8	11.2	-10.4	0.7	-4.2	5.0	-9.1	7.6	18.0	5.0	5.0

Source: ECB.

1) Data refer to the changing composition of the euro area.

## 5 Money and credit

### 5.2 Deposits in M3 <sup>1)</sup>

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

	Non-financial corporations <sup>2)</sup>					Households <sup>3)</sup>					Financial corporations other than MFIs and ICPFs <sup>2)</sup>	Insurance corporations and pension funds	Other general government <sup>4)</sup>
	Total	Overnight	With an agreed maturity of up to 2 years	Redeemable at notice of up to 3 months	Repos	Total	Overnight	With an agreed maturity of up to 2 years	Redeemable at notice of up to 3 months	Repos			
	1	2	3	4	5	6	7	8	9	10	11	12	13
Outstanding amounts													
2012	1,618.7	1,112.8	406.9	88.1	10.8	5,308.6	2,360.4	977.3	1,960.3	10.5	811.2	209.1	306.3
2013	1,710.6	1,198.6	400.8	94.7	16.5	5,414.0	2,542.6	875.7	1,991.2	4.5	801.0	192.8	298.6
2014	1,813.4	1,329.3	368.2	96.4	19.5	5,556.7	2,753.3	810.6	1,989.9	2.8	886.3	218.5	330.8
2014 Q2	1,751.9	1,244.6	394.7	97.3	15.3	5,481.4	2,623.1	859.8	1,994.0	4.5	801.1	210.3	314.6
Q3	1,789.5	1,283.8	391.1	99.2	15.4	5,531.9	2,686.9	845.1	1,995.1	4.9	794.8	208.4	327.1
Q4	1,813.4	1,329.3	368.2	96.4	19.5	5,556.7	2,753.3	810.6	1,989.9	2.8	886.3	218.5	330.8
2015 Q1	1,847.0	1,392.6	340.4	99.0	14.9	5,598.3	2,843.8	761.7	1,988.8	3.9	953.5	225.1	339.0
2014 Dec.	1,813.4	1,329.3	368.2	96.4	19.5	5,556.7	2,753.3	810.6	1,989.9	2.8	886.3	218.5	330.8
2015 Jan.	1,853.5	1,379.5	366.2	96.4	11.4	5,565.6	2,786.5	795.4	1,979.9	3.8	886.7	228.3	343.9
Feb.	1,851.9	1,393.6	347.1	97.2	13.9	5,566.5	2,810.2	771.1	1,980.9	4.3	906.0	224.4	349.6
Mar.	1,847.0	1,392.6	340.4	99.0	14.9	5,598.3	2,843.8	761.7	1,988.8	3.9	953.5	225.1	339.0
Apr.	1,843.5	1,386.9	332.9	112.8	10.9	5,609.3	2,857.2	756.5	1,991.9	3.7	960.7	230.1	344.2
May <sup>(p)</sup>	1,851.6	1,403.6	324.0	111.9	12.2	5,623.7	2,876.8	746.5	1,996.6	3.8	967.7	231.5	344.9
Transactions													
2012	72.2	99.4	-33.2	10.0	-4.0	222.8	99.4	35.6	100.2	-12.5	16.5	15.0	25.0
2013	97.9	90.4	-6.0	7.7	5.8	108.7	183.7	-100.1	31.1	-6.0	-17.4	-14.2	-8.5
2014	68.0	89.8	-25.6	1.2	2.5	140.2	209.0	-65.7	-1.5	-1.7	46.1	5.8	20.9
2014 Q2	14.8	18.7	-4.3	0.3	0.2	41.4	40.4	-4.9	7.1	-1.2	20.5	4.6	0.9
Q3	29.6	33.6	-5.7	1.9	-0.2	47.3	61.9	-16.0	1.0	0.4	-8.3	-2.3	12.6
Q4	6.4	15.9	-12.2	-1.4	4.0	25.9	67.6	-33.1	-6.6	-2.0	56.0	-8.7	-5.8
2015 Q1	29.8	49.2	-17.1	2.6	-4.9	39.3	81.5	-43.3	0.0	1.1	50.4	5.1	8.7
2014 Dec.	-20.1	-20.3	-3.3	-2.8	6.3	4.8	23.6	-15.3	-1.6	-1.9	11.2	-11.5	-2.7
2015 Jan.	27.3	39.7	-4.1	-0.1	-8.3	-3.5	25.3	-20.6	-9.3	1.0	-11.0	9.0	13.5
Feb.	11.8	13.4	-5.0	0.8	2.5	12.1	23.4	-12.7	1.0	0.4	18.4	-4.3	5.8
Mar.	-9.2	-4.0	-8.0	1.8	0.9	30.7	32.8	-9.9	8.2	-0.4	43.0	0.4	-10.7
Apr.	0.7	9.4	-6.7	1.9	-3.9	12.7	16.9	-5.1	1.3	-0.3	11.0	5.4	5.3
May <sup>(p)</sup>	5.6	14.8	-9.5	-1.0	1.2	13.7	19.1	-10.3	4.7	0.2	4.7	1.1	0.6
Growth rates													
2012	4.7	9.8	-7.5	13.2	-25.2	4.4	4.4	3.8	5.4	-54.2	2.1	7.8	9.1
2013	6.1	8.1	-1.5	8.8	54.6	2.0	7.8	-10.3	1.6	-57.0	-2.2	-6.9	-2.8
2014	3.9	7.5	-6.3	1.3	14.5	2.6	8.2	-7.5	-0.1	-37.2	5.5	3.2	7.0
2014 Q2	6.2	8.3	-0.6	4.9	40.5	2.0	7.3	-8.1	0.3	-30.3	-4.4	1.7	-0.3
Q3	6.0	8.6	-2.1	3.4	47.4	2.2	7.3	-7.0	0.1	-20.8	-0.9	2.3	3.3
Q4	3.9	7.5	-6.3	1.3	14.5	2.6	8.2	-7.5	-0.1	-37.2	5.5	3.2	7.0
2015 Q1	4.6	9.5	-10.0	3.5	-5.7	2.8	9.7	-11.2	0.1	-31.0	14.6	-0.7	5.2
2014 Dec.	3.9	7.5	-6.3	1.3	14.5	2.6	8.2	-7.5	-0.1	-37.2	5.5	3.2	7.0
2015 Jan.	4.9	10.0	-8.1	1.5	-34.8	2.5	8.6	-9.2	-0.2	-20.8	5.7	0.5	8.9
Feb.	4.8	9.9	-8.9	1.4	-21.9	2.5	8.9	-10.3	-0.2	-25.5	7.9	-0.9	8.0
Mar.	4.6	9.5	-10.0	3.5	-5.7	2.8	9.7	-11.2	0.1	-31.0	14.6	-0.7	5.2
Apr.	4.3	9.8	-11.5	5.4	-37.8	2.9	9.9	-11.5	0.1	-35.3	15.6	1.6	7.4
May <sup>(p)</sup>	4.3	10.4	-14.0	4.3	-24.1	2.9	10.2	-12.6	0.2	-25.3	13.4	2.1	8.0

Source: ECB.

1) Data refer to the changing composition of the euro area.

2) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector. These entities are included in MFI balance sheet statistics with financial corporations other than MFIs and insurance corporations and pension funds (ICPFs).

3) Including non-profit institutions serving households.

4) Refers to the general government sector excluding central government.

## 5 Money and credit

### 5.3 Credit to euro area residents <sup>1)</sup>

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

	Credit to general government			Credit to other euro area residents								
	Total	Loans	Debt securities	Total	Loans					Debt securities	Equity and non-money market fund investment fund shares	
					Total	To non-financial corporations <sup>3)</sup>	To households <sup>4)</sup>	To financial corporations other than MFIs and ICPFs <sup>3)</sup>	To insurance corporations and pension funds			
												Adjusted for loan sales and securitisation <sup>2)</sup>
1	2	3	4	5	6	7	8	9	10	11	12	
Outstanding amounts												
2012	3,410.8	1,169.3	2,241.5	13,069.5	10,860.0	-	4,544.6	5,242.3	984.3	89.0	1,435.9	773.6
2013	3,407.5	1,096.3	2,311.2	12,709.4	10,546.4	-	4,354.1	5,221.4	872.6	98.3	1,363.9	799.1
2014	3,608.5	1,131.5	2,477.0	12,566.3	10,513.1	-	4,279.5	5,200.6	904.8	128.1	1,278.4	774.9
2014 Q2	3,449.1	1,101.7	2,347.4	12,588.4	10,464.8	-	4,306.3	5,191.0	868.5	99.0	1,317.4	806.3
Q3	3,508.9	1,102.2	2,406.7	12,561.8	10,444.8	-	4,288.1	5,194.6	858.8	103.3	1,307.0	810.1
Q4	3,608.5	1,131.5	2,477.0	12,566.3	10,513.1	-	4,279.5	5,200.6	904.8	128.1	1,278.4	774.9
2015 Q1	3,673.2	1,153.2	2,520.0	12,680.4	10,615.3	-	4,310.2	5,234.8	935.6	134.6	1,276.9	788.3
2014 Dec.	3,608.5	1,131.5	2,477.0	12,566.3	10,513.1	-	4,279.5	5,200.6	904.8	128.1	1,278.4	774.9
2015 Jan.	3,653.0	1,148.7	2,504.3	12,634.4	10,581.4	-	4,301.0	5,223.2	918.3	138.9	1,277.3	775.6
Feb.	3,638.5	1,146.5	2,492.1	12,653.1	10,589.7	-	4,313.0	5,222.2	917.5	137.1	1,272.9	790.4
Mar.	3,673.2	1,153.2	2,520.0	12,680.4	10,615.3	-	4,310.2	5,234.8	935.6	134.6	1,276.9	788.3
Apr.	3,699.0	1,151.5	2,547.4	12,651.7	10,606.0	-	4,301.6	5,233.9	933.5	137.1	1,263.9	781.8
May <sup>(p)</sup>	3,696.2	1,144.0	2,552.1	12,660.8	10,608.5	-	4,298.6	5,242.0	923.8	144.1	1,261.1	791.2
Transactions												
2012	185.0	-4.0	189.0	-100.6	-69.1	-13.4	-107.6	26.0	14.5	-2.0	-69.9	38.5
2013	-24.4	-73.6	49.2	-304.5	-247.4	-221.2	-132.8	-3.5	-120.7	9.6	-71.7	14.6
2014	72.6	16.3	56.3	-103.8	-50.9	18.6	-59.9	-13.7	11.1	11.6	-88.2	35.3
2014 Q2	-27.2	-10.3	-16.9	-50.1	-47.4	9.2	-18.7	-35.4	8.5	-1.7	-12.5	9.7
Q3	40.4	-1.4	41.8	-18.9	-10.6	-10.8	-18.6	8.2	-4.4	4.2	-14.1	5.7
Q4	46.5	12.8	33.7	5.4	23.2	33.7	3.3	6.4	6.9	6.6	-34.8	17.0
2015 Q1	38.4	21.6	16.8	36.2	45.8	53.1	8.7	19.7	11.4	6.0	-2.3	-7.3
2014 Dec.	23.2	8.0	15.3	24.6	24.2	25.0	9.9	3.3	8.4	2.5	-17.1	17.5
2015 Jan.	32.3	13.5	18.7	8.5	16.6	17.2	1.8	5.6	-1.3	10.5	0.7	-8.8
Feb.	-20.5	2.7	-23.1	10.5	8.1	15.3	10.2	1.3	-1.5	-1.9	-5.7	8.0
Mar.	26.6	5.4	21.2	17.2	21.1	20.6	-3.2	12.8	14.2	-2.6	2.7	-6.6
Apr.	36.8	-1.4	38.2	-10.3	6.8	17.3	-0.3	3.6	0.9	2.7	-10.7	-6.4
May <sup>(p)</sup>	9.8	-7.7	17.5	5.0	-0.2	8.0	-4.3	7.9	-10.7	7.0	-3.0	8.1
Growth rates												
2012	5.8	-0.3	9.5	-0.8	-0.6	-0.1	-2.3	0.5	1.5	-2.2	-4.6	5.2
2013	-0.7	-6.3	2.2	-2.3	-2.3	-2.0	-2.9	-0.1	-12.2	10.8	-5.0	1.9
2014	2.1	1.5	2.4	-0.8	-0.5	0.2	-1.4	-0.3	1.1	11.8	-6.5	4.4
2014 Q2	-2.5	-1.5	-3.0	-2.2	-1.8	-1.1	-2.3	-0.6	-5.9	4.8	-7.5	0.5
Q3	-0.5	-0.7	-0.4	-1.9	-1.2	-0.6	-2.0	-0.5	-2.5	8.5	-8.5	1.8
Q4	2.1	1.5	2.4	-0.8	-0.5	0.2	-1.4	-0.3	1.1	11.8	-6.5	4.4
2015 Q1	2.8	2.0	3.2	-0.2	0.1	0.8	-0.6	0.0	2.3	14.1	-4.8	3.1
2014 Dec.	2.1	1.5	2.4	-0.8	-0.5	0.2	-1.4	-0.3	1.1	11.8	-6.5	4.4
2015 Jan.	2.3	1.6	2.6	-0.6	-0.2	0.5	-1.1	-0.1	1.5	19.3	-6.5	3.3
Feb.	1.9	1.5	2.0	-0.4	-0.1	0.6	-0.6	-0.2	0.5	15.4	-5.6	4.2
Mar.	2.8	2.0	3.2	-0.2	0.1	0.8	-0.6	0.0	2.3	14.1	-4.8	3.1
Apr.	3.8	2.4	4.5	0.0	0.0	0.8	-0.4	0.0	0.3	17.2	-2.3	2.7
May <sup>(p)</sup>	4.0	0.9	5.5	0.2	0.5	1.0	-0.3	0.9	-0.9	26.9	-5.1	3.8

Source: ECB.

1) Data refer to the changing composition of the euro area.

2) Adjusted for the derecognition of loans on the MFI balance sheet on account of their sale or securitisation.

3) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector. These entities are included in MFI balance sheet statistics with financial corporations other than MFIs and insurance corporations and pension funds (ICPFs).

4) Including non-profit institutions serving households.



## 5 Money and credit

### 5.4 MFI loans to euro area non-financial corporations and households <sup>1)</sup>

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

	Non-financial corporations <sup>2)</sup>					Households <sup>3)</sup>				
	Total	Adjusted for loan sales and securitisation <sup>4)</sup>	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Adjusted for loan sales and securitisation <sup>4)</sup>	Loans for consumption	Loans for house purchase	Other loans
	1					2				
<b>Outstanding amounts</b>										
2012	4,544.6	-	1,127.9	795.6	2,621.0	5,242.3	-	602.0	3,823.6	816.7
2013	4,354.1	-	1,065.6	740.8	2,547.8	5,221.4	-	573.5	3,851.5	796.4
2014	4,279.5	-	1,081.0	724.5	2,474.0	5,200.6	-	563.2	3,861.3	776.1
2014 Q2	4,306.3	-	1,058.1	734.1	2,514.1	5,191.0	-	570.3	3,832.2	788.5
Q3	4,288.1	-	1,056.5	726.1	2,505.4	5,194.6	-	567.1	3,843.7	783.8
Q4	4,279.5	-	1,081.0	724.5	2,474.0	5,200.6	-	563.2	3,861.3	776.1
2015 Q1	4,310.2	-	1,089.9	738.9	2,481.4	5,234.8	-	567.9	3,891.7	775.3
2014 Dec.	4,279.5	-	1,081.0	724.5	2,474.0	5,200.6	-	563.2	3,861.3	776.1
2015 Jan.	4,301.0	-	1,087.4	735.5	2,478.2	5,223.2	-	566.2	3,879.7	777.3
Feb.	4,313.0	-	1,090.4	734.8	2,487.8	5,222.2	-	565.2	3,883.4	773.6
Mar.	4,310.2	-	1,089.9	738.9	2,481.4	5,234.8	-	567.9	3,891.7	775.3
Apr.	4,301.6	-	1,089.9	737.1	2,474.6	5,233.9	-	566.9	3,893.8	773.2
May <sup>(p)</sup>	4,298.6	-	1,084.7	741.9	2,472.0	5,242.0	-	568.1	3,901.1	772.9
<b>Transactions</b>										
2012	-107.6	-60.3	6.2	-51.4	-62.3	26.0	34.7	-17.7	48.8	-5.1
2013	-132.8	-127.5	-44.5	-44.5	-43.7	-3.5	14.3	-18.1	27.6	-13.1
2014	-59.9	-46.6	-13.8	0.7	-46.8	-13.7	42.3	-3.0	-2.0	-8.7
2014 Q2	-18.7	-7.5	3.3	6.0	-28.1	-35.4	9.3	-2.0	-33.1	-0.3
Q3	-18.6	-20.1	-3.1	-7.0	-8.5	8.2	9.5	1.2	13.1	-6.1
Q4	3.3	5.8	-7.4	8.0	2.7	6.4	14.9	-2.2	10.6	-2.0
2015 Q1	8.7	11.8	-0.6	8.0	1.3	19.7	23.9	2.5	17.6	-0.4
2014 Dec.	9.9	10.3	7.0	-1.7	4.7	3.3	4.2	-2.5	6.5	-0.8
2015 Jan.	1.8	1.7	-1.8	5.3	-1.7	5.6	6.2	0.1	6.4	-0.8
Feb.	10.2	12.3	3.1	-1.1	8.1	1.3	6.3	-0.6	3.8	-1.8
Mar.	-3.2	-2.2	-1.9	3.8	-5.2	12.8	11.5	3.0	7.5	2.3
Apr.	-0.3	1.9	3.3	-0.4	-3.2	3.6	11.9	-0.9	5.4	-0.9
May <sup>(p)</sup>	-4.3	1.3	-6.3	4.6	-2.6	7.9	10.3	1.6	6.7	-0.4
<b>Growth rates</b>										
2012	-2.3	-1.3	0.5	-6.0	-2.3	0.5	0.7	-2.8	1.3	-0.6
2013	-2.9	-2.8	-4.0	-5.6	-1.7	-0.1	0.3	-3.0	0.7	-1.6
2014	-1.4	-1.1	-1.3	0.1	-1.8	-0.3	0.8	-0.5	0.0	-1.1
2014 Q2	-2.3	-2.1	-2.7	-3.3	-1.9	-0.6	0.5	-1.4	-0.4	-1.0
Q3	-2.0	-1.8	-1.4	-3.4	-1.9	-0.5	0.5	-1.1	-0.2	-1.7
Q4	-1.4	-1.1	-1.3	0.1	-1.8	-0.3	0.8	-0.5	0.0	-1.1
2015 Q1	-0.6	-0.2	-0.7	2.1	-1.3	0.0	1.1	-0.1	0.2	-1.1
2014 Dec.	-1.4	-1.1	-1.3	0.1	-1.8	-0.3	0.8	-0.5	0.0	-1.1
2015 Jan.	-1.1	-0.8	-0.9	1.1	-1.9	-0.1	0.9	-0.4	0.1	-1.0
Feb.	-0.6	-0.3	0.5	0.8	-1.5	-0.2	1.0	-0.5	0.0	-1.1
Mar.	-0.6	-0.2	-0.7	2.1	-1.3	0.0	1.1	-0.1	0.2	-1.1
Apr.	-0.4	-0.1	0.3	1.2	-1.2	0.0	1.3	-0.1	0.1	-0.9
May <sup>(p)</sup>	-0.3	0.1	0.3	2.2	-1.3	0.9	1.4	0.5	1.4	-1.1

Source: ECB.

1) Data refer to the changing composition of the euro area.

2) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector. These entities are included in MFI balance sheet statistics with financial corporations other than MFIs and insurance corporations and pension funds (ICPFs).

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.

## 5 Money and credit

### 5.5 Counterparts to M3 other than credit to euro area residents <sup>1)</sup>

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

	MFI liabilities						MFI assets			
	Central government holdings <sup>2)</sup>	Longer-term financial liabilities vis-à-vis other euro area residents					Net external assets	Other		
		Total	Deposits with an agreed maturity of over 2 years	Deposits redeemable at notice of over 3 months	Debt securities with a maturity of over 2 years	Capital and reserves		Total		Reverse repos to central counterparties <sup>3)</sup>
1	2	3	4	5	6	7	8	9	10	
<b>Outstanding amounts</b>										
2012	305.4	7,570.1	2,395.9	106.0	2,680.8	2,387.4	1,029.8	146.4	260.8	201.2
2013	260.2	7,305.0	2,373.3	91.5	2,506.3	2,333.9	1,153.9	124.5	183.8	122.1
2014	262.1	7,178.6	2,253.1	92.0	2,375.3	2,458.2	1,388.0	184.1	184.5	139.8
2014 Q2	270.3	7,295.3	2,301.8	90.1	2,455.1	2,448.4	1,346.1	147.7	171.3	119.0
Q3	249.7	7,332.4	2,278.6	92.4	2,457.0	2,504.3	1,419.5	179.8	163.6	121.7
Q4	262.1	7,178.6	2,253.1	92.0	2,375.3	2,458.2	1,388.0	184.1	184.5	139.8
2015 Q1	287.6	7,321.3	2,259.8	90.5	2,394.8	2,576.2	1,509.6	236.8	234.7	159.1
2014 Dec.	262.1	7,178.6	2,253.1	92.0	2,375.3	2,458.2	1,388.0	184.1	184.5	139.8
2015 Jan.	306.0	7,292.7	2,245.5	92.8	2,402.6	2,551.8	1,481.3	234.5	203.3	133.3
Feb.	262.9	7,302.7	2,263.4	91.6	2,396.3	2,551.3	1,450.9	265.8	226.3	144.5
Mar.	287.6	7,321.3	2,259.8	90.5	2,394.8	2,576.2	1,509.6	236.8	234.7	159.1
Apr.	260.2	7,232.6	2,235.8	88.7	2,355.3	2,552.8	1,450.5	238.3	209.3	132.1
May <sup>(p)</sup>	275.9	7,225.6	2,232.0	87.4	2,342.5	2,563.7	1,466.7	241.6	222.9	140.7
<b>Transactions</b>										
2012	-4.9	-115.3	-156.3	-10.2	-106.4	157.6	99.4	28.8	9.4	41.5
2013	-46.0	-88.8	-18.6	-14.3	-137.6	81.6	359.2	-64.7	32.2	43.9
2014	-6.9	-162.0	-119.7	1.8	-154.7	110.6	244.9	-18.9	0.7	17.7
2014 Q2	9.4	-65.1	-54.7	-1.0	-15.8	6.5	74.9	23.9	-5.8	2.3
Q3	-20.9	-3.1	-28.4	2.3	-28.5	51.5	38.4	25.3	-7.7	2.6
Q4	4.4	-95.4	-25.1	1.0	-77.2	5.9	36.8	-55.7	20.9	18.1
2015 Q1	22.2	-47.8	-30.7	-2.5	-47.4	32.8	1.8	52.2	50.1	19.3
2014 Dec.	0.4	-44.0	-6.2	2.4	-34.0	-6.2	-25.2	-60.8	0.1	9.0
2015 Jan.	40.6	-11.9	-16.1	-0.2	-12.7	17.2	-3.4	45.9	18.8	-6.5
Feb.	-43.1	-17.9	-8.5	-1.2	-12.0	3.7	-21.4	33.1	23.0	11.3
Mar.	24.7	-18.0	-6.1	-1.1	-22.7	11.9	26.5	-26.9	8.3	14.6
Apr.	-27.3	-39.5	-21.6	-1.8	-18.9	2.8	-28.7	2.0	-25.3	-27.0
May <sup>(p)</sup>	15.7	-17.7	-5.1	-1.3	-24.5	13.2	4.6	-10.3	13.6	8.6
<b>Growth rates</b>										
2012	-1.5	-1.5	-6.1	-8.8	-3.8	7.0	-	-	2.5	26.1
2013	-15.1	-1.2	-0.8	-13.5	-5.1	3.5	-	-	10.3	23.5
2014	-2.7	-2.2	-5.1	2.0	-6.1	4.6	-	-	0.4	14.5
2014 Q2	-9.0	-1.6	-3.9	-6.8	-3.2	2.6	-	-	-23.8	-4.5
Q3	-11.5	-1.1	-4.7	-1.2	-2.7	4.2	-	-	-17.5	-3.2
Q4	-2.7	-2.2	-5.1	2.0	-6.1	4.6	-	-	0.4	14.5
2015 Q1	5.6	-2.9	-5.9	-0.3	-6.8	4.0	-	-	32.5	36.3
2014 Dec.	-2.7	-2.2	-5.1	2.0	-6.1	4.6	-	-	0.4	14.5
2015 Jan.	22.3	-2.3	-5.6	2.5	-6.0	4.6	-	-	22.4	28.3
Feb.	-4.4	-2.4	-5.7	0.8	-5.9	4.3	-	-	27.0	28.4
Mar.	5.6	-2.9	-5.9	-0.3	-6.8	4.0	-	-	32.5	36.3
Apr.	-5.6	-3.1	-5.5	-2.3	-7.3	3.4	-	-	28.6	33.0
May <sup>(p)</sup>	-2.6	-3.2	-5.3	-3.8	-8.4	4.2	-	-	51.4	51.4

Source: ECB.

1) Data refer to the changing composition of the euro area.

2) Comprises central government holdings of deposits with the MFI sector and of securities issued by the MFI sector.

3) Not adjusted for seasonal effects.

## 6 Fiscal developments

### 6.1 Deficit/surplus, revenue and expenditure <sup>1), 2)</sup>

(as a percentage of GDP; flows during one-year period)

	Deficit (-)/ surplus (+)	Revenue						Expenditure						
		Total	Current revenue			Capital revenue	Total	Current expenditure				Capital expenditure		
			Direct taxes	Indirect taxes	Net social contributions			Compen- sation of employees	Intermediate consumption	Interest	Social payments <sup>3)</sup>			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2011	-3.9	44.7	44.5	11.7	12.7	15.1	0.2	48.6	44.3	10.4	5.3	3.0	23.0	4.3
2012	-3.4	45.8	45.6	12.2	13.0	15.3	0.2	49.1	44.6	10.4	5.3	3.0	23.5	4.5
2013	-2.5	46.4	46.1	12.5	13.1	15.5	0.3	48.9	44.8	10.4	5.3	2.8	23.8	4.1
2014	-2.1	46.5	46.3	12.5	13.3	15.5	0.3	48.7	44.9	10.3	5.3	2.6	24.0	3.8
2014 Q1	-2.7	46.6	46.1	12.5	13.0	15.4	0.5	49.4	45.4	10.3	5.3	2.8	23.0	4.0
Q2	-2.6	46.7	46.2	12.5	13.0	15.5	0.5	49.2	45.4	10.3	5.3	2.7	23.0	3.9
Q3	-2.4	46.6	46.1	12.5	13.1	15.5	0.5	49.0	45.3	10.3	5.3	2.7	23.0	3.7
Q4	-2.4	46.6	46.2	12.5	13.1	15.5	0.5	49.1	45.3	10.3	5.3	2.6	23.1	3.7

Sources: ECB for annual data; Eurostat for quarterly data.

1) Data refer to the Euro 19. Quarterly ratios are calculated using four-quarter cumulated sums.

2) EU budget transactions are included and consolidated in annual data.

3) Current transfers to non-profit institutions serving households are included in annual data.

### 6.2 Government debt-to-GDP ratio <sup>1)</sup>

(as a percentage of GDP; outstanding amounts at end of period)

	Total	Financial instrument			Holder			Original maturity		Residual maturity			Currency	
		Currency and deposits	Loans	Debt securities	Resident creditors	Non-resident creditors	Up to 1 year	Over 1 year	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currencies	Other curren- cies	
														MFIs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2011	85.8	2.9	15.3	67.5	42.7	24.3	43.1	12.2	73.6	20.3	29.8	35.7	84.0	1.8
2012	89.1	3.0	17.2	68.8	45.4	26.2	43.6	11.4	77.7	19.5	31.6	38.0	86.9	2.2
2013	90.9	2.7	17.0	71.2	45.9	26.1	45.0	10.4	80.5	19.4	32.2	39.3	89.0	2.0
2014	92.0	2.7	16.8	72.4	45.2	25.9	46.8	10.1	81.8	19.2	32.2	40.5	89.9	2.0
2014 Q1	91.9	2.7	16.8	72.4	.	.	.	.	.	.	.	.	.	.
Q2	92.7	2.6	16.6	73.4	.	.	.	.	.	.	.	.	.	.
Q3	92.0	2.6	16.6	72.8	.	.	.	.	.	.	.	.	.	.
Q4	91.9	2.7	16.8	72.4	.	.	.	.	.	.	.	.	.	.

Sources: ECB for annual data; Eurostat for quarterly data.

1) Data refer to the Euro 19.

## 6 Fiscal developments

### 6.3 Annual change in the government debt-to-GDP ratio and underlying factors <sup>1)</sup>

(as a percentage of GDP; flows during one-year period)

	Change in debt-to-GDP ratio <sup>2)</sup>	Primary deficit (+)/surplus (-)	Deficit-debt adjustment <sup>3)</sup>								Interest-growth differential	Memo item: Borrowing requirement
			Total	Transactions in main financial assets					Revaluation effects and other changes in volume	Other		
				Total	Currency and deposits	Loans	Debt securities	Equity and investment fund shares				
	1	2	3	4	5	6	7	8	9	10	11	12
2011	2.1	1.2	0.1	-0.3	0.2	-0.2	-0.2	-0.1	0.4	0.1	0.8	3.9
2012	3.3	0.6	0.1	1.1	0.3	0.3	-0.1	0.5	-1.3	0.3	2.7	5.0
2013	1.8	0.1	-0.2	-0.6	-0.4	-0.4	-0.1	0.3	0.0	0.4	2.0	2.7
2014	1.1	-0.2	0.2	0.0	0.2	-0.1	-0.2	0.1	-0.1	0.2	1.1	2.7
2014 Q1	1.2	0.0	-0.2	0.0	0.0	0.2	-0.2	0.0	-0.6	0.4	1.4	3.0
Q2	0.9	-0.1	-0.2	-0.1	0.0	0.0	-0.2	0.1	-0.2	0.1	1.3	2.6
Q3	0.9	-0.3	0.0	0.0	0.0	0.0	-0.2	0.2	-0.4	0.4	1.1	2.7
Q4	1.0	-0.2	0.2	0.1	0.2	0.0	-0.2	0.1	-0.1	0.2	1.0	2.7

Sources: ECB for annual data; Eurostat for quarterly data.

1) Data refer to the Euro 19. Quarterly ratios (except in column 1) are calculated using four-quarter cumulated sums.

2) Calculated as the difference between the government debt-to-GDP ratios in the last and an earlier period, i.e. the previous year for annual data and the same quarter a year earlier for quarterly data.

3) Quarterly data include intergovernmental lending within the context of the financial crisis.

### 6.4 Government debt securities <sup>1)</sup>

(debt service as a percentage of GDP; average residual maturity in years; average nominal yields in percentages per annum)

	Debt service due within 1 year <sup>2)</sup>					Average residual maturity <sup>3)</sup>	Average nominal yields <sup>4)</sup>							
	Total	Principal <sup>5)</sup>		Interest			Outstanding amounts					Transactions		
		Maturities of up to 3 months	Maturities of up to 3 months	Total	Floating rate		Zero coupon	Fixed rate	Maturities of up to 1 year	Issuance	Redemption			
	1											2	3	4
2012	16.3	14.2	4.9	2.1	0.5	6.3	3.8	1.7	1.1	4.0	3.1	1.6	2.2	
2013	16.5	14.4	5.0	2.1	0.5	6.3	3.5	1.7	1.3	3.7	2.8	1.2	1.8	
2014	15.9	13.9	5.1	2.0	0.5	6.4	3.1	1.5	0.5	3.5	2.7	0.8	1.6	
2014 Q1	16.8	14.7	4.9	2.1	0.5	6.4	3.4	1.7	1.0	3.7	2.7	1.2	1.7	
Q2	16.6	14.5	5.4	2.1	0.5	6.4	3.3	1.6	0.7	3.6	2.7	1.1	1.6	
Q3	17.3	15.2	5.7	2.1	0.5	6.4	3.2	1.5	0.5	3.5	2.8	0.9	1.6	
Q4	15.9	13.9	5.1	2.0	0.5	6.4	3.1	1.5	0.5	3.5	2.7	0.8	1.6	
2015 Jan.	15.7	13.6	5.1	2.0	0.5	6.5	3.1	1.4	0.4	3.5	2.7	0.8	1.7	
Feb.	15.7	13.6	4.5	2.0	0.5	6.5	3.0	1.4	0.3	3.4	2.7	0.7	1.7	
Mar.	15.5	13.4	4.6	2.0	0.5	6.5	3.0	1.4	0.0	3.4	2.8	0.6	1.7	
Apr.	15.9	13.9	4.8	2.0	0.5	6.6	2.9	1.3	0.3	3.4	2.8	0.5	1.7	
May	16.0	13.9	5.1	2.0	0.5	6.6	2.9	1.3	-0.2	3.4	2.8	0.4	1.6	
June	15.5	13.5	4.9	2.0	0.5	6.6	2.9	1.3	0.1	3.4	2.8	0.3	1.4	

Source: ECB.

1) Data on government debt securities are recorded at face value and not consolidated within the general government sector.

2) Flows of principal and interest during the debt service period.

3) Residual maturity at the end of the period.

4) Outstanding amounts at the end of the period; transactions as 12-month average.

5) Principal amounts do not cover short-term securities issued and redeemed within the next 12 months.

## 6 Fiscal developments

### 6.5 Fiscal developments in euro area countries <sup>1)</sup>

(as a percentage of GDP; flows during one-year period and outstanding amounts at end of period)

	Belgium	Germany	Estonia	Ireland	Greece	Spain	France	Italy	Cyprus	
	1	2	3	4	5	6	7	8	9	
Government deficit (-)/surplus (+)										
2011	-4.1	-0.9	1.2	-12.7	-10.2	-9.4	-5.1	-3.5	-5.8	
2012	-4.1	0.1	-0.2	-8.1	-8.7	-10.3	-4.8	-3.0	-5.8	
2013	-2.9	0.1	-0.2	-5.8	-12.3	-6.8	-4.1	-2.9	-4.9	
2014	-3.2	0.7	0.6	-4.1	-3.5	-5.8	-4.0	-3.0	-8.8	
2014 Q1	-3.0	0.3	-0.2	-5.5	-10.2	-6.5	-3.9	-2.8	-12.9	
Q2	-3.3	0.3	-0.3	-5.2	-3.0	-6.2	-3.9	-2.9	-11.9	
Q3	-3.1	0.6	-0.2	-4.7	-2.3	-5.7	-4.0	-2.8	-10.2	
Q4	-3.2	0.7	0.6	-4.1	-3.5	-5.8	-4.0	-3.0	-8.8	
Government debt										
2011	102.0	77.9	6.0	111.2	171.3	69.2	85.2	116.4	66.0	
2012	103.8	79.3	9.7	121.7	156.9	84.4	89.6	123.1	79.5	
2013	104.4	77.1	10.1	123.2	175.0	92.1	92.3	128.5	102.2	
2014	106.5	74.7	10.6	109.7	177.1	97.7	95.0	132.1	107.5	
2014 Q1	108.5	75.8	10.5	121.8	174.3	94.9	94.2	131.2	102.6	
Q2	108.9	75.6	10.5	116.8	177.4	96.4	95.3	134.1	109.7	
Q3	108.3	75.1	10.5	114.3	175.8	96.8	95.4	132.0	104.7	
Q4	106.6	74.7	10.6	109.7	177.1	97.7	95.2	132.1	107.5	
	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Austria	Portugal	Slovenia	Slovakia	Finland
	10	11	12	13	14	15	16	17	18	19
Government deficit (-)/surplus (+)										
2011	-3.3	-8.9	0.4	-2.6	-4.3	-2.6	-7.4	-6.6	-4.1	-1.0
2012	-0.8	-3.1	0.1	-3.6	-4.0	-2.2	-5.6	-4.0	-4.2	-2.1
2013	-0.7	-2.6	0.9	-2.6	-2.3	-1.3	-4.8	-14.9	-2.6	-2.5
2014	-1.4	-0.7	0.6	-2.1	-2.3	-2.4	-4.5	-4.9	-2.9	-3.2
2014 Q1	-0.4	-1.0	1.4	-3.0	-3.1	-1.5	-3.9	-13.5	-2.6	-2.6
Q2	-0.3	-1.3	1.1	-3.5	-3.0	-1.2	-4.6	-12.8	-2.6	-2.8
Q3	0.0	-0.7	0.5	-2.7	-2.6	-1.2	-4.4	-12.8	-2.8	-2.9
Q4	-1.4	-0.7	.	-2.1	-2.3	-2.4	-4.5	-4.9	-2.9	-3.2
Government debt										
2011	42.7	37.2	19.1	69.7	61.3	82.1	111.1	46.5	43.4	48.5
2012	40.9	39.8	21.9	67.4	66.5	81.5	125.8	53.7	52.1	52.9
2013	38.2	38.8	24.0	69.2	68.6	80.9	129.7	70.3	54.6	55.8
2014	40.0	40.9	23.6	68.0	68.8	84.5	130.2	80.9	53.6	59.3
2014 Q1	38.6	39.7	23.7	71.8	68.1	81.1	133.3	77.1	57.6	57.3
Q2	41.0	38.6	23.6	74.4	69.5	82.3	130.8	78.2	55.7	58.7
Q3	40.4	38.1	23.3	71.7	69.0	80.8	132.2	77.7	55.4	58.2
Q4	40.0	40.9	.	68.0	68.8	84.5	130.2	80.9	53.6	59.3

Source: Eurostat.

1) Quarterly ratios are calculated using four-quarter cumulated sums for flows and GDP.

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