1 Macro-financial and credit environment

***Macro-financial conditions** have brightened somewhat in the euro area, in the context of a continued shift in global growth momentum from emerging to advanced economies. While euro area growth prospects remain weak by international standards, the risks surrounding the economic outlook have become more balanced on account of recent monetary policy decisions, lower oil prices and the weaker euro exchange rate. Within the euro area, a broadening of improved financial market sentiment has contrasted with continued real fragmentation at the country level, despite some further progress made in terms of rebalancing. This suggests a fragile equilibrium with underlying risks, including several at the global level. In particular, the prospect of diverging monetary policy trends in major advanced economies, ongoing geopolitical tensions and major adjustments in global commodity markets have the potential to reignite risk aversion vis-à-vis countries, markets and asset classes, which could trigger an unwinding of global search-for-yield flows.*

*In the **public sector**, euro area sovereign stress has remained contained despite a flare-up of sovereign tensions at the country level. Sovereign financing conditions have improved further in terms of both pricing and duration, supported by additional unconventional measures recently launched by the Eurosystem. Sovereign risks nonetheless remain in the current still fragile growth environment, with related challenges for several countries in durably restoring the sustainability of public finances in the context of a prolonged period of low nominal growth as well as waning fiscal and structural reform efforts.*

*Amid this macro-financial environment, financing conditions have continued to ease for the euro area **non-financial private sector**, as unconventional measures by the Eurosystem gain hold and help reduce persistent financial fragmentation across countries and firm sizes. A strengthening economic recovery should contribute to improving income and earnings prospects for households and non-financial corporations, which together with the favourable interest rate environment should help support the ongoing process of balance sheet repair associated with elevated indebtedness in several euro area countries. At the same time, the recovery of euro area residential and commercial **property markets** is continuing and becoming more broad-based across countries and market segments amid continued favourable financing conditions and an improving economic outlook. Heterogeneity in property markets across countries appears to have declined, but developments continue to diverge strongly at the country and regional levels in terms of prices and valuations in both the residential and commercial market segments.*

1.1 Euro area recovery regaining momentum

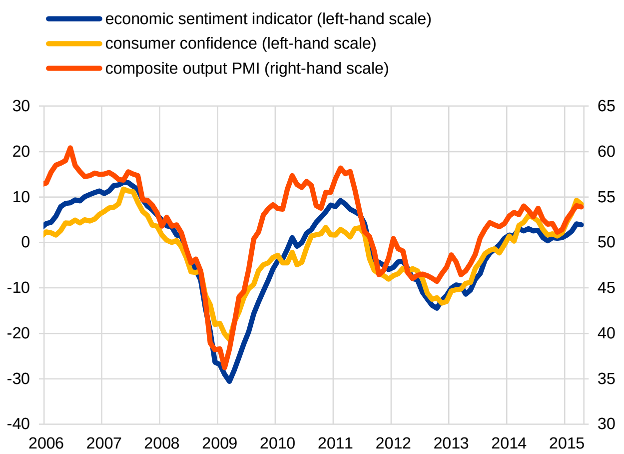
The economic recovery in the **euro area** has been gaining momentum, though remaining generally weak by international standards. A pick-up in aggregate euro area economic growth appears to have taken hold towards the end of 2014 driven by

Chart 1.1

Economic sentiment has improved considerably in the euro area since the beginning of 2015…

Economic sentiment indicator, consumer confidence and Purchasing Managers' Index in the euro area

(Jan. 2006 – Apr. 2015; points; diffusion index: 50+ = expansion)



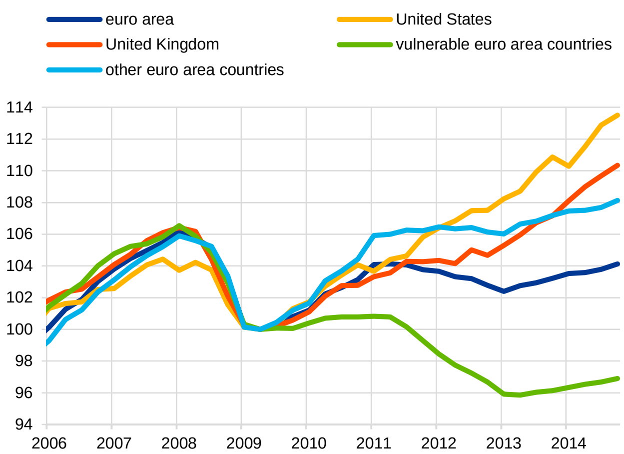
Sources: Eurostat and European Commission.

Chart 1.2

…but developments in the euro area economy continue to lag those seen in other advanced economies

GDP levels in the euro area, the United States and the United Kingdom

(Q1 2006 – Q4 2014; index: Q2 2009 = 100)



Sources: Eurostat and ECB calculations.
Note: Vulnerable euro area countries comprise Cyprus, Greece, Ireland, Italy, Portugal, Slovenia and Spain.

domestic demand. Strengthened private consumption has benefited from further easing financing conditions, while favourable real disposable income developments on the back of lower energy prices have translated into improved purchasing power, economic sentiment and confidence (see Chart 1.1). The euro area recovery has, however, continued to lag developments in other major advanced economies given the ongoing process of balance sheet repair as well as continued (albeit diminishing) real and financial fragmentation across countries. In particular, economic output in the euro area has, on average, remained below its pre-crisis level amid varying trends in vulnerable and other euro area countries (see Chart 1.2).

The latest economic indicators, including survey data and the flash GDP estimate for the first quarter of 2015, suggest that the euro area economy has gained additional momentum since the end of 2014. Looking ahead, the euro area economic recovery is expected to strengthen further in 2015 and beyond, driven by both domestic and external demand. First and foremost, support stems from the Eurosystem's recently launched accommodative non-standard monetary policy measures, in particular the expanded asset purchase programme (see Box 1), but lower oil prices, continued benign financing conditions, a weaker euro and a lower fiscal drag will underpin economic activity in the near and medium terms. Against this backdrop, the March 2015 ECB staff macroeconomic projections for the euro area envisage a more favourable growth path than the December 2014 Eurosystem projections. Accordingly, real GDP is forecast to expand at a rate of 1.5% in 2015 which is expected to accelerate further to 1.9% in 2016 and 2.1% in 2017.

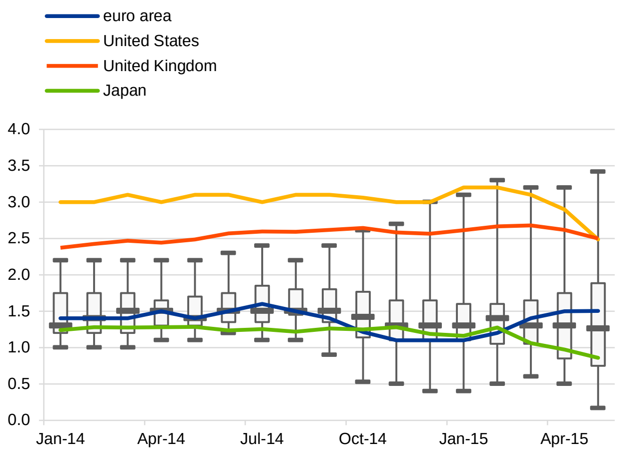
While remaining on the downside, the risks surrounding the economic outlook for the euro area have become more balanced on account of the recent monetary policy decisions, lower oil prices and the lower euro exchange rate. Over the short to medium term, several factors continue to weigh on the underlying euro area growth momentum, including heightened geopolitical tensions across the globe, the ongoing process of balance sheet adjustment in the financial and non-financial private sectors as well as still adverse labour market conditions in vulnerable euro area economies. At the same time, a rather slow pace of implementation of structural reforms may weigh on the pace of the recovery in some euro area countries, especially those where the commitment to reforms has fallen most.

Chart 1.3

Improving economic growth prospects in the euro area, but developments continue to diverge both within the euro area and across advanced economies

Evolution of forecasts for real GDP growth in the euro area and selected other advanced economies for 2015

(Jan. 2014 – May 2015; percentage change per annum, minimum-maximum range)



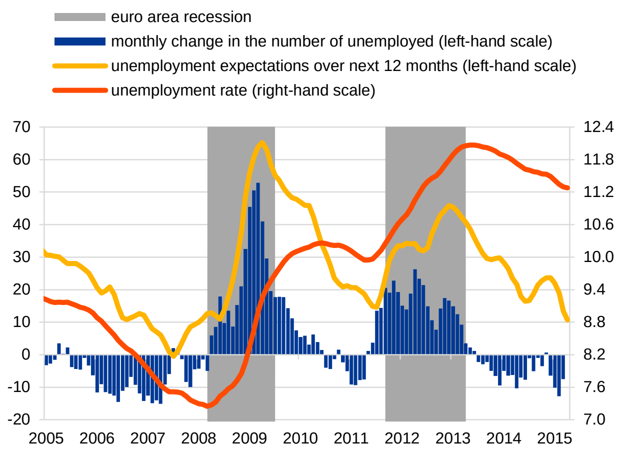
Sources: Consensus Economics and ECB calculations.
Note: The chart shows the minimum, maximum, median and interquartile distribution across the 11 euro area countries surveyed by Consensus Economics (Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal and Spain).

Chart 1.4

Labour market conditions have continued to improve in the euro area, but unemployment remains high

Developments in the number of unemployed, unemployment rate and unemployment expectations in the euro area

(Jan. 2005 – Apr. 2015; percentages; percentage balances; number in tens of thousands; three-month moving averages)



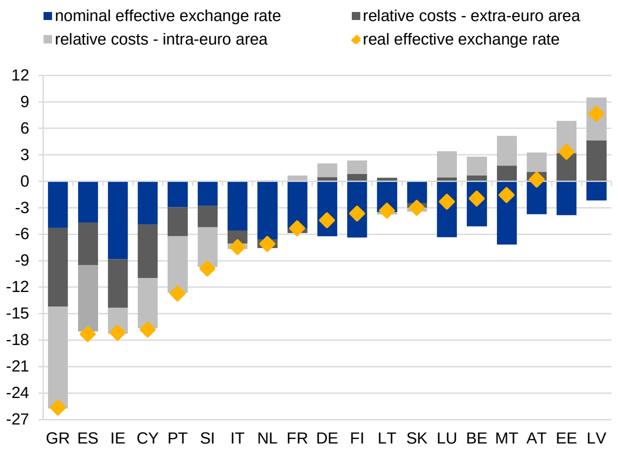
Sources: Eurostat, European Commission and ECB calculations.
Note: An increase (decrease) of the indicator on unemployment expectations corresponds to less (more) optimistic expectations.

Chart 1.5

Continued improvements in relative prices and costs in most euro area countries

Decomposition of the change in the real effective exchange rate

(Q4 2009 – Q4 2014; percentages)



Source: ECB.
Notes: The real effective exchange rate is deflated by unit labour costs. A decline corresponds to a real depreciation, i.e. an improvement in competitiveness.

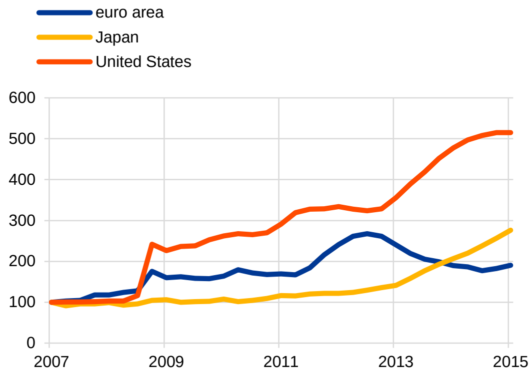
Despite the improved growth outlook for the euro area as a whole, real fragmentation across countries – albeit somewhat lower than during the euro area sovereign debt crisis – remains a cause for concern, amid some recent signs of a renewed widening in cross-country divergence of growth rates (see Chart 1.3). Similarly, labour market conditions have shown some signs of improvement (see Chart 1.4), but developments continue to differ considerably within the euro area, as high unemployment rates in more vulnerable countries, such as Greece and Spain, contrast with relatively benign labour market conditions in other euro area economies, for example Austria and Germany. This heterogeneity continues to highlight inter alia the need for employment-enhancing structural reforms with a view to fostering a broad-based and inclusive economic recovery.

Overall competitiveness, as captured, for instance, in the current account balances of more vulnerable euro area countries, has improved considerably since the onset of the crisis. A large part of the underlying current account adjustment has been of a non-cyclical nature and is therefore likely to be sustained. Efforts to restore competitiveness are ongoing within the euro area, even if – after six years of observed efforts towards rebalancing – in 2014 the current account adjustment slowed down or reversed partially in some vulnerable euro area economies. This can be partly explained by the recovery of domestic demand, which was only partly offset by the impacts of continued adjustments in relative prices and costs (see Chart 1.5). Looking ahead, the near-term outlook for external rebalancing will be shaped by two conflicting forces. On the one hand, the cyclical upturn in economic activity in vulnerable euro area economies may exert downward pressures on current account balances, while, on the other hand, transitory factors – in particular the recent weakening of the euro and lower oil prices – should support external rebalancing. The longer-term prospects for external rebalancing depend on a number of determinants, such as the reallocation of resources towards high-productivity firms, which requires the continuation of structural reforms to help enhance the euro area's medium-term growth potential and reduce the real fragmentation across the euro area.

Box 1
Accommodative monetary policy and euro area financial stability

Chart A
Abundant central bank liquidity provision

Central bank balance sheets
(total assets in local currency; index: Q1 2007 = 100)



Sources: Haver Analytics, ECB and ECB calculations.

Amid concerns that inflation would remain too low for a prolonged period, implying risks to medium-term price stability, the ECB's Governing Council has implemented a number of monetary policy measures since June 2014 to provide further monetary policy accommodation to the euro area economy.[1] Most recently, in March 2015 the expanded asset purchase programme (APP) was launched encompassing a set of euro-denominated investment-grade public sector securities. In addition, the expanded APP integrates the existing purchase programmes for asset-backed securities (ABSPP) and covered bonds (CBPP3) that were launched in autumn 2014. Under this expanded programme, which is intended to be carried out at least until the end of September 2016, the combined monthly purchases will amount to €60 billion per month or €1,140 billion in total. As there had been market expectations for some time of a purchase programme and because its size exceeded expectations, it has already produced a substantial easing of broad financial conditions, which is expected to support price stability and foster financial stability in the euro area. At the same time, unintended side effects on financial stability cannot be ruled out as very accommodative monetary conditions stimulate not only economic risk-taking – as intended – but may also lead to excessive financial risk-taking. It should be borne in mind that the prices of financial assets traded across borders are affected not only by the ECB's monetary policy stance, but also by global monetary conditions, which have remained very accommodative for some years now, as reflected e.g. in central bank

[1] For details, see the Overview section of *Economic Bulletin*, Issue 2/2015, ECB.

balance sheet sizes (see Chart A) and general reductions in market interest rates. In this environment, financial stability has to be monitored closely to inform the potential activation of macroprudential policy instruments best suited to addressing in a targeted manner associated risks specific to particular countries, sectors or institutions.

From the viewpoint of the main prevailing risks for financial stability, a lack of ECB monetary policy action would have been detrimental not only to the maintenance of price stability, but also to the safeguarding of financial stability in the euro area. Not taking additional action could have triggered a further reduction of inflation expectations with a direct impact on real interest rates, thus leading to an unwarranted tightening of financial conditions and ultimately lower nominal growth. In this sense, the ECB's expanded APP should be beneficial for financial stability in the euro area. First, in pursuit of price stability, the further easing of the monetary policy stance strengthens aggregate demand via improved confidence and lower real interest rates, increasing capacity utilisation and supporting money and credit growth. Second, it also helps to alleviate the real debt burdens of households, firms and governments, which otherwise could have been subject to adverse debt dynamics with ramifications for financial stability.[2] In addition, rising asset prices improve the net worth of firms and households, enhancing borrowers' creditworthiness and thereby providing scope for banks to further ease their credit standards without endangering financial stability. Lastly, the ECB's monetary policy measures provide additional funding cost relief for banks via targeted longer-term refinancing operations (TLTROs) and a reduction in long-term government bond yields, which are the basis for the pricing of a large variety of assets and loan contracts. This will support banks' essential financial intermediation function for the real economy.

Notwithstanding these financial stability benefits, an accommodative monetary policy stance geared towards maintaining price stability can, in principle, lead to potential risks to financial stability that supervision and macroprudential policy have to address.[3] For example, the direct reduction in interest rates of asset classes purchased by the Eurosystem and other asset classes indirectly affected via portfolio rebalancing activities boosts asset and collateral values, by increasing the net present value of future cash flows, as well as income and profits. This fact provides the potential for increased risk tolerance or reduced levels of risk perception and would be reflected in lower risk premia and lower volatility. Greater appetite for risk in the presence of abundantly available liquidity may have the potential to push certain asset prices to values that are not justified by their fundamental values, a development that could be amplified by herding behaviour of investors in an environment of over-optimistic beliefs. Notably, in the residential property sector, which has been at the heart of many previous episodes of financial distress, such developments would be accompanied by strong credit growth. Therefore, there is a need to monitor risk-taking behaviour and specifically asset price growth that is accompanied by increased leverage as such developments could amplify the risk of an abrupt asset price correction. If such developments were to be widespread, they would lead to instability in the financial system, thereby hampering monetary policy transmission and ultimately price stability.

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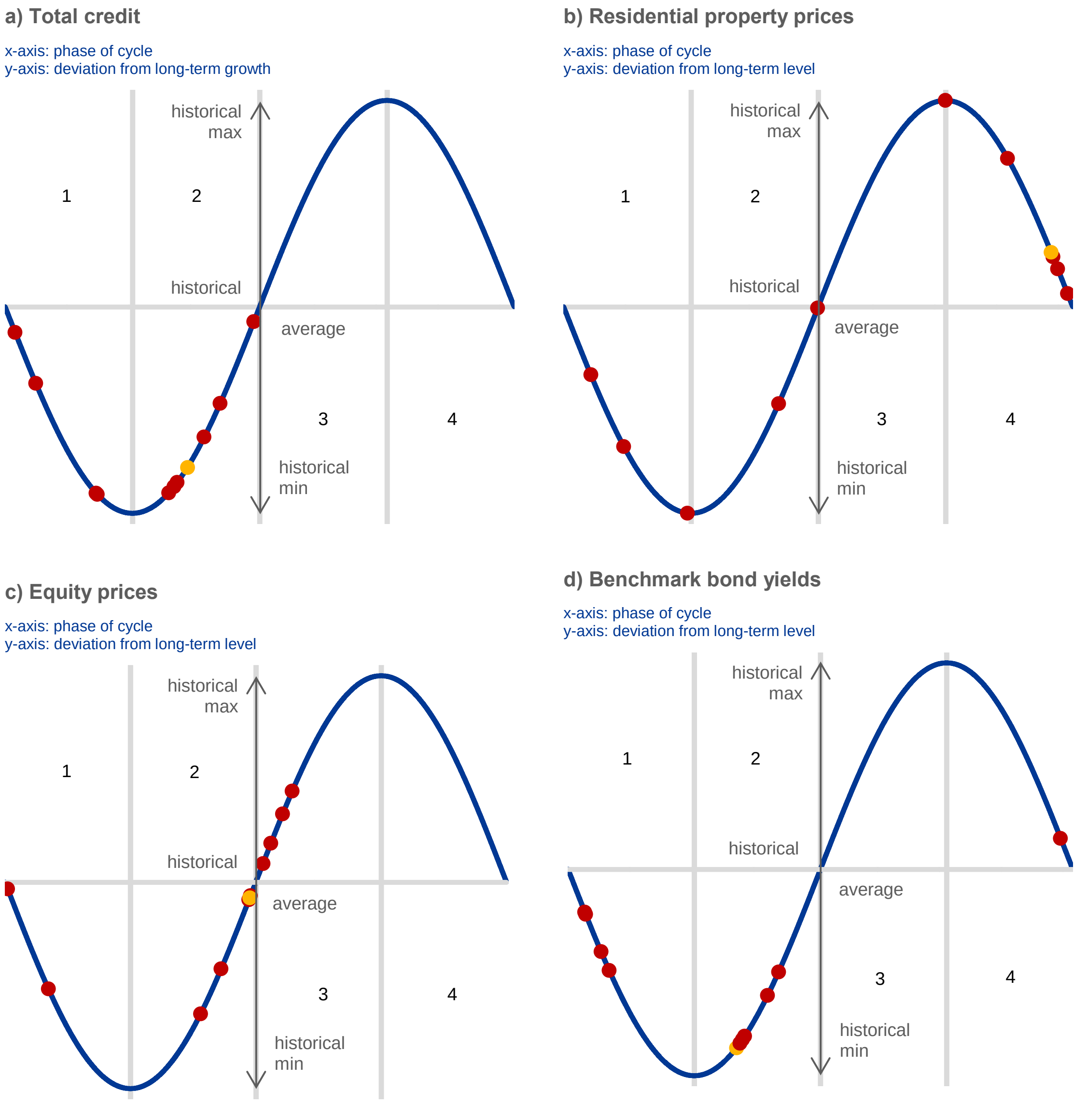
2 See the box entitled "Financial stability challenges posed by very low rates of consumer price inflation", *Financial Stability Review*, ECB, May 2014.

3 For theoretical arguments, see Borio, C. and Zhu, H., "Capital regulation, risk-taking and monetary policy: A missing link in the transmission mechanism?", *Journal of Financial Stability*, Vol. 8, 2012, pp. 236-251. Empirical evidence is provided in e.g. Altunbas, Y., Gambacorta, L. and Marqués-Ibáñez, D., "Do bank characteristics influence the effect of monetary policy on bank risk?", *Working Paper Series*, No 1427, ECB, 2012 and references therein.

Chart B

Stylised financial cycle estimates suggest limited broad-based excesses in euro area credit or asset prices



Sources: ECB and ECB calculations.
Notes: Based on the computations in Schüler, Y., Hiebert, P. and Peltonen, T., "Characterising financial cycles across Europe: One size does not fit all", *Working Paper Series*, ECB (forthcoming). The charts show the cyclical position of ten euro area countries (AT, BE, DE, ES, FI, FR, IE, IT, NL and PT), denoted by red dots, and the euro area aggregate (yellow dot) for credit and property prices for Q3 2014 (Q4 2014 for total credit in the euro area and for house prices in FI, IE and NL) and for equity prices and benchmark bond yields for Q4 2014 (Q3 2014 for benchmark bond yields in PT). Historical minima, maxima and averages are country-specific. The cycle is shown in a stylised fashion divided into its four phases: 1. growth/level below trend and deviating further from trend; 2. growth/level below trend and increasing towards the trend; 3. growth/level above trend and deviating further from trend; and 4. growth/level above trend and declining towards the trend. The cycles are based on the following measurements: panel a): quarterly percentage change in real total credit to the non-financial private sector; panel b): quarterly percentage change in real residential property prices; panel c): index of real equity prices; and panel d): real ten-year government bond yields. Real concepts are deflated by annual HICP inflation.

To date, broad-based risks stemming from excessive risk-taking or asset price developments are contained in the euro area. Estimates of financial cycle sub-components generally provide additional evidence for that assessment (see Chart B), though financial asset prices in some countries appear to have been drifting away from historical norms at the end of 2014. Most notably, the credit cycle component (see Chart B, panel a) estimated for the euro area and euro area countries does not support the view of a credit-driven asset price boom. All countries experience cyclical real credit growth rates below their long-term average, but in a number of euro area countries credit growth has started to recover even if remaining below its long-term value. These developments are also confirmed by the growth rates for loans to the non-financial private sector, notably mortgage lending, and are reflected in the cyclical component of real residential property prices (see Chart B, panel b). With regard to financial asset prices, equity prices are in an upswing phase of the cycle (see Chart B, panel c), but are still close to associated long-run values, while long-term real interest rates have come down further and appear to be below long-run values in almost all euro area countries (see Chart B, panel d).

With financial cycles and business cycles not always synchronised across countries in the euro area, the price stability-oriented monetary policy stance influencing all sectors of the euro area economy needs to be complemented by policy measures that can be used in a targeted manner to address country, sector or institution-specific systemic risks. Macroprudential policy, comprising a set of granular measures in this vein, provides the most appropriate instruments for staving off risks to financial stability and containing systemic risks to support monetary policy that is clearly focused on fulfilling its price stability mandate. This requires close monitoring not only of asset markets, but also of regulated financial institutions (i.e. banks, insurance corporations and pension funds) and the less regulated non-bank financial sector, as well as broader financial developments in the non-financial private sector. Indeed, since the beginning of 2014 a number of macroprudential policy instruments have been implemented in euro area countries, including the activation of capital instruments available under the Capital Requirements Directive IV and the Capital Requirements Regulation, as well as other instruments available under national legislation, such as loan-to-value limits. Notably, a number of these measures address the property sector – for example, in terms of adjustments to the risk weights applicable to property lending, as well as loan-to-value and loan-to-income limits.

All in all, while the recent further substantial easing of the monetary policy stance may contribute to financial stability in the euro area by increasing nominal growth, any potential for unintended adverse ramifications requires close monitoring. However, to date, such unintended consequences appear to be contained for the euro area as a whole. Any possible emergence of major side-effects in specific sectors and countries would call for the activation of macroprudential policy instruments, as monetary policy retains a necessary focus on maintaining price stability.

The **global economy** has also continued on a muted growth trajectory, but developments remain uneven across countries and regions. While economic dynamics in advanced economies have gained some additional traction, emerging economies have lost further momentum even if remaining the main engine of global growth. The highly accommodative monetary policy stance in advanced economies – though showing potential for increased divergence – has continued to provide vital support to the global recovery. While global growth is expected to recover gradually further on the back of lower oil prices and continued policy support, risks to the global outlook remain tilted to the downside. In particular, a sharp repricing of risk with ensuing corrections in asset prices, a potential disorderly unwinding of capital flows and sharp exchange rate movements along the path to normalisation of macroeconomic policies in key advanced economies remain causes for concern. In addition, heightened geopolitical risks (e.g. Russia), persistent macroeconomic vulnerabilities and/or financial imbalances in major advanced and emerging economies, as well as less buoyant growth prospects for emerging markets, may stand in the way of a more forceful global recovery.

Regarding the main global economic regions, economic momentum in many **advanced economies** outside the euro area continued to firm gradually as highly accommodative monetary policies continue to support favourable financial conditions, while headwinds from private sector deleveraging, slack in labour markets and fiscal consolidation have started to wane in several countries. Recent trends indicate a continued recovery ahead, supported in particular by lower oil prices, but the pace of progress varies across countries. In this context, the uncertainty about the path of monetary policies across advanced economies represents a key source of risk, as a multi-speed economic recovery translates into divergent monetary policies. A faster than expected normalisation of interest rates in some advanced economies may increase volatility and trigger abrupt adjustments in currency markets that may spill over to other financial market segments and, eventually, weigh on global growth. In particular, a rise in US bond yields could lead to a wider repricing of risky assets and a rise in bond yields globally. At the same time, risks related to geopolitical tensions remain elevated, still harbouring the potential for adverse growth effects going forward.

In the **United States**, the expansion in economic activity slowed in the first quarter of 2015, in part due to temporary factors such as adverse weather conditions and port disruptions, but also due to the appreciation of the US dollar that is weighing on export performance and to a decline in mining and oil sector investment given the drop in oil prices. However, economic fundamentals remain supportive and economic activity is also underpinned by benign financial conditions. Financial stress indicators have continued to hover at all-time lows, pointing to a possible underpricing of risk by market participants. Looking ahead, economic growth is expected to remain robust supported by lower oil prices, accommodative monetary policy, the ongoing recovery in labour and housing markets as well as fading headwinds from fiscal policy and household balance sheet repair. Downside risks to the growth outlook include a faster than expected normalisation of interest rates, a further appreciation of the US dollar and looming vulnerabilities in the non-financial corporate sector. While the near-term fiscal outlook has improved, long-term fiscal imbalances, if unaddressed, may trigger a reassessment of sovereign risk going forward.

In **Japan**, the recovery in economic activity remains overall tepid. After returning to positive growth in the previous quarter, real GDP gained traction in the first quarter of 2015 largely on account of a higher contribution of private inventories. The rebound in domestic demand from the protracted slump following the April 2014 VAT hike has remained modest thus far, while net exports contributed negatively to growth. Looking ahead, growth is expected to continue on its moderate recovery path, partly supported by lower oil prices, a weak yen and continued accommodative monetary policies. At the same time, the government's decision to postpone the planned second VAT hike to April 2017 and to provide additional fiscal stimulus should imply a lower fiscal drag on growth in 2015-16. Risks to the Japanese economy remain tilted to the downside amid increasing fiscal risks and key challenges with a view to ensuring long-term public debt sustainability. Given banks' significant sovereign exposure (around 17% of total assets), a repricing of risk in financial markets and the related potential increase in government bond yields could harm the profitability and solvency of some financial institutions.

Economic activity in the **United Kingdom** has gathered further momentum in 2014, despite some softening towards the end of the year. Economic activity was driven by robust domestic demand on the back of improving labour market conditions, buoyant housing market developments, an accommodative monetary policy stance and declining macroeconomic uncertainty. According to preliminary estimates, the economy decelerated in early 2015. Looking ahead, risks to growth are broadly balanced. On the upside, low energy prices and stronger wage growth might support private consumption, while continued favourable credit conditions might stimulate business investment. On the downside, however, the need for further balance sheet repair in both the private and public sectors as well as the lagged effect of the appreciation of the pound sterling could weigh on economic activity. In addition, a potential correction in residential housing markets may affect the debt-servicing capacities of highly indebted households, while a possible referendum on EU membership following the outcome of the May 2015 general election is likely to heighten political uncertainty.

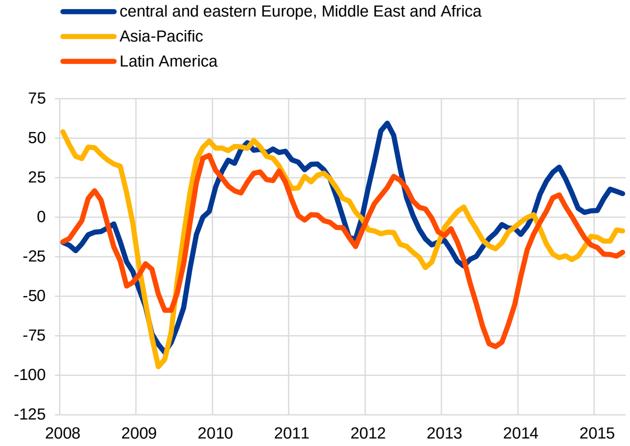
In general, **emerging markets** have lost further momentum on the back of heightened geopolitical tensions, unfolding adjustments of domestic and/or external imbalances and lower oil prices which adversely affected most oil-exporting emerging economies. Economic trends continued to diverge across the emerging market universe, with upbeat sentiment in central and eastern Europe contrasting with relatively muted economic dynamics in emerging Asia and Latin America (see Chart 1.6). Despite some positive stimuli for oil-importing emerging economies, the future growth trajectory in some countries is likely to be restrained by the limited scope for monetary and fiscal policy support as well as prevalent infrastructure bottlenecks and capacity constraints that weigh on potential output. In other countries, which are highly dependent on capital inflows, activity is likely to be dampened, as economies rebalance in response to tighter financial conditions and the expected adjustment of US monetary policy. Against the backdrop of the recent broad-based appreciation of the

Chart 1.6

Economic prospects diverge considerably across emerging market regions

Economic surprise indices across emerging economies

(Jan. 2008 – May 2015; deviation from median forecasts; six-month moving averages)



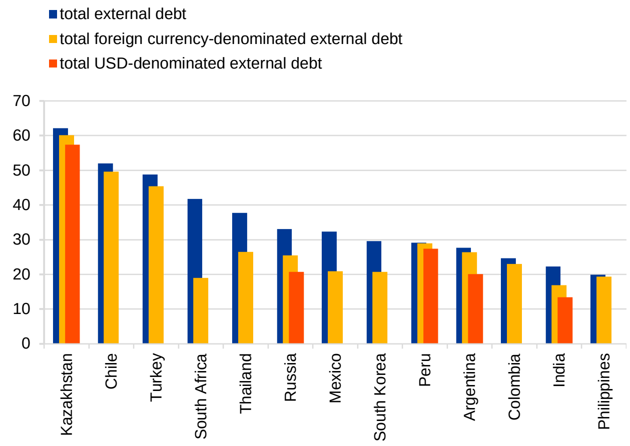
Sources: Citigroup and Bloomberg.
Notes: Deviations are weighted by their impact on foreign exchange markets. Central and eastern Europe, Middle East and Africa comprises Turkey, South Africa, Poland, the Czech Republic and Hungary. Asia-Pacific includes China, Hong Kong, India, Indonesia, South Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand, while Latin America covers Brazil, Mexico, Chile, Colombia and Peru.

Chart 1.7

A large share of gross external debt is denominated in US dollars in many emerging market economies

Currency decomposition of gross external debt

(Q3 2014; percentage of GDP)



Sources: World Bank and ECB calculations.

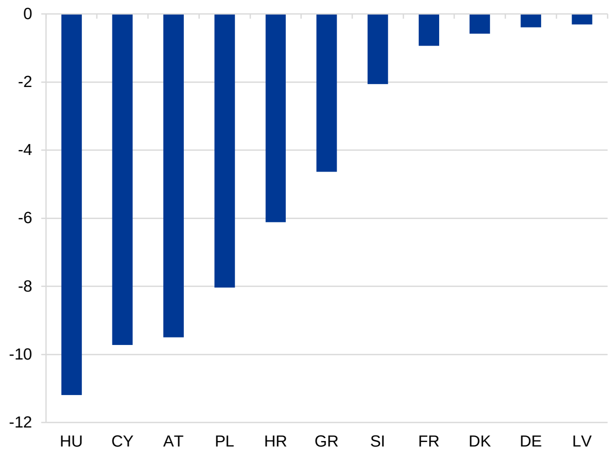
US dollar, concerns regarding potential currency mismatches on sovereign and corporate balance sheets in emerging markets have resurfaced (see Chart 1.7). That said, net foreign currency exposures appear to have declined across emerging markets over the past decade, inter alia given the increased issuance of domestic currency-denominated debt. This may render emerging markets overall less vulnerable to major downward exchange rate pressures vis-à-vis the US dollar, even if aggregate figures may hide pockets of risk at the country and/or sector levels.

Chart 1.8

Swiss franc exposures are sizeable in some EU countries, suggesting heightened credit risk

Net Swiss franc exposure of the non-monetary financial institution sector

(Q4 2014; percentage of GDP)



Sources: ECB, Eurostat and ECB calculations.
Notes: Figures for Croatia also comprise Swiss franc-indexed loans. The net Swiss franc exposure is calculated as the difference between the Swiss franc-denominated deposits of and the Swiss franc-denominated loans to the non-monetary financial institution sector.

The economic recovery continued in most **emerging European economies**, notably the EU countries in central and eastern Europe, driven by robust domestic demand that is supported by EU structural fund inflows and strengthening purchasing power of consumers amid very low inflation and declining energy prices. To date, the impact of the Ukraine-Russia crisis on the region has remained relatively contained, despite the pronounced (also oil price-driven) downturn of the Russian economy. A possible further escalation of the Ukraine-Russia conflict as well as the duration and scope of EU sanctions against Russia and potential retaliatory measures remain the main downside risks to the region's economic outlook. At the same time, the ongoing economic recovery in the euro area is expected to underpin economic activity in the region via improved export prospects. That said, in several countries domestic demand continues to be constrained by a still incomplete process of balance sheet repair in the private and public sectors, which is often further exacerbated by existing legacy currency mismatches, in particular on household balance sheets. In the context of the latter, several countries (e.g. Hungary, Croatia) have taken measures to alleviate the pressure on unhedged borrowers in the aftermath of the Swiss National Bank's decision to remove the EUR/CHF exchange rate cap in January 2015 (see Chart 1.8). This could put additional pressure on banks which in many countries still continue to be challenged by legacy asset quality problems. In spite of the ongoing economic recovery, credit growth remained muted in most countries given the still elevated level of non-performing loans and the ongoing (albeit slowing) deleveraging by foreign banks amid continued efforts to adjust towards a more self-sustained and domestically funded business model.

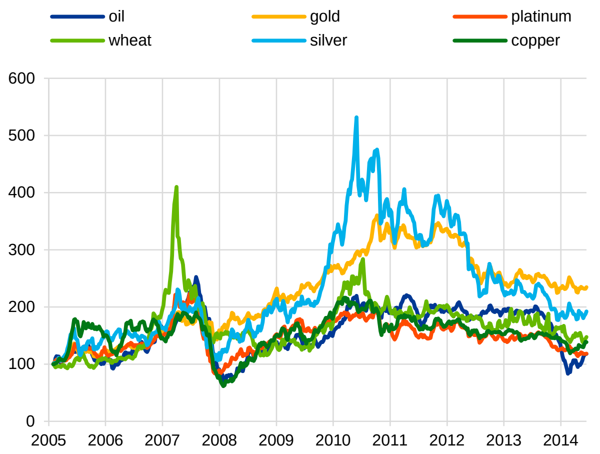
Economic conditions remained subdued in **emerging Asia** in 2014, in particular driven by developments in China where corrections in property markets weighed on investment activity. Looking ahead, economic momentum is expected to strengthen somewhat in the region driven by the overall positive impact of lower oil prices, stronger foreign demand from key advanced economies as well as further monetary easing in several countries, notably in India and China. Still, regional growth dynamics will fall short of the momentum seen in previous years. Risks to activity in the region remain tilted to the downside and relate to possible stronger than expected exchange rate adjustments linked to divergent monetary policies in advanced economies, as well as the uncertainty surrounding the monetary policy normalisation in the United States. Moreover, a major slowdown of the Chinese economy may trigger additional knock-on effects for other Asian economies with close trade and financial links to China where high credit growth and leverage as well as a strongly expanding shadow banking sector indicate risks to financial stability.

Chart 1.9

Commodity markets stabilise following sharp corrections in some market segments

Selected commodity price developments

(Dec. 2005 – May 2015; index: Dec. 2005 = 100)



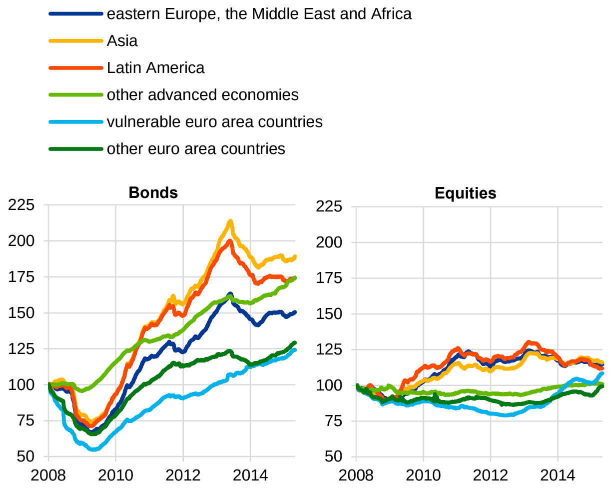
Source: Bloomberg.

Chart 1.10

Bond and equity flows to the euro area and other advanced economies continue to rise

Equity and bond flows to advanced and emerging market economies

(Jan. 2008 – May 2015; index: Jan. 2008 = 100)



Source: EPFR.
Note: Bonds include both sovereign and corporate bonds.

Economic activity in **Latin America** remained weak in 2014, while growth became more uneven across countries. Several countries have lost momentum or dipped into outright recession, in particular commodity exporters which saw their terms of trade deteriorate sharply as a result of lower commodity prices (e.g. Brazil, Venezuela). In other countries (e.g. Mexico), activity has remained solid, buttressed by strong foreign (US) demand. Overall, risks remain skewed to the downside and mainly relate to a further tightening of external financing conditions and to a disorderly rebalancing of the Chinese economy, on which commodity exporters in the region are strongly dependent. Also, fiscal challenges in oil-exporting economies, coupled with heightened political risks and underlying structural vulnerabilities in some countries, may act as a drag on growth.

In sum, the recovery of the global economy is expected to continue at a moderate pace, but will remain uneven across countries and regions. Risks to the outlook have diminished somewhat, but remain tilted to the downside as long-standing and newly emerging underlying vulnerabilities continue to pose a threat to recovery across the globe, with inherent fragilities being partly masked by continued benign financial market sentiment. Alongside persistent real and financial global imbalances, which remain high in a historical context despite having narrowed since the onset of the global crisis, the ongoing geopolitical tensions represent a continued cause for concern – not only the tensions in the context of the ongoing Ukraine-Russia crisis, but also those relating to other parts of the world (e.g. the Middle East). Moreover, the – mainly supply side-driven – sharp adjustments in commodity markets (see Chart 1.9), while likely having a net positive effect on the global economy, may contribute to heightened volatility in global financial markets and challenge the macro-fiscal stability of major oil-exporting emerging economies (see Box 2), thereby triggering potential shifts in investor sentiment vis-à-vis and negative spillovers across emerging economies. Lastly, as evidenced by the temporary bouts of emerging market volatility in 2013 and 2014 (see Chart 1.10), the risk of a disorderly and broad-based unwinding of global search-for-yield flows in the context of the prospective exit from unconventional monetary policies by some major central banks in advanced economies remains a cause for concern. In the event of an abrupt US monetary policy tightening, emerging economies that rely heavily on short-term foreign financing might be particularly exposed to liquidity risk. As in previous sell-off episodes, countries that rely on short-term external financing are particularly exposed to capital flow reversal risks.

All in all, important macro-financial risks to euro area financial stability relate to global factors, including the ongoing geopolitical tensions, the uneven distributional effects of lower oil prices and the diverging monetary policies in major advanced economies. All these factors, beyond raising uncertainties regarding the pace and sustainability of the economic recovery in emerging and advanced economies, may trigger renewed tensions in global financial markets and a potential unwinding of global search-for-yield flows. At the same time, macro-financial risks also continue to originate from within the euro area in a still fragile, low nominal growth environment. In particular, continued real and financial fragmentation, as well as the ongoing balance sheet repair in both the private and public sectors in several countries, continue to weigh on euro area growth momentum.

Box 2

Lower oil prices and their implications for financial stability in the euro area

The oil market has seen an upheaval since mid-2014, exhibiting a more than 50% peak-to-trough drop in prices (see Chart A). Despite a relatively benign global volatility environment and some recovery since early 2015, going forward, prices are likely to remain below the highs observed after the 2009 recovery, in particular given the supply and price elasticity of North American unconventional oil. The net impact on the global economy, including the euro area, is expected to be beneficial on average given positive growth effects, but its distribution will be clearly asymmetric between oil-exporting and oil-importing economies (see Chart B). Oil-exporting emerging economies[4] seem particularly vulnerable given less diversified economic structures and high oil dependency, notwithstanding varying levels of fiscal space and reserves to cope with related challenges. In this environment, the direct linkages of euro area banks require monitoring from a financial stability perspective. Such linkages comprise the exposure, investment and ownership channels, including petrodollar flows in the form of debt and/or equity funding.

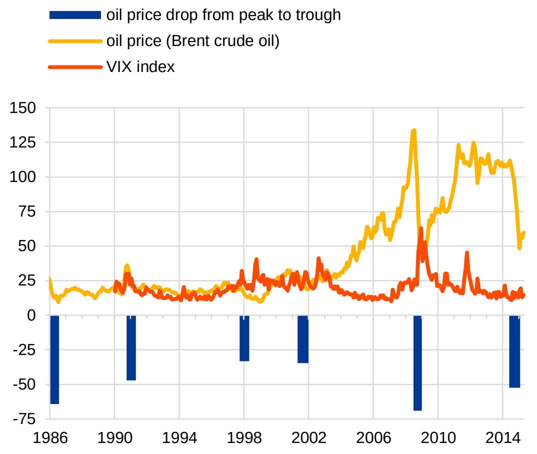
[4] According to the US Energy Information Administration, the world's largest net oil-exporting emerging economies in 2013 with exports of more than 1,000 barrels a day were, in descending order, Saudi Arabia, Russia, the United Arab Emirates, Kuwait, Iraq, Nigeria, Venezuela, Qatar, Angola, Kazakhstan, Algeria and Iran.

Chart A

Sharp drop in oil prices amid a relatively benign global volatility environment

Developments in the oil price and the VIX index

(Jan. 1986 – Apr. 2015; US dollars per barrel, percentages)



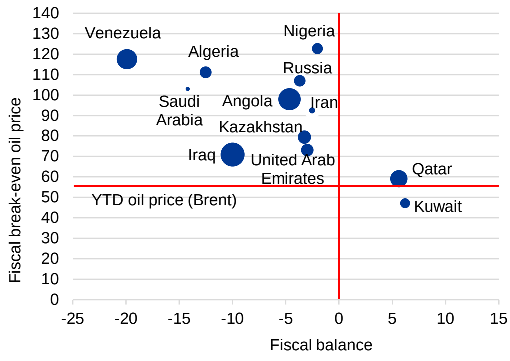
Source: Bloomberg.

Chart B

Persistent low oil prices may challenge the macro-fiscal stability of major oil exporters

Forecast fiscal balance and fiscal break-even oil price of major oil-exporting emerging economies

(2015 forecasts, percentage of GDP and US dollars per barrel)



Sources: Bloomberg, Deutsche Bank and IMF.
Note: The size of the bubble represents the general government debt as a percentage of GDP.

On the assets side of euro area bank balance sheets, BIS data suggest a rather modest and manageable exposure to oil-exporting emerging economies. Nonetheless, the variability across country-specific exposures is evident and can lead to the emergence of pockets of localised risk. Under a tail-risk scenario, these pockets of risk could be amplified by broader shifts in investor sentiment, with spillovers across emerging markets and a negative feedback loop with the world economy, and could implicitly affect euro area financial stability. That said, euro area banks' claims on the world's major oil-exporting emerging economies amounted on average to some 2.5% of their total foreign claims as at end-2014, with Portugal and Austria having the largest relative exposures. These countries were the most exposed also relative to their GDP (see Chart C). The countries to which euro area banks are exposed the most are Russia, Saudi Arabia and the United Arab Emirates.

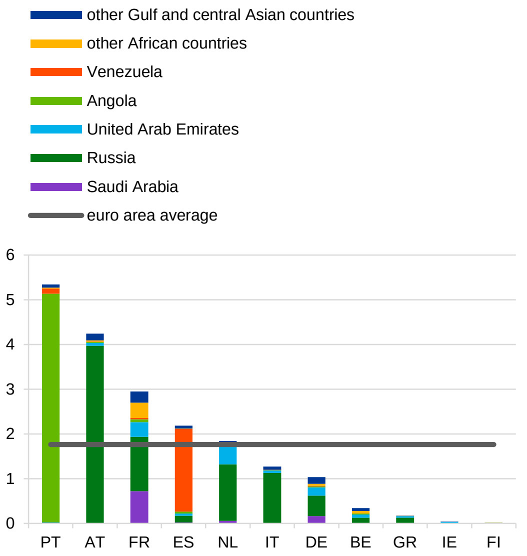
Similarly, euro area banks' direct exposure to the oil and gas sector appears to be relatively small and concentrated in a few institutions. Zooming in on the syndicated loan market, euro area banks arrange about one-fifth of the USD 1.8 trillion global syndicated loan market for oil and gas (about half of the share of North American banks). French banks (BNP Paribas, Crédit Agricole and Société Générale), followed by Deutsche Bank and ING, appear to be the most active in absolute terms. However, the level of exposure concentration seems limited, with the share of oil and gas in total syndicated loan commitments exceeding 15% only for ABN AMRO, Natixis and BBVA (see Chart D). The regional distribution of oil and gas borrowers appears almost equally divided between the Americas (50%) and Europe, the Middle East and Africa (44%).

Chart C

Euro area banks' overall exposures to oil-exporting economies seem relatively modest, but cross-country heterogeneity is high

Claims of BIS reporting banks on major oil-exporting economies

(Q4 2014; percentage of GDP, immediate borrower basis)



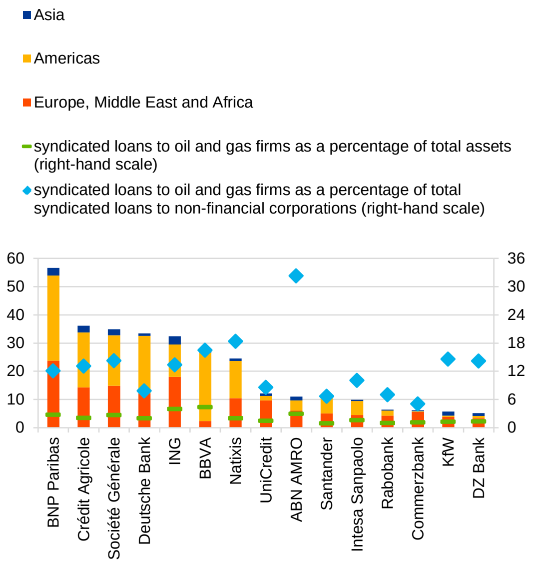
Sources: BIS consolidated banking statistics and ECB calculations.
Note: Values are reported on an immediate borrower basis instead of the ultimate risk basis given better data coverage. Figures comprise total exposures to the sovereign as well as the financial and non-financial private sectors. Other Gulf and central Asian countries include Kazakhstan, Kuwait, Iraq, Iran and Qatar, while other African countries comprise Algeria and Nigeria. Russian exposure data for Austria refer to the latest observation point from the third quarter of 2012. The euro area average is the average value of the eleven countries shown in the chart.

Chart D

Syndicated loan commitments to the oil and gas sector are small and concentrated in a few institutions

Syndicated loan commitments of major euro area banks

(outstanding amounts due after 1 March 2015; USD billions, percentages)



Sources: Dealogic and ECB calculations.

On the liabilities side of euro area bank balance sheets, investment risks may emerge to the extent that petrodollars represent a source of funding (see Chart E). In the event of limited alternative funding sources (e.g. wholesale), decelerating petrodollar inflows or even potential outflows could result in balance sheet pressures which, in turn, could trigger asset divestments and downward pressure on prices. Ownership risks may arise via the equity stakes of investors from oil-exporting economies (often sovereign wealth funds) in euro area banks (see Table A). Notwithstanding the generally long-term nature of this type of investment, divestments may be triggered by a prolonged period of low oil prices and the related need for a major rebalancing in home countries.

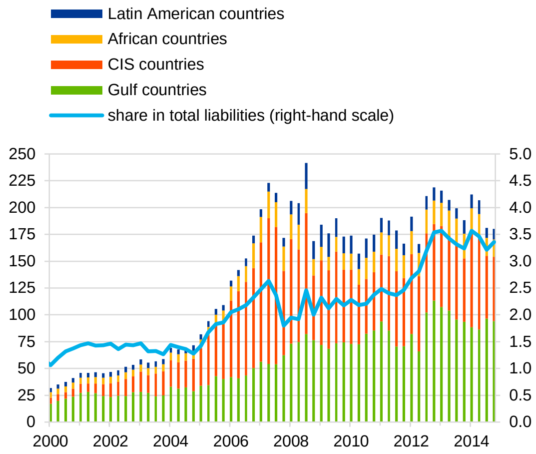
All in all, the direct transmission channels of lower oil prices to euro area banks would suggest only limited associated challenges to euro area financial stability. Nevertheless, country and sector-specific exposure concentrations as well as banks' funding profiles should be monitored carefully, especially as any related vulnerabilities can be amplified by indirect effects stemming from a fragile global growth environment, policy asymmetries in advanced economies and geopolitical tensions.

Chart E

Increasing, but still relatively low importance of oil exporters as a funding source for euro area banks

BIS reporting banks' liabilities to major oil-exporting emerging markets

(Q1 2000 – Q4 2014; USD billions, percentages)



Source: BIS.
Notes: Liabilities comprise loans and deposits. Gulf countries include Kuwait, Iraq, Iran, Qatar, the United Arab Emirates and Saudi Arabia. African countries comprise Algeria, Angola and Nigeria, while the Commonwealth of Independent States (CIS) and Latin American countries cover Russia and Kazakhstan as well as Venezuela, respectively.

Table A

Investors from oil-exporting economies have shown interest in acquiring stakes in euro area banks in the aftermath of the financial crisis

Selected ownership stakes held by investors from oil-exporting countries in selected euro area banks

(2014; EUR billions, percentage of capital)

Bank	Owner	Country	Investment volume
Deutsche Bank (DE)	Paramount Holdings Services	Qatar	1.75 billion / 5.8%
Alpha Bank (GR)	Paramount Holdings Services	Qatar	n.a. / 9%
BIL (LU)	Precision Capital	Qatar	n.a. / 90%
UniCredit (IT)	Aabar Investments	Abu Dhabi	1.0 billion / 5.0%
UniCredit (IT)	Central Bank of Libya	Libya	0.6 billion / 2.9%

Sources: Banks' annual reports.
Note: Data for Alpha Bank are on a full warrant basis as of June 2013.

1.2 Benign sovereign financing conditions, but underlying vulnerabilities remain

Sovereign stress conditions have remained relatively benign against the background of the expanded asset purchase programme, with the composite indicator of systemic stress in sovereign bond markets still considerably below the levels seen at the height of the euro area sovereign debt crisis in 2011-12 (see Chart 1.11). The aggregate indicator, however, conceals substantial divergence in sovereign stress across countries. In particular, default risk expectations have increased sharply in Greece amid heightened political uncertainty.

At the same time, **fiscal deficits** in the euro area continued to decline. The 2014 aggregate euro area fiscal deficit fell to 2.4% of GDP, from 2.9% in 2013. Fiscal conditions have improved in many countries, including former programme countries, as well as Germany and the Netherlands, while stabilising in other major euro area economies, such as France and Italy. According to the European Commission's spring forecast, the aggregate euro area fiscal deficit is projected to decline further to 2.0% of GDP in 2015 and 1.7% of GDP in 2016, largely driven by positive cyclical developments.

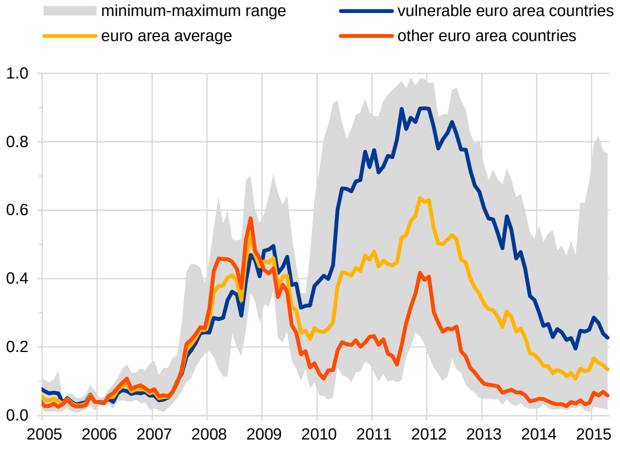
Despite the overall improvement in fiscal conditions in the euro area in recent years, sovereign risks remain elevated amid incomplete adjustment. Despite the progress of the last years, structural balances are expected to remain well below the medium-term objective set by individual euro area countries in the context of the Stability and Growth Pact (see Chart 1.12). In fact, the concrete implementation of reform and consolidation commitments appears to have dwindled, while also proceeding at an uneven pace across countries. For the euro area as a whole, the fiscal stance is expected to remain neutral given the lack of further intensification of consolidation efforts, as reflected by the flat profile of the euro area structural budget balance since 2013 at about 1% of GDP, following major consolidation efforts in 2011 and 2012. Further progress with fiscal consolidation is needed to anchor long-term public debt sustainability and restore fiscal buffers.

Chart 1.11

Sovereign tensions contained in most (but not all) euro area countries…

Composite indicator of systemic stress in euro area sovereign bond markets

(Jan. 2005 – Apr. 2015)



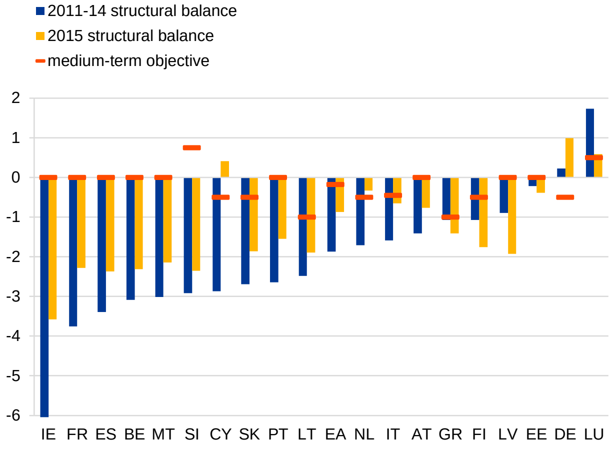
Sources: ECB and ECB calculations.
Notes: Aggregation of country indicators capturing several stress features in the corresponding government bond markets (changing default risk expectations, risk aversion, liquidity risk and uncertainty) for vulnerable (Greece, Ireland, Italy, Portugal and Spain) and other (Austria, Belgium, Germany, Finland, France and the Netherlands) countries. The range reflects the maximum and minimum across the entire set of the above-mentioned countries. For further details on the CISS methodology, see Hollo, D., Kremer, M. and Lo Duca, M., "CISS – a composite indicator of systemic stress in the financial system", *Working Paper Series*, No 1426, ECB, March 2012.

Chart 1.12

…highlighting the need for sustainable public finance settings at the national level

Structural balances and medium-term fiscal objectives across the euro area

(2011-2014; 2015; percentage of GDP)



Source: European Commission's spring 2015 economic forecast.

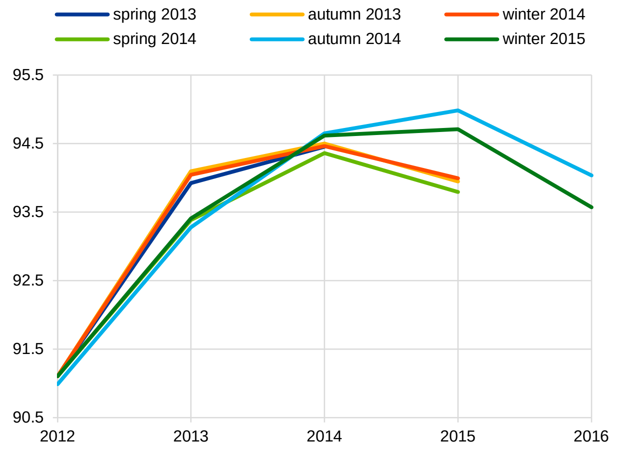
Notwithstanding these challenges to public finances, the unwinding of financial sector support is expected to contribute to the improvement of fiscal balances in many countries. In this context, following major one-off events in 2014 in Austria, Cyprus, Portugal and Slovenia, support to the financial sector is expected to decrease in almost all euro area countries in 2015 and 2016, with many countries already starting to recover at least part of the liquidity and/or capital support provided to financial institutions during the crisis. Going forward, bail-in and bank resolution arrangements based on the provisions of the Bank Recovery and Resolution Directive and the Single Resolution Mechanism should limit the future potential for contingent liabilities of any given country vis-à-vis its banking sector.

Chart 1.13

Reduced fiscal effort and lower than expected output growth lead to a shift of debt peak forecasts over time...

Public debt forecasts for the euro area

(2012-2016; percentage of GDP; different lines indicate different forecast vintages)



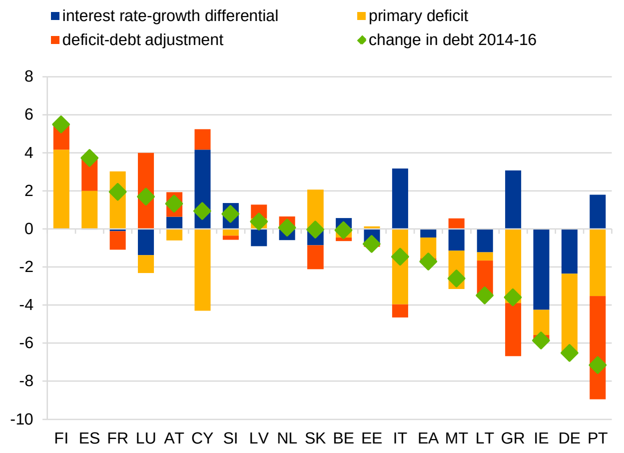
Source: European Commission (different forecast vintages).
Note: The impact of the transition to the European System of Accounts 2010 between the spring 2014 forecast and the autumn 2014 forecast is eliminated by assuming a common debt ratio in 2012 for all vintages equal to the value reported in the winter 2015 forecast. From this common starting value, in the pre-ESA 2010 forecast vintages the debt ratio follows the profile specific to each forecast vintage.

Chart 1.14

…but developments at the country level are fairly heterogeneous

Changes in public debt levels across the euro area

(2014-2016; percentage points of GDP)



Source: European Commission's spring 2015 forecast.

Against this backdrop, structural reforms remain a key ingredient for bolstering economic recovery and reducing interest rate-growth differentials, thereby mitigating **public debt** sustainability concerns. On average, the euro area public debt-to-GDP ratio has reached 94.2% of GDP in 2014, and it is projected by the European Commission to fall to 92.5% of GDP by 2016. Having said that, compared with earlier projections, reduced fiscal efforts and slower than expected output growth have in the last few years contributed to the continuous shifts of the peak debt-to-GDP level over time (see Chart 1.13), which may undermine market confidence in public debt sustainability.

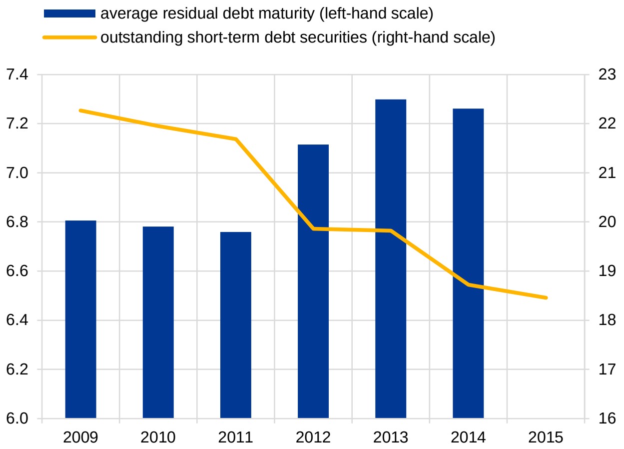
In terms of the evolution of public debt levels, the outlook has slightly improved after the adoption of the expanded asset purchase programme, thanks to somewhat lower interest payments and higher expected nominal growth. Still, the picture is rather heterogeneous at the country level. Ten euro area countries are forecast to reduce their debt ratios over the 2014-16 horizon, in particular on account of primary surpluses, but in most cases also driven by positive interest rate-growth differentials (see Chart 1.14). Regarding public debt sustainability, the most important risks across the euro area relate to complacency in terms of fiscal adjustment and structural reforms, a slower than expected recovery in economic activity and a prolonged period of low inflation. Such developments would impede the debt servicing abilities of sovereigns, in particular of those which currently face heightened market optimism and downward rigidities in fiscal positions. While the Eurosystem's expanded asset purchase programme addresses the risk of a too prolonged period of low inflation (see Box 1), it may have the unintended consequence of reducing governments' incentives to undertake the necessary structural reforms or fiscal adjustments in countries where they are needed. Against this background, maintaining an appropriate level of fiscal discipline and continuing reform efforts is key.

Chart 1.15

Debt issuance with longer maturities predominates in the current low yield environment

Maturity structure of euro area government debt and debt securities

(2009-2014; Apr. 2015; years; percentage of total outstanding general government debt securities)



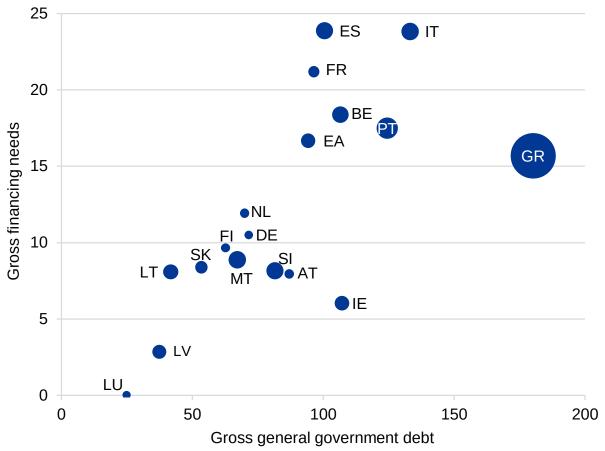
Source: ECB Government Finance Statistics.
Note: Outstanding short-term debt securities comprise short and long-term debt securities with a residual maturity of up to one year.

Chart 1.16

2015 financing needs are substantial for several euro area countries

Public debt levels and gross financing needs across the euro area

(2015; percentage of GDP, percentages)



Sources: European Commission and Bloomberg.
Note: The size of the bubble reflects the 2015 year-to-date average ten-year government bond yield.

While medium-term risks persist, short-term **sovereign financing** pressures have continued to abate, inter alia thanks to further improving financing conditions in the run-up to (via market expectations) and following the operationalisation of the Eurosystem's expanded asset purchase programme. In fact, even if still substantial, government refinancing needs are forecast to drop to about 13% of GDP for the euro area aggregate in 2015, down from approximately 27% of GDP in 2014, and are projected to decrease further in 2016. Overall lower liquidity pressures are also a function of the ongoing shift in issuance activity towards longer maturities in most countries, as highlighted by the gradual increase in the average total government debt (comprising debt securities and loans) maturity for the euro area aggregate (see Chart 1.15). Given the current environment of low and further declining (or even negative) government bond yields at short maturities, this trend is likely to continue in the near term, as investors search for higher returns by increasing the duration of the purchased assets. As at end-April 2015, outstanding government debt securities with a residual maturity of up to one year accounted for about 18.5% of total outstanding debt securities in the euro area or 14% of GDP. The average residual maturity of outstanding euro area government debt securities was 6.5 years, with the residual maturities ranging from 2.9 years in Cyprus to 11.8 years in Ireland. Looking at the country level, 2015 refinancing needs are substantial for several countries, while based on country specificities considerable differences in financing costs prevail (see Chart 1.16). The financing needs are, however, gradually declining towards levels seen prior to the financial crisis, as lower interest rates pass through into reduced debt servicing costs.

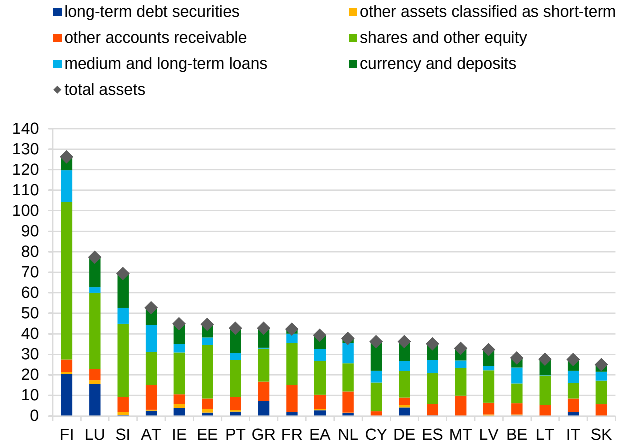
Turning to the assets side of sovereign balance sheets, the **financial assets** of governments represent an important element in the assessment of sovereign liquidity and debt sustainability problems as they may – to some extent – alleviate sovereign financing needs. In fact, euro area sovereigns hold substantial financial assets in several countries, amounting to some 40% of GDP at the end of 2014 on average amid a considerable degree of cross-country variation (see Chart 1.17). At the same time, the market value of consolidated general government total financial liabilities in the euro area was 112% of GDP, yielding net financial liabilities of 73.3% of GDP. However, the value of liquid assets that can be effectively used as a buffer to finance the rollover of government liabilities varies across countries, ranging from 2.2% of GDP in France to some 18.2% of GDP in Slovenia. Shares and other equity accounted for the largest part of financial assets in most euro area countries, suggesting that privatisation of state-owned assets could play an important role in mitigating debt sustainability concerns provided that privatisation proceeds (see Chart 1.18) are used to retire public debt.

Chart 1.17

Available short-term liquid financial assets may help cushion possible sudden financing needs…

Structure of euro area governments' financial assets

(Q4 2014; percentage of GDP)



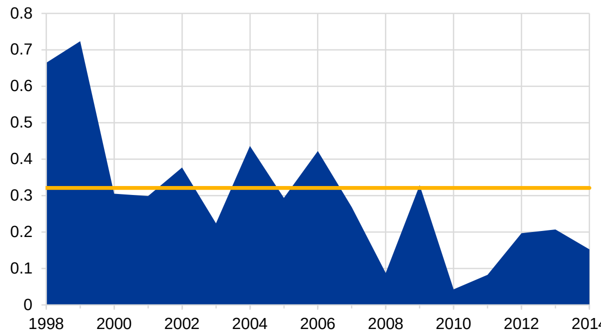
Sources: Eurostat, national sources and ECB calculations.
Note: Other assets classified as short-term include short-term debt securities, short-term loans and monetary gold.

Chart 1.18

…while privatisation revenues may help alleviate debt sustainability concerns

Privatisation revenues in the euro area

(1998-2014; percentage of GDP)



Sources: ECB Government Finance Statistics and ECB calculations.
Note: The yellow line indicates the average value over the period 1995-2014.

1.3 Improving financing conditions in the non-financial private sector underpin decreasing fragmentation

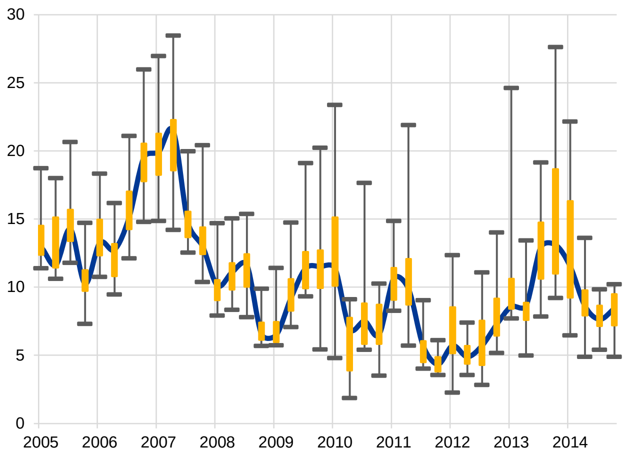
The **income and earnings** dynamics of the euro area non-financial private sector have shown recent signs of improvement, though remaining muted and largely mirroring the euro area macroeconomic environment. The income situation of households has seen real disposable income growth accelerating amid low inflation outturns, while distance-to-distress indicators capturing household balance sheet risks suggest that overall credit risks related to household balance sheets in the euro area are much less pronounced than at the height of the euro area sovereign debt crisis (see Chart 1.19). A continued recovery of the euro area household sector is expected, buttressed by overall improving labour market conditions, even if the situation continues to be weak in more vulnerable euro area countries, thereby still weighing on households' income prospects. That said, households' expectations regarding their employment and financial situations have become more optimistic with the economic recovery regaining momentum. This perception is also corroborated by observed improvements in household net worth (see Chart 1.20). For the first time since end-2011, holding gains on housing assets have been mildly positive in recent quarters in accordance with the observed gradual strengthening in housing market dynamics at the aggregate euro area level. These developments should help alleviate balance sheet pressures of stressed households with outstanding debt obligations.

Chart 1.19

Risks related to household balance sheets remain at elevated levels…

Households' distance to distress in the euro area

(Q1 2005 – Q4 2014; number of standard deviations from estimated default point)



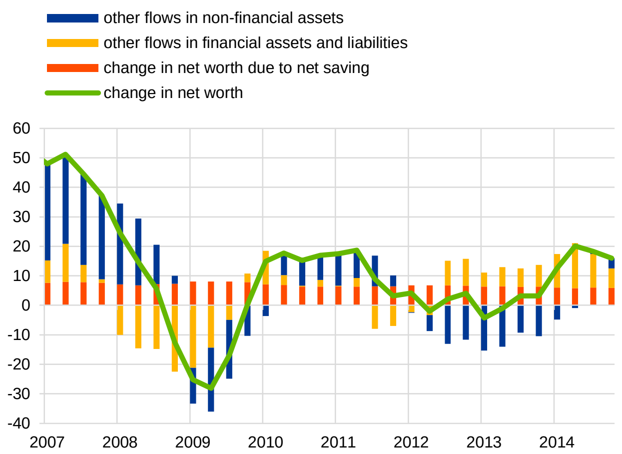
Sources: ECB, Bloomberg, Thomson Reuters Datastream and ECB calculations.
Notes: A lower reading for distance to distress indicates higher credit risk. The chart shows the median, minimum, maximum and interquartile distribution across 11 euro area countries for which historical time series cover more than one business cycle. For details on the indicator, see Box 7 in *Financial Stability Review*, ECB, December 2009.

Chart 1.20

…but improving net worth of households helps mitigate balance sheet pressures

Change in the net worth of euro area households

(Q1 2007 – Q4 2014; four-quarter moving sums; percentage of gross disposable income)



Sources: ECB, Bloomberg, Thomson Reuters Datastream and ECB calculations.
Notes: Other flows in non-financial assets include mainly holding gains and losses on real estate (including land). Other flows in financial assets and liabilities include mainly holding gains and losses on shares and other equity, while changes in net worth due to net saving comprise net saving, net capital transfers received and the discrepancy between the non-financial and the financial accounts. Based on the standards of the European System of Accounts 2010 (ESA 2010).

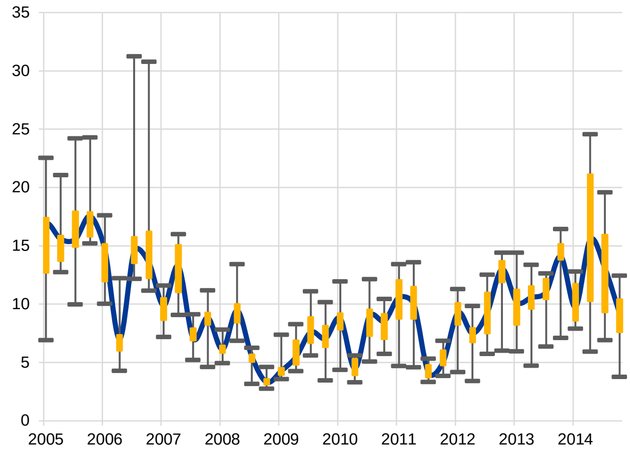
Corporate balance sheet risks have remained limited against the backdrop of improving growth prospects, historically low funding costs and low probabilities of default. However, estimated sectorial distance to distress signals somewhat increasing credit risks towards year-end 2014 as market volatility has edged up (see Chart 1.21). The earnings-generating capacity of euro area non-financial corporations has improved slightly, driven by the gradual economic recovery, yet corporate profitability has remained muted, with non-financial corporations' gross operating surplus remaining broadly unchanged over the course of 2014. Being a function of overall economic developments, corporate earnings in the euro area are expected to rise as the economic recovery gathers pace.

These developments, combined with an environment of low interest rates, have brought the interest payment burden of households and non-financial firms to new record lows (see Chart 1.22). Borrowers, however, have seen some rise in their real debt burden amid recent low inflation outturns, in particular (but not only) in countries with still ongoing relative price adjustments. Looking ahead, the ongoing balance sheet repair should help offset the risks related to an eventual normalisation of interest rates and the ensuing rise in debt servicing costs. This might challenge borrowers in those countries where loans with floating rates or rates with rather short fixation periods are more widespread. A higher debt service burden for borrowers in a rising interest rate environment is, however, likely to be partly offset by the positive impact of a pick-up in economic dynamics on households' and firms' income and earnings situation.

Chart 1.21
Corporate balance sheet risks remain lower than during the euro area sovereign debt crisis

Non-financial corporations' distance to distress in the euro area

(Q1 2005 – Q4 2014; number of standard deviations from estimated default point)

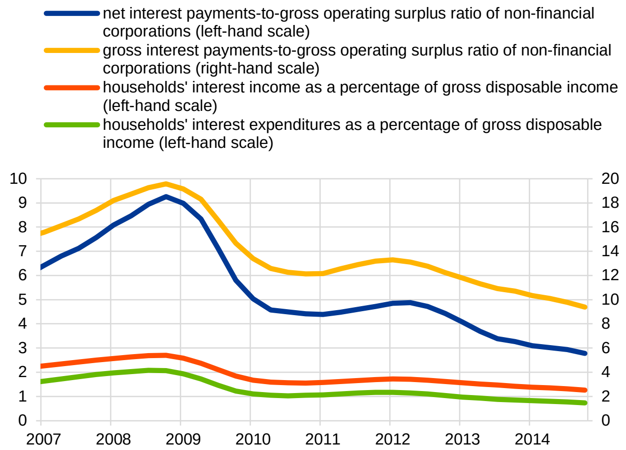


Sources: Eurostat and ECB.
Notes: A lower reading for distance to distress indicates higher credit risk. The chart shows the median, minimum, maximum and interquartile distribution across 11 euro area countries for which historical time series cover more than one business cycle. For details on the indicator, see Box 7 in *Financial Stability Review*, ECB, December 2009.

Chart 1.22
Interest payment burdens of households and non-financial corporations have touched record lows

Interest payment burden of the euro area non-financial private sector

(Q1 2007 – Q4 2014; four-quarter moving sums; percentages)



Sources: ECB and Eurostat.
Note: Based on ESA 2010 standards.

More favourable income and earnings prospects notwithstanding, legacy balance sheet concerns continue to constrain the non-financial private sector in the euro area, particularly firms. On average, euro area household **indebtedness** stood at slightly above 60% of GDP at end-2014, a figure which – while not remarkable by international standards – remains high by historical standards and has declined only marginally since the peak in mid-2010 despite weak loan dynamics. Muted household income growth over the past years and adverse labour market conditions in several countries, combined with lengthy insolvency regimes, have tended to inhibit a swift deleveraging. The level of indebtedness of the non-financial corporate sector was more elevated at 107% of GDP (on an unconsolidated basis, excluding trade credit) or 83% of GDP on a fully consolidated basis (see Chart 1.23). On average, corporate indebtedness remains elevated by historical and international standards, including benchmarks as defined in European macroeconomic surveillance, both on a consolidated and unconsolidated basis.

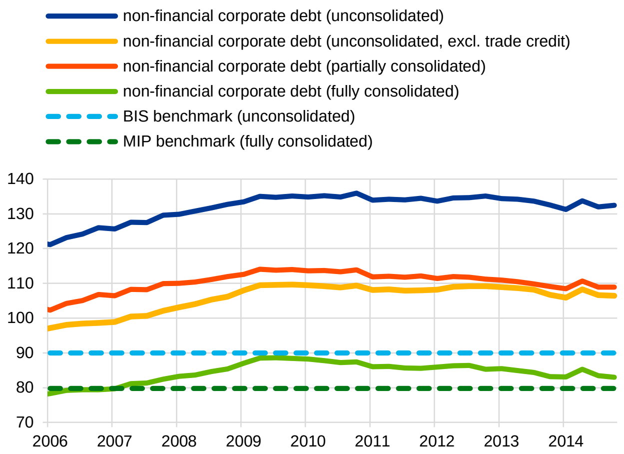
More generally, balance sheet repair has continued to be gradual, given weak nominal GDP growth and non-financial corporations' increased recourse to market-based funding in recent years. The estimated debt overhang of euro area households and firms – i.e. the difference between (estimated) benchmark and actual debt-to-GDP levels – declined further over the course of 2014, reaching levels which imply some residual deleveraging needs (see Chart 1.24). Still, the aggregate euro area household and corporate debt figures continue to mask sizeable heterogeneity across countries, implying that in some countries the possible remaining deleveraging needs could imply a drag on growth going forward. Particularly in terms of corporate deleveraging, the pace of adjustment differed markedly across the euro area, with deleveraging being more forceful in countries which had accumulated large amounts of debt prior to the crisis, e.g. Ireland and Spain. The same is true for deleveraging at the sector level, where overindebted sectors, such as construction and real estate services, continue to deleverage more strongly than less-indebted ones such as industry or trade.

Chart 1.23

Non-financial corporations' indebtedness continued to edge down, but is still elevated by international and historical standards

Corporate debt ratios in the euro area and benchmark debt levels

(Q1 2006 – Q4 2014; percentage of GDP)



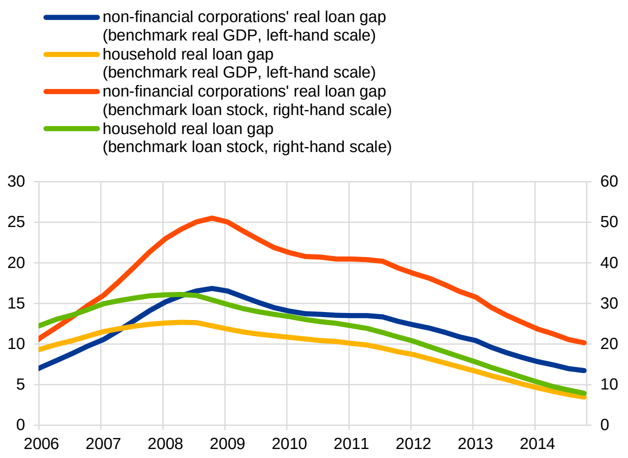
Sources: Eurostat and ECB.
Notes: Fully consolidated debt includes loans net of intra-sectoral loans, debt securities and pension reserves. Partly consolidated debt includes trade credit in addition to the instruments included in consolidated debt, while unconsolidated debt also includes intra-sectoral loans. The MIP benchmark refers to the European Commission´s macroeconomic imbalance procedure, with the 133% of GDP limit for fully consolidated non-financial private sector debt split between firms and households based on their average past shares in the stock of non-financial private sector debt. The BIS benchmark refers to the threshold after which debt is found to have a significant adverse impact on growth.

Chart 1.24

Debt overhang is gradually easing in the non-financial private sector

Excess level of corporate and household debt in the euro area

(Q1 2006 – Q4 2014; percentage of real GDP)



Sources: ECB and ECB calculations.
Notes: The loan gaps denote the deviation of actual loans from the levels that would have resulted from reference paths for loan growth calculated on the basis of assumptions for "trend" developments in the model determinants weighed together with the estimated long-run model elasticities. For the model and methodology underlying the calculation of loan gaps in more detail, see Annex 6 of Chapter 7 in *Enhancing Monetary Analysis* edited by Papademos, L. and Stark, J., 2010.

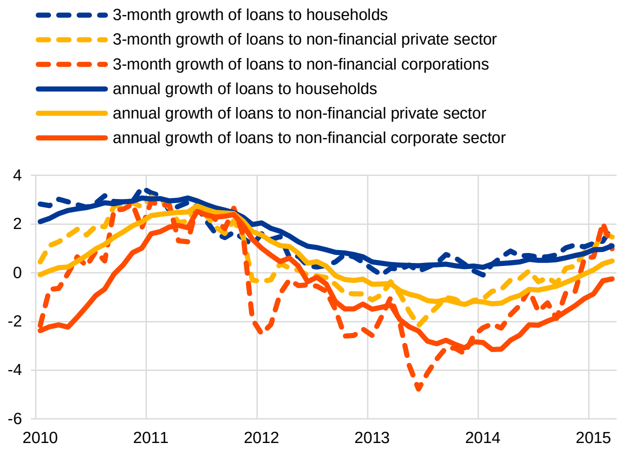
Bank lending flows to the non-financial private sector have remained muted overall given the ongoing process of balance sheet repair in both the financial and non-financial sectors. However, the underlying short-term dynamics of bank lending have shown incipient signs of a recovery on the back of strengthening demand and receding supply-side constraints (see Chart 1.25). On average, bank lending to euro area households has remained subdued, mirroring continued sluggish dynamics of household income, high levels of unemployment, remaining deleveraging needs and housing market weakness in some more vulnerable euro area countries. That said, this relatively lacklustre aggregate picture masks rather heterogeneous developments at the country level, with annual growth rates ranging from some -10% in Ireland to over +10% in Slovakia. Turning to the components of bank lending by purpose, modest annual growth in loans for house purchase has been offset by a continued (albeit decelerating) drop in consumer loans and other types of lending.

Chart 1.25

Bank lending to the euro area non-financial private sector has shown signs of recovery

Bank lending to the euro area non-financial private sector

(Jan. 2010 – Mar. 2015; annual percentage changes; percentages)



Source: ECB.
Note: Data have been adjusted for loan sales and securitisation.

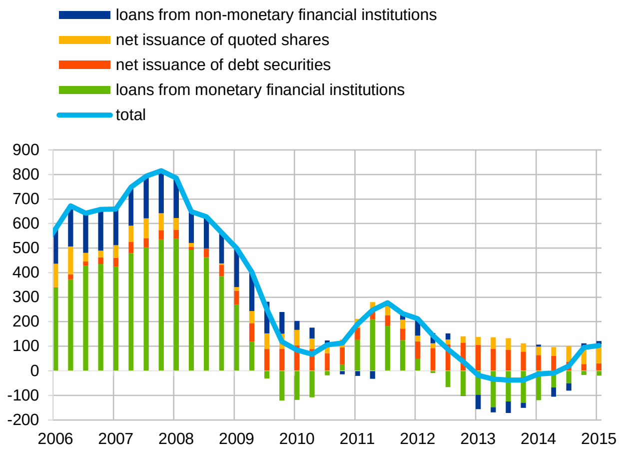
Looking ahead, the April 2015 euro area bank lending survey suggests further improvements in households' financing conditions, as reflected by the continued easing of credit standards on loans to households, in particular for consumer loans and other lending, and the further net increase in demand for all loan categories. Supply-side constraints appear to be easing particularly for consumer loans and other lending to households given increased competitive pressures, but banks' higher risk tolerance has also contributed to the net easing of credit standards. By contrast, banks tightened slightly their credit standards in net terms for loans to households for house purchase. While competition continued to be the dominant factor contributing to an easing of credit standards on housing loans, banks' risk tolerance contributed marginally to the overall net tightening of credit standards for housing loans. On the demand side, improving consumer confidence, the low general level of interest rates, more favourable housing market prospects and increased financing needs for spending on durable consumer goods have translated into a continued net increase in demand for housing loans and consumer credit.

Chart 1.26

External financing conditions for euro area non-financial corporations continued to improve

External financing of euro area non-financial corporations

(Q1 2006 – Q1 2015; EUR billions; four-quarter moving flows)



Sources: Eurostat, ECB, Dealogic and ECB calculations.

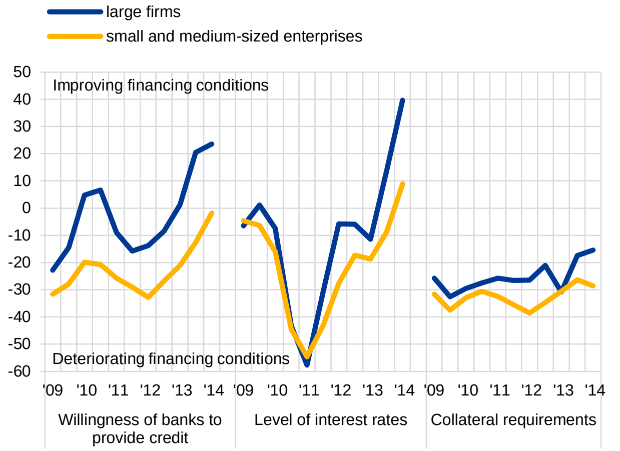
The net external financing of euro area non-financial corporations has stabilised at modest levels in early 2015, after recovering in 2014 (see Chart 1.26). The decline in new bank loans to non-financial corporations, albeit strongly decelerating over the course of 2014, was more than compensated for by funds obtained from other funding sources. The issuance of debt securities strengthened again towards the end of 2014 and in early 2015, after moderating in late summer and early autumn last year, with the latter partly explained by easing access to bank credit. The issuance of quoted shares has increased considerably in recent quarters amid improved stock market sentiment. That said, bank funding substitution has still remained limited to larger firms and mainly those which are domiciled in countries with more developed capital markets (e.g. Germany, France), while small and medium-sized enterprises (SMEs) and large firms located in more vulnerable countries remained more dependent on bank funding. Going forward, alongside improving supply and demand-side conditions, targeted Eurosystem measures to revive lending, i.e. the targeted longer-term refinancing operations or the asset-backed securities and covered bond purchase programmes, should promote the recovery of credit going forward, while at the same time contributing to a further decrease in funding costs for non-financial firms in the euro area.

Chart 1.27

Easier access to funding for large firms as well as small and medium-sized enterprises…

Financing conditions of euro area SMEs in comparison with large firms

(H1 2009 – H1 2014; net percentages of respondents; changes over the past six months)



Source: ECB calculations based on the survey on access to finance of enterprises (SAFE).
Note: The level of interest rates and collateral requirements are presented using an inverted scale.

That said, the results of the latest euro area bank lending survey suggest that underwriting terms for corporate loans have continued to improve, driven in particular by banks' lower cost of funds and alleviating balance sheet constraints as well as increased competition. Across firm sizes, credit standards were eased on loans to both large firms and SMEs. However, according to the ECB's latest survey on access to finance of enterprises in the euro area, banks' willingness to grant a loan continues to be somewhat higher for large firms (see Chart 1.27). This is also corroborated by the fact that the success of large firms when applying for a bank loan was higher than for SMEs, indicating overall better access to finance of large firms compared with SMEs. Demand for corporate loans in the euro area continued to rise, but cross-country heterogeneity has remained considerable. Financing needs related to inventories and working capital and in particular the low general level of interest rates contributed strongly to the demand for loans to enterprises. The issuance of debt securities by non-financial corporations and firms' internal financing capacity contributed negatively to loan demand.

Corporate liquidity buffers have remained high at some 30% of GDP in the euro area, suggesting that alongside external funding sources non-financial firms can also rely on internal funds as a financing source. That said, these high liquidity buffers may reflect a lack of investment opportunities but also precautionary motives (i.e. mitigating the risk of limited access to external financing in the future) in the context of a low opportunity cost of holding liquid assets and perceived risks associated with access to bank funding in some countries. Still, firming economic growth prospects coupled with waning uncertainty regarding the prevalent business conditions could unlock these resources and may help make an important contribution to financing the economic recovery.

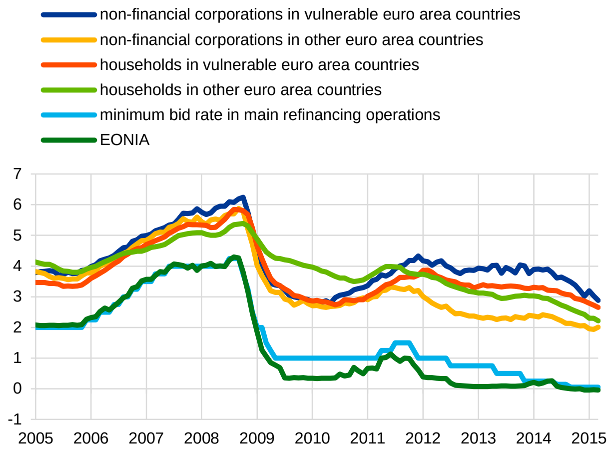
Funding costs of the euro area non-financial private sector have continued to decline across most business lines, maturities and funding sources. In fact, the composite cost-of-borrowing indicators for euro area households and non-financial corporations have continued to drop (see Chart 1.28), with a decreasing wedge between non-financial firms located in vulnerable and other euro area countries since the height of the euro area sovereign debt crisis. Still, fragmentation in financing conditions persists, with the impacts of the latest standard and non-standard monetary policy measures yet to be fully passed through.

Chart 1.28

...is accompanied by lower funding costs for both non-financial corporations and households

Composite indicators of the nominal cost of bank borrowing for euro area households (for house purchase) and non-financial corporations, the ECB policy rate and EONIA

(Jan. 2005 – Mar. 2015; percentages)



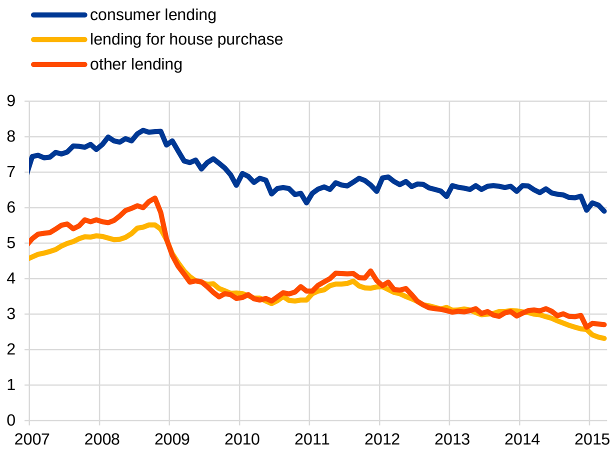
Sources: ECB and ECB calculations.
Notes: The indicator for the total cost of lending is calculated by aggregating short and long-term rates using a 24-month moving average of new business volumes. For methodological details on the construction of the cost-of-borrowing indicator, see "Assessing the retail bank interest rate pass-through in the euro area at times of financial fragmentation", *Monthly Bulletin*, ECB, August 2013.

Chart 1.29

Nominal funding costs for euro area households have reached record lows in all lending categories…

Euro area nominal bank lending rates on new loans to households

(Jan. 2007 – Mar. 2015; percentages)



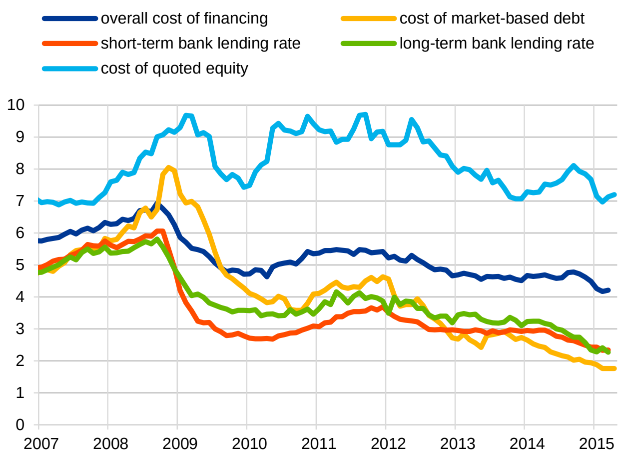
Source: ECB.

Chart 1.30

…as have euro area non-financial corporate funding costs

Nominal cost of external financing of euro area non-financial corporations

(Jan. 2007 – Apr. 2015; percentages)



Sources: ECB, Merrill Lynch, Thomson Reuters Datastream and ECB calculations.
Notes: The overall cost of financing for non-financial corporations is calculated as a weighted average of the cost of bank lending, the cost of market-based debt and the cost of equity, based on their respective amounts outstanding derived from the euro area accounts. The cost of equity estimates are based on a three-stage dividend discount model.

More specifically, nominal financing costs for euro area households have reached their lowest levels since the start of the reporting of harmonised euro area bank lending rates in 2003 for all categories of lending (see Chart 1.29), while real funding costs tended to edge up at the turn of 2014-15 due to lower inflation outturns. Likewise, non-financial corporations' overall nominal financing costs have continued to fall across all external financing sources, supported by a low interest rate environment as well as further improving financial market conditions and a better economic growth outlook following the announcement and implementation of the Eurosystem's expanded asset purchase programme. In particular, the cost of market-based debt has reached record lows amid lower corporate default expectations and the ongoing search for yield. Bank lending rates declined further across the maturity spectrum as the monetary policy measures taken since June 2014 took hold, but lending rates continue to vary across countries and firm sizes, with still less favourable conditions faced by small firms, particularly in more vulnerable countries. The cost of equity for firms has dropped since the end of 2014 (see

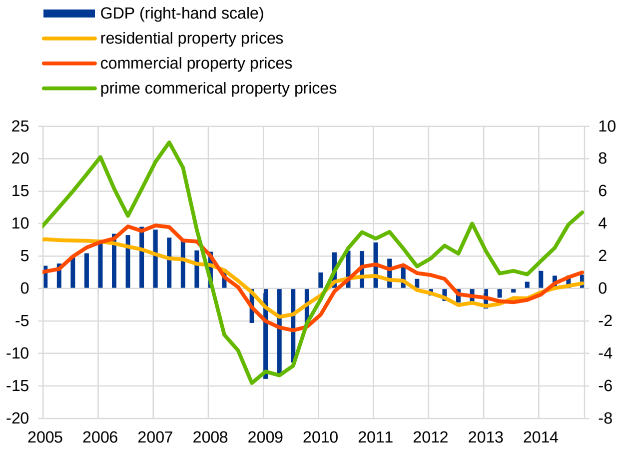
Chart 1.30), touching pre-crisis levels amid ebullient equity markets, falling equity risk premia and higher expected dividend payouts in many countries.

Chart 1.31

In line with the overall economy, euro area residential and commercial property prices continued to recover

Euro area commercial and residential property values and the economic cycle

(Q1 2005 – Q4 2014; percentage change per annum)



Sources: Eurostat, ECB, experimental ECB estimates based on IPD and national data, and Jones Lang Lasalle.

The overall development of euro area **property markets** remained muted in the second half of 2014, albeit amid growing signs of a firming recovery in a number of countries. After almost three years of price declines, residential property markets have exhibited a moderate growth path at the aggregate euro area level. Euro area commercial property markets have also continued their recovery, while underlying price trends in the prime and non-prime market segments have continued to diverge considerably (see Chart 1.31).

Despite signs that the recovery is becoming more broad-based across countries, particularly in the commercial property segment, cross-country heterogeneity remains high in both the residential and commercial property realms. This largely relates to signs that a major multi-year correction in the aftermath of the global financial crisis is nearing completion for many euro area countries. Indeed, country-level data indicate a strong rebound in residential and prime commercial property price growth in a number of countries, notably Ireland, the Netherlands and Spain (see Chart 1.32). By contrast, property prices continued to drop in countries such as Cyprus, Greece and Slovenia, in particular in the residential segment.

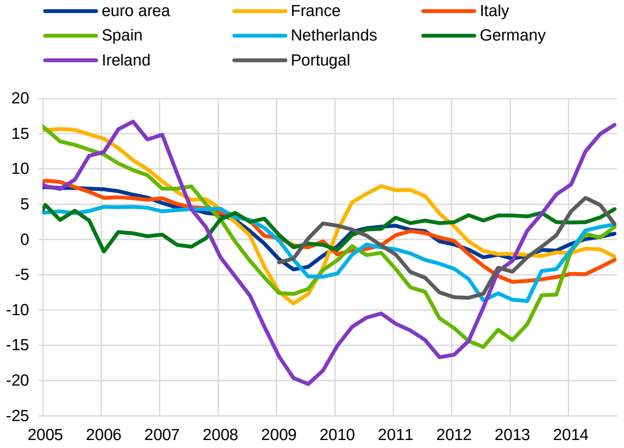
Given their inherent granularity, property price aggregates at the country level might not fully capture divergent underlying regional price trends, most notably in situations where strong house price growth in supply-constrained metropolitan areas contrasts with subdued price developments in other regions. In fact, price growth in the capital city/largest cities has exceeded the corresponding price changes at the national level in several countries in recent years, in particular in Austria, Germany and Ireland (see Chart 1.33), highlighting the risk that strong house price growth could potentially ripple out to surrounding areas. The potential for this is, however, likely to be limited in many countries at the current juncture, given favourable supply-side conditions outside large cities and/or newly adopted macroprudential measures which aim to rein in any potential house price exuberance going forward (e.g. in Ireland). So far the ongoing housing market recovery or the regional buoyancy of euro area residential property markets has not translated into rapid credit growth. Pent-up demand from domestic cash buyers in the current low yield environment as well as the presence of alternatively financed foreign buyers in certain (mainly high-priced) market segments, in particular in large cities, may help explain these developments.

Chart 1.32

Rebound in residential property price growth in several euro area countries following post-crisis adjustments

Residential property price growth in selected euro area countries

(Q1 2005 – Q4 2014; percentage change per annum)



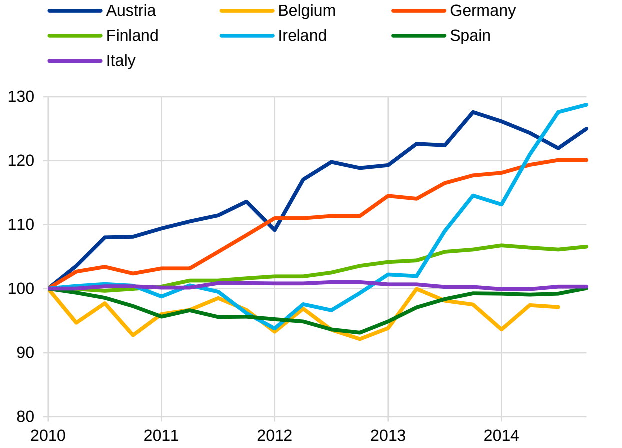
Sources: ECB and national sources.

Chart 1.33

Country-level developments often mask underlying regional disparities, with strong house price growth in metropolitan areas in some countries

Residential property prices in the capital city/large cities vis-à-vis the national aggregate

(Q1 2010 – Q4 2014; index: Q1 2010 = 100; ratio of residential property prices in capital city/largest cities vis-à-vis the national aggregate)



Sources: BIS, national sources and ECB calculations.

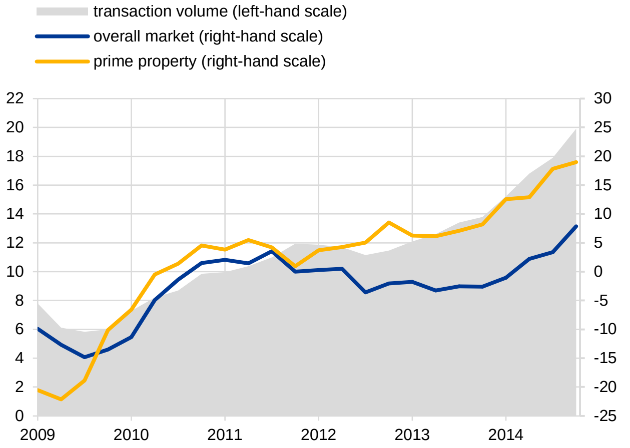
A similar regional dynamic pertains to the prime commercial segment centred in large cities, which has continued on its ebullient course in the context of the current low yield environment and the ongoing search for yield. Accordingly, investment activity in commercial property markets has remained robust, with underlying transaction volumes reaching new post-crisis highs (see Chart 1.34). Activity has been increasingly driven by foreign investors, with non-European investors, in particular from the United States, further increasing their European commercial property holdings, most likely also supported by the recent weakening of the euro vis-à-vis the US dollar. Demand for commercial property has been considerable in countries that had previously experienced pronounced corrections in prices, such as Ireland and Spain. Overall, continued strong investor interest was accompanied by a broad-based decline in yields on prime commercial property (see Chart 1.35), with yields in several countries such as France, Germany and the Benelux states already at or below pre-crisis levels. That said, intensified competition for prime assets and yield compression in core euro area property markets is increasingly driving property investors towards the non-prime segment and non-core countries.

Chart 1.34

Buoyant developments in euro area prime commercial property markets have continued

Commercial property price changes and investment values in the euro area

(Q1 2009 – Q4 2014; average of price changes in Austria, France, Germany, Ireland, the Netherlands and Spain)



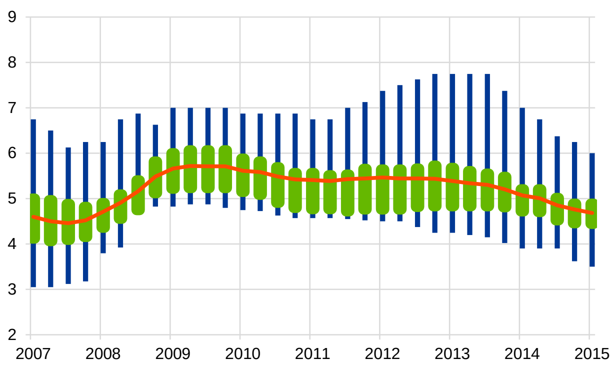
Sources: DTZ Research, ECB, experimental ECB estimates based on IPD and national data, and Jones Lang Lasalle.
Note: Four-quarter moving average of investment volumes.

Chart 1.35

Yields on prime commercial property across euro area countries have dropped further amid continued signs of search for yield

Yields on prime commercial property in the euro area

(Q1 2007 – Q1 2015; percentages, maximum, minimum, interquartile distribution and average)



Source: Jones Lang Lasalle.
Note: The euro area countries covered are Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain.

Valuation metrics for the euro area as a whole suggest that residential property prices are broadly in line with fundamentals, but moved further away from their long-term average for prime commercial property given continued strong price increases (see Chart 1.36). However, these aggregates harbour heterogeneous developments across countries, while similar disparities may emerge at the regional level, as reflected by signs of overvaluation of residential property in some large cities in Austria and Germany. It needs to be stressed though that valuation estimates are surrounded by a high degree of uncertainty as they do not capture country-level aspects, such as fiscal treatment or other structural market specificities (see Box 3).

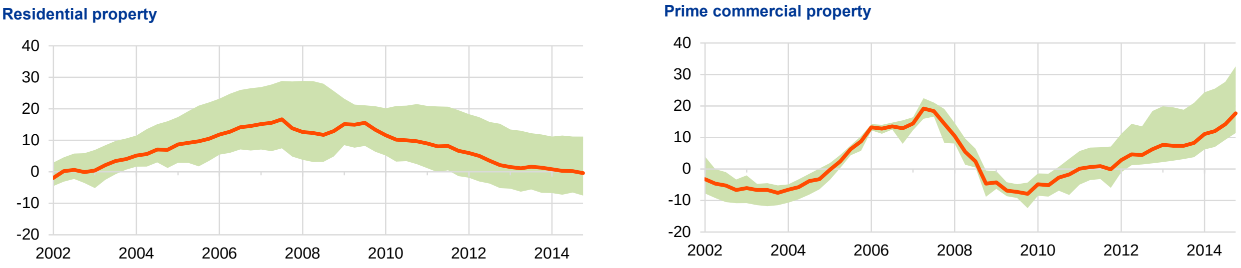
All in all, the recovery in euro area residential and commercial property markets is ongoing and should gather further momentum on the back of favourable financing conditions and improving economic growth prospects. However, the outlook for euro area residential and commercial property markets remains vulnerable from two angles. First, adverse economic shocks could reverse improvements seen in many countries and market segments and would further challenge those investors and borrowers who are already confronted with difficulties. Second, any disruption to financing conditions through, for instance, increased global risk aversion could affect the debt servicing capacity of both households and commercial property investors via the more limited availability and higher cost of funding, thereby contributing to rising rollover risks and aggravating the interest payment burden. Against the backdrop of a strong rebound in some countries and asset classes, price developments should be carefully monitored in the current low yield environment with the related search for yield in some market segments.

Chart 1.36

Valuation estimates for euro area residential property prices are in line with fundamentals, but they are above their long-term average for prime commercial property

Estimated over/undervaluation of residential and prime commercial property prices in the euro area

(Q1 2002 – Q4 2014; percentages; euro area average, minimum-maximum range of valuation estimates)



Sources: Jones Lang Lasalle, ECB and ECB calculations.
Notes: Valuation estimates for residential property prices are based on four different valuation methods: the price-to-rent ratio, the price-to-income ratio and two model-based methods. For details of the methodology, see Box 3 in *Financial Stability Review*, ECB, June 2011. For further details on valuation estimates for prime commercial property, see Box 6 in *Financial Stability Review*, ECB, December 2011.

Box 3

Statistical valuation metrics for residential property markets

Misaligned asset prices are among the key root causes of financial instability. This pertains particularly to residential property assets upon which the bulk of bank lending is secured. However, measures of the degree of house price misalignments from fundamentals are surrounded by a high degree of uncertainty. This reflects the challenge of adequately capturing the complex interaction of housing, rental and mortgage markets, as well as data constraints and measurement issues. In a cross-country setting, the challenge of identifying misalignments is made all the more difficult by the substantial heterogeneity in structural market characteristics across countries. Commonly used metrics are two statistical-based indicators, the house price-to-rent and house price-to-income indicators. This box assesses the usefulness of these statistical indicators when applied across euro area countries.

House price valuation metrics can provide useful information and a means of benchmarking developments against historical norms. In a cross-country setting, they can also provide a comparative framework for assessing imbalances in housing markets. From the policy perspective, such metrics entail a consistent benchmark to indicate whether further in-depth analysis is warranted at the country level at which point fuller cognisance can be taken of country specificities. Commonly used cross-country housing valuation metrics for this purpose can be broken down into two broad strands.

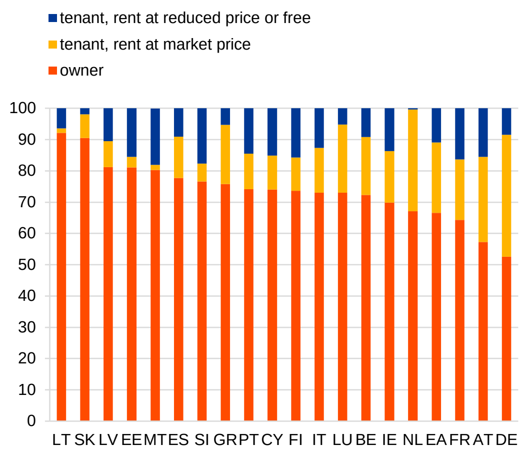
The first strand comprises statistical indicators and is the main focus of this box. This includes an indicator that relates house prices to rents based on an arbitrage assumption. Accordingly, if house prices rise beyond what is justified by fundamentals then households will postpone purchasing a house and rent instead, thereby producing downward pressure on house prices. The validity of this assumption rests on households having a viable alternative in the rental market. The extent to which this holds differs across euro area countries and largely depends on the scale and composition of national rental and owner-occupied markets. While on average rental markets only account for about 30% of the overall euro area housing sector, this differs considerably across countries (see Chart A). Further complicating this, rents may not always be set at market rates given considerable regulation of the sector. Last but not least, the house price-to-rent indicator typically assumes a constant long-term average, but there may be important structural breaks arising from policy changes. For these reasons, the house price-to-rent indicator, although commonly used as a benchmark for house price valuation, may not be a reliable metric for assessing valuations in some euro area countries.

Chart A

Rental markets are relatively small in several euro area countries

Tenure status in euro area countries

(2013; percentages)



Sources: European Commission SILC Survey and ECB calculations.

Another statistical indicator relates house prices to income. Similar to the house price-to-rent ratio, such indicators are generally related to their long-term average. If the ratio lies above its long-term average, prospective buyers may find purchasing a home, and servicing the associated debt, more difficult, which should reduce demand and lead to downward pressures on house prices. Given a strong prevalence of mortgage financing, such indicators are often transformed into "affordability" measures, which are adjusted to reflect the prevailing average interest rate on bank loans for house purchase.

The affordability ratio can be adjusted for interest rate developments in a number of ways. An interest rate variable, derived from a standard annuity formula, can be incorporated directly into the affordability ratio[5]. Alternatively, house prices can be regressed on income and mortgage interest rates and the residuals can be taken as the valuation estimates. To allow for the non-linear effect of interest rates on housing demand, the regression equation could be supplemented by a quadratic polynomial on interest rates. By way of illustration, house prices in the euro area as a whole appear moderately undervalued in 2014 when interest rates are taken on board (either by an annuity-based or a regression-based approach) rather than broadly in line with fundamentals as suggested by the basic house price-to-income indicator (see Chart B).

A separate strand relates house prices to a broader set of fundamental driving factors through multivariate regression analysis. While relating house prices to rents and incomes offers intuitive appeal and ease of construction, such measures might fail to capture important fundamental factors, notably those relating to the supply side of the housing market. In addition, given the symbiosis between housing and mortgage markets, developments in mortgage credit to households should be jointly modelled with house prices. That said, the fundamental factors themselves may be fragile. This is especially relevant in the case of mortgage credit[6], as an assessment of

[5] The ratio is constructed as follows: r/(1-(1+r)^(-T))*(house price index)/(income index) where T is the mortgage term and r is the nominal mortgage interest rate. Typically, a mortgage term of 20 years and a fixed mortgage interest rate are assumed. The interest rate-adjusted affordability indicator is then calculated as the deviation in percentage terms of the ratio from its long-term average.

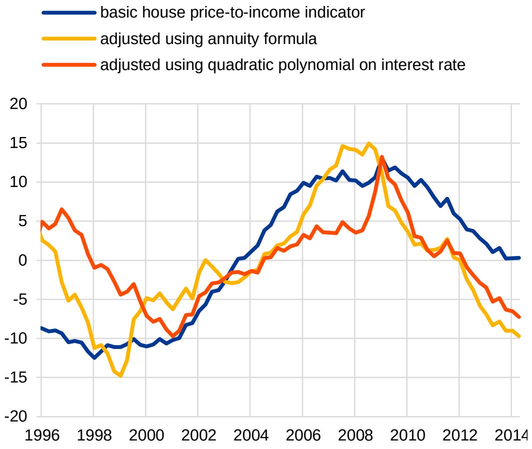
[6] Muellbauer, J., "When is a housing market overheated enough to threaten stability?", *Discussion Paper Series*, No 623, Department of Economics, University of Oxford, 2012.

Chart B

Residential property price valuations vary significantly across different house price-to-income metrics

House price-to-income ratios

(Q1 1996 – Q2 2014; percentage deviations)



Sources: Eurostat and ECB calculations.
Notes: Disposable income per household is used as the proxy for income rather than GDP per capita used in the existing framework. The interest rate is the average mortgage interest rate.

misalignments in house prices can only be meaningfully arrived at if allowances are also made for misalignments in mortgage credit. Further issues include the impact of structural breaks arising from, for instance, substantial changes to mortgage interest tax deductibility.

The three strands of metrics evaluated in this box form the basis of valuation assessments, both for the euro area and at the country level. The house price-to-rent and house price-to-income indicators offer simplicity, transparency and ease of computation, but given the numerous caveats attached to these indicators they may give an unduly distorted picture of the state-of-play regarding house prices in some countries. Thus, it may be preferable to place greater reliance on model-based approaches that take into account a wider set of fundamental factors. Work is under way to devise an analytical toolkit to address these issues, with the aim of rolling out further valuation metrics later this year.