3 EURO AREA FINANCIAL INSTITUTIONS

Mirroring an improving macro-financial environment, sentiment towards euro area financial institutions has continued to strengthen amid progress in bank balance sheet repair and in the implementation of the banking union. A high degree of uncertainty nonetheless persists regarding the outlook for euro area financial institutions – and for banks in particular – mostly linked to lingering concerns about banks' asset quality. For banks, rising loan loss provisioning levels continued to weigh heavily on ***financial performance****, dominating financial results at the end of last year (including sizeable one-off losses reported by some banks, partly in preparation for the ECB's comprehensive assessment). For insurers, the operating environment also remained difficult, with financial results displaying a modest but stable performance. A low-yield environment remains a particular concern for insurers over the medium term.*

While balance sheet repair continues on aggregate, it remains in many ways uneven across banks. The deterioration in asset quality has been closely linked to past macroeconomic challenges, and as such mostly borne by banks in vulnerable countries. As macro-financial conditions improve, an ongoing steady improvement in banks' ***capital positions*** *has increasingly benefited from new equity capital, following significant balance sheet deleveraging over the last years. Similarly, bank funding markets continue to strengthen, with further signs of receding fragmentation in both market and deposit funding. But fragmentation still persists in credit conditions, with bank lending generally having remained sluggish.*

Macro-financial ***scenario-based analysis*** *confirms that the financial stability risk outlook for financial institutions remains elevated in three main areas. First, the improving situation of euro area financial institutions remains vulnerable to a potential reassessment of risk in global markets, in particular via their exposures to compressed bond market premia, as well as emerging market-related assets. Second, despite further progress in loss recognition and balance sheet strengthening, asset quality concerns continue to trouble banks pending the results of the ongoing comprehensive assessment exercise. Third, despite a further easing in tensions in euro area sovereign debt markets, renewed stress at the heart of the euro area crisis remains possible, amid continued public debt sustainability challenges.*

While these scenarios have the potential to have the largest impact on banks' solvency, the continued bolstering of balance sheets by banks and policy actions may ultimately mitigate the severity of estimated impacts. Indeed, steady progress continues in strengthening the ***regulatory and supervisory framework*** *for financial institutions, markets and infrastructures both at the EU level and globally. Of particular relevance for the euro area, a further key step has been taken towards completing the banking union with the political agreement on the decision-making mechanism and funding for the proposed Single Resolution Mechanism that should help attenuate the link between banks and their sovereigns.*

3.1 BALANCE SHEET REPAIR CONTINUES IN THE EURO AREA BANKING SECTOR

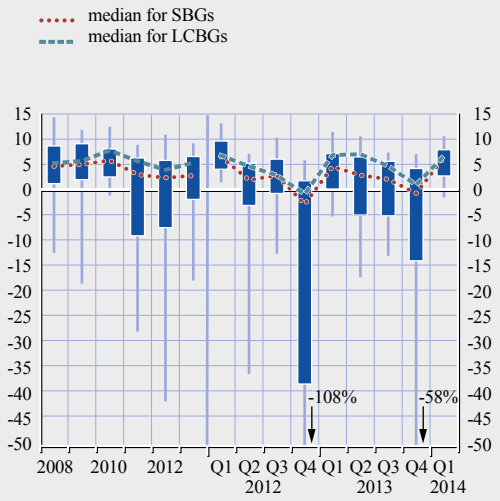
FINANCIAL CONDITION OF EURO AREA BANKS

Bank profitability remains subdued…

The **profitability** of euro area significant banking groups (SBGs) has remained weak, with a number of banks disclosing negative results in the fourth quarter of 2013 (see Chart 3.1). This weakness in earnings reflected three main factors. First, elevated loan loss provisions have continued, covering for asset quality deterioration as a legacy from the euro area recession. Second, some banks reported sizeable one-off losses in the last quarter of 2013, possibly also in relation to the preparation for the ECB's comprehensive assessment, involving a combination of a sharp rise in loan loss provisioning

Chart 3.1 Euro area banks' return on equity

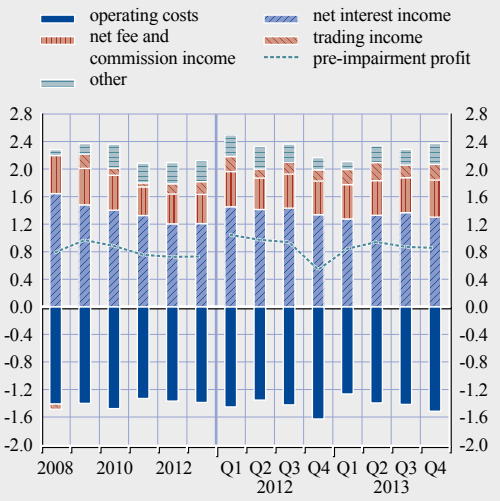
(2008 – Q1 2014; percentages; 10th and 90th percentiles and interquartile range distribution across SBGs)



Source: SNL Financial.
Note: Based on publicly available data on SBGs, including LCBGs, that report annual financial statements and on data on a sub-set of those banks that report on a quarterly basis.

Chart 3.2 Pre-impairment profit of euro area banks and its main components

(2008 – Q4 2013; percentage of total assets; median values for SBGs)



Source: SNL Financial.
Note: Based on publicly available data on SBGs that report annual financial statements and on data on a sub-set of those banks that report on a quarterly basis.

and impairments on other assets at the same time as an accelerated build-up of capital buffers. Third, some banks booked high litigation charges and significant declines in fixed-income trading revenues. Ultimately, while both the fourth quarter of 2013 and the full year 2013 average financial performances of euro area banks were slightly better than a year earlier, a median return on equity of 3% for SBGs for 2013 indicates currently muted internal capital generation for many banks. Looking at more recent developments, results for the first quarter of 2014 were, on average, slightly higher than in the same period last year.

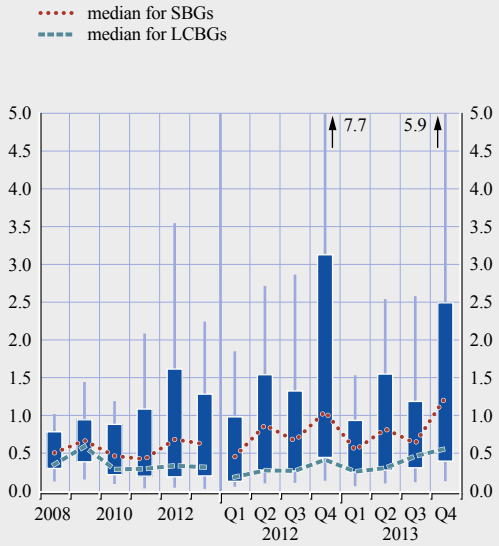
Banks' underlying operating performance, on average, showed little sign of improvement – with pre-impairment profits remaining flat in the last quarter of 2013 and for the full year (see Chart 3.2). This reflected a relative stability in both revenues and costs for 2013 as a whole. While stable on average, net interest income for banks in vulnerable countries showed signs of moderate recovery in the second half of 2013, with banks benefiting from declines in funding costs. Net fees and commissions rose slightly in the last quarter of 2013, partly reflecting higher fee income from corporate bond underwriting. Trading income also picked up somewhat, on average, in the last quarter of 2013 although patterns across banks varied, for instance due to differences in the relative weight of fixed income versus equity trading. At the same time, there was a slight uptick in operating costs for 2013 as a whole, albeit with substantial differences across banks. While some banks realised efficiency gains, as illustrated by lower cost-to-income ratios, others experienced increases, for instance as a result of increased provisions for litigation costs and restructuring costs.

… mainly due to still elevated or rising impairment costs…

Headline results have been heavily affected by higher impairment costs, disproportionately affecting the group of smaller and medium-sized SBGs (see Chart 3.3). These costs have mainly been on loans but, in some cases, also on non-financial assets such as goodwill related to former acquisitions. Stark differences in **provisioning** levels across banks persisted, mainly driven by

Chart 3.3 Impairment charges of euro area banks

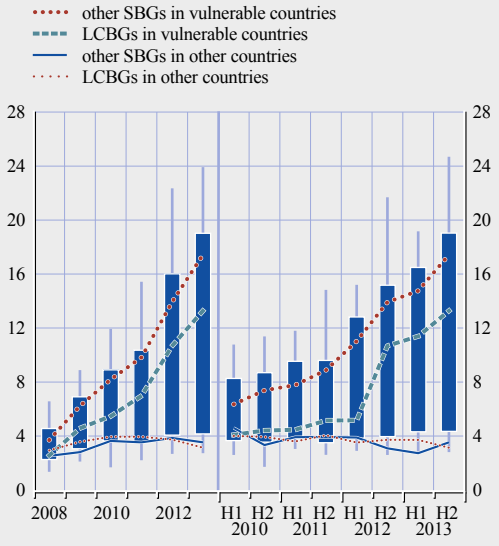
(2008 – Q4 2013; percentage of total assets; 10th and 90th percentiles and interquartile range distribution across SBGs)



Source: SNL Financial.

Chart 3.4 Impaired loans of euro area banks in vulnerable and other countries

(2008 – H2 2013; percentages; 10th and 90th percentiles and interquartile range distribution across SBGs)



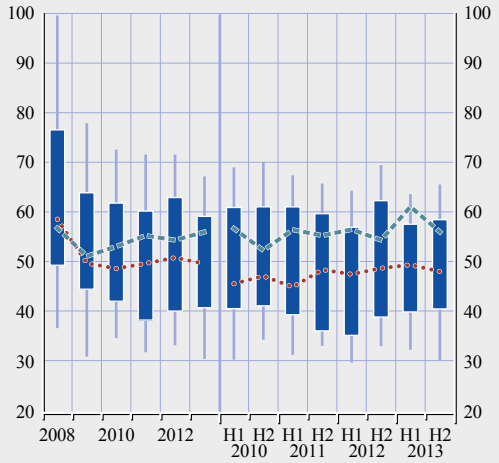
Source: SNL Financial.
Note: Based on publicly available data on SBGs, including LCBGs, that report annual financial statements and on data on a sub-set of those banks that report at least on a semi-annual basis.

factors related to the economic cycle. In 2013, the median value of credit risk costs for SBGs in vulnerable countries, albeit declining somewhat, was still more than double the level in 2010. Average loan loss provisions for banks in other countries remained at moderate levels.

The reported deterioration in **asset quality** was mostly borne by euro area banks in countries that had witnessed stress over the last years. The continued deterioration in the impaired loan ratio in the second half of 2013 reflected a stark increase in banks within vulnerable countries, and in particular for SBGs other than the largest banks (see Chart 3.4). This latter development was possibly linked to higher exposure to the SME sector that was mostly affected by weak macroeconomic conditions in these countries. The divergent asset quality trends nonetheless also apply to large banks, with a median reported impaired loan ratio of 13% for large and complex banking groups (LCBGs) in vulnerable countries, contrasting with only 3% for their peers in other countries.

Chart 3.5 Coverage ratios of euro area banks

(2008 – H2 2013; loan loss reserves as a percentage of impaired loans; 10th and 90th percentiles and interquartile range distribution across SBGs)



Source: SNL Financial.
Note: Based on publicly available data on SBGs, including LCBGs, that report annual financial statements and on data on a sub-set of those banks that report at least on a semi-annual basis.

… banks still burdened by high non-performing loans…

Despite higher provisioning by a number of banks, the **coverage** of impaired (non-performing) loans by reserves did not improve in the second half of 2013, with the median coverage ratio for SBGs remaining around 50% (see Chart 3.5). While slightly declining, LCBGs' loan loss reserves remain considerably higher compared with smaller SBGs. On the other hand, for a number of banks with relatively low coverage ratios, increased provisions could barely keep up with the increase in non-performing loans.

Box 6

PROVISIONING AND EXPECTED LOSS AT EUROPEAN BANKS

Mounting credit losses affected European banks greatly during the financial crisis. In many cases, the corresponding adjustment in loan loss provisions occurred rather precipitously, likely influenced by a combination of market pressure and supervisory action. While for IRB banks the calculation of expected credit loss is tightly regulated in the Basel II Accord and the Capital Requirements Directive, banks retain considerable discretion in determining the amount of loan loss provisions. As a general rule, banks may create specific provisions only when there has been a credit event. This restriction implies that provisions typically lag the deterioration in loan quality and do not consider expected loss that is based on forward-looking default probabilities. This divergence in loss recognition results in a provisioning gap that in the course of the crisis needed to be closed, occasionally with the intervention of the competent authorities.

EU capital regulation prescribes that a provisioning shortfall – the difference between eligible provisions and expected loss for the portion of a bank under the internal ratings-based (IRB) approach – must be deducted fully from regulatory capital. Excess provision amounts, in turn, may be added to Tier 2 capital up to 0.6% of risk-weighted assets (RWA), subject to limitation at supervisory discretion. This so-called *regulatory calculation difference* (RCD) therefore leads to a capital charge even if banks avoid adequate provisioning that would affect profits and thus book capital.

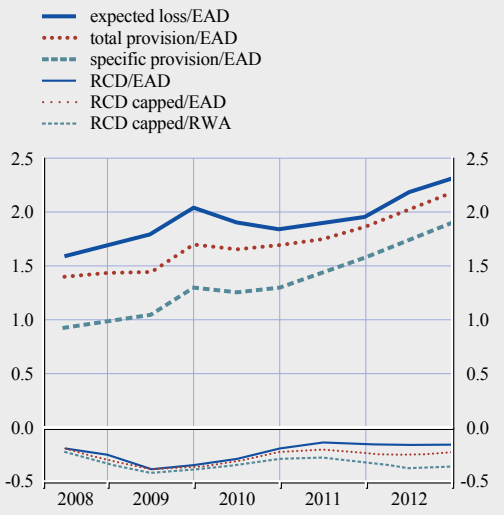
Empirical evidence points to a delay in loan loss recognition in the early phase of the global financial crisis. Data for 110 banks in 16 European countries between December 2008 and June 2013 collected by the EBA-ECB Impact Study Group show that the RCD, expressed as a percentage of total exposure (EAD or exposure at default), became more negative in 2008-09 as provisions were slow to catch up with rising expected loss (see the chart). The difference subsequently narrowed as expected loss stabilised, while provisions kept trending upwards. In some jurisdictions, general provisions accumulated before the crisis were converted into specific provisions, thereby easing the adjustment burden.

These developments were more pronounced at banks in vulnerable countries whose RCD initially exceeded the sample average but then improved markedly, in fact turning positive in 2013, not least due to additional supervisory provisions imposed in some countries under EU-IMF adjustment programmes. Overall, the increase in expected loss was primarily due to a rising share of non-performing loans that required an increase of the probability of default (PD) to 100%, whereas the PDs and thus the expected loss of non-defaulted exposures remained remarkably stable throughout the crisis.

The regulatory impact of the RCD is greater in practice since positive differences are capped and the deduction from regulatory capital needs to be expressed in RWA terms. As a growing number of banks began posting positive RCDs when the crisis abated, the cap of 0.6% of RWA became more binding, which is illustrated in a growing difference between the theoretical RCD (before applying the cap) and the RCD after capping (see the chart). At the same time, the rebalancing of risk assets and deleveraging more generally caused RWA to fall, thereby augmenting the regulatory impact of the RCD that, expressed in RWA, in 2013 was close to the maximum recorded in 2009 (see the chart). Ongoing changes to accounting standards have recognised this issue of the RCD, and their implementation should eventually contribute to correcting it. The International Accounting Standards Board, in 2013, published an exposure draft that introduces for financial instruments an expected credit loss model for the accounting recognition and measurement of credit losses. The reform expressly seeks to address the delayed recognition of credit losses that was identified during the financial crisis as a weakness in existing accounting standards. Under the proposal, recognition of credit losses would no longer be dependent on the bank first identifying a credit loss event. Rather, an estimate of expected losses would always be applied, based on the probability of a credit loss. For performing exposures this would require accounting for 12-month expected credit losses, while for exposures that have significantly deteriorated in terms of credit quality (including doubtful but not yet defaulted loans) lifetime expected credit losses would be recognised in the statement of financial position as a loss allowance or provision.

Expected loss, provisions and regulatory calculation difference

(2008 – 2012; percentages)



Source: European Banking Authority (EBA).

During the transition until IFRS 9 is implemented, the current accounting framework is likely to contribute to continued cyclicality in capital requirements. As past pronounced initial increases in the RCD reflecting a provision shortfall illustrate, some capital-constrained banks may choose to run up the RCD rather than fully recognise rising loan losses by building sufficient provisions as doing so avoids a further deterioration in profits and the capital position visible to stakeholders. However, a rising provisioning gap eventually requires an even stronger adjustment and may have pro-cyclical effects as banks then choose to achieve their capital target in part through optimising risk-weighted assets via rebalancing portfolios to the detriment of certain borrowers. The potential of correlated provisioning to create systemic externalities in the efficient deployment of bank capital would suggest a role for timely supervisory action aimed at avoiding undue delays in provisioning, including by requiring additional general provisions for prudential reasons.

Capital positions strengthened further…

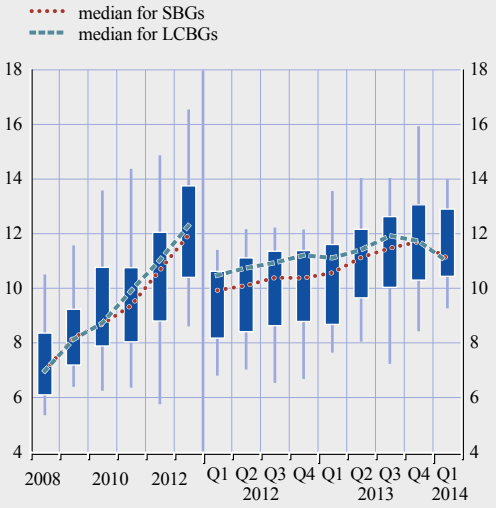
While the earnings performance was mixed, a steady across-the-board increase in euro area banks' **risk-weighted capital ratios** continued in the second half of 2013, although core Tier 1 (CT1) ratios slightly declined in the first quarter of 2014 (see Chart 3.6). It is important to stress, however, that changes in reported core Tier 1 ratios in the first three months of 2014 were mainly impacted by the application of new solvency rules under the CRR/CRD IV framework which led to an increase in risk-weighted assets. Looking at the development of fully-loaded Basel III common equity Tier 1 (CET1) ratios, the median CET1 ratio for euro area LCBGs rose to 10.4% at end-March 2014 (see Chart 3.7), slightly below the median level for their global peers, but still exceeding the fully phased-in 2019 minimum, including capital conservation and systemic importance buffers.

… mainly driven by deleveraging but also capital increases…

A decomposition of changes in banks' aggregate CT1 ratio over the last two years shows that, on average, deleveraging accounted for nearly

Chart 3.6 Core Tier 1 capital ratios of euro area banks

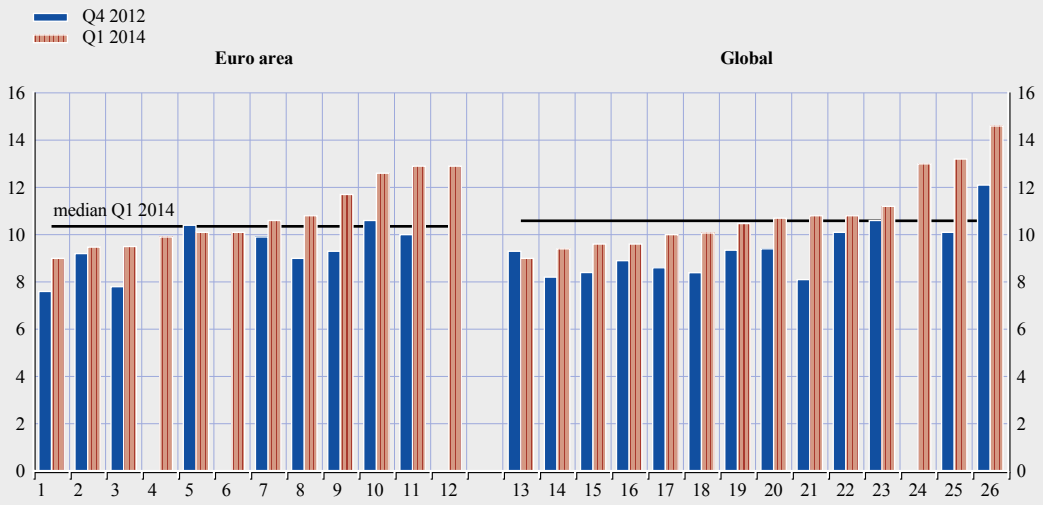
(2008 – Q1 2014; percentages; 10th and 90th percentiles and interquartile range distribution across SBGs)



Source: SNL Financial.
Note: Based on publicly available data on SBGs, including LCBGs, that report annual financial statements and on data on a sub-set of those banks that report on a quarterly basis.

Chart 3.7 Basel III common equity Tier 1 capital ratios of euro area and global large and complex banking groups

(percentages)



1 Commerzbank
2 UniCredit
3 Deutsche Bank
4 BBVA
5 ING Bank
6 Société Générale
7 BNP Paribas
8 Groupe BPCE
9 Groupe Crédit Agricole
10 Intesa Sanpaolo
11 ABN AMRO
12 LBBW
13 Bank of America
14 RBS
15 Barclays
16 JPMorgan Chase
17 Credit Suisse
18 Wells Fargo
19 Citigroup
20 Bank of NY Mellon
21 Lloyds
22 HSBC
23 State Street
24 Danske Bank
25 UBS
26 Nordea Bank

Source: SNL Financial.
Note: Based on publicly available data on LCBGs.

half of the increase in CT1 ratios over the period, closely followed by capital increases, then de-risking. Within this time frame, capital increases and a shift towards assets with lower risk weights were the largest contributors in 2012 (see Box 8 for details), while in 2013 deleveraging gained in importance in the improvement of solvency ratios with a more limited role of capital increases (see Chart 3.8). In stark contrast with developments in 2012, the de-risking of balance sheets did not help to increase capital ratios in 2013, at least on average, and the average risk weight even somewhat increased last year.

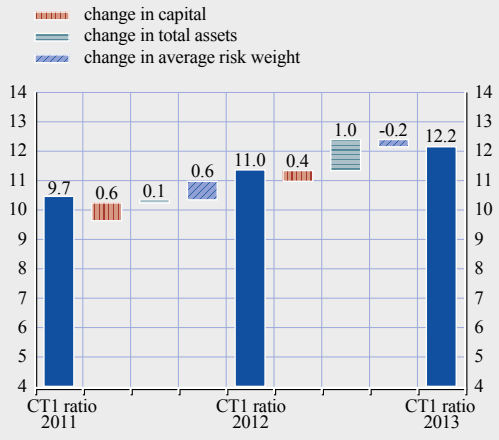
In addition to retained earnings, the most recent increases in CT1 capital have resulted from two other main sources. First, equity capital raisings have amounted to some €45 billion for SBGs since the middle of last year (excluding state-aid measures). Furthermore, some banks completed or announced capital increases in the first five months of 2014, possibly in preparation for the comprehensive assessment to address capital shortfalls in stress tests carried out at national level, but, in some cases, to repay state aid. Second, lower CT1 capital deductions and capital gains from asset sales have also contributed to capital increases.

… while some large banks face further deleveraging needs

Euro area SBGs also continued to improve their **leverage** ratios, measured as the ratio of tangible equity to tangible assets, although with differences between the largest banks and smaller SBGs (see Chart 3.9). This follows a rather large cumulative deleveraging by euro area monetary financial institutions (MFIs), which have reduced total assets by €4.3 trillion since peaking in May 2012. This process appears to have accelerated towards the end of last year, with an around €800 billion balance sheet reduction recorded in December 2013 alone – although around half of this decrease was reversed in January 2014 (see Chart 7 in the Overview). While this increased volatility in bank assets around the turn of the year partly reflects seasonal patterns, the higher than usual monthly balance sheet changes suggest some year-end balance sheet pruning ahead of the comprehensive assessment exercise.

Chart 3.8 Decomposition of changes in euro area banks' aggregate core Tier 1 ratio

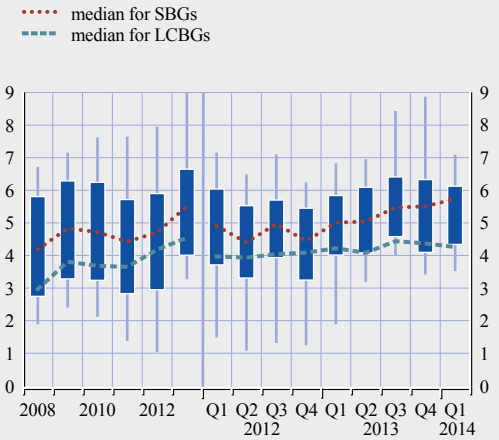
(2011 – 2013; percentages and percentage points)



Source: SNL Financial.
Notes: The aggregate core Tier 1 ratio is based on publicly available data for a sample of 69 SBGs. The positive contributions of changes in total assets and average risk weight represent deleveraging and de-risking respectively.

Chart 3.9 Euro area banks' leverage ratios (tangible equity to tangible assets)

(2008 – Q1 2014; percentages; 10th and 90th percentiles and interquartile range distribution across SBGs)



Source: SNL Financial.
Note: Based on publicly available data on SBGs, including LCBGs, that report annual financial statements and on data on a sub-set of those banks that report on a quarterly basis.

Box 7

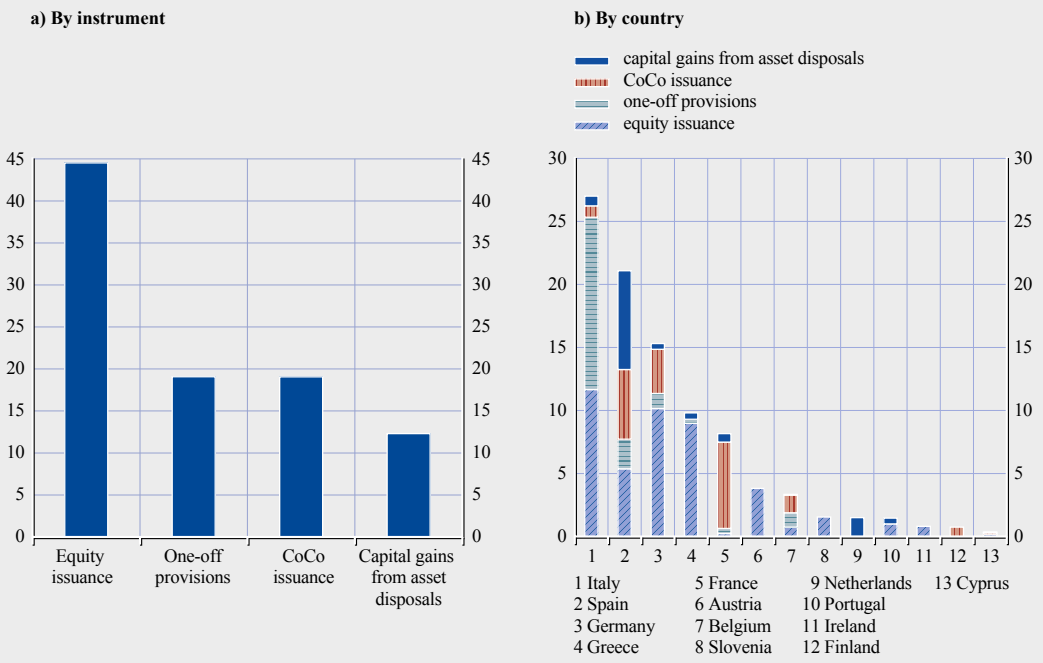
RECENT BALANCE SHEET STRENGTHENING BY EURO AREA BANKS

Since the third quarter of 2013, when discussions about the ECB's comprehensive assessment intensified, significant banking groups in the euro area have bolstered their balance sheets by over €95 billion through equity issuance, one-off provisions, contingent convertible (CoCo) bond issuance and capital gains from asset disposals.[1] This has been in addition to other forms of capital generation, including for example retained earnings and changes in deferred tax asset treatments, and de-risking (shifts from riskier to safer assets).

Issuance of equity has contributed the most to the strengthening of balance sheets, with completed and announced deals since July 2013 amounting to some €45 billion (see the chart below). One-off provisions, for example related to reclassification of assets and on extraordinary items, are estimated to have accounted for an additional €19 billion. Increased issuance of CoCos, to the tune of €19 billion, and capital gains from asset disposals of around €12 billion, have contributed to increasing banks' shock-absorption capacities as well.

Balance sheet strengthening by euro area significant banking groups

(since July 2013; EUR billions)



Sources: SNL Financial, Dealogic, banks' financial reports, market research and ECB calculations.
Notes: One-off provisions include provisions related to reclassifications and extraordinary items identified by banks as being related to the asset quality review.

1 The information in this box is based on publicly available, and in some cases partial, information and the numbers presented should therefore be seen as indicative estimates only.

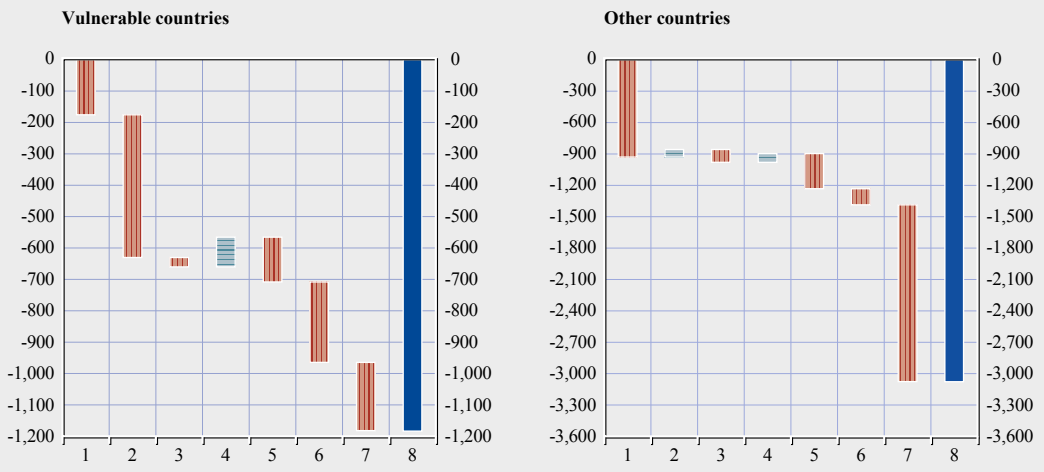
Actions by banks have, however, differed across euro area countries (see the chart above). These differences can largely be attributed to the differences in banks' operating environment, with the largest capital increases and other measures reported in Italy and Spain.

Some of the actions by banks were not triggered by the forthcoming comprehensive assessment, but are rather a result of – in some cases already planned – measures to de-risk balance sheets, improve capital levels amid previously identified insufficiencies and repay state-aid support. In addition, continued deterioration in banks' operating environment in some cases also necessitated action to further improve balance sheets. Nonetheless, some of the measures can be seen as preparatory action ahead of the comprehensive assessment and, regardless of the trigger for the action, banks' progress in strengthening balance sheets has been significant. The pre-emptive measures are welcome as they reduce the risk of congestion in bank capital markets after the publication of the comprehensive assessment results, should additional shortfalls be identified.

Looking back over a longer period, two main factors have contributed to bank balance sheet shrinkage. First, a reduction in derivative positions has made the most significant contribution to balance sheet shrinkage on aggregate, accounting for around half of the €4.3 trillion decline in euro area MFI assets since the peak in May 2012, and in particular by banks in other countries (see Chart 3.10). This largely reflects declines in the market value of interest rate derivatives over the last 12-18 months as well as the increased netting of (centrally cleared) derivative instruments which, in some cases, resulted in a substantial decline in banks' reported derivatives exposures. Second, a cutback in loans to the non-financial private sector (including asset transfers) specifically affecting vulnerable countries accounted for around one-third of the asset declines since May 2012.

Chart 3.10 Changes in euro area MFIs' key assets since May 2012 in vulnerable versus other countries

(June 2012 – Mar. 2014; EUR billions)



1 MFI loans (including Eurosystem deposits)
2 Loans to the non-financial private sector
3 Loans to other financial institutions/insurers and pension funds
4 Credit to government
5 Non-government debt securities
6 External assets
7 Other assets
8 Total assets

Sources: ECB and ECB calculations.
Note: Other assets largely consist of derivatives.

Box 8

TO WHAT EXTENT HAS BANKS' REDUCTION IN ASSETS BEEN A DE-RISKING OF BALANCE SHEETS?

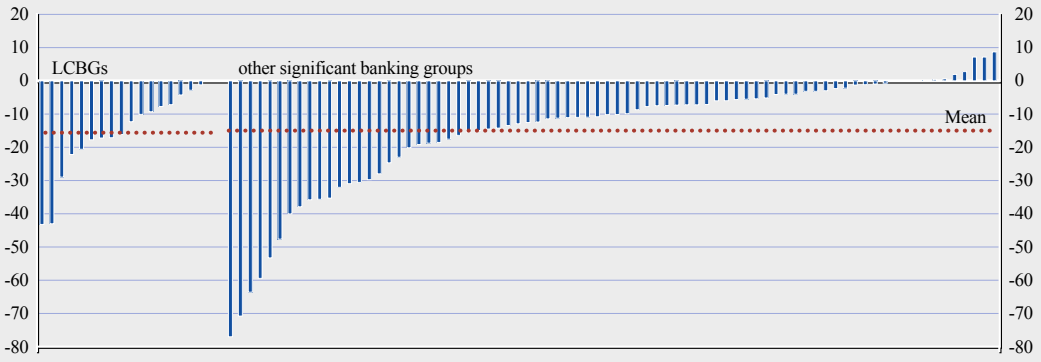
Deleveraging by euro area banks has been significant over the last years. A fall in euro area MFI balance sheets (euro area-domiciled assets only) by €4.3 trillion since May 2012 underscores euro area domestic balance sheet reduction; taking a broader view of *consolidated* balance sheets suggests an even larger figure. Indeed, significant banking groups in the euro area have reduced the size of their *consolidated* balance sheets (that is, including assets outside the euro area) by over €5 trillion – a 20% decline – since their respective peak values (which on aggregate was in the first half of 2012, though differing across banks). The extent of asset reductions has, however, varied greatly across banks with some banks reporting stable or even growing total assets, whereas banks most affected by the global financial crisis – some of which are undergoing orderly restructuring or a winding-down of operations – have cut more than two-thirds of their balance sheets (see Chart A). This raises the question to what extent the reduction in total assets has actually reduced banks' risk exposures.

Although SBGs reported a significant reduction in total assets during 2013, the decrease in risk-weighted assets was even greater (see Chart B). Indeed, whereas total assets increased each year from 2009 to 2012, on average, *risk-weighted assets* have been on an accelerated declining path ever since 2009 (see Chart B). The share of risk-weighted assets as a percentage of total assets has, on average, declined by some 13 percentage points, to around 45% of total assets, but with a range from 16% to 85% of total assets across banks. This could suggest that banks' have been more aggressive in cutting higher-risk exposures, but it has also led analysts, investors and supervisors to question to what extent the reduction in risk-weighted assets has been achieved by adjustments to banks' internal models.[1]

Information about the actual level of de-risking of banks' balance sheets can be obtained by analysing changes in *exposures at default* (EADs) – the credit risk exposure measure used in the Basel

Chart A Changes in euro area banks' total assets

(percentage decline from peak to most recent value)



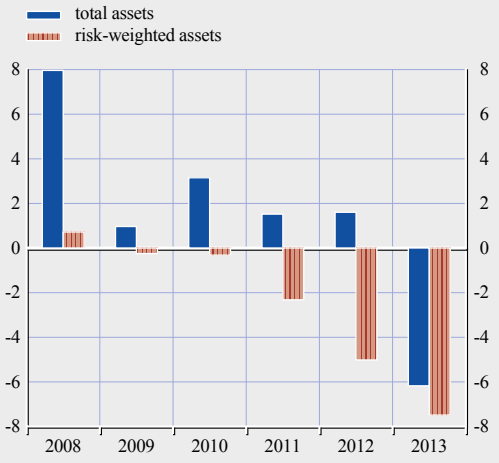
Source: SNL Financial.

1 See Box 4 in ECB, *Financial Stability Review*, May 2013.

framework – from banks' Pillar 3 disclosures. Between 2011 and 2013 data for a sample of 21 euro area significant banking groups (SBGs) for which information is available show that the aggregated credit exposure at default declined by around €682 billion, which suggests a relatively strong overall reduction in aggregate credit risk exposures. The aggregate decrease consisted mainly of a fall of €580 billion (-13%) in corporate exposures, €250 billion (-18%) in financial institution exposures and €155 billion (-45%) in securitisation exposures (see Chart C). These changes resulted in banks reducing their total credit risk capital charges by 34% from 2011 to 2013. Although the largest decrease in exposure was observed for corporates, this exposure class made up about one-third of the total credit risk exposure in 2013 and absorbed 57% of total capital requirements (see Chart D).

Chart B Changes in euro area banks' total assets and risk-weighted assets

(2008 – 2013; percentage change per annum; averages for significant banking groups)



Sources: SNL Financial and ECB calculations.

A shift from capital-intensive exposures, such as corporates, towards less capital-intensive exposures, such as sovereign and secured lending, reflects changes in banks' operating environment – including loan demand – and the increased supply of sovereign debt in the euro area during the period. That said, some of the exposure changes were likely also driven by efforts by banks to de-risk their balance sheet, also with a view to meeting more stringent regulatory requirements. This was reinforced by increasing exposures to retail mortgages that are less capital intensive. Furthermore, tensions in euro area funding markets are likely to have

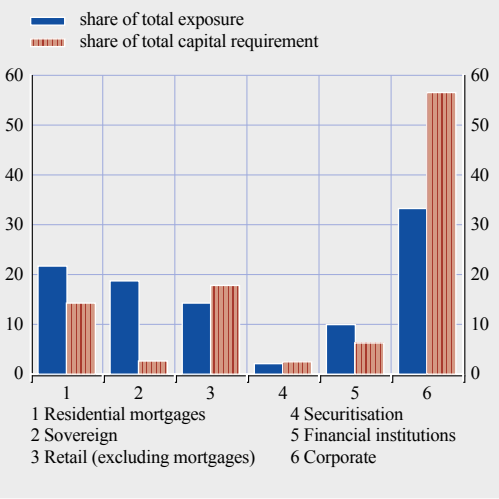
Chart C Changes in selected euro area significant banking groups' exposures at default

(EUR billions)

Sources: Banks' Pillar 3 reports and ECB calculations.

Chart D Selected euro area significant banking groups' exposures at default and capital requirements

(2013; percentage of total)



Sources: Banks' Pillar 3 reports and ECB calculations.

led to a reduction in exposures towards financial institutions, which was reinforced by regulatory changes in calculating the capital charge for this type of exposure. The decrease in securitisation exposures incorporates the significant reduction in the size of the securitisation market, but also regulatory changes that lead to higher capital charges for this type of exposure (e.g. more stringent market risk capital requirements under Basel 2.5).

All in all, euro area banks have significantly bolstered their loss-absorption capacities in recent years and the large reduction in euro area banks' balance sheets is likely to have contributed to lowering the level of risk confronting banks. It is, however, difficult to assess to what extent the asset shedding has led to a true de-risking of balance sheets. This is important as a deleveraging process could unduly reduce the supply of credit to the economy. The comprehensive assessment carried out by the ECB will make a significant contribution towards making banks' balance sheets more transparent. In addition, by identifying and implementing necessary action, it will contribute to banks' balance sheet repair and confidence building, which will support the banking sector's ability to extend credit.

BANKING SECTOR OUTLOOK AND RISKS

Outlook for the banking sector on the basis of market indicators

Market-based indicators point to an improving outlook

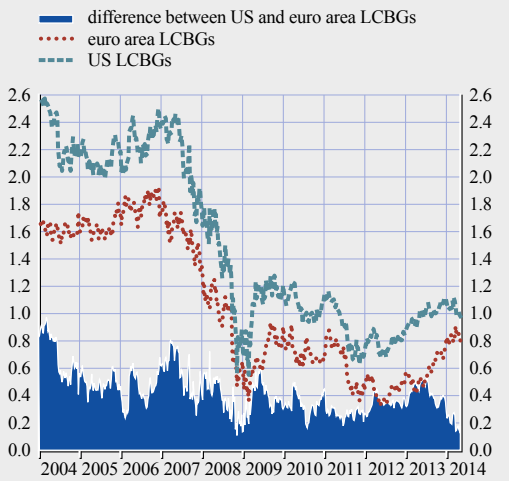
Market-based indicators suggest a further improvement in the outlook for euro area banks since the finalisation of the last FSR. In particular, euro area LCBGs' price-to-book ratios rose to their highest levels in more than three years (see Chart 3.11), thanks to progress made both in balance sheet repair and in the implementation of the banking union – both of which likely contributed to investors' increasing risk appetite for euro area bank stocks. Nevertheless, the latest reading of price-to-book ratios, which remain below 1 for a number of banks, suggests that concerns continue to linger about banks' asset quality and earnings outlook.

Indeed, while the latest earnings forecasts for euro area LCBGs signal an improvement for 2014, market expectations of profitability, on average, remain at low levels in particular for banks in vulnerable countries (see Chart 3.12). Furthermore, the implied volatility of euro area bank share prices, albeit declining, remained higher than that of general market indices (see Chart S.2.11), indicating the still higher uncertainty regarding the outlook for the banking sector in comparison with, for instance, that for the non-financial sectors.

Similarly, a market-based measure of systemic banking sector stress suggests that, following a significant decline in the second half of 2013, systemic risk within euro area banks is currently at the lowest level recorded in three years (see Chart 3.13). Looking at the dispersion of bank-level credit default swap (CDS) spreads, despite improvements across

Chart 3.11 Price-to-book ratios of large and complex banking groups in the euro area and the United States

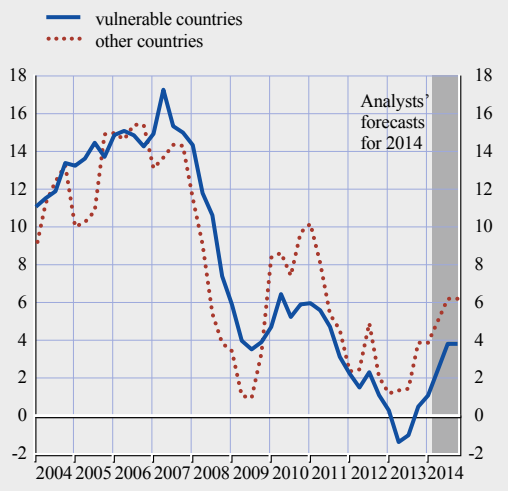
(Jan. 2004 – May 2014; ratio)



Sources: Bloomberg and ECB calculations.
Note: Median values for LCBGs in the United States and the euro area.

Chart 3.12 Return on equity of euro area significant banking groups and analysts' forecasts

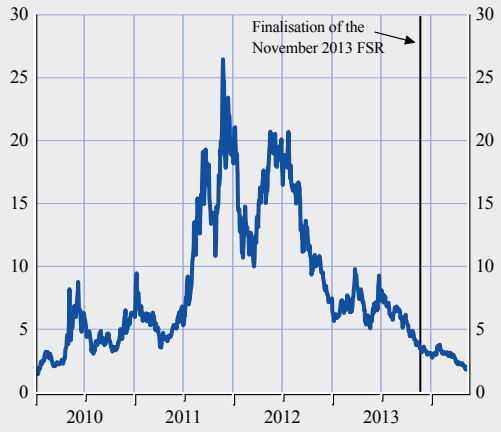
(Q1 2004 – 2014; percentages)



Source: Bloomberg.
Note: Based on median ROE and ROE forecasts for listed SBGs in vulnerable and other countries.

Chart 3.13 Measure of euro area banking sector stress

(Jan. 2010 – May 2014; probability; percentages)



Sources: Bloomberg and ECB calculations.
Notes: The measure contains the credit default swap-implied probability of two or more of a sample of 15 banks defaulting simultaneously over a one-year horizon. See Box 8 in ECB, *Financial Stability Review*, June 2012, for further details.

the board, differences in the perceived credit risk of large banks remain wide, partly highlighting differences in the outlook for asset quality (see Chart S.3.27). The equity price and balance sheet-based SRISK measure – an alternative measure of systemic risk – also declined in the last few months, falling to a level well below that observed in mid-2011 (see Chart 3.14).

Credit risks emanating from banks' loan books

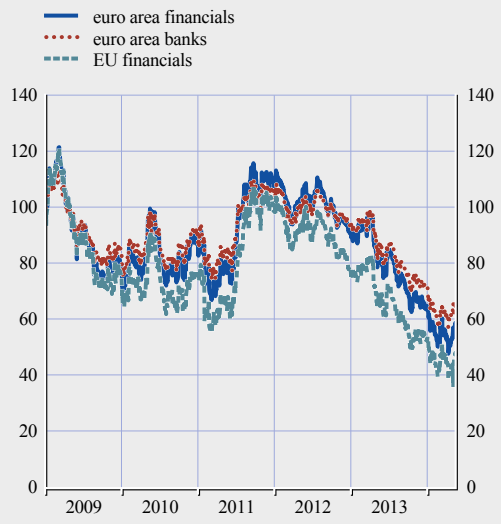
Credit risk remains elevated…

The level of **credit risk** in the loan book of the euro area banking sector is closely tied to economic fortunes and, with a weak, fragile, uneven and gradual economic recovery in the euro area as a whole, these risks remain elevated. The effects of this appear particularly pronounced for MFI lending to the non-financial private sector, which remained weak, while lending to households stayed broadly stable. Within these aggregate figures, financial disintermediation may be playing a role, with distributional consequences benefiting larger firms with access to international markets and hurting smaller and medium-sized firms reliant on bank-based finance.

This challenge for the euro area banking sector is, however, part of a broader phenomenon of non-financial sector deleveraging in many advanced economies. Indeed, credit conditions

Chart 3.14 SRISK for euro area banks and EU financials

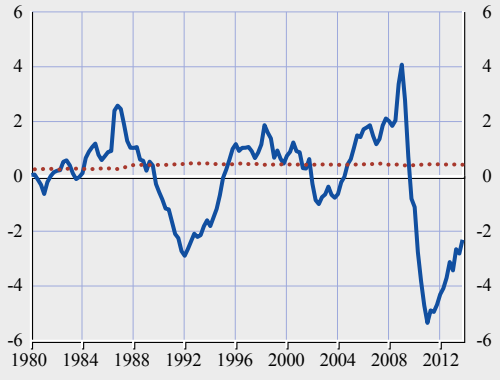
(Jan. 2009 – May 2014; index: Jan. 2009 = 100)



Sources: NYU VLAB and ECB calculations.

Chart 3.15 Global credit gap and optimal early warning threshold

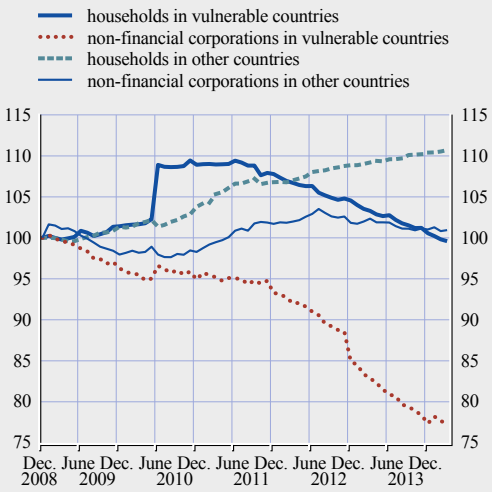
(Q1 1980 – Q4 2013; percentages)



Sources: ECB and ECB calculations.
Note: Index for 18 OECD countries – see Alessi, L. and Detken, C., "Quasi real time early warning indicators for costly asset price boom/bust cycles: A role for global liquidity", *European Journal of Political Economy*, Vol. 27(3), September 2011.

Chart 3.16 MFI lending to the non-financial private sector in vulnerable and other euro area countries

(Dec. 2008 – Mar. 2014, index: Dec. 2008 = 100)



Source: ECB.
Note: Data are not adjusted for loan sales and securitisation.

across OECD economies have remained relatively weak by historical standards, with a global credit gap for OECD countries remaining well below its early warning threshold for costly asset price booms, despite some further improvement in the second half of 2013 (see Chart 3.15). These aggregate developments, however, belie stark heterogeneity in lending conditions across countries as economic recoveries proceed at different speeds. Within the euro area, continued strong declines in lending to the non-financial private sector recorded in more vulnerable countries were partly offset by moderate lending growth in core countries (see Chart 3.16).

According to survey information, much of the observed weakness in credit flows over the last years has been closely tied to weak credit demand, rather than credit supply impediments. In this vein, the results of the April 2014 euro area bank lending survey suggest promising tentative signs of easing credit standards for household loans and a stabilisation of credit conditions for non-financial corporations (NFCs).

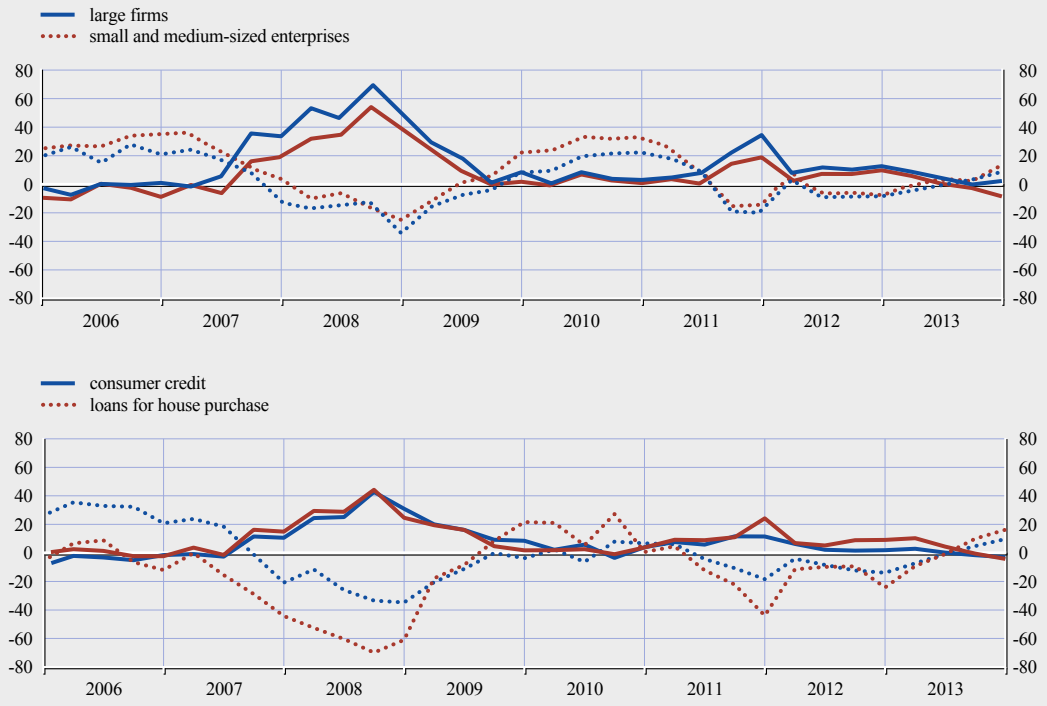
They also point to a recovery in credit demand for both households, irrespective of the purpose of the loan, and NFCs, regardless of the firm size. Perhaps more significant, survey evidence also suggests that the ongoing easing of credit standards has been relatively stronger for small and medium-sized enterprises (SMEs) than for large firms (see Chart 3.17). While these signs could indicate a turning point in credit flows, they are closely tied to the pace of economic expansion and its impact on income and earnings risks for households and NFCs in a context of ongoing challenging balance sheet adjustment.

… with a continued rise in non-performing loans

At the country level, a continued rise in non-performing loans (NPLs) is particularly visible in vulnerable euro area countries (see Chart 3.4 above), although there are some first tentative signs of a slowdown in the rate of increase of NPLs in some countries, most notably in Portugal. Available

Chart 3.17 Credit standards and demand conditions in the non-financial corporate and household sectors

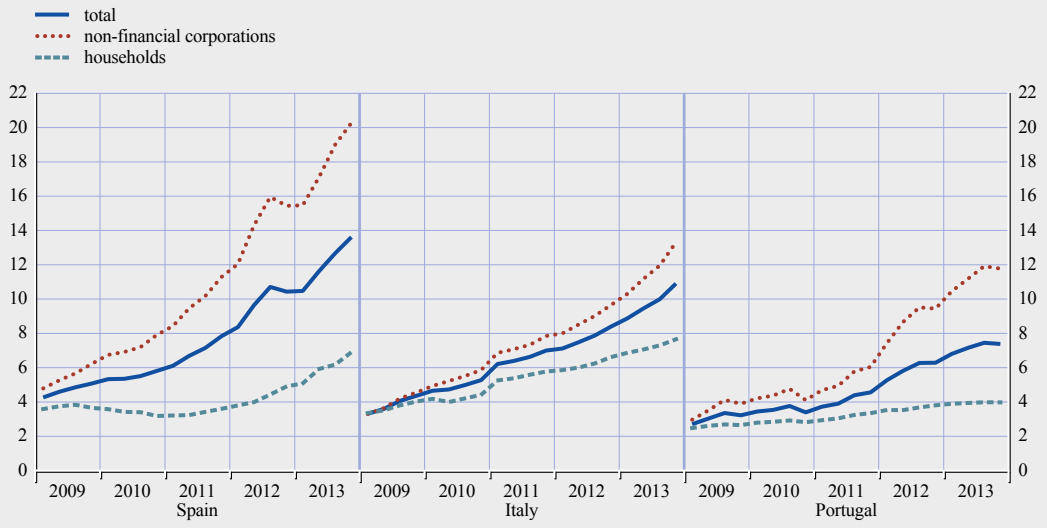
(Q1 2006 – Q1 2014; weighted net percentages)



Source: ECB.
Notes: The solid lines denote credit standards, while the dotted lines represent credit demand. Credit standards refer to the net percentages of banks contributing to a tightening of credit standards, while credit demand indicates the net percentages of banks reporting a positive contribution to demand.

Chart 3.18 Non-performing loan ratios in selected euro area countries, broken down by economic sector

(Q1 2009 – Q4 2013; percentages)



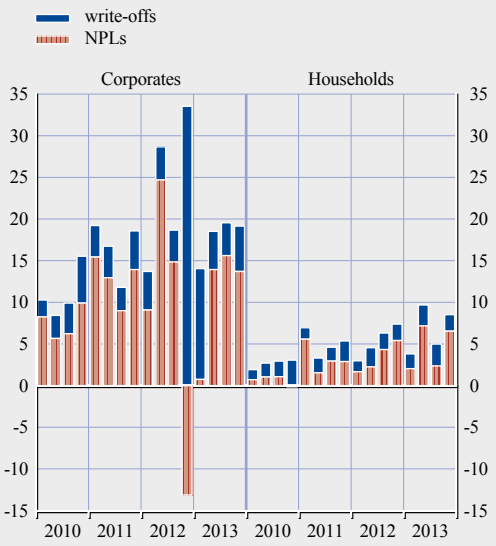
Source: National central banks.
Note: Given differences in national NPL definitions, cross-country comparability is limited.

data suggest that the rise in NPLs mainly stems from the corporate sector (see Chart 3.18). This is in part reflected in the persistent divergence of lending rates for NFCs and SMEs in particular (see Section 1).

A further rise in non-performing loans is likely in the coming quarters for countries which saw the most severe economic downturns, as asset quality trends historically tend to follow economic developments with a lag. Nevertheless, there are some tentative signs that the pace of credit quality deterioration could ease in an increasing number of countries as the economic recovery gains momentum. In fact, the combined quarterly change of corporate NPLs in Spain, Italy and Portugal (where sectoral NPL data are available) appears to have stabilised in the last two quarters of 2013 (see Chart 3.19). The upcoming comprehensive assessment exercise will be crucial in furthering the process of bank balance sheet repair, ensuring prudent

Chart 3.19 Quarterly change in non-performing loans and loan write-offs in Spain, Italy and Portugal

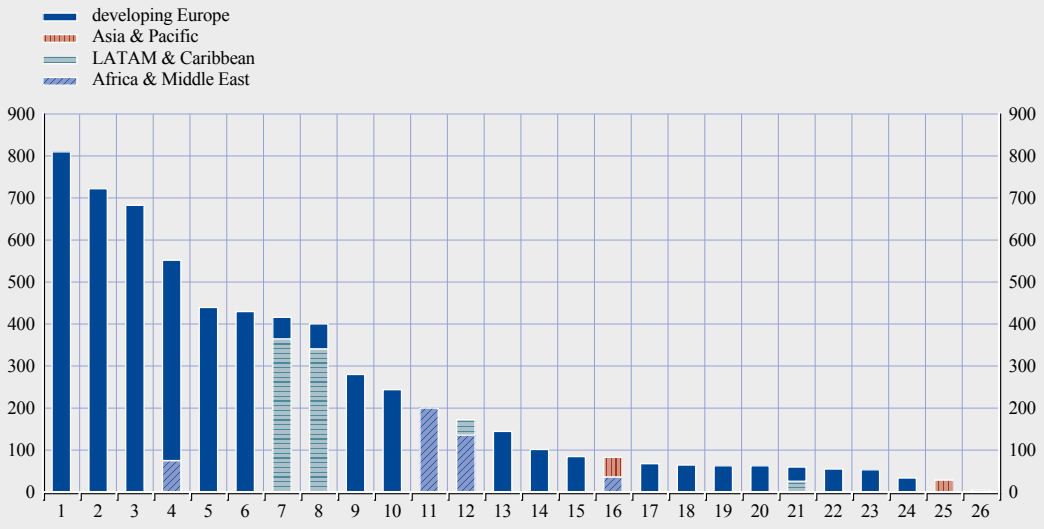
(Q1 2010 – Q4 2013; EUR billions)



Sources: National central banks and ECB.

Chart 3.20 Emerging market credit risk exposures of selected euro area significant banking groups

(June 2013; exposure at default as a percentage of common equity)



1 Raiffeisen
2 Erste Bank
3 NBG
4 NLB
5 BBVA
6 Santander
7 KBC
8 BCP
9 Unicredit
10 Banco BPI
11 Eurobank
12 ESFG
13 Société Générale
14 Bank of Cyprus
15 Commerzbank
16 CGD
17 Alpha Bank
18 NKBM
19 Intesa Sanpaolo
20 BayernLB
21 ING Bank
22 Rabobank
23 HRE
24 BNP Paribas
25 DZ Bank
26 PTSB

Source: EBA.

asset valuation and stricter loan loss recognition as well as providing more transparency on asset quality. Complementing this, the cleaning-up of bank balance sheets can be fostered at the national level by removing legal and judicial obstacles to timely NPL resolution.

Finally, while euro area banks' credit risks mainly emanate from domestic exposures, some banks with significant cross-border exposures in emerging market economies (EMEs) also face the risk of asset quality deterioration in some of these countries. In fact, some SBGs are highly exposed to EMEs, based on their exposure at default (EAD) to common equity, in particular to countries in "developing Europe" (see Chart 3.20). Should the macroeconomic environment deteriorate further, SBGs most exposed to EMEs could face higher loan losses on these portfolios in the period ahead (see Special Feature D for details).

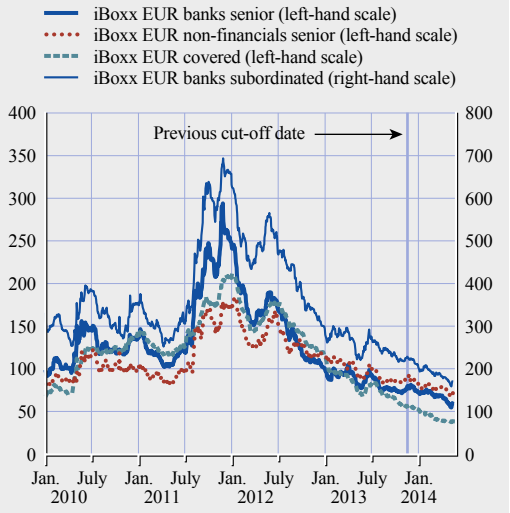
FUNDING LIQUIDITY RISK

Funding conditions remained very favourable…

Market-based bank funding conditions remain at their most favourable in years. Average spreads on bank debt continued to tighten for most, if not all, debt instruments (see Chart 3.21). There was higher issuance of both senior unsecured and subordinated debt by euro area banks in the first five months of 2014 compared with a year earlier (see Chart 3.22). Looking at the different funding instruments, investor appetite for junior claims remains very strong. The market for subordinated debt, including less traditional contingent convertible capital instruments (CoCos), also remained buoyant driven both by an increased supply of Basel III-compliant additional Tier 1 instruments and by the continued strong investor demand for high-yielding (hybrid) debt instruments. This trend is expected to persist throughout this year and beyond as banks will continue to build up their subordinated debt buffers to prepare to meet the CRR/CRD IV total capital and leverage ratios as well as minimum bail-in requirements.

Chart 3.21 Spreads on banks' senior debt, subordinated debt and covered bonds

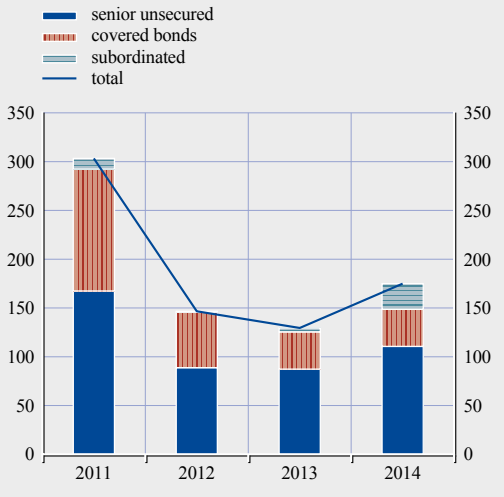
(Jan. 2010 – May 2014; basis points)



Sources: ECB and Markit.

Chart 3.22 Debt issuance of euro area banks broken down by type

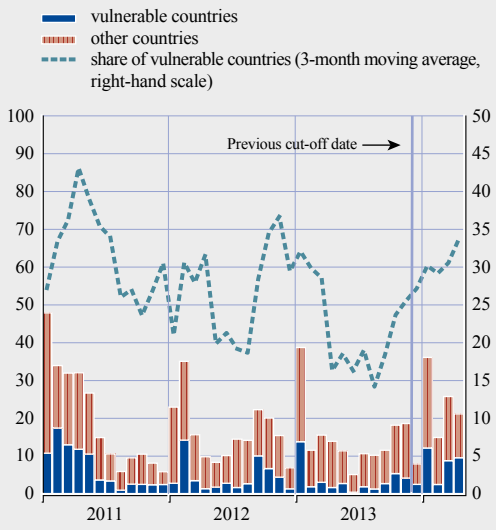
(Jan. – May for each year; EUR billions)



Source: Dealogic.
Note: Excludes retained deals.

Chart 3.23 Monthly senior unsecured debt issuance by euro area banks and the share of vulnerable countries

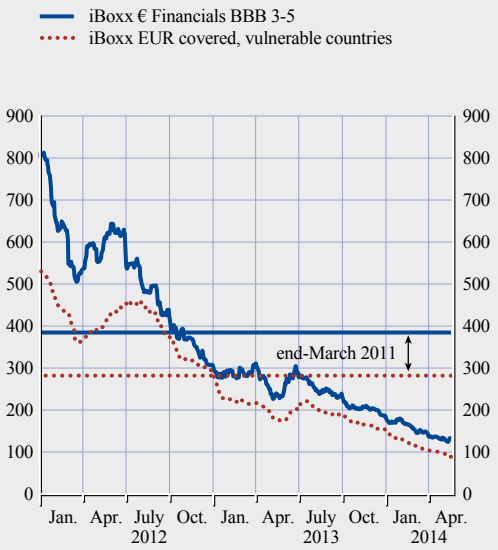
(Jan. 2011 – Apr. 2014; EUR billions, percentages)



Source: Dealogic.
Notes: Excludes retained deals. "Vulnerable countries" refer to Cyprus, Greece, Ireland, Italy, Portugal, Slovenia and Spain.

Chart 3.24 Covered bond spreads in vulnerable euro area countries and senior spreads for lower investment-grade financials

(Jan. 2012 – May 2014; basis points)



Sources: ECB and Markit.
Note: "Vulnerable countries" in this chart refer to Ireland, Italy, Portugal and Spain due to the availability of covered bond spread data.

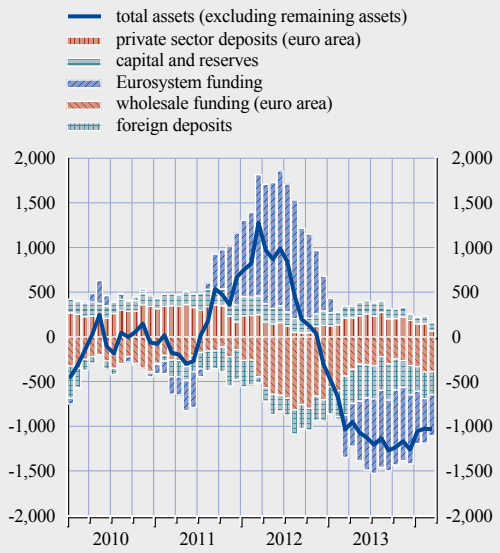
… and fragmentation of market-based funding also declined…

Market-based funding appears to be widely available, suggesting a strong reversal of the financial fragmentation that emerged in recent years. This includes the improved access to debt markets by some banks that had previously been shut out of capital markets, not least due to their weaker balance sheets/capital positions. In another sign of improving funding conditions, banks' debt issuance activity has become more broad-based, marked by a further rise in the share of banks in vulnerable countries in senior unsecured debt issuance (see Chart 3.23) as well as the return of several lower-rated banks to senior debt markets. Similarly, a number of second-tier banks with only intermittent market access in the past few years could increase debt issuance volumes and at lower costs. In fact, the segmentation of bank debt markets by pricing declined further, reflected in the narrowing spread differential on debt issued by banks in other countries and vulnerable countries (see Chart 3.24).

The funding situation of euro area banks has also benefited from continued **deposit** inflows in most countries, albeit at a slowing pace. As a result, the trend towards less reliance on wholesale funding sources continued, as indicated by a further decline in loan-to-deposit ratios (see Chart S.3.15), in conjunction with the continued deleveraging process which reduced banks' overall funding needs (see Chart 3.25). Moreover, banks in many euro area countries, including most vulnerable countries, continued to reduce their dependence on central bank funding by repaying funds borrowed through three-year longer-term refinancing operations (LTROs), with the overall repayment rate rising to 54% in mid-May 2014 from 39% at end-November 2013.

Chart 3.25 Monthly flows in main liabilities of the euro area banking sector

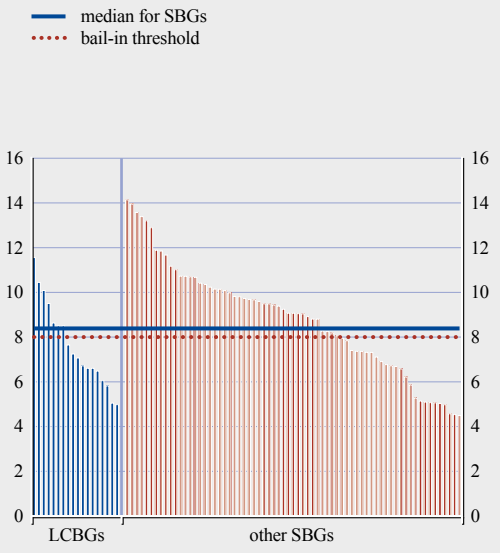
(Jan. 2010 – Mar. 2014; 12-month flows, EUR billions)



Source: ECB.
Note: Total assets are adjusted for remaining assets, which largely consist of derivatives.

Chart 3.26 Share of subordinated debt and equity in total liabilities for euro area banks

(end-2013 or latest available; percentage of total liabilities)



Sources: SNL Financial and ECB calculations.
Note: The calculation excludes derivative liabilities from the denominator.

… but improvements remain vulnerable to a potential reassessment of risk premia

Regarding remaining funding vulnerabilities, while funding market improvements for banks were underpinned by continued balance sheet strengthening as well as the decline in sovereign debt yields, the broadening issuer base towards banks with lower credit ratings as well as increased demand for higher-yielding but more complex instruments such as CoCos (see Box 9) should also be seen in the context of investors' search-for-yield behaviour. Therefore, improvements in the availability and cost of market funding remain vulnerable to a potential reassessment of risk premia and/or adverse changes in sovereign risk perceptions.

Furthermore, uncertainty remains regarding the extent to which bail-in concerns are reflected in the pricing of senior unsecured debt, while rating agencies are yet to fully incorporate bail-in implications in banks' unsecured ratings. It is likely that banks intend to cover much of the shortfall of "bail-inable" debt with subordinated debt so as to protect senior debt holders in order to achieve lower funding costs on a bigger portion of their debt structure. Therefore, banks with a buffer of equity and subordinated debt below the 8% bail-in threshold may be at risk of facing higher senior funding costs in future (see Chart 3.26). However, as yet no such relationship can be identified for a sample of SBGs, possibly indicating the dominance of other factors (e.g. sovereign risk) in the pricing of bank debt.

Box 9

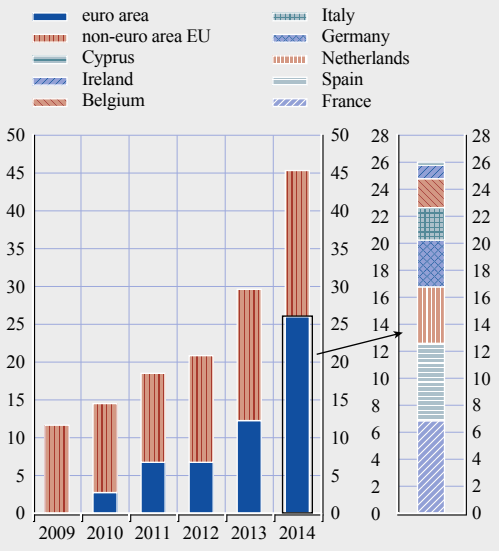
DEVELOPMENTS IN MARKETS FOR CONTINGENT CAPITAL INSTRUMENTS

As part of the phase-in of Basel III risk-weighted capital and leverage requirements, there is a potential for growth in the use of hybrid debt instruments. The quantitative risk-weighted capital requirements for the Tier 1 (T1) and total capital ratios are significant – implying a 1.5 percentage point capital ratio requirement using additional Tier 1 (AT1) capital (or hybrid debt), as well as a 2.5 percentage point requirement for Tier 2 (T2) capital instruments. At the same time, the leverage ratio needs to be met using Tier 1 capital with no restrictions on AT1 instruments. Under the European transposition of Basel requirements (CRD IV), all AT1 instruments are required to have specific write-down or conversion features, as demonstrated by contingent convertible bonds (CoCos). It is therefore not surprising that there has been a significant recent pick-up in CoCo issuance by euro area banks.

The CoCo market in Europe is relatively recent but not entirely new. EU banks have issued since 2009 a variety of contingent capital instruments in the amount of approximately €45 billion, of which €26 billion were issued by banks in the euro area (see Chart A). Banks' CoCo issuance activity picked up strongly in 2013 and in the first five months of 2014, partly driven by banks' efforts to issue CRR/CRD IV-compliant instruments. This is also reflected in the increasing share of AT1 instruments (see Chart B). In addition to the public CoCo issuances, some banks from countries under financial assistance programmes received state aid and recapitalisation in the form of CoCos that are owned by the state.

Chart A Outstanding amount of EU banks' publicly issued CoCos

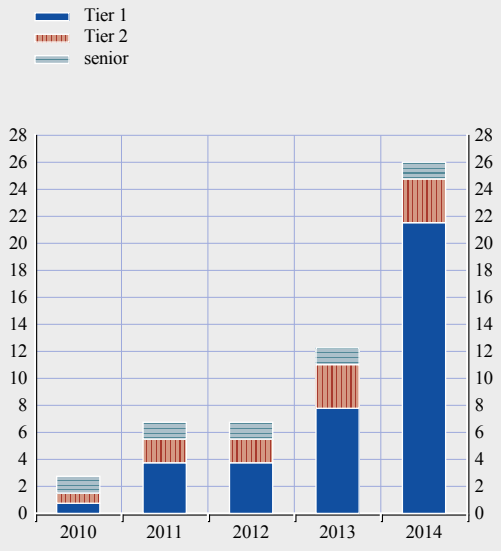
(Jan. 2009 – May 2014; EUR billions)



Sources: Dealogic, Bloomberg and ECB calculations.
Note: The chart does not include CoCos subscribed by the government as part of state-aid measures.

Chart B Euro area banks' cumulative CoCo issuance by type

(Jan. 2010 – May 2014; EUR billions)

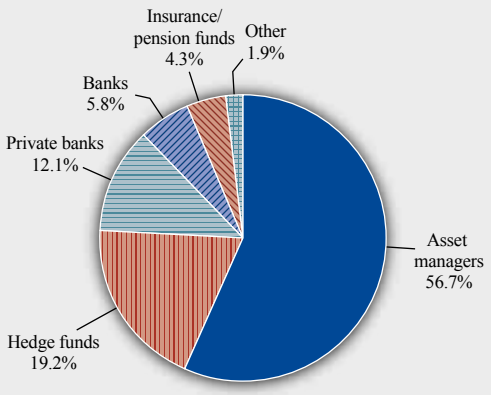


Sources: Dealogic, Bloomberg and ECB calculations.
Note: The chart does not include CoCos subscribed by the government as part of state-aid measures.

While on aggregate this nascent market segment is growing, the European CoCo market is by no means homogeneous and instruments differ in terms of their main features, including their loss-absorption mechanism, trigger levels, maturity or legal basis. Looking at the composition of CoCos by regulatory treatment, the majority of euro area banks' CoCo issuances are AT1 instruments. However, some European banks also issued Tier 2 instruments for different reasons such as national regulatory objectives or credit rating objectives. Regarding the loss-absorption triggering mechanism, most of the CoCos issued by euro area banks have been designed to meet AT1 criteria, with triggers based on common equity Tier 1 (CET1) ratios and with varying trigger levels, although they are mostly set at a minimum level of 5.125%. However, in some cases, CoCos have much higher triggers, even above 8% CET1. The loss-absorption mechanism for the majority of outstanding CoCos issued by euro area banks is principal write-down (permanent or temporary), although recent issues were dominated by CoCos with equity conversion triggers.

Chart C CoCo investors by type for issuances since 2013

(Jan. 2013 – May 2014)



Sources: Dealogic, Bloomberg and ECB calculations.
Note: Based on a sample of CoCo issuances representing 50% of total (public) issuance by EU banks since the start of 2013.

This growth in bank issuance clearly has a counterpart in growing investor demand. A CoCo investor base has developed, including a growing share of real money investors (see Chart C). This provides welcome stability to the investor base, encompassing now (according to market reports) predominantly asset managers and banks, in addition to "fast money" from private banks and hedge funds. The CoCo market is global in terms of the investor base geography.

The market started as a predominantly US dollar-denominated issuance market, but a growing euro-denominated market is catching up. CoCo structures remain complex and no trend towards standardisation is apparent to date. While less surprising for instruments issued before the agreement on the transposition of the Basel III framework into EU law, the kick-start of CoCo issuances following the June 2013 finalisation of the CRR/CRD IV package showed national regulators making ample use of the discretion granted to them, while not supporting greater harmonisation of structures.

While these state-contingent write-down possibilities offer a welcome addition to loss-absorption capacity, the complexity of CoCos is a non-negligible risk for this asset class with potential systemic relevance. CoCo investors are exposed to three main risk drivers: (i) the probability of conversion; (ii) the nature of the conversion (permanent or temporary write-down or conversion into equity); and (iii) the risk of coupon deferral or cancellation.

Two main systemic risks are relevant. First, with heterogeneous properties, the liquidity of this market could be tested in the event of correlated selling. The thickness of different tiers of a bank's capital structure becomes relevant in this regard, with the tiers being (from the most junior to the most senior capital instrument) CET1, CoCo AT1, Coco T2 and non-CoCo T2.

The thickness of each layer beyond potential regulatory minima defines how much more losses an institution can weather before the following more senior layer of capital would see losses. Second, moral hazard risks associated with the issuing bank may be relevant. CoCos can set incentives for banks to overstretch their risk-taking, gambling on the upside of risky exposures without cushioning this risk-taking with additional equity capital. A structural moral hazard risk inherent in CoCos may also be a potential subordination to equity.

The increasing signs of hunt-for-yield behaviour, combined with redirected capital flows from emerging markets to Europe, have benefited this growing market, pushing up valuations. This, in turn, may have allowed banks to raise cheap capital to bolster their balance sheets and improve their leverage ratios. It is however unclear whether current valuation levels internalise all the risks of these complex instruments. A reassessment of risks could not only hamper the building-up of bank capital structures, it could also negatively affect bank funding costs.

Market-related risks

Interest rate risk remains material…

Banks' **interest rate risk** remained material despite a decline in yields at the long end of the euro area yield curve which reversed much of the increase observed over the six-month period covered in the November 2013 FSR. This was accompanied by a flattening of government bond yield curves both in the United States and Europe when compared with the term structures observed at the time of the finalisation of the November 2013 FSR (see Chart S.2.5). Furthermore, there has been a further compression in bond yields of lower-rated sovereigns since late 2013, helped by investors' intensifying search-for-yield behaviour (see Section 2). Against this background, through their direct exposures to higher-yielding debt instruments, euro area banks remain vulnerable to a potential reassessment of risk premia in global markets, in particular via possible valuation losses on their government bond portfolios, to the extent that their positions are not adequately hedged.

... with some banks still exposed to lower-rated sovereign debt…

In this respect, data on euro area MFIs' **holdings of government debt** show a continuation of home bias in sovereign debt holdings for banks in most euro area countries (see Chart 3.27). In some cases, sovereign bond holdings as a percentage of total assets remain well above pre-crisis levels despite no further increase since mid-2013. While the elevated level of (mostly domestic) sovereign exposures partly reflects "normal" cyclical behaviour of bank balance sheets amid increased risk aversion, it also represents a vulnerability to unexpected increases in sovereign risk premia. Bank-level data from the EBA transparency exercise also suggest that exposures to debt of lower-rated sovereigns are not evenly distributed within the respective countries, with mid-sized or smaller SBGs having higher exposures compared with larger banks (see Chart 3.28).

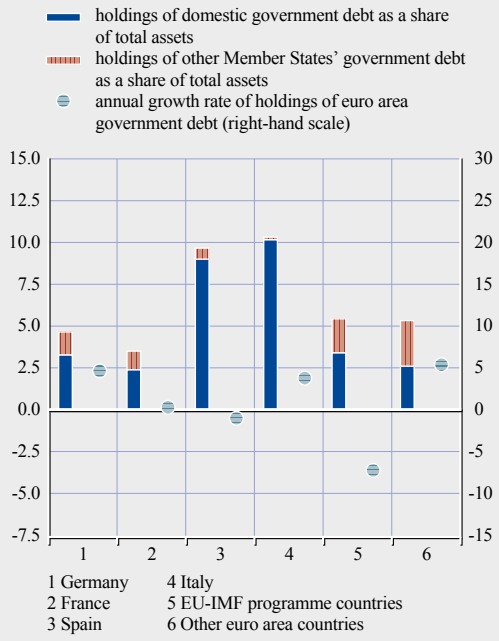
… while corporate bond exposures remain limited...

Regarding other fixed-income exposures, euro area MFIs, on average, further reduced their **holdings of euro area non-financial corporate debt** – albeit with considerable country-level heterogeneity (see Chart 3.29). The share of these securities in banks' balance sheets remains limited in most countries, even in those where banks increased their corporate bond holdings. This suggests that the direct impact of a sharp adjustment of risk premia on euro area corporate bonds would be contained at the aggregate level. However, some banks with material exposures to EME corporate bonds could be more negatively affected under such a scenario.

Finally, MFI statistics on share holdings indicate that euro area banks' exposure to this asset class has, on average, remained broadly unchanged at only 2.6% of euro area MFIs' total assets in March 2014 (see Chart 3.30). That said, bank exposures are widely dispersed across euro area countries, with the share of equity exposures in total assets ranging from 0.3% to 5.2%.

Chart 3.27 MFIs' holdings of domestic and other euro area sovereign debt, broken down by country

(Mar. 2013 – Mar. 2014; percentage of total assets; annual growth rate)

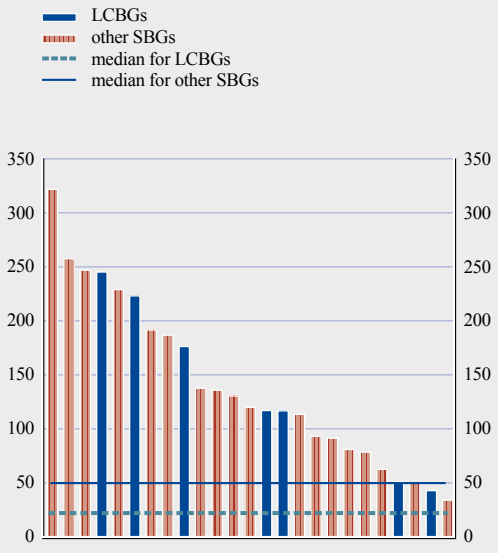


1 Germany
2 France
3 Spain
4 Italy
5 EU-IMF programme countries
6 Other euro area countries

Source: ECB.

Chart 3.28 Sovereign debt exposures of significant banking groups to vulnerable countries

(Q2 2013; percentage of Tier 1 capital)



Source: EBA.
Notes: Median values are based on all LCBGs and other SBGs covered in the EBA transparency exercise. The blue and orange bars show LCBGs and other SBGs, respectively, that are among the 25 SBGs with the highest exposures.

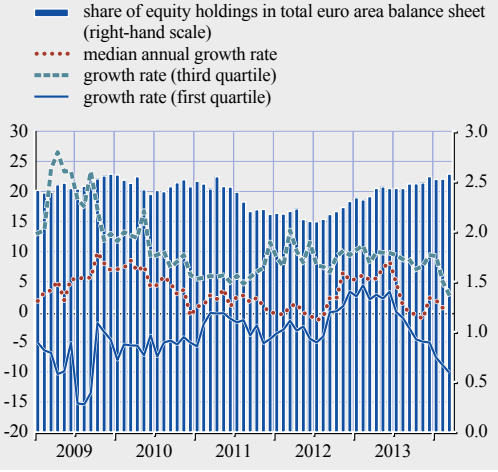
Chart 3.29 Annual growth rate of euro area MFIs' holdings of debt incurred by non-financial corporations and the share of such holdings in their total assets

(Q1 2007 – Q4 2013; percentage change per annum; share of total balance sheet)

Source: ECB.

Chart 3.30 MFIs' holdings of shares and other equity

(Jan. 2009 – Mar. 2014; percentage change per annum; share of total balance sheet)



Source: ECB.

3.2 THE EURO AREA INSURANCE SECTOR: STILL ROBUST BUT FACED WITH MULTIPLE CHALLENGES

FINANCIAL CONDITION OF LARGE INSURERS[1]

Insurers' performance remained stable

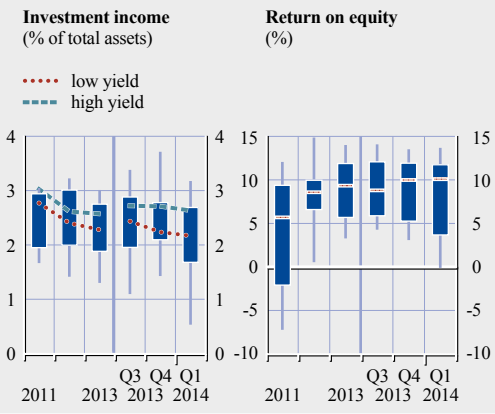
The results of large euro area insurers demonstrate a modest but stable performance amid a difficult operating environment. The overall growth of business volumes was muted on account of weak economic activity and intense competition (see Chart S.3.22 in the Statistical Annex). The latter was accentuated for life insurance in some countries through tax changes that worsened its competitive position vis-à-vis other savings products. The reported profitability of large euro area insurers however remained stable, supported by solid investment income and good insurance underwriting results (see Chart 3.31 and Charts S.3.21 and S.3.23). Investment income continued to show resilience to the low-yield environment, although companies headquartered in countries where yields had been low reported marginally lower returns in the second half of 2013. The extent of diversification of large insurers, the ongoing, albeit slow, portfolio adjustment towards higher-yielding investments, and the long-term nature of insurance business, reflected in an investment policy that is less sensitive to market risk, are all likely to have contributed to the limited differences between the two samples.

Nominal capital buffers at record levels

Capital buffers in the European insurance sector remain at historical highs (see Chart 3.32). The uncertainties related to the economic outlook and the forthcoming regulatory requirements may have contributed to the conservative capital planning demonstrated by large euro area insurers and to the decreasing dispersion especially at the lower end of the sample.[2] Valuation increases of assets may however have also played a role in vulnerable countries during the second half of 2013

Chart 3.31 Investment income and return on equity for large euro area insurers

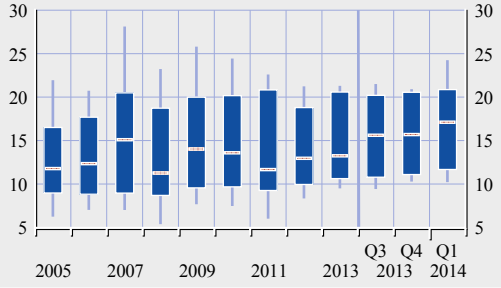
(2011 – Q1 2014; 10th and 90th percentiles, interquartile distribution and median)



Sources: Bloomberg, individual institutions' financial reports and ECB calculations.
Notes: Investment income excludes unrealised gains and losses. The median is shown separately for companies headquartered in countries where government bond yields have been high (7 companies) and in countries where they have been low (15 companies) over the period of observation.

Chart 3.32 Capital positions of large euro area insurers

(2005 – Q1 2014; percentage of total assets; 10th and 90th percentiles, interquartile distribution and median)



Sources: Bloomberg, individual institutions' financial reports and ECB calculations.
Note: Capital is the sum of borrowings, preferred equity, minority interests, policyholders' equity and total common equity.

1 The analysis is based on a varying sample of 21 listed insurers and reinsurers with total combined assets of about €4.9 trillion in 2012, which represent around 79% of the assets in the euro area insurance sector. Quarterly data were only available for a sub-sample (15) of these insurers.
2 The recent advances in Solvency II negotiations are likely to have reduced regulatory uncertainty to a significant degree lately. See Section 3.4 on regulatory developments.

and the first quarter of 2014, following the decrease in sovereign yields and the market-consistent treatment of assets, but not of liabilities, in place in many jurisdictions.

INSURANCE SECTOR OUTLOOK: MARKET INDICATORS AND ANALYSTS' VIEWS

Market indicators stable

Market-based indicators suggest a relatively benign outlook for the euro area insurance sector over the next year, notwithstanding a still muted economic outlook and challenges presented by the persisting low yields of highly rated government bonds. The market pricing of insurance companies continued its steady improvement (see Chart S.3.30). The decreasing trend in the perceived credit risk across large insurers has also continued (see Chart S.3.28).

Analysts expect continued convergence of yields…

Analysts' views tend to mirror those of market-based indicators (see Chart 3.33). The outlook is in general dominated by a baseline expectation of slowly increasing yields on highly rated government bonds and a continued stabilisation in the vulnerable countries. The latter has in particular resulted in recent revisions of outlooks by rating agencies for some of the insurers in the concerned jurisdictions.

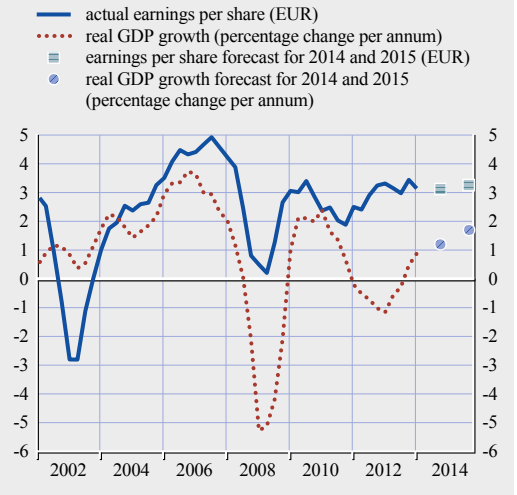
Analysts also note that although portfolio adjustments may increase credit and liquidity risk that insurers are exposed to, the move is likely to remain small scale, and thus diversification and illiquidity premium benefits are expected to continue to outweigh the risks in the short-to-medium term. The high level of capitalisation in the insurance sector and the perception of reduced regulatory and other uncertainties have raised expectations of increased dividend payments.

… but muted new business and pricing hamper profits

On the negative side, analysts expect the weak economic growth to impact underwriting income, as attracting new business is difficult for some life insurers in particular. Non-life insurance and reinsurance are expected to suffer from general price decreases, and competition from insurance-linked securities is seen as dampening particularly reinsurance premium income in the future.

Chart 3.33 Earnings per share of selected large euro area insurers and real GDP growth

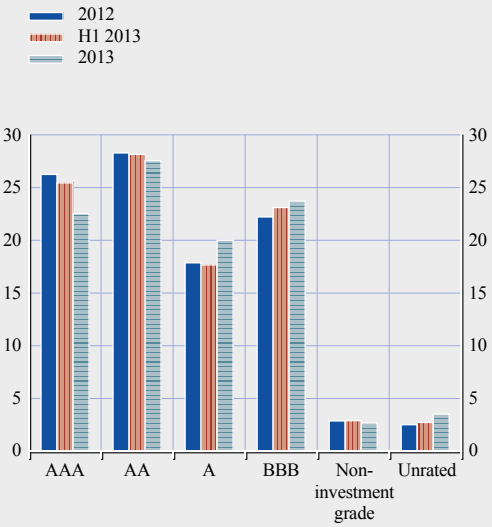
(Q1 2002 – Q4 2015)



Sources: European Commission, Thomson Reuters and ECB calculations.

Chart 3.34 Bond investments of selected large euro area insurers split by rating categories

(weighted average; percentage of total bond investments)



Sources: Company reports, JPMorgan Cazenove and ECB calculations.
Note: Based on the available data for 11 large euro area insurers.

INVESTMENT RISK

Investment activity of large euro area insurers is concentrated in government and corporate bond markets. Despite some as yet limited signs of portfolio shifts towards alternatives, investments in structured credit, equity and commercial property still remained at low levels on aggregate at year-end 2013 (see Chart S.3.25). The fixed-income portfolio in addition tends to be dominated by highly rated bonds (see Chart 3.34). Although some variation can be observed in the underlying data, the overall picture implies a generally significant investment exposure to the low-yield environment for large euro area insurers, irrespective of the country of residence.

Despite the decreased stress in government bond markets...

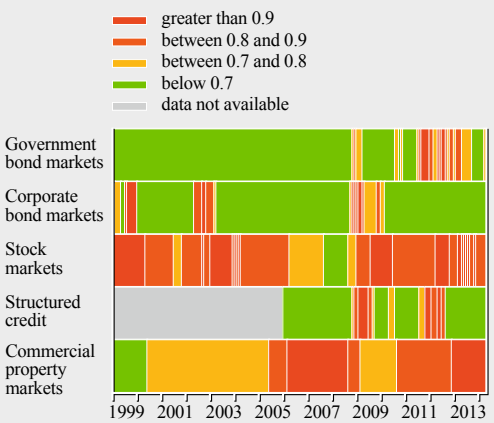
Given the high exposure to highly rated sovereign bonds, it is interesting that the investment uncertainty map signals some easing in these markets, although the latest data indicate some reverse movement (see Chart 3.35). This easing derives from the decreased volatility, coupled with moderately higher yields when compared with the recent historical lows. A continued moderate interest rate rise would have a generally positive impact on the economic solvency of insurers, attributable to the effect of the higher discount rates on the liabilities side. The potentially negative impact of an interest rate rise on prudential ratios in jurisdictions where liabilities are not treated in a market-consistent way would likely remain contained, not least owing to the current comfortable solvency levels. The pace of such a rise would be important for gauging the impact on capital, as a slower pace would allow insurers more time to readjust their portfolios. By contrast, a return to record low yields would aggravate the situation considerably not only in terms of economic solvency but in particular in terms of investment income.

... low yields are likely to strain income in the medium term

Despite the decreased stress in the government bond markets, the income impact of any eventual normalisation of interest rates on highly rated government bonds is likely to remain muted for some time to come. First, the yields still remain at very low levels. Second, as hold-to-maturity strategies shield insurers from market risk to some extent, they also imply a slow transition to higher-yielding products once yields rise. Although not likely to be critical for the large euro area insurers in the short-to-medium term, the current level of yields continues to constitute a significant strain on small and medium-sized, typically non-diversified, life insurers in the most concerned jurisdictions, in particular if they offer fixed guarantees to policyholders.

Chart 3.35 Investment uncertainty map for the euro area

(Jan. 1999 – Apr. 2014)



Sources: ECB, Bloomberg, JPMorgan Chase & Co., Moody's, Jones Lang LaSalle and ECB calculations.
Notes: Each indicator is compared with its "worst" level since January 1999. "Government bond markets" represent the euro area ten-year government bond yield and the option-implied volatility of German ten-year government bond yields; "Corporate bond markets" A-rated corporate bond spreads and speculative-grade corporate default rates; "Stock markets" the level and the price/earnings ratio of the Dow Jones EURO STOXX 50 index; "Structured credit" the spreads of residential and commercial mortgage-backed securities; and "Commercial property markets" commercial property values and value-to-rent ratios.

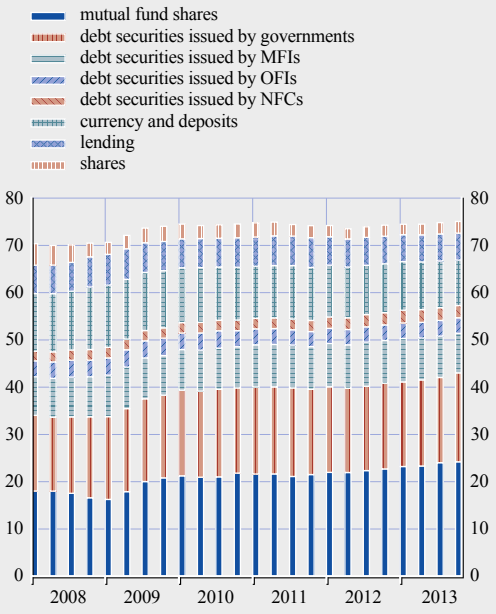
Portfolio adjustment to low yields remains slow

Portfolio adjustments to diversify away from low-yielding products appear to be taking place slowly. A slightly increasing share of the overall portfolio of euro area institutional investors is invested in mutual fund shares, while an increase in the share of government bonds in the portfolio can be observed in the course of the past 12 months (see Chart 3.36). The balance sheets

of selected large euro area insurers display some differentiation as regards the low- and high-yield environments; however, they indicate that the share of government bonds in the investment portfolio has increased during the second half of 2013 also for insurance companies domiciled in low-yield environments (see Chart 3.37). Individual company data show that domestic bond holdings in low-yield countries have not fallen markedly and, in some cases, have even increased. The observations suggest that besides the return on investment, also other factors such as home bias and geographical asset-liability matching, regulation or group-internal strategies within conglomerates, may have played a role in the investment decisions of institutional investors.

Chart 3.36 Financial assets of euro area insurance companies and pension funds

(Q1 2008 – Q4 2013; percentage of total financial assets)



Source: ECB data from balance sheets of insurance companies and pension funds.
Notes: MFIs refer to monetary financial institutions, NFCs to non-financial corporations and OFIs to other financial intermediaries. Counterparties reside in the euro area. The remaining assets (not pictured in the chart) consist of financial assets with counterparties residing outside the euro area.

Risks from credit risk protection remain small

Finally, exposures of the insurance sector to credit risk protection selling have remained modest at the global level. Such non-traditional activities may however become an interesting source of income should the low-yield environment continue to prevail, and therefore warrant continued monitoring.[3] The share of direct lending by institutional investors to counterparties, another bank-type activity which requires dedicated risk management, has been on the rise in some euro area countries. On aggregate the level remains low, however (see Chart 3.36). The realised developments indicate that notwithstanding the anecdotal evidence that insurers are increasing direct lending activities and investing in mortgages or infrastructure projects, the amounts committed so far remain modest.

Adjustment to low yields slow and with home bias

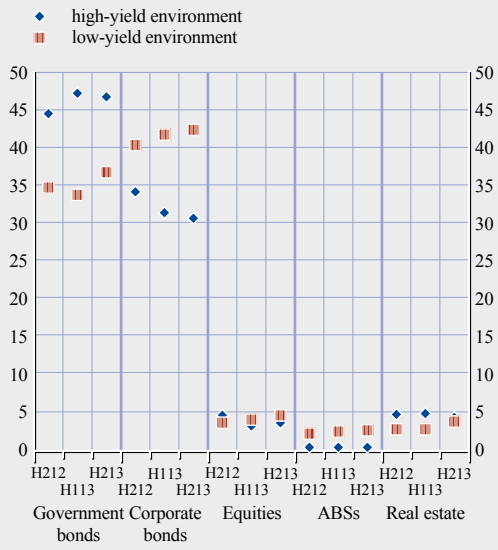
All in all, the evidence points towards an ongoing gradual adjustment of investment strategies by euro area insurers in an environment of low and uncertain returns on investment. At the same time, the process continues to be slow and directed by what could be characterised as a significant home bias in investment strategies. As a result, most euro area insurers and pension funds remain significantly exposed to the low-yield environment, which constitutes the key risk in the medium-to-long term. The moderate pace of developments is still likely to lead to positive diversification benefits before becoming a threat to financial stability, and in some cases regulatory action to readjust potentially overly strict requirements on specific investment products could result in improved market outcomes.[4] Notwithstanding these benefits, the ongoing transition may also imply an increased market, credit and liquidity risk in the future and should therefore continue to be monitored closely in parallel.

3 The proposed policy measures applicable to global systemically important insurers (G-SIIs) are targeted at containing this risk, among others. See http://www.financialstabilityboard.org/publications/r_130718.pdf

4 EIOPA's proposal to introduce a more granular treatment of securitisations is an important initiative in this regard. See "Discussion paper on standard formula design and calibration for certain long-term investments", 19 December 2013, available at https://eiopa.europa.eu. See also Box 11 on the revival of qualified securitisation for a more general view of the issue.

Chart 3.37 Investment mix for selected large euro area insurers

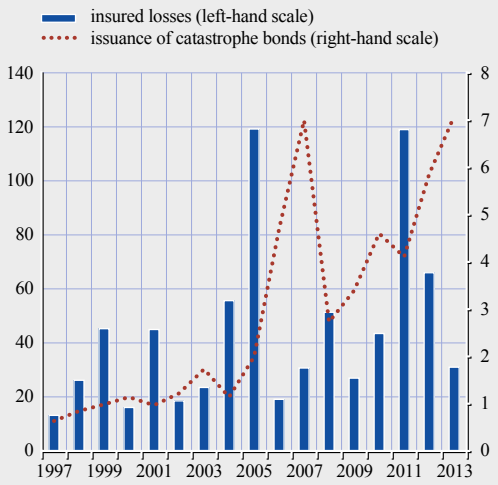
(H2 2012 – H2 2013; percentage of total investments; medians)



Sources: JPMorgan Cazenove, individual institutions' financial reports and ECB calculations.
Notes: Based on consolidated financial accounts data. The equity exposure data exclude investment in mutual funds. Insurers are divided into high and low-yield categories on the basis of the country of residence.

Chart 3.38 Insured catastrophe losses and catastrophe bond issuance

(1997 – 2013; USD billions)



Sources: EQECAT, Munich Re, Swiss Re, Guy Carpenter and ECB calculations.

UNDERWRITING RISK

Underwriting risks remain key short-term risks for insurers, given the significant impact natural catastrophes can have on capital. Inadequate pricing of policies and life insurance guarantees constitutes another major source of risk in the medium-to-long term, as premiums collected and the return on investment may not suffice to pay the contracted liabilities. Recent developments in the markets imply strains for both the reinsurance and life insurance business models as regards long-term challenges – mainly impacting profitability for the time being, but they may in the future constitute a solvency issue for some smaller, non-diversified players in the sector.

Low insured catastrophe losses and increased issuance of alternative capital…

Low claims from catastrophe losses have supported the accumulation of capital in the non-life and reinsurance sectors (see Chart 3.32). Insured catastrophe losses remained well below the ten-year average in 2013, the major single event having been the hailstorms in Germany in June and July with estimated insured losses of USD 4 billion (see Chart 3.38). The Atlantic hurricane activity also remained low in 2013.

Strong issuance of insurance-linked securities, such as catastrophe bonds, has further increased capital inflows into reinsurance activities (see Chart 3.38). After a strong first half of 2013, the year-end saw a surge in monthly issuance. As a consequence, the total issuance for the year 2013 reached the all-time high of 2007. The increased interest by institutional investors, but also hedge funds, in the presence of low returns on more traditional investments is also reflected in the decreasing yield on the products.

… have dented non-life pricing

The record capital buffers and the increased inflow of funds into insurance-linked securities such as catastrophe bonds have resulted in some overcapacity in the market, which has been reflected in the generally muted price developments for non-life insurance and mostly declining prices of reinsurance policies. Reinsurance prices for natural catastrophes in particular declined almost universally around the globe. The overall impact on the underwriting profits of European insurers is however expected to be subdued. First, large euro area (re)insurers are in general well diversified geographically and across business lines. The pricing of motor insurance, for example, is continuing on its upward trend in many core European markets, and some loss-impacted areas in Europe also saw increasing reinsurance prices. Second, traditional reinsurance has some distinctive benefits for insurers in terms of product design and is therefore likely to be able to defend its market position against the standardised catastrophe bonds.[5] Indeed, reinsurers seem to have increased their efforts to produce more tailored offers to their customers and put the focus on product innovation, including developing solutions for risks that currently remain largely uninsured.[6]

Life business model strained by low yields

Despite somewhat higher yields on highly rated government bonds, the overall level remains very low and in some jurisdictions continues to strain the business models of small and medium-sized life insurers that offer fixed policyholder guarantees, in particular. These companies are also typically worse placed to increase the share of alternative investments such as infrastructure loans owing to lesser financial and risk management capacity, and may be less flexible in the short run in terms of innovation and product design. The problem manifests itself in different ways, depending on the operational environment in each jurisdiction and the exact business model deployed. A protracted period of low yields could result in significant solvency problems in 2023 for some of the German life insurers, which have typically offered generous guarantees to policyholders in the past.[7]

A guarantee may constitute a distinctive advantage of a life insurance policy in comparison to other savings products, the lowering of which may significantly reduce its attractiveness and thus threaten new business or even risk lapses on existing policies. Competitive pressure may aggravate the problem further. In some jurisdictions, competition from banking products, sometimes accentuated through tax initiatives that are disadvantageous for life insurance, has already resulted in increasing lapses and therefore shrinking markets (see Chart S.3.22). Low GDP growth sometimes compounds the impact. Decreasing guarantees in such an environment may indeed be risky.

Continuing difficulties in attracting new business and retaining existing clients could result in a re-emergence of liquidity risk, in particular if cash demands for lapses and surrenders are increased at the same time as investments in alternative, potentially less liquid, products gain pace in the low-yield environment. While not constituting a major or widespread risk at present, also owing to the long-term nature of contracts and the penalties in place for early redemption, the liquidity situation should be monitored as its pace of change can be significantly faster than that of other risks to the insurance sector. In any case, the developments underline the need to revisit life insurance business models to ensure that they are sustainable and not based on unrealistic assumptions about investment returns. In some countries, supervisors have introduced additional provisions to cater for the specific risks arising from the interaction of the low-yield environment and the life insurance business model. Although such provisions may further add to the short-term strains on the industry, they are relatively limited compared with risks that threaten to arise in the long term.

5 For example, a reinsurance policy can be better tailored to cover specific risks and can have renewable features.
6 Such risks include aspects of natural catastrophes, terrorism and cyber risk, among others.
7 See "Bridging low interest rates and higher capital requirements", *Financial Stability Review*, Deutsche Bundesbank, 2013, pp. 73-90. In an extreme stress scenario, 32 companies which represent a 43% market share would not meet the Solvency I capital requirements. In the baseline, only one company would no longer meet the own funds requirements pursuant to Solvency I. An intermediate, Japan-style scenario resulted in 12 companies which represent a 14% market share becoming undercapitalised by 2023.

3.3 A QUANTITATIVE ASSESSMENT OF THE IMPACT OF SELECTED MACRO-FINANCIAL SHOCKS ON FINANCIAL INSTITUTIONS

A quantitative impact assessment is not comparable with micro-prudential stress tests or the EBA/SSM EU-wide stress-testing exercise…

The assessment of the impact of macro-financial shocks on euro area financial institutions is based on a macro-prudential simulation exercise involving top-down stress-testing tools. For a number of reasons, the results are not comparable with those of micro-prudential stress tests or the ongoing EU-wide stress-testing exercise being carried out by the European Banking Authority (EBA) and the Single Supervisory Mechanism (SSM). First, the shocks discussed in the Financial Stability Review (FSR) do not form a comprehensive scenario, but should rather be viewed as a series of stand-alone sensitivity tests. Second, whereas the FSR quantitative assessment is a top-down exercise, the ongoing EBA/SSM EU-wide stress-testing exercise is essentially a bottom-up stress test.[8] This difference in overall approach also results in differences in the assumptions and tools used to translate the impact of the shocks into bank solvency ratios. In addition, the capital measure used in the FSR assessment is the EBA core Tier 1 ratio, while the EBA/SSM stress test will use a common equity Tier 1 measure, reflecting transitory arrangements as of end-2016. The sample of the institutions subject to the assessment also differs substantially between the two exercises[9] and, lastly, the horizon of the FSR assessment covers two years, while the EBA/SSM stress test covers three years.

Despite these fundamental differences, the combined effects on activity and banks' solvency of the various macro-financial shocks considered in the FSR exercise broadly correspond, over the relevant two-year horizon, to those that can be expected from the EBA/SSM adverse scenario.[10]

… and involves three macro-financial shocks mapped to sources of systemic risk

This section provides a quantitative assessment of three chains of events which start with macro-financial shocks that map the main systemic risks presented in the previous sections of this FSR (see Table 3.1):

(i) *the risk of an abrupt reversal of the global search for yield, amid pockets of illiquidity and likely asset price misalignments* – reflected by a sharp increase in investor risk aversion worldwide, leading to falling stock and corporate bond prices, to reduced access of banks to wholesale debt financing and to deposit outflows, and to lower euro area external demand;

(ii) *continuing weak bank profitability and balance sheet stress in a low inflation and low growth environment* – materialising through negative shocks to aggregate supply and demand in a number of euro area countries;

(iii) *the risk of a re-emergence of sovereign debt sustainability concerns, stemming from insufficient common backstops, stalling policy reforms, and a prolonged period of low nominal growth* – materialising through an increase in long-term interest rates and declining stock prices.

8 More details about the methodology, scenarios and process of the EBA/SSM EU-wide stress-testing exercise can be found in the EBA and SSM communications released on 29 April 2014.

9 128 euro area banks are participating in the EBA/SSM stress test. This section presents an assessment of the impact of the adverse shocks on a smaller group of 17 large and complex banking groups (LCBGs).

10 The tools employed are: (i) a forward-looking solvency analysis, similar to a top-down stress test, for euro area banks; and (ii) a forward-looking analysis of the assets and liabilities side of the euro area insurance sector. For a more detailed description of the tools, see Henry, J. and Kok, C. (eds.), "A macro stress testing framework for systemic risk analysis", *Occasional Paper Series*, No 152, ECB, October 2013, as well as "A macro stress testing framework for bank solvency analysis", *Monthly Bulletin*, ECB, August 2013. The results are based on publicly available data up to the fourth quarter of 2013 (or a few quarters earlier) for individual banks and insurance companies, as well as on bank exposure data disclosed in the 2013 transparency exercise coordinated by the EBA.

Table 3.1 Mapping main systemic risks into adverse macro-financial shocks

Risk	Shock	Key assumptions driving impact on GDP
Abrupt reversal of the global search for yield, amid pockets of illiquidity and likely asset price misalignments	Global risk aversion shock	Increasing risk aversion and deteriorating investor confidence worldwide, fuelling stock price declines, widening of corporate bond spreads, and increases in money market rates and in the cost of funding of the private sector
Continuing weak bank profitability and balance sheet stress in a low inflation and low growth environment	Weak economic growth shock	Reduction in investment and consumption as well as increasing user cost of capital and falling nominal wages
Re-emergence of sovereign debt sustainability concerns, stemming from insufficient common backstops, stalling policy reforms, and a prolonged period of low nominal growth	Sovereign debt shock	An aggravation of the sovereign debt crisis fuelling the increase in sovereign bond yields and stock price declines

Source: ECB.

MACRO-FINANCIAL SHOCKS AND THEIR IMPACT ON GDP

The three adverse shocks described below and summarised in Tables 3.1 and 3.2 display the key driving factors at play, as well as the overall impact on euro area GDP, with the latter giving an indication of the transmission of the respective shocks to the solvency of euro area banks. The impact of the adverse shocks is assumed to be felt from the beginning of 2014, consistent with the reference date for the balance sheet and capital data of the financial institutions.

Increased risk aversion

An abrupt decrease in investor confidence, leading to a decline in the prices of financial assets and a deterioration of bank funding conditions in the euro area …

The first adverse chain of events concerns the potential for a mispricing of risk across various market segments around the world and is modelled as an abrupt reversal of investor confidence and an increase in risk aversion worldwide. The prices of financial assets would decline, and an ensuing global recession would have negative implications – via trade and confidence spillovers – for the global economic outlook, including euro area foreign demand.[11] Additionally, the improvement in euro area bank funding conditions, observed since mid-2013, would be reversed, especially in the countries where the sovereign remains under stress. This would manifest itself through increases in money market interest rates and credit costs for the private sector in the EU Member States. First, an increase in the three-month EURIBOR captures the risk of worsening funding conditions in money markets. It kicks in gradually, starting in the first quarter of 2014. The gradual increase mirrors the assumed increasing uncertainty about the quality of bank credit portfolios. Second, banks affected by funding constraints are assumed to increase the cost of extending credit to the private sector and to limit the supply thereof. To account for this effect, a set of country-specific shocks to the *cost of corporate credit* (via the user cost of capital) and to *interest margins on loans to households* (via the financial wealth of households) is considered.[12] Lastly, the increase in risk aversion is assumed to cause corporate bond spreads to rise markedly from their current low levels.[13]

… with a negative impact on euro area external demand and, eventually, euro area GDP

On the basis of these assumptions, US stock prices are assumed to fall by 24% in the first quarter, and to gradually recover thereafter, remaining 13% below the baseline at the end of 2015. The

11 The impact on euro area foreign demand is derived with the National Institute Global Econometric Model (NiGEM).

12 The country-specific shocks are calibrated taking into account the plausible further fragmentation of funding markets (and differentiation in credit conditions for the private sector) across EU Member States, in order to reflect their different risk of being substantially hit by the adverse macroeconomic developments. The magnitudes of the shocks are derived on the basis of market and expert assessment of severe macroeconomic risks.

13 The increase in the corporate bond rates has been calibrated using the same simulation approach as that applied to government bond yields under the sovereign debt shock. An increase in risk aversion could also affect sovereign yields, but this is treated separately under "Sovereign debt shock".

resulting negative impact on euro area external demand, expressed in percentage changes from baseline levels, amounts to -2.4% at the end of 2014 and -2.9% at the end of 2015. The simulated widening of corporate bond spreads corresponds, on average, to a haircut of around 4.2% on banks' corporate bond holdings.

The impact of the fall in external demand and the bank funding stress on the euro area economies is derived using stress-test elasticities.[14] The overall impact on euro area real GDP, expressed in deviations from baseline growth rates, is -1.0 and -1.6 percentage points in 2014 and 2015 respectively. However, the impact differs considerably across the euro area countries, depending in particular on their export orientation, their exchange rate sensitivity and the severity of bank funding constraints.

Weak euro area growth

The second chain of events is based on a shock to aggregate supply and demand

In order to capture the risk of weaker than anticipated domestic economic activity in many euro area countries, this chain of events involves country-specific reductions in aggregate supply, via increases in both the user cost of capital and nominal wages, and in aggregate demand, via a slowdown in both fixed investment and private consumption. The calibration of the country-specific demand and supply effects was based on a quantitative and qualitative ranking of the most pertinent risks at the country level.[15] The impact on GDP is derived using the above-mentioned stress-test elasticities.

These assumptions result in an overall impact on euro area real GDP growth, expressed in deviations from baseline growth rates, of -0.6 and -1.0 percentage point in 2014 and 2015 respectively. Again, the real economic impact varies considerably across euro area countries, with countries under sovereign stress affected most negatively.

Sovereign debt shock

In the third chain of events, euro area sovereign bond yields rise to abnormally high levels…

Sovereign stress has been at the heart of the crisis. This chain of events attempts to capture such stress with a rise in euro area sovereign bond yields to elevated levels, while taking into account co-movements with other asset prices (in particular, stock prices). The bond yields rise in all euro area countries, and are calibrated at a 5% marginal probability level, independently for each individual country.[16]

… accompanied by a sharp decline in stock prices and an increase in both short-term interest rates and sovereign CDS spreads

The design of this shock is based on the following assumptions. First, an increase in long-term government bond yields is assumed for all euro area countries. The weighted average euro area long-term interest rate rises by 117 basis points. Leaving aside the substantial impact on Greek long-term government bond yields, the increase in government bond yields across euro area countries ranges from 53 to 214 basis points. Second, the shape of national yield curves on the cut-off date is used to transpose the simulated shock across the term structure of interest rates. Third, the increase in bond yields has spillover effects on stock prices, ranging from -4.4% to -26% across euro area countries (the euro area weighted average amounts to -12%). The adverse movements in bond yields and stock prices lead to an immediate and persistent increase in short-term market interest rates.[17] Lastly, the increase in ten-year government bond yields determines the country-specific widening of sovereign credit default swap (CDS) spreads.[18]

14 Stress-test elasticities are a simulation tool that is based on impulse response functions (taken from ESCB central banks' models) of endogenous variables to predefined exogenous shocks. They incorporate intra-euro area trade spillovers.
15 The aggregate supply and demand effects are calibrated in line with the historical volatilities of relevant economic variables in each country.
16 The calibration of the sovereign bond yield increase is based on the simulated 95th percentile of the distribution of daily compounded changes in ten-year government bond yields and stock prices observed between 3 August 2012 and 31 December 2013. The sample has been chosen to account for the change in markets after the announcement of Outright Monetary Transactions by the ECB on 2 August 2012.
17 The same simulation procedure as that used for calibrating the long-term bond yield increase across euro area countries has been applied to the three-month EURIBOR.
18 These are based on estimated regressions of sovereign CDS spreads on long-term government bond yields.

Table 3.2 Overall impact on euro area GDP growth under the baseline scenario and adverse shocks

(percentages; percentage point deviations from baseline growth rates)

	2013	2014	2015
Baseline (annual growth rates given in the European Commission's forecast)	-0.4	1.2	1.7
Percentage point deviations from baseline growth			
Global risk aversion shock		-1.0	-1.6
Weak economic growth shock		-0.6	-1.0
Sovereign debt shock		-0.2	-0.4

Sources: European Commission, ECB and ECB calculations.

This implies losses on sovereign exposures and an increase in banks' cost of funding and credit risk

These factors lead to country-specific increases in sovereign bond yields that in turn result in marking-to-market valuation losses on euro area banks' sovereign exposures in the trading book and the available-for-sale (AFS) portfolio.[19] In addition, the increase in sovereign credit spreads also raises the cost of euro area banks' funding. Moreover, the country-specific effects on interest rates and stock prices also have direct implications for the macroeconomic outlook, which in turn affects banks' credit risk. The impact on euro area real GDP amounts to -0.2 and -0.4 percentage point deviations in 2014 and 2015 respectively.[20]

The combined impact of the three macro-financial shocks amounts to a 4.8 percentage point deviation from the baseline scenario. The EBA/SSM adverse scenario is only slightly more severe, with a total deviation from the baseline of 5.0 percentage points over the two-year horizon.

SOLVENCY RESULTS FOR EURO AREA LARGE AND COMPLEX BANKING GROUPS

The impact on bank solvency is broken down into that on *individual* profit and loss results, on the one hand, and that stemming from cross-institutional *contagion*, on the other.

Changes in credit risk and profits, implied by adverse shocks, impact banks' solvency positions

The impact of the three shocks on euro area LCBGs' profit and loss accounts (and solvency positions) is obtained from projections of the main variables determining banks' solvency, such as credit risk, profits and risk-weighted assets.[21] Details of the technical assumptions for all relevant variables are contained in Table 3.3. The overall impact is expressed in terms of changes to banks' core Tier 1 capital ratios.

Under the baseline scenario, the average core Tier 1 capital ratio is projected to increase from 12.0% to 12.5% at the end of 2015

Under the **baseline scenario**, euro area LCBGs' average core Tier 1 capitalisation is projected to increase from 12.0% in the fourth quarter of 2013 to 12.5% by the end of 2015 (see Chart 3.39). The overall improvement in the solvency position under the baseline mainly reflects that the projected accumulation of pre-provision profits more than offsets the projected loan losses. The average development of euro area LCBGs' solvency positions, however, masks substantial variations across individual institutions and euro area countries.

The global risk aversion shock leads to an average core Tier 1 capital ratio of 9.9% at the end of 2015

All three **adverse shocks** discussed above would have a notable adverse impact on euro area LCBGs' solvency, with average core Tier 1 capital ratios declining by between 1.1 and

19 By contrast, securities held in the banking book are assumed not to be affected by the asset price shock. The valuation haircuts are calibrated to the new levels of government bond yields, using the sovereign debt haircut methodology applied in the EBA's 2011 stress-test exercise.The exposures held in the AFS portfolio are subject to a prudential filter, which by the end of 2015 would lead to a recognition of 40% of the overall mark-to-market losses in the regulatory capital.

20 The impact of these shocks on euro area economic growth was again derived on the basis of stress-test elasticities.

21 The balance sheet and profit and loss data are based on banks' published financial reports as well as supervisory information disclosed in the context of the EBA's 2013 EU-wide transparency exercise. To the extent possible, the data have been updated to cover the period up to the fourth quarter of 2013. The sample includes 17 euro area LCBGs. Data are consolidated at the banking group level. Bank balance sheets are assumed to remain unchanged over the simulated horizon, except when it is explicitly assumed otherwise, as in the global risk aversion shock.

Table 3.3 Technical assumptions regarding the individual risk drivers of banks' solvency ratios

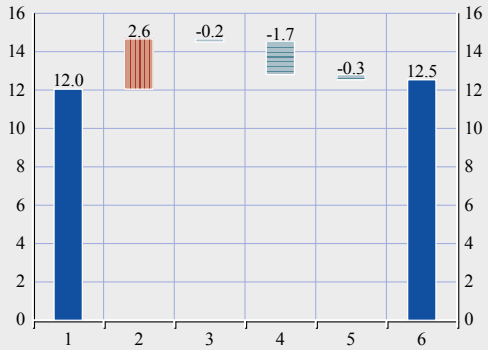
Credit risk	Changes to probabilities of default and loss given default estimated by exposure types (i.e. loans to non-financial corporations, retail and commercial real estate loans).[1] Projected changes at the country level applied to bank-specific loss rates to calculate the expected losses.[2] For exposures to sovereigns and financial institutions, provisioning is based on rating-implied probabilities of default, similar to what was done in the EBA's exercise.[3]
Net interest income	Based on a loan-deposit margin multiplier approach to assess the impact of interest rate changes.[4] Changes in short-term loan and deposit rates are then multiplied by the outstanding amounts of loans and deposits for each bank at the beginning of the horizon. To account for a marginal pricing of deposit rates, which have risen sharply in many euro area countries in recent years, changes in the short-term rate have been adjusted by adding the spread between the three-month money market rate and new business time deposit rates at country level as at end-December 2013.
Other operating income	Projected annual trading income corresponds, for each bank, to its average trading income over the period 2011-13 under the baseline, and to the average of the five years (2009-13) under the adverse shocks. These historical averages are reduced, over the stress-test horizon, by one standard deviation (baseline) or two standard deviations (adverse shocks). The mark-to-market losses on sovereign and corporate bond exposures reflect the projected interest rates and credit spreads, while taking into account a harmonised phasing-out of prudential filters on exposures held in the available-for-sale portfolio as required under the CRR. Fee and commission income is assumed to remain constant in nominal terms.
Taxes and dividends	Tax and dividend assumptions are bank-specific, using the historical average ratio of positive tax payments to pre-tax profits over a three-year period and the median dividend-to-net income ratio over the same period.
Risk-weighted assets	Risk-weighted assets are calculated at the bank level, using the Basel formulae for banks following the internal ratings-based approach and assuming fixed losses given default.[5]

Source: ECB.
1) For the forecasting methodology applied, see *2011 EU-wide EBA stress test: ECB staff forecasts for probability of default and loss rate benchmark*, ECB, 4 April 2011.
2) The starting levels of both the probabilities of default and the loss given default were calibrated conservatively based on publicly available data, including financial reports of individual banks and disclosures made in the course of the EBA transparency exercise.
3) See *2011 EU-wide Stress Test: Methodological Note – Additional Guidance*, EBA, June 2011.
4) See Box 7 of the December 2010 FSR and Box 13 of the June 2009 FSR for further details.
5) Risk-weighted assets are defined according to the so-called Basel 2.5 (or CRD III) framework, including higher risk weights on re-securitisations in the banking book and certain market risk elements in the trading book.

2.6 percentage points relative to the baseline scenario by the end of 2015 (see Chart 3.40). Under the impact of the weak euro area growth shock and the sovereign debt shock, euro area LCBGs'

Chart 3.39 Average contribution of changes in profits, loan losses and risk-weighted assets to the core Tier 1 capital ratios of euro area LCBGs under the baseline scenario

(percentage of the core Tier 1 capital ratio and percentage point contribution)

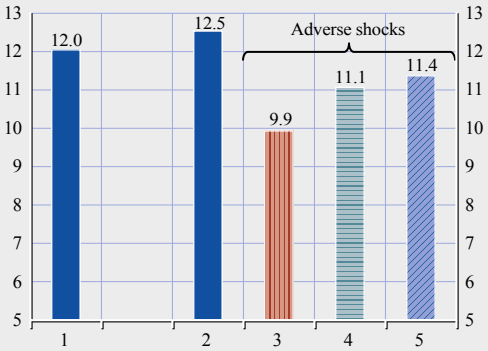


1 Core Tier 1 ratio, Q4 2013
2 Profit
3 Other effects
4 Loan losses
5 Risk-weighted assets
6 Core Tier 1 ratio, end-2015

Sources: Individual institutions' financial reports, EBA, ECB and ECB calculations.
Note: Due to rounding, contributions may not add up to the totals.

Chart 3.40 Average core Tier 1 capital ratios of euro area LCBGs under the baseline scenario and adverse shocks

(percentages; average of euro area LCBGs)



1 End-2013
2 Baseline, end-2015
3 Global risk aversion shock
4 Weak economic growth shock
5 Sovereign debt shock

Sources: Individual institutions' financial reports, EBA, ECB and ECB calculations.

Table 3.4 Reverse stress-test results

(multipliers)

Shock	Multiplier necessary to bring the core Tier 1 capital ratio of one-third of the banks to below 6%	Multiplier necessary to bring the core Tier 1 capital ratio of one-third of the banks to below 8%
Global risk aversion shock	9.7	7.0
Weak economic growth shock	13.8	12.1
Sovereign debt shock	37.9	35.9

Sources: ECB and ECB calculations.

core Tier 1 capital ratios would decline to 11.1% and 11.4%, respectively, by the end of 2015. The global risk aversion shock would produce the most negative result, an average core Tier 1 capital ratio of 9.9% by the end of 2015. Considering the combination of these shocks, the overall negative effect on the capital ratios should be close to 4 percentage points.

The main driving factors under the three shocks are the increase in loan losses and lower or negative retained earnings with respect to the baseline. Notably, under the sovereign debt and the global risk aversion shocks, the decline in profits is relatively strong, owing to mark-to-market losses, the impact of which is amplified by the gradual phasing-out of prudential filters. Under the adverse economic growth shock, the adverse impact largely originates from high loan losses.

Cross-checking results with a reverse stress test

The likelihood of capital shortfalls under the adverse shocks is low by design, as they are based on low-probability events.[22] In this respect, it is useful to consider a **reverse stress test** whereby the size of the shock needed to drive the core Tier 1 capital ratio of, for example, one-third of the euro area banks in the sample down to a pre-specified threshold is derived for each of the shocks.[23] If macro-financial shocks are mild, it is necessary to scale up the intensity of the shocks in the reverse stress test in order to lower banks' core Tier 1 ratio below a reference threshold (e.g. 6% or 8%).

Considering a threshold core Tier 1 capital ratio of 6%, *the global risk aversion shock is found to be the most severe among the three shocks. However, even that shock would need to be scaled up by a very large multiplier of around 9.7 to bring the ratio of more than one-third of the banks to below 6%* (see Table 3.4). By contrast, the weak economic growth shock requires a higher reverse stress test multiplier of 13.8, while the multiplier needed for the sovereign debt shock is substantially larger, standing at almost 40.

POTENTIAL INTERBANK CONTAGION DUE TO BANK FAILURES

Adverse shocks to individual banks' solvency positions can lead to contagion effects via interbank liabilities

The simulated deterioration in a bank's solvency position under the adverse shocks may spill over to other banks in the system. This can happen if, for example, the failure of a bank to comply with a threshold capital level would imply losses for interbank creditors – resulting in additional system-wide losses.

Interbank contagion effects could be amplified further if, in response to distressed interbank loans, banks were to sell their securities holdings to fill the gap in their balance sheets. This may give rise to fire-sale losses, which could adversely affect the marking-to-market valuation of their securities portfolios and further depress their capacity to fully honour interbank liabilities. If these actions

22 In order to rank the systemic risks considered in the various shocks, it is not sufficient to focus solely on the solvency ratios. The probability of occurrence attached to each of the shocks should also be considered in order to make the results fully comparable.

23 To derive the factor ("multiplier") that is needed for each shock to reach a specific median core Tier 1 capital ratio, the amplified macro-model output is fed through the credit risk and profit satellite models, which in turn are linked to the balance sheets of individual institutions.

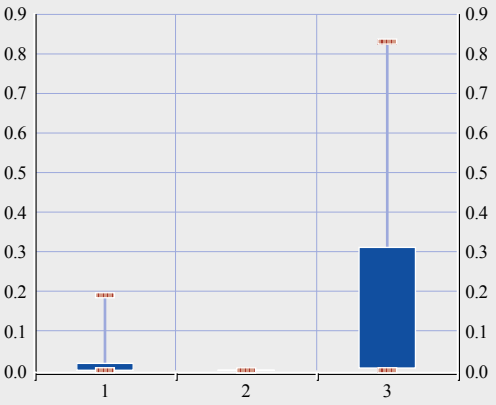
are taken by many banks at the same time, they would magnify the implied impact on market prices of the assets being sold.

In the absence of detailed data on interbank exposures, publicly available information and dynamic network modelling are used to simulate instances where a financial institution can cause contagion effects throughout the financial system.[24] The interbank contagion results, derived by applying such a methodology to the three adverse shocks considered above, are illustrated in Chart 3.41.[25]

For the simulated networks with the strongest contagion effects, the system-wide core Tier 1 capital ratio falls by about 0.01 percentage point in some countries (see Chart 3.41). However, should the banks respond to capital pressure by shedding assets at fire-sale prices, the capital shortfalls would be larger.

Chart 3.41 "Worst case" basis point reduction in the core Tier 1 capital ratio of euro area banks due to interbank contagion: dispersion across simulations

(basis point reduction of the core Tier 1 capital ratio; 10th and 90th percentiles and interquartile range)



Sources: Individual institutions' financial reports, EBA, ECB and ECB calculations.
Note: Interquartile range represents the 25th to 75th percentiles of the cross-country contagion effects under the most severe (upper 10th percentile) of 20,000 simulated interbank networks.

ASSESSING THE RESILIENCE OF EURO AREA INSURERS

Major risks are quantified using a market-consistent approach for assets and liabilities…

The assessment of the impact of the three main euro area financial stability risks on large euro area insurers is conducted using publicly available data for 13 major euro area insurance groups up to the fourth quarter of 2013. It relies on a market-consistent approach to the quantification of risks and is applied to the *assets* and *liabilities* of insurance corporations. Given the strong heterogeneity of the individual reporting in this sector, the approach aims to spell out the main risks in economic terms, rather than trying to gauge the impact in terms of prudential solvency ratios.[26]

The following market, credit and underwriting risks are assessed: (i) a change in interest rates; (ii) a fall in equity and property prices[27]; (iii) a deterioration of the creditworthiness of borrowers through a widening of credit spreads for marketable instruments; (iv) lapse rate[28] increases; and (v) an increase in loss rates on loan portfolios.

24 The exercise is based on a sample of 65 European banks that were covered in the 2011 EU-wide stress-testing exercise conducted by the EBA. Interbank networks are generated randomly on the basis of banks' interbank placements and deposits, taking into account the geographical breakdown of banks' activities. Once the distribution of interbank networks has been calibrated, the system is subjected to a shock in order to assess how specific shocks are transmitted throughout the system and to gauge the implications for the overall resilience of the banking sector. The shock is typically a bank's default on all its interbank payments. For a more detailed description of the methodology, see Halaj, G. and Kok, C., "Assessing interbank contagion using simulated networks", *Working Paper Series*, No 1506, ECB, 2013, and Computational Management Science (10.1007/s10287-013-0168-4).

25 Two limitations on the maximum exposure that is allowed vis-à-vis an individual counterparty are embedded into the network simulators, following the prescriptions in Article 111 of Directive 2006/48/EC. First, an interbank exposure of each bank cannot exceed 25% of its regulatory capital. Second, the sum total of the interbank exposures of a bank, individually exceeding 10% of its capital, cannot be higher than 800% of its capital.

26 The exercise is not related to the EU-wide stress test for the insurance sector coordinated by the European Insurance and Occupational Pensions Authority (EIOPA). Whereas the FSR quantitative assessment is a top-down exercise, the EIOPA stress-testing exercise is essentially a bottom-up stress test. The emphasis of the FSR assessment is on the risks insurers face on aggregate rather than on the prudential solvency ratios of individual insurers, which are computed in the EIOPA exercise.

27 The decrease in property prices is limited, as it is calculated as an endogenous response, rather than as a stand-alone shock. The estimate of its impact is complemented by a sensitivity analysis (see below).

28 The lapse rate is defined as the percentage of contracts prematurely terminated by policyholders.

Table 3.5 Parameters for the assessment of euro area insurers

	Baseline	Global risk aversion shock	Weak economic growth shock	Sovereign debt shock
Exogenous parameters				
Average euro area increase in long-term government bond yields (basis points)	0	0	0	189
Average add-on in credit yields of corporate bonds (basis points)	0	126	0	117
Shock to equity prices	0%	-10%	0%	-22%
Average add-on in lapse rates	0%	-0.1%	-1.1%	-0.1%
Endogenous parameters				
Cumulative loss rates over two years	0.4%	0.7%	0.3%	0.6%
Change in property prices	0%	0%	-0.3%	-0.9%

Source: ECB.
Note: Endogenous parameters have been obtained using macroeconomic models as well as credit risk models, on the basis of the projected values of the macro-financial variables under the baseline scenario and the three adverse shocks.

… under the adverse macro-financial shocks set out earlier

Using the same adverse shocks as those for banks, the risks for insurance companies are transmitted through three channels, namely: (i) valuation effects on financial securities and liabilities owing to changes in sovereign yields and swap rates; (ii) sales of assets due to unforeseen payments resulting from increased lapse rates; and (iii) changes in the credit quality of loan portfolios.

Simplifying assumptions necessary

A number of simplifying assumptions had to be made for this exercise (see Table 3.6 for an overview). First, decreases in the market value of insurance corporations' holdings of shares, bonds and property are assumed to occur instantaneously, before institutions have an opportunity to adjust their portfolios. This implies that no hedging or other risk-mitigation measures[29] were taken into account; consequently, losses may be overestimated. Second, available granular data (e.g. on investment in sovereign bonds, broken down by jurisdiction, on investment in corporate bonds and on loans, broken down by credit ratings, as well as on liabilities and debt assets, broken down by maturity) were used wherever possible, but broad aggregates of financial investments were used in some instances. The relative weights of various investments, broken down by instrument, are shown in Chart S.3.25. Third, all income and expenses related to the underwriting business are assumed to be fixed. For example, reduced demand for insurance products is not taken into account and each maturing contract is expected to be replaced, so that the underwriting income of each insurer remains constant. The underwriting component of income is stressed only in the form of increasing lapse rates. Details of the technical assumptions for all relevant variables are given in Table 3.6.

The joint sovereign debt and global risk aversion shock has a stronger impact

The results confirm the importance of credit risk, although the degree of vulnerability to the materialisation of macro-financial shocks is very heterogeneous across individual insurance groups (see Chart 3.42).

The joint sovereign debt and global risk aversion shock results in the most significant changes in assets for insurance companies – with average losses amounting to 1.1% of their assets. These originate mainly from (corporate) credit risk.[30]

29 For example, interest rate risk hedging, asset-liability matching techniques and counter-cyclical premia (to dampen the effect of temporary adverse interest rate shocks through offsetting changes in the valuation of liabilities).
30 Expressed as a percentage of net assets (assets minus liabilities), the effect would be equal to 15.7%.

Table 3.6 Technical assumptions regarding the individual risk drivers of insurers' balance sheets

Credit risk	Credit risk assessment carried out using (i) breakdowns by rating or region, depending on data availability and (ii) loss rate starting levels, which are stressed using the same methodology as applied for assessing the resilience of euro area banks.
Interest rate risk transmission	Sensitivities to interest rate changes computed for each interest rate-sensitive asset and liability exposure. Relevant yield curves used to project asset and liability cash-flow streams, to calculate internal rates of return, and to discount the cash flows using yield curve shocks.
Haircut definition	Haircuts for *debt securities* derived from changes in the value of representative securities implied by the increase in interest rates under each shock and uniformly applied across the sample of large euro area insurers. Valuation haircuts to *government bond portfolios* estimated on the basis of representative euro area sovereign bonds across maturities. Haircuts for *corporate bonds* derived from a widening of credit spreads.
Lapse risk	Lapse risk quantified by projecting insurers' cash flows over a two-year horizon, assuming a *static composition* of contracts and the reinvestment of maturing assets without a change in the asset allocation. Lapse rates linked to macroeconomic variables.[1)] Unexpected component of lapses[2)] leads to *surrender payments*.[3)] In case of negative cash flows from surrender payments, the insurer is obliged to use cash reserves or sell assets to meet obligations. Lapse risk equals the cash or other assets needed to cover surrender payments.
Other assumptions specific to the sensitivity of investment income	Investment income earned from *reinvested assets* shocked on the basis of investment income earned at the beginning of the simulation horizon. *All other assets* assumed to earn the initial investment income throughout the simulation horizon. Maturing fixed income assets reinvested retaining the initial asset composition. *Underwriting business component* of operating profit assumed to remain constant throughout the simulation horizon. No distribution of *dividends* assumed.

Source: ECB.
1) Sensitivities of lapse rates to GDP and unemployment were derived by taking the mean of a number of elasticity values, collected from the literature (e.g. Honegger, R. and Mathis, C., "Duration of life insurance liabilities and asset liability management", *Working Paper*, Actuarial Approach for Financial Risks (AFIR), 1993; Kim, C., "Report to the policyholder behaviour in the tail subgroups project", *Technical Report*, Society of Actuaries, 2005; Smith, S., "Stopping short? Evidence on contributions to long-term savings from aggregate and micro data", *Discussion Paper*, Financial Markets Group, LSE, 2004) and from ECB calculations.
2) The unexpected component of lapses is defined as the difference between the projected lapse rate and the average lapse rate reported by large European insurers.
3) It is assumed that 50% of the total amount represented by the extra lapse rates has to be paid (due to the existence of penalties in the contracts, which lower the insurers' risk).

Rising yields have no adverse impact on insurers' solvency

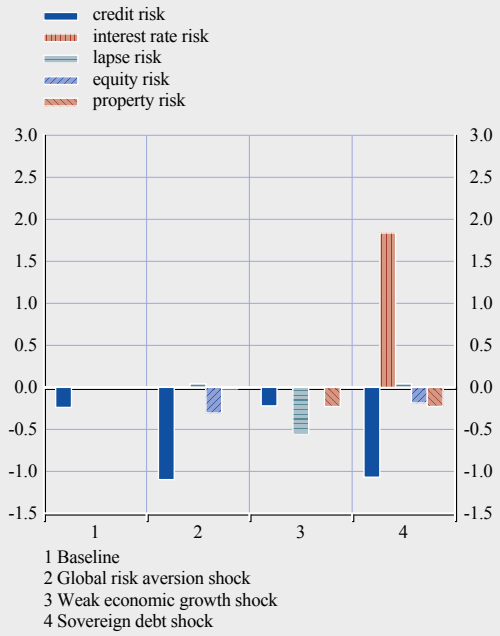
By contrast, the rising yields under the sovereign debt shocks do not have a negative impact on the solvency of insurers in the sample. An increase of 1.8% in their net assets is explained by the longer duration of liabilities and, consequently, their greater sensitivity to the applied discount rate. Average prudential solvency ratios would, however, probably decrease, as most insurers in the sample belong to jurisdictions in which liabilities are not marked to market.[31] Variations in equity price losses are largely related to the heterogeneity in the volume of such investments. The impact of a fall in equity on assets reaches 0.3%, on average.[32] In addition, lapse risk-related losses, amounting to 0.6% of assets, would be higher under the weak economic growth shock. The remaining shocks have milder effects on insurers' balance sheets.

31 Regarding interest rate risk, the forthcoming Solvency II regime is expected to replace current practices with a uniform approach in which the swap curve is used for the discount rate. To gauge the rough impact of such a regime, a projected swap curve, calculated on the basis of a model linking swap rates to sovereign yields, was used to discount liabilities. Under the sovereign debt shock, the application of Solvency II valuation would lead to a lower increase in net assets of, on average, 0.5%, compared with the case where the sovereign yield is used as the discount rate, as the adverse valuation effects in insurers' fixed-income portfolio would not be offset to the same extent by respective movements on the liabilities side since the swap rate would remain decoupled from sovereign yields. It is important to note that the effect of any counter-cyclical instruments under Solvency II was not included in this exercise. Consequently, the negative impact in this exercise is likely to appear significantly more pronounced than it would be under a fully defined Solvency II regime. In addition, this result differs significantly among jurisdictions, depending on the relative paths of the sovereign yields and the swap rates.

32 Owing to data availability, gross equity exposures (gross of unit-linked exposures) were used and, consequently, the equity risk may be overestimated.

Chart 3.42 Changes in asset values for large euro area insurers under different shocks

(Q4 2013 – Q4 2015; percentage of total assets)



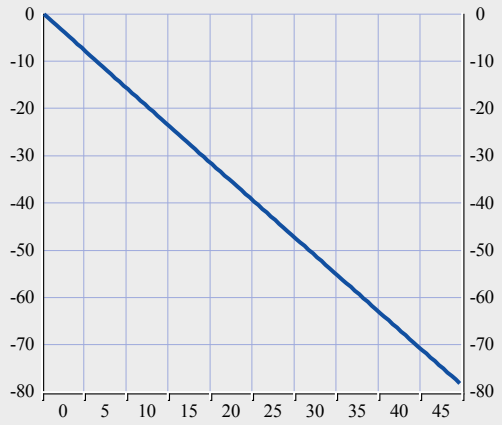
1 Baseline
2 Global risk aversion shock
3 Weak economic growth shock
4 Sovereign debt shock

Sources: Individual institutions' financial reports and ECB calculations.

Chart 3.43 Sensitivity of large euro area insurers' total investment income to shocks to the yields on newly invested assets

(Q4 2013 – Q4 2016)

x-axis: size of the shock to income earned on reinvested assets, expressed as a percentage of initial total investment income
y-axis: basis points



Sources: Individual institutions' financial reports and ECB calculations.

A sensitivity analysis of the impact of a property price shock is also conducted. An additional house price shock amounting to an 8.6% decrease in property prices is assumed.[33] The losses associated with such a shock are found, on average, to represent 0.2% of insurers' assets.

Halving the income on newly invested assets leads to a reduction of 78 basis points in total investment income

Another risk faced by insurers is a continuation of the current low-yield environment or a further weakening of their investment income. Chart 3.43 depicts the change in total investment income due to a reduction in income earned from newly invested assets relative to the income earned by existing assets over a three-year horizon. If, for instance, the income earned on newly invested assets is halved, the total investment income would be lowered by, on average, 78 basis points. A comparison with the current average investment income of euro area insurers (see the previous section) suggests, however, that such a reduction in itself does not imply a key challenge for the solvency of the sector, especially given that in this exercise no strategic responses of the insurance firms have been taken into account.[34]

33 The shock is calibrated with reference to a simulated forward distribution, using the same non-parametric simulation technique that is employed to calibrate financial market shocks. A shortfall measure conditional on a 1% percentile is computed on the basis of the resulting forward distribution.

34 The result is in line with earlier contributions concluding that insurance companies can cope with the low-yield environment in the medium term (see e.g. Kablau, A. and Wedow, M., "Gauging the impact of a low-interest rate environment on German life insurers", *Discussion Paper Series 2: Banking and Financial Studies*, No 02/2011, Deutsche Bundesbank, 2011). On the other hand, the impact of the low-yield environment on investment income would become much more pronounced if a longer projection horizon is assumed (see e.g. "Insurance companies bridging low interest rates and higher capital requirements", *Financial Stability Review*, Deutsche Bundesbank, 2013, pp. 69-85, where a ten-year horizon reaching 2023 is assumed).

3.4 RESHAPING THE REGULATORY AND SUPERVISORY FRAMEWORK FOR FINANCIAL INSTITUTIONS, MARKETS AND INFRASTRUCTURES

This section provides an overview and assessment of a number of regulatory initiatives at both the international and EU levels that are considered to be of primary importance for enhancing financial stability in the EU.

The policy framework for micro- and macro-prudential policy in the EU follows international standards

The November 2013 issue of the Financial Stability Review (FSR) provided a concise overview of the macro-prudential aspects of the Capital Requirements Regulation and Directive (CRR/CRD IV) as well as the Single Supervisory Mechanism Regulation (SSMR). Although certain elements of the CRR/CRD IV package are still subject to finalisation and recalibration, a significant number of policy tools are already available for macro-prudential authorities. Many of these policy tools can be considered as standard micro-prudential instruments used for macro-prudential purposes and being in line with international standards, in particular the Basel Committee's new global standards for capital and liquidity (Basel III).

In addition to defining a set of instruments that macro-prudential authorities can apply to address risks to financial stability, the CRR/CRD IV package also sets out strict notification and coordination mechanisms for authorities. Importantly, most of these instruments will also be available for the ECB when acting in its capacity of a macro-prudential authority in the EU.[35]

The CRR requires the European Commission to report by 31 December 2014 to the European Parliament and the Council about the review of macro-prudential rules in the CRR/CRD IV. In this context, the Commission shall review whether the macro-prudential rules are sufficient to mitigate systemic risks in sectors, regions and Member States, including assessing (i) whether the tools are effective, efficient and transparent, (ii) whether the coverage and possible overlap between tools are adequate, and (iii) how internationally agreed standards interact with the provisions of the CRR/CRD IV.

The revision of the CRR/CRD IV package should reflect the institutional changes in the macro-prudential policy framework brought about by the establishment of the SSM

Although the current macro-prudential policy framework set out in the CRR/CRD IV largely reflects the views of the ECB,[36] including in particular the increased scope of action for macro-prudential authorities beyond the limits originally envisaged in the CRR, the implementation of the macro-prudential toolkit and the associated coordination mechanism can, in some respects, be considered as overly complex and burdensome both for national and EU authorities. Furthermore, the establishment of the Single Supervisory Mechanism (SSM) and the enhanced role of the ECB in macro-prudential policy are not reflected in the CRR/CRD IV text. Therefore, the ECB supports the revision of the macro-prudential rules of the CRR/CRD IV package in a way that reflects the institutional changes in the macro-prudential policy framework brought about by the establishment of the SSM.

With regard to ongoing regulatory initiatives, Tables 3.7-3.9 provide an update of the major strands of work in the EU, followed by a short overview of selected policy measures from the perspective of financial stability and macro-prudential policy.

Significant progress towards a banking union

Since the publication of the last issue of the FSR, significant achievements have been made in the areas identified as central elements of an integrated financial framework in Europe, particularly in the euro area, namely the establishment of (i) a Single Supervisory Mechanism, (ii) a common resolution framework, (iii) a Single Resolution Mechanism and (iv) harmonised deposit insurance.

35 See Box 8 in the November 2013 issue of the FSR.

36 See the Opinion of the European Central Bank of 25 January 2012 on a proposal for a Directive on the access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms and a proposal for a Regulation on prudential requirements for credit institutions and investment firms (CON/2012/5).

Table 3.7 Selected legislative proposals in the EU for the banking sector

Initiative	Description	Current status
Single Supervisory Mechanism Regulation (SSMR)	The Regulation establishes a Single Supervisory Mechanism (SSM) with strong powers for the ECB (in cooperation with national competent authorities) for the supervision of all banks in participating Member States (euro area countries and non-euro area Member States which join the system).	On 4 November 2013 the SSMR entered into force. The SSM is scheduled to become operational in November 2014. The ECB is well under way with its preparations to take up the new role of supervisor and is currently carrying out a comprehensive assessment of all banks which will be under its direct supervision.
Bank Recovery and Resolution Directive (BRRD)	The BRRD sets out a resolution framework for credit institutions and investment firms, with harmonised tools and powers relating to prevention, early intervention and resolution for all EU Member States.	An agreement was reached on 11 December 2013 between the European Parliament, EU Member States and the Commission. The agreement has been subject to technical fine-tuning and was formally adopted by the European Parliament on 15 April 2014. The BRRD will enter into force on 1 January 2015, although the bail-in provisions will only be applicable as of 1 January 2016, at the latest.
Single Resolution Mechanism (SRM) Regulation	The SRM Regulation establishes a single system, with a single resolution board and single bank resolution fund, for efficient and harmonised resolution of banks within the SSM. The SRM would be governed by two legal texts: the SRM Regulation covering the main aspects of the mechanism, and an Intergovernmental Agreement related to some specific aspects of the Single Resolution Fund (SRF).	An agreement was reached on 20 March 2014 between the European Parliament, EU Member States and the Commission. The Council has confirmed the agreement and the European Parliament approved it on 15 April 2014. The SRM would enter into force on 1 January 2015, whereas resolution functions (including the SRF) would apply from 1 January 2016.
Deposit Guarantee Scheme (DGS) Directive	The DGS Directive deals mainly with the harmonisation and simplification of rules and criteria applicable to deposit guarantees, a faster payout, and an improved financing of schemes for all EU Member States.	An agreement was reached on 17 December 2013 between the European Parliament, EU Member States and the Commission. The Directive will enter into force once it has been signed by both the Parliament and the Council and published in the Official Journal, expected in the weeks following adoption at the Parliament's April plenary session. Member States will have one year after entry into force to transpose it into national law.
Regulation on structural measures	The Regulation introduces restrictions on certain activities and sets rules on structural separation, with the aim of improving the resilience of EU credit institutions.	The Commission's proposal was published on 29 January 2014.

The first pillar of the banking union is the establishment of a Single Supervisory Mechanism

The establishment of the **Single Supervisory Mechanism** is well under way. On 4 November 2013 the Single Supervisory Mechanism Regulation entered into force. The Regulation confers specific micro- and macro-prudential tasks upon the ECB with strong systemic aspects in both areas for supervision of credit institutions in euro area countries and in non-euro area Member States which enter into close cooperation agreements with the ECB.

From a micro-prudential (i.e. institution-specific) angle, the ECB will, in the initial stage, exercise direct supervisory power over "significant" credit institutions which, because of (i) their overall size (above €30 billion), (ii) their importance for the economy of the EU or any participating Member State or (iii) the significance of their cross-border activities, may pose risks to the

EU financial system, either directly or through contagion channels. Effectively, the ECB will become the authority responsible for the direct supervision of significant institutions, accounting for almost 85% of total banking assets in the euro area, while ensuring the effectiveness and consistent functioning of the SSM with regard to all credit institutions.

At the same time, the ECB will also be entrusted with the power to implement certain macro-prudential measures that are applicable in a uniform way to all credit institutions, or to a sub-set of them, with the aim to address systemic risks of a structural or cyclical nature. Preparations for the establishment of an appropriate organisational structure and coordination mechanism between the ECB and the Member States are well under way.

An essential element of the preparations for the SSM is the comprehensive assessment, providing the necessary clarity for the banks that will be subject to the ECB's direct supervision and allowing for balance sheet repair before the start of the banking union. The comprehensive assessment is built on two important pillars and is progressing well.

The first is an asset quality review (AQR), where the ECB and the participating national competent authorities (NCAs) review the quality of banks' assets as at 31 December 2013. The AQR is based on a capital benchmark of 8% for common equity Tier 1. The ECB published the "AQR Phase 2 Manual" on 11 March, providing full transparency for the different building blocks of the AQR.

The second pillar is a stress test aimed at examining the resilience of banks' balance sheets to stress scenarios. The stress test will provide a forward-looking view of banks' shock-absorption capacity under stress. The horizon for the exercise will be three years and a static balance sheet assumption will apply over this stress-test horizon. On 29 April the European Banking Authority (EBA) released the methodology and scenarios for the EU-wide stress test. The ECB has collaborated closely with the EBA on the stress-test methodology and with the European Systemic Risk Board (ESRB) which produced the adverse scenario. The baseline scenario was produced by the European Commission. The capital thresholds for the baseline and adverse scenarios are set at ratios of 8% and 5.5%, respectively, for common equity Tier 1.

The AQR and the stress test are closely interlinked and will yield a rigorous, independent and centralised comprehensive assessment. The results will be published in October 2014, shortly before the SSM is due to assume its operational responsibility.

More generally, the ECB-internal preparations for the SSM are also well under way and progress has been made on various fronts. Following the completion of a public consultation, the ECB adopted the SSM Framework Regulation on 25 April 2014. The SSM Framework Regulation provides the procedures governing the cooperation between the ECB and the NCAs and sets out the methodology for the assessment of the significance of credit institutions. The development of the SSM supervisory model has largely been finalised.

The BRRD will provide common and efficient tools and powers for addressing a banking crisis

An important element of the banking union is a common EU framework for bank recovery and resolution. It was therefore important that a political agreement was reached between the European Parliament and the Member States on the **Bank Recovery and Resolution Directive** (BRRD) on 11 December 2013.

The new rules, which should enter into force on 1 January 2015,[37] will provide common and efficient tools and powers for addressing a banking crisis pre-emptively and for managing failures of credit institutions and investment firms in an orderly way throughout the EU. It will also help to restore the principle that investors, and not taxpayers, are first in line to bear losses when risks stemming from an investment materialise. For this purpose, the range of powers available to the relevant authorities consists of three elements: (i) preparatory steps and plans to minimise the risks of potential problems; (ii) in the event of emerging problems, powers to halt a bank's deteriorating situation at an early stage in order to avoid a failure (early intervention); and (iii) if an institution is failing or likely to fail, clear means to resolve the bank in an orderly fashion, while preserving its critical functions and not exposing taxpayers to losses.

The SRM aims to set up a single system for resolution, with a Single Resolution Board and a Single Resolution Fund

Another key element of the banking union is the **Single Resolution Mechanism (SRM)**, which establishes a single system for resolution, with a Single Resolution Board and a Single Resolution Fund (SRF) at its centre, for the resolution of banks in SSM-participating Member States. As stated in the ECB opinion on the SRM proposal[38], the ECB fully supports the establishment of the SRM, which will contribute to strengthening the architecture and stability of Economic and Monetary Union.

The SRM is a necessary complement to the SSM in order to achieve a well-functioning banking union and to sever the link between banks and their sovereigns. With both the SSM and SRM fully in place, the level of responsibility and decision-making for supervision and resolution will be at the European level. This will in turn ensure that incentives are aligned, avoiding potential distortions and conflicts of interest. The SRM will ensure that if a bank fails, and it is in the public interest to resolve it, its resolution can be managed efficiently, jointly and in the common interest. The SRM will be better able to deal with failing cross-border banks than national authorities, since all the necessary supervisory information and tools will be available to centralised decision-makers. Furthermore, the SRM will be better placed to take due account of contagion and spillovers when making resolution decisions. It will also ensure a consistent application of resolution principles and tools throughout the banking union, also for banks with no cross-border activity.

The SRM will be governed by two legal texts: (i) the SRM Regulation, which covers the main aspects of the mechanism and is based on the BRRD, and (ii) an Intergovernmental Agreement (IGA), which covers some specific aspects of the Single Resolution Fund (SRF).

The SRM will apply to all banks supervised by the SSM. Thus, any Member State outside the euro area which opts to join the SSM will automatically also fall under the SRM. The decision-making within the SRM will be built around a Single Resolution Board (SRB), which will involve permanent members acting independently and the national resolution authorities, as well as the Commission and the ECB as observers. The SRB will prepare resolution plans and directly resolve all entities and groups which are directly supervised by the ECB or are defined as cross-border groups in the SRM Regulation. It will also directly resolve any bank under national supervision whenever such resolution includes use of the SRF.

The SRB will meet in two configurations: the plenary and executive sessions. In its plenary session, comprising all members, the SRB would take all decisions of a general nature. In its executive session, comprising the permanent members, the observers and the directly concerned Member States' members, the SRB would prepare all decisions concerning a resolution procedure and

37 With the exception of the bail-in tool which will follow by 1 January 2016 at the latest.
38 See the Opinion of the ECB of 6 November 2013 (CON/2013/76).

adopt those decisions. However, when a resolution scheme would require the use of the SRF above certain thresholds, any member of the plenary may, within a strict deadline, request that the plenary session decide instead of the executive session.

If all the conditions for resolution are met, the SRB will adopt a resolution scheme for the institution or group in question, which is transmitted immediately thereafter to the European Commission. The resolution scheme is approved if either the Commission approves it upfront or it raises no objections within 24 hours. The Council only becomes involved in the decision-making if the Commission disagrees with the resolution scheme. In such a case, within 12 hours of receiving the resolution scheme from the SRB, the Commission may propose to the Council to either: (i) object to the resolution scheme on grounds that there is no public interest of resolution or (ii) approve or object to a material modification of how much the SRF is used in the resolution scheme. In such a case, the Council will, still within these first 24 hours, either approve or object to the proposal by a simple majority decision. In other words, they cannot amend it. If the Council approves the proposal of the Commission, the SRB must modify the resolution scheme accordingly within eight hours. This process implies that resolution decisions can be made over a weekend, also in the case when a scheme is modified by the Commission and approved or rejected by the Council.

The SRM Regulation also establishes the SRF, to which all the banks in the participating Member States would contribute. The SRF has a target level of an amount equal to 1% of covered deposits of the SSM banks, which is to be reached in eight years.

The transfer of contributions levied at national level to the SRF, as well as the mutualisation of the SRF's available means, is provided for in the IGA established among the Member States participating in the SRM. Mutualisation shall be subject to a transition period of eight years, during which financial means transferred to the SRF will be earmarked to national compartments. This mutualisation is substantially frontloaded, making available – if needed – a large portion of the available means in all compartments also in the early years of the transition period. If the compartments of the affected Member States and the mutualised contribution from all compartments are still insufficient, ex post contributions from the institutions in the affected Member States will be used. The SRB may also exercise its power to contract for the SRF borrowings or other forms of support or to make temporary transfers between compartments. This borrowing capacity should be in place by the date when the Regulation becomes fully applicable, i.e. 1 January 2016 at the latest.

The Council confirmed the agreement and the European Parliament approved it in April 2014. The text will again be put to a vote in the first plenary session of the European Parliament in July (in the form of a corrigendum to the April vote). After this, the Council will formally adopt the text; thus, final adoption is expected on 16 July. The Single Resolution Mechanism would enter into force on 1 January 2015, whereas resolution functions would apply from 1 January 2016.

Box 10

FORTHCOMING IMPLEMENTATION OF THE BAIL-IN TOOL

The forthcoming Bank Recovery and Resolution Directive (BRRD) will introduce a bail-in tool in all Member States by 1 January 2016 at the latest. The bail-in tool will enable resolution authorities to write down or convert into equity the claims of a broad range of creditors in resolution. This tool will be essential to achieve orderly resolution without exposing taxpayers to losses, while ensuring continuity of critical functions to avoid a serious disturbance in the financial system and the economy as a whole.

The order in which creditors, after shareholders, would be affected by a bail-in is the following: subordinated liabilities, unsecured and non-preferred liabilities, and preferred liabilities. Covered deposits are excluded from bail-in, but the deposit guarantee scheme (DGS) would step in and make a contribution for covered deposits (i.e. eligible deposits up to €100,000) if needed. To further protect deposits in insolvency and resolution, a harmonised depositor preference is introduced. Eligible deposits from natural persons and micro, small and medium-sized enterprises will be preferred over unsecured and non-preferred liabilities, while covered deposits will be preferred over all eligible deposits. The DGS will subrogate the preferred ranking of covered deposits in insolvency and resolution cases; thereby the depositor preference will also protect the DGS.

In the BRRD, a few particular types of liabilities, in addition to covered deposits, are excluded from bail-in, e.g. secured liabilities, liabilities in relation to client assets, client money or fiduciary relationships, and certain very short-term (less than seven days) liabilities to other institutions or to financial systems/operators of such systems. All creditors are also protected by the "no-creditor-worse-off" principle, i.e. they should never face losses in resolution that are higher than they would be subjected to under normal insolvency.

In exceptional circumstances, the BRRD allows resolution authorities to exclude or partially exclude other liabilities if: (i) it is not possible to bail them in within a reasonable time; (ii) it is strictly necessary and proportionate to achieve the continuity of critical functions and core business lines; (iii) it is strictly necessary and proportionate to avoid giving rise to widespread contagion; or (iv) if bailing them in would cause a destruction of value such that the losses borne by other creditors would be higher than if these liabilities were excluded from the bail-in. In order to avoid that this flexibility is casually used to shield creditors from losses, the resolution fund cannot be used, as a general rule, to cover any excluded liabilities until an amount of at least 8% of the total liabilities, including own funds, of a bank have been bailed in. The Commission has the right to object or require amendments if the requirements for such exemptions are not met, provided that the exemption would require a contribution by the SRF or an alternative financing source. The Single Resolution Mechanism will also ensure a consistent application of the bail-in tool in the banking union.

In order to make sure that there are sufficient liabilities to bail in at the point of resolution, the resolution authorities will, in consultation with the supervisors, determine a minimum requirement of eligible liabilities and own funds (MREL) for bail-in for each bank. The MREL will be determined as a percentage of total liabilities and own funds, with which banks must comply. To be eligible, an instrument must be issued and fully paid up, not owed to, secured by or guaranteed by

the institution itself, not be a preferred deposit or a derivative, and have a remaining maturity of at least one year, among other things.

The level and, for bank groups, the locations of the MREL will depend on the resolution strategy developed for the specific bank or group. The resolution authority, after consulting the supervisor, will draw up a plan which provides for the resolution actions to be taken if the bank meets the conditions for resolution. These plans should describe how orderly resolution may be achieved without exposing taxpayers to losses, while ensuring continuity of critical functions. It will be possible to adjust the MREL depending on the structure, size, risk profile and business model of the bank and its degree of resolvability. For most banks in the EU, the work to conduct resolvability assessments, develop resolution plans and determine MREL levels will begin in 2015, when both the BRRD and the Single Resolution Mechanism Regulation will be applicable. However, for the global systemically important banks (G-SIBs) under the G20/Financial Stability Board's agenda to end the too-big-to-fail problem, the work has already started. Currently, work – in which the ECB is participating – is ongoing to develop a proposal on the adequacy, type and location of gone-concern loss-absorbing capacity (GLAC) in resolution for G-SIBs. The GLAC proposal, which would correspond to the MREL in the BRRD, should be ready by the end of the year – in time for the FSB's Brisbane summit in November 2014.

Improved depositor protection in Europe

A final element of the banking union is the establishment, in the medium term, of a common deposit guarantee fund in Europe. A first step in this direction was the agreement on the **Deposit Guarantee Scheme Directive (DGSD)** on 17 December 2013. The DGSD will enter into force once it has been signed by both the Parliament and the Council and published in the Official Journal. It is expected to be finalised in May. Member States will have one year after entry into force to transpose it into national law.

The DGSD will ensure that deposits in all Member States will continue to be guaranteed up to €100,000 per depositor and bank. The DGSD will also ensure faster payouts with specific repayment deadlines, which would be gradually reduced from 20 to 7 working days. It will also ensure strengthened financing of national DGSs, notably by requiring a significant level of ex ante funding (0.8% of covered deposits) to be met in ten years. A maximum of 30% of the funding could be made up of payment commitments. In case of insufficient ex ante funds, the DGS would collect immediate ex post contributions from the banking sector and, as a last resort, the DGS would have access to alternative funding arrangements, such as loans from public or private third parties. There would also be a voluntary mechanism for mutual borrowing between DGSs from different EU countries.

The proposal for a Regulation on structural measures aims at improving the resilience of European banks

On 29 January 2014 the European Commission presented its proposal for a **Regulation on structural measures for EU credit institutions**. The proposal aims at improving the resilience of European banks by preventing contagion to traditional banking activities from banks' trading activities. This would be done by prohibiting banks from carrying out proprietary trading, i.e. securities trading not related to client activity or hedging, and only for the purpose of making a profit. Furthermore, it is proposed that supervisors can require a bank to shift other trading activities to trading entities, which are legally, economically and operationally separated from the deposit-taking entity of the bank. The decision on structural separation should be based on various risk metrics, such as the share of trading assets in banks' total assets and the relative importance of market risk exposure. Importantly, trading in government bonds issued by Member States will be exempted from the prohibition as well

as the separation requirements. Likewise, the deposit-taking entity will still be able to use financial instruments aimed at hedging its own risks. The regulation will cover all global systemically important banks in the EU as well as other banks with sufficiently large trading activities.

Another key objective of this proposal is to reduce banks' incentives to take excessive risks on the back of the safety net (resolution funds, deposit insurance funds, or ultimately governments), and to make banks less complex to resolve. In that way, the proposal can complement the BRRD and may, at the same time, contribute to enhancing systemic stability in Europe. Also, by harmonising rules on structural regulation, the proposal seeks to create a level playing field between banks inside the EU.

The ECB is working on its opinion on this proposal.

In addition to initiatives in the area of banking regulation, several steps have been taken to also strengthen the resilience of **financial infrastructures**.

The Governing Council adopted an ECB Regulation on oversight requirements for systemically important payment systems

Taking into account the comments received during a public consultation in 2013, it is expected that the Governing Council will adopt an **ECB Regulation on oversight requirements for systemically important payment systems** in due course. The Regulation, which implements the CPSS-IOSCO principles in a legally binding way, covers both large-value and retail payment systems of systemic importance, whether operated by Eurosystem national central banks or private entities. It defines the criteria for qualifying a payment system as systemically important. The requirements defined in the Regulation are aimed at ensuring efficient management of legal, credit, liquidity, operational, general business, custody, investment and other risks as well as sound governance arrangements, objective and open access and the efficiency and effectiveness of systemically important payment systems (SIPSs). These requirements are proportionate to the specific risks to which such systems are exposed. Four SIPSs have been identified: TARGET2, operated by the Eurosystem, EURO1 and STEP2, operated by EBA Clearing, and CORE, operated by STET. There will be a transitional period of one year after the entry into force of the Regulation, allowing for the four SIPS operators to familiarise themselves with and to implement the requirements.

Since the publication of the last issue of the FSR, important key milestones in the implementation of the **European Market Infrastructure Regulation** (EMIR) have been reached.

Central counterparties (CCPs) that were previously authorised in a Member State had to apply for authorisation under EMIR by 15 September 2013. On 18 March 2013 the first EU CCP was authorised under EMIR. In the meantime, further EU CCPs[39] that filed an application have been authorised to offer services and conduct activities in the EU. The authorisation of a CCP under EMIR triggers the process of determining the mandatory clearing obligation. In accordance with EMIR, the European Securities and Markets Authority (ESMA) will have to submit draft regulatory standards on the clearing obligation by mid-September 2014 if the classes of over-the-counter (OTC) derivatives notified to ESMA meet the criteria defined in EMIR. The procedure defined in Article 5(2) of EMIR is triggered every time a new CCP clearing OTC derivatives is authorised.

Six trade repositories have been registered by ESMA in accordance with EMIR. The first registration took effect on 14 November 2013 and the reporting to trade repositories began on 12 February 2014 for those contracts entered into as of that date, with outstanding contracts being phased in.

39 An up-to-date list of authorised CCPs can be found on the website of ESMA at http://www.esma.europa.eu/content/Registries-and-Databases

Table 3.8 Selected legislative proposals in the EU for financial markets

Initiative	Description	Current status
ECB Regulation on oversight requirements for systemically important payment systems	The Regulation aims at ensuring efficient risk management for all types of risk that systemically important payment systems face, together with sound governance arrangements, objective and open access, as well as the efficiency and effectiveness of SIPSs.	Expected to be adopted shortly.
European Market Infrastructure Regulation (EMIR)	The Regulation aims to bring more safety and transparency to the over-the-counter derivatives market and sets out rules, inter alia, for central counterparties and trade repositories.	The Regulation entered into force in August 2012. Implementation is ongoing.
Regulation on improving the safety and efficiency of securities settlement in the EU and on central securities depositories (CSDR)	The Regulation introduces an obligation of dematerialisation for most securities, harmonised settlement periods for most transactions in such securities, settlement discipline measures and common rules for central securities depositories.	The CSDR was adopted by the European Parliament on 15 April 2014 and is expected to be adopted by the Council in June, which would allow for an entry into force early in the third quarter of 2014.
Review of the Markets in Financial Instruments Directive and Regulation (MiFID II/MiFIR)	The proposals will apply to investment firms, market operators and services providing post-trade transparency information in the EU. They are set out in two pieces of legislation: a directly applicable regulation dealing, inter alia, with transparency and access to trading venues, and a directive governing authorisation and organisation of trading venues and investor protection.	The European Commission's proposal was published in October 2011. A final agreement between the Parliament and the Council was reached in January 2014. The proposals are now being fine-tuned at the technical level.
Money Market Fund (MMF) Regulation	The proposal addresses the systemic risks posed by this type of investment entity by introducing new rules aimed at strengthening their liquidity profile and stability. It also sets out provisions that seek, inter alia, to enhance their management and transparency, as well as to standardise supervisory reporting obligations.	The European Commission's draft proposal was published in September 2013. The European Parliament has been studying the proposal.
Regulation on reporting and transparency of securities financing transactions	The proposal contains measures aimed at increasing the transparency of securities lending and repurchase agreements through the obligation to report all transactions to a central database. This seeks to facilitate regular supervision and improve transparency towards investors and on re-hypothecation arrangements.	The European Commission's draft proposal was published in January 2014.

The European Commission published a legislative proposal on improving the safety and efficiency of securities settlement in the EU and on **central securities depositories** (the CSDR) in March 2012. The Regulation will introduce, inter alia, an obligation of dematerialisation for most securities, harmonised settlement periods for most transactions in such securities, settlement discipline measures and common rules for CSDs. The CSDR will enhance the legal and operational conditions for cross-border settlement in the EU. The European Parliament adopted the CSDR on 15 April and its adoption by the Council is expected in June, which would allow for an entry into

force in July 2014. The CSDR delegates to ESMA and the EBA the drafting, in close cooperation with the members of the ESCB, of technical standards within nine months of the entry into force date. In the interim period until the CSDR and technical standards are finalised and in force, the Eurosystem will use the Principles for Financial Market Infrastructures (PFMIs) as oversight standards.

In the field of **shadow banking**, following up on its action plan of September 2013, the European Commission issued a legislative proposal for a **regulation on reporting and transparency of securities financing transactions** (SFTs) on 29 January 2014. The proposal would require that all transactions are reported to a central database. This would (i) allow supervisors to better identify, monitor and address the risks associated with SFTs, (ii) improve transparency towards investors on the practices of investment funds engaged in SFTs and other equivalent financing structures by requiring detailed reporting on these operations, aiding investors in taking better-informed decisions, and (iii) improve the transparency of the re-hypothecation (i.e. any pre-default use of collateral by the collateral taker for their own purposes) of financial instruments by setting minimum conditions to ensure the consent of the parties involved.

The FSB made progress on its shadow banking reforms

At the international level, the Financial Stability Board (FSB) completed in March 2014 its high-level policy framework for strengthening oversight and regulation of other shadow banking entities (other than money market funds) with the endorsement of an information-sharing process among its members. The sharing of information among the competent authorities concerned is due to start in May 2014, and a peer review of the domestic implementation of the FSB policy framework is planned to be launched in 2015.

The FSB is expected to release an implementation timetable for the policy framework for recommendations to address financial stability risks associated with SFTs (initially published in August 2013). The FSB aims to finalise its policy recommendations on haircuts for non-centrally cleared SFTs by September this year, based on the feedback and results of a recent public consultation and quantitative impact study.

Table 3.9 Selected legislative proposals in the EU for the insurance sector

Initiative	Description	Current status
Solvency II Directive/Omnibus II Directive	The Solvency II Directive is the framework directive that aims to harmonise the different regulatory regimes for insurance corporations in the European Economic Area. Solvency II includes capital requirements, supervision principles and disclosure requirements. The Omnibus II Directive aligns the Solvency II Directive with the legislative working methods introduced by the Lisbon Treaty, incorporates new supervisory measures given to the European Insurance and Occupational Pensions Authority (EIOPA) and makes technical modifications.	The Solvency II Directive was adopted by the EU Council and the European Parliament in November 2009. It is now scheduled to come into effect on 1 January 2016. In March the European Parliament adopted the Omnibus II Directive following a plenary vote. The European Commission is now preparing delegated acts and EIOPA is working on a package of implementing technical standards and guidelines.

Breakthrough in insurance regulation in Europe

In the field of insurance regulation in Europe, a breakthrough has been achieved. Based on the technical findings of the Long-Term Guarantees Assessment (LTGA) by EIOPA, the trialogue has reached a compromise on measures for long-term activities in the Omnibus II Directive. Such measures shall mitigate distortions to long-term business triggered by short-term volatility in financial markets, as Solvency II introduces the market-consistent valuation of all assets and liabilities. The agreement made it possible to further proceed with the implementation of Solvency II. The European Parliament approved the Solvency II transposition date of 31 March 2015 and implementation date of 1 January 2016. The European Commission is now preparing delegated acts and EIOPA is working on two sets of implementing technical standards and guidelines.

Box 11

REVIVAL OF "QUALIFYING" SECURITISATION, MAIN HURDLES AND REGULATORY FRAMEWORK

The securitisation market seized up with the onset of the financial crisis and has remained severely impaired since then. Many factors are deemed to be causing this stagnation, including poor investor sentiment, unfavourable transaction economics, a poor macroeconomic environment and regulatory concerns.

Risks and losses associated with securitisation products have, however, been substantially different across asset types and jurisdictions. While certain securitisation market segments were key contributors to the widespread stress, this was not the case for all segments. Indeed, only 0.1% of European residential mortgage-backed securities (RMBSs), accounting for more than half of total European securitisation issuance, defaulted between 2007 and the third quarter of 2013, by one estimate[1]. This is in stark contrast to the performance of collateralised debt obligations (CDOs) of asset-backed securities (ABSs), where the default rate was around 40% over the same period. The chart below provides additional evidence of heterogeneity in securitisation performance across both jurisdictions and asset classes. The performance of securitised instruments throughout the crisis has at times been extremely heterogeneous, which in many ways contrasts with the stigma that has affected the overall demand for securitised instruments across the board.

On the regulatory side, the treatment of securitisation is profoundly under review, both at the European and international level. This is however a complex task: the beneficial features of securitisation (such as risk diversification and the creation of marketable securities out of illiquid assets) should be fostered, while mitigating potential risks (such as the lack of risk retention by originators and the complexity and opaqueness of certain products). At the same time, consistency needs to be ensured relative to other instruments (such as covered bonds) and across various market participants (e.g. banks, insurers, money market funds) which are subject to different regulatory frameworks; failure to achieve this balance could lead to unintended consequences. The regulatory treatment of securitisation requires close scrutiny: recent proposals appear to have been calibrated on the worst-performing transactions, whereas structural differences across jurisdictions could have been taken into consideration more prominently.

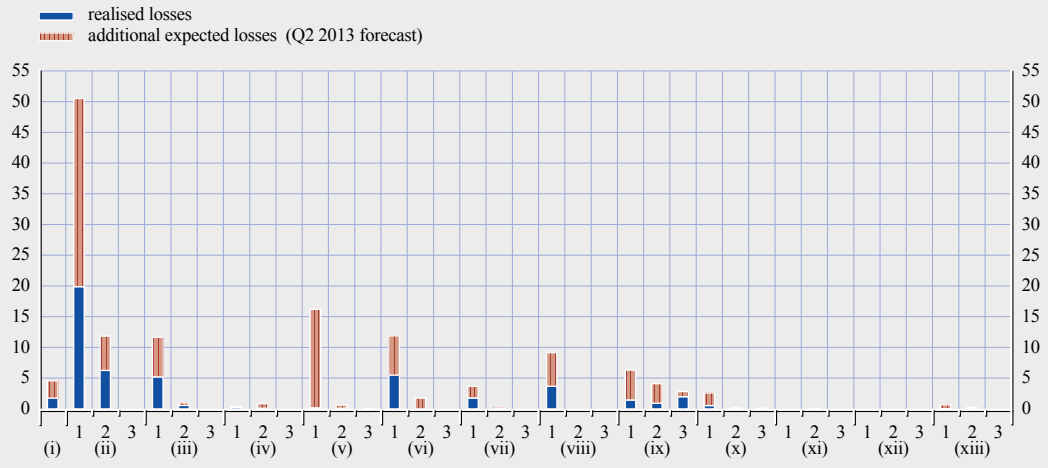
1 Source: Standard and Poor's.

In this context, some recent initiatives aim to identify qualifying securitisations, which through their simplicity, structural robustness and transparency, would enable investors to model risk with confidence and would provide originators with incentives to behave responsibly. Qualifying securitisations could benefit from improved market liquidity and may also warrant a more favourable regulatory treatment. The European Commission is currently undertaking work on high-quality securitisation products in order to assess if a preferential regulatory treatment compatible with prudential principles is warranted for such securitisations. The ECB has a keen interest in a well-functioning ABS market and is therefore closely following the developments in initiatives regarding securitisations, also in the light of the role of ABSs as collateral in the Eurosystem's monetary policy operations. The ECB has introduced loan-level information requirements for ABSs if used as collateral in the Eurosystem's credit operations. Through the launch of the Prime Collateralised Securities (PCS) label initiative in November 2012, market participants have also attempted to identify high-quality ABSs. Moreover, the ECB is actively contributing to efforts to revive the ABS market by expressing its views on the matter, including in two joint publications with the Bank of England on the revival of the securitisation market in April and May 2014.

The topic is of wider importance owing to the desire among EU policy-makers to explore the role of SME loan securitisation in funding the real economy and to ensure that such issuance is not unduly constrained by its regulatory treatment. With the European deleveraging cycle not yet completed, enhancing the access to financing is a crucial policy objective. Owing to the ability of securitisation instruments to diversify credit risks, lower funding costs and mitigate asset encumbrance, this topic is also key from a financial stability perspective.

Structured finance: realised and additional expected losses across regions

(2000 – 2012; percentages)



1 United States
2 Europe, Middle East and Africa
3 Asia

(i) All instruments
(ii) Collateralised debt obligations
(iii) Collateralised bond obligations
(iv) Collateralised loan obligations
(v) Other structured credit
(vi) Sub-prime residential mortgage-backed securities
(vii) Prime residential mortgage-backed securities
(viii) Other residential mortgage-backed securities
(ix) Commercial mortgage-backed securities
(x) Commercial asset-backed securities
(xi) Auto asset-backed securities
(xii) Credit card asset-backed securities
(xiii) Other asset-backed securities

Source: Fitch Ratings.

Many challenges remain in terms of making any definition of "qualifying securitisations" operational, reaching an EU and international agreement, and the possible "rewards" for qualifying ABSs. In this context, the Eurosystem's (and, more generally, central banks') ABS collateral eligibility criteria may offer an appropriate starting point to define qualified securitisation criteria, while prudential considerations should also be taken into account when defining a qualifying instrument for regulatory purposes.

The potential revival of a qualifying securitisation market will certainly require concerted and coordinated efforts; thus, the active involvement of all key EU and international policy bodies involved in structured finance and long-term financing is crucial. A healthy securitisation market based on high-quality underlying assets, robust and standardised structures, and increased disclosure could contribute to providing smooth funding channels for real economy assets, distributing risks across different asset classes, regions and financial sectors, and increasing banks' flexibility to tap additional sources of liquidity. All in all, it could support both the financial system and the broader economy.