Report on Risks and Vulnerabilities of the European Banking System

July 2012
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Executive summary

The current conjuncture

EU banks have undergone significant changes since 2007, with an accelerated pace in 2011 and 2012. Funding structures have shifted considerably, towards the predominance of official and retail sources of funding. Capital levels have strengthened whilst profits have reduced, leading to significantly lower returns on equity.

Business models are adapting as banks retreat from some areas of business – such as investment banking or global finance – particularly where economically affordable funding is no longer available and regulatory changes require more risk protection. Further adjustments are likely. The re-segmentation of banking markets within national boundaries, particularly interbank funding, will significantly impact business models going forward.

During 2011 and 2012 significant efforts have been made to strengthen the EU banking sector in terms of both capital and funding/liquidity. The EBA's 2011 EU wide stress test reviewed credit soundness, sovereign holdings and funding costs. However, as the situation deteriorated additional measures were required, leading among other steps to the EBA's December 2011 Recapitalisation Recommendation. The Recapitalisation entailed a system wide strengthening of participating banks' capital bases to 9% core tier 1 and thus their ability to absorb losses. It was not a stress test, but was a necessary step in the progress to restore banks balance sheet. National authorities will continue to pursue the process of balance sheet repair by assessing individual banks' asset valuations, especially for specific credit segments with a focus on geographies and sectors such as property loans.

Market participants and rating agencies continue to see banks and sovereigns as inextricably interlinked, leading to acute pressure on funding costs. The ECB’s LTRO has meant that funding pressures have eased somewhat following the ECB’s action but further measures will be required to return to sustainable funding. Policy announcements as of June 2012 to potentially inject capital directly into banks and undertake EU wide supervision appeared to improve market sentiment in this regard.

Nonetheless, as of mid-2012 the situation remains extremely fragile with increasing uncertainty on asset quality, funding capacity and concerns over the possibility of extreme events. Banks and supervisors are considering, and putting in place, relevant emergency actions as a rapid deterioration of events could lead to further significant change in the banking landscape.

Beyond 2012 – medium term supervisory risks

A return to sustainable funding, beyond the temporary solution brought by the LTRO, will require (i) restoring market confidence in EU banks, (ii) a recalibration of banks strategies, business models, asset-liability mixes and risk-tolerance levels, and (iii) forward-looking and close monitoring by supervisors in 2012 and beyond. Lengthening maturity profiles, diversifying funding sources and meeting the new liquidity requirements must all be balanced with the challenges of increasing usage of collateral, rising asset encumbrance and changing market views on banks' unsecured liabilities. The focus on secured and retail funding all create potential challenges on the prudential and consumer protection front. These issues will absorb the efforts of both bank management teams and supervisors in the years to come. For the larger EU banking groups with material cross-border activities these efforts will have to continue to expand well beyond national borders.

As banks adjust to the changing environment, further restructuring of their activities and business models is expected. Moreover, the need to address more vigorously asset quality deterioration – particularly (i) where economies are in recession and (ii) for higher-risk credit sectors like real estate – will come to the fore.
A number of tools are being used by banks and supervisors to address deteriorating asset quality. For example, higher provisioning levels are being demanded and some supervisors and banks are strengthening their loan-modification and arrears management monitoring capacity to help identify inflection points where forbearance on potentially problematic loans moves from being a risk mitigant to being a risk in its own right.

Lower returns on equity, tougher funding conditions, and the segmentation of the single market, are all key drivers for change in banks business models. Heightened supervisory attention will be paid to these developments to understand changes both within the banking system and to monitor aspects of traditional banks which move to other areas of the financial system.

Table 1 summarises the EBA’s views regarding the main risks and vulnerabilities in the EU banking sector in the short and medium terms.

### Table 1: Main risks facing the EU banking sector

<table>
<thead>
<tr>
<th>Bank risk</th>
<th>Risk drivers</th>
<th>Level of risk</th>
<th>Trend</th>
<th>Contributing factors / interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sovereign risk</strong></td>
<td>Sovereign deficits, sovereign/bank link, lack of market confidence, political uncertainty</td>
<td></td>
<td>↑</td>
<td>Macro-economy conditions</td>
</tr>
<tr>
<td><strong>Funding and liquidity risk</strong></td>
<td>Volatile market sentiment, risk of banks’ downgrades, national compartmentalisation and ring-fencing</td>
<td></td>
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<tr>
<td><strong>Deteriorating asset quality</strong></td>
<td>Loan restructurings and modifications, uncertainty on timely recognition of problem loans, dynamics of real estate</td>
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<tr>
<td><strong>Business model changes</strong></td>
<td>More robust capital levels and deleverag</td>
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<tr>
<td><strong>Capital levels and Deleverage</strong></td>
<td>Business model changes, macro-economic condition, volatile market sentiment, risk of banks’ downgrades</td>
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<td><strong>Asset encumbrance</strong></td>
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<tr>
<td><strong>Fragmentation of the single market</strong></td>
<td>Funding and liquidity risk</td>
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<td><strong>Challenge of shadow banking</strong></td>
<td>National-only regulatory/policy initiatives. Lower regulation of other financial sectors</td>
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<tr>
<td><strong>Level</strong></td>
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</tr>
<tr>
<td><strong>Trend</strong></td>
<td>Increasing</td>
<td>Stable</td>
<td>Decreasing</td>
<td>The level of risk summarises, in a judgmental fashion, the probability of the materialisation of the risk factors and the likely impact on banks. The assessment takes into consideration the evolution of market and prudential indicators, NSAs and banks’ own assessments as well as analysts’ views.</td>
</tr>
</tbody>
</table>

Source: EBA Staff Assessment
This is the first Annual Report on Risks and Vulnerabilities of the European banking sector by the European Banking Authority (EBA). It has been prepared in accordance with the EBA Regulation (Art. 32(3) Of Regulation (EU) No 1093/2010 of the European Parliament and of the Council) which states:

\[
\text{Without prejudice to the tasks of the ESRB set out in Regulation (EU) No 1092/2010, the Authority shall, at least once a year, and more frequently as necessary, provide assessments to the European Parliament, the Council, the Commission and the ESRB of trends, potential risks and vulnerabilities in its area of competence.}
\]

The Authority shall include a classification of the main risks and vulnerabilities in these assessments and, where necessary, recommend preventative or remedial actions.

The EBA is presenting this report to discharge its responsibilities under the relevant regulation. The report describes the main developments and trends that affected the EU banking sector in 2011 and provides the EBA’s outlook on the main micro-prudential risks and vulnerabilities looking ahead.

This report focuses on the short and medium-term challenges that the EU banks face. The report draws on the views of national supervisors and banks to construct a forward-looking view of risks that are becoming of concern to regulators and policy makers. The report also identifies some of the measures that are being set in train now to address these forward-looking risks.

The report is based on various sources, such as supervisory data, public disclosure by banks including audited statements, market indicators and other metrics, as well as the EBA’s own ad-hoc thematic analyses.

Micro-prudential information on an institution-by-institution basis is the first essential component for the assessment of risks and vulnerabilities. The EBA collects a core set of “Key Risk Indicators” (KRIs), which are reported quarterly by national authorities and cover 57 banks from 20 EEA countries. In terms of coverage, the banks in the sample cover at least 50 per cent of each national banking sector and time-series have been collected, on a best effort basis, from the last quarter of 2008 (see the Annex for details).

Since KRIs are collected at a point in time, they tend to be backward-looking in nature. They are thus the starting point for the EBA analysis and are complemented with various other forward-looking sources of information and data.

In particular, information from the Risk Assessment Questionnaire (RAQ) is also analysed. The RAQ is a qualitative questionnaire completed for individual banks in order to get a bottom-up view on the main risks and vulnerabilities as perceived by supervisors and banks themselves. The main findings of the RAQ are reported throughout the report and have contributed to the overall risk assessment.
The report is organised as follows:

- **Chapter 3** presents notes on the sovereign crisis and the interconnections between banks and sovereigns under stress and sets the stage for the rest of the report. It also illustrates the impact of the crisis on banks’ liquidity and funding positions and the actions put in place by the authorities.

- **Chapter 4** provides a broader description of the current conjuncture, based on the supervisory data that the EBA collects as well as on the results of the RAQ, carried out last March.

- **Chapter 5** switches to the medium-term assessment. The leitmotif is again banks’ funding and liquidity and the post-LTRO strategy, but also the outlook on asset quality as the result of the difficult macroeconomic environment.

- **Chapter 6** looks more generally at the possible shape of the EU banking sector after the crisis and discusses the perspectives in terms of business models and deleveraging.

- Finally, **Chapter 7** introduces the issue of consumer protection and identifies how poor customer-relationship practices may affect banks’ profitability and risk profiles.
3 The sovereign crisis and its impact on liquidity and funding

The current crisis has revealed the strong interconnections in the capital markets between EU sovereigns and banks. These interlinkages have led to a prolonged collapse of market confidence in the EU banking sector, which is still gravely affecting funding costs and availability and equity valuations. This has made it very difficult for banks to issue new debt in the market, or indeed new equity. Risk aversion and reluctance to invest in EU banks – especially those in the euro zone (EZ) – have been particularly widespread across non-European investors, notably in North America.

3.1 Structure of EU banks’ funding

EU banks are more dependent on wholesale funds than banks in other regions due to the specific dynamics of each market.

As examples, the Asian markets are characterised by a high savings ratio as well as by a more reduced share of economic growth generated by bank lending. In the US about three-quarters of outstanding residential mortgages are not in originating banks’ balance sheets, being securitised and held by GSEs and to a lesser extent via private securitisation. In contrast, a very large majority of mortgages in the EU – especially outside the UK and the Netherlands – are held in the originating banks’ balance sheets, being largely funded with covered bonds raised in wholesale markets. Also, to a greater extent than in the EU, the US business credit market is highly bank-disintermediated as practically all large corporates and a significant number of larger SMEs issue directly in the market.

Equally, large markets in the EU saw significant savings disintermediation in earlier years (savings shifting from bank deposits to mutual funds and life insurance plans), on a far broader scale than any corresponding credit disintermediation. As a consequence, EU banks have had to rely increasingly on wholesale funds (market issuance but also corporate deposits) to underpin their lending growth. That being said, we note that a degree of savings reintermediation back to bank deposits is now taking place in parts of the EU.

The ratio of customer deposit to total liabilities dropped from about 50% to 46% between 2009 and 2011 (chart 1).
The structure of funding explains why EU banks have been particularly affected by the crisis. In fact, the last five years have seen a significant change in the dynamics of bank funding. Before the crisis, EU banks were pursuing mostly asset-driven strategies. Specifically, as funding was readily available at affordable price points, especially in the wholesale markets, banks were aiming primarily to increase their assets, leading to excessive leverage which generated unsustainably high earnings for several years.

The crisis and its implications on the availability of liquidity forced an abrupt strategic turnaround for banks, which have been since adopting liability-driven strategies, aiming to obtain the funding at price points which could justify generating assets at economically viable costs.

3.2 The impact of the crisis

3.2.1 Wholesale funding

Medium and long-term market issuance by banks has been significantly down from late 2007 onwards compared to the pre-crisis decade due to widening spreads and reduced availability – as investor confidence in banks has been harmed by the crisis, especially in the aftermath of the Lehman bankruptcy.

Source: Dealogic
Three pronounced funding-drought periods can be identified: (i) the acute phase of the financial crisis post Lehman (3Q 2008-1Q 2009); (ii) the first EU sovereign market concern (2Q 2010); and (iii) the deeper EU sovereign crisis concern (2H 2011). This last phase is continuing during 2Q 2012, even if ECB funding for EU banks via LTRO significantly attenuated the liquidity tail risk and shored up market confidence during 1Q 2012.

Deteriorating market confidence has also led to a significant reduction in cross-border interbank transactions. This has been reflected in shorter maturities, higher borrowing rates being demanded, and mostly in banks’ unwillingness to engage with other banks on a cross-border basis within the EU. This re-segmentation within national boundaries is ongoing and if not reverted could have negative consequences for the pan-EU market and financial flows.

One direct consequence of the difficult market conditions for traditional bank medium- and long-term funding – issuing unsecured bonds and notes – is the growth in importance of secured funding such as covered bonds, for which market appetite has remained in place more so than for unsecured debt. This is explained by the additional security afforded to covered bond investors by the existence of (i) cover pools consisting of relatively safer assets as a second source of repayment (low LTV mortgages or public-sector loans) and (ii) specific legal frameworks for covered bonds which offer additional investor reassurance. In both primary and secondary markets covered bond spreads have remained tighter than the equivalent senior unsecured debt thus making covered bonds more attractive funding instruments for residential mortgages. The fact that rating agencies rate covered bonds significantly higher than the senior unsecured liabilities of the same issuer – in a majority of cases as high as AAA – has also been contributing to higher investor appetite.

As for short-term funding, banks have been increasingly borrowing on a collateralised basis (via repos) from three main sources: (i) central banks, such as the ECB/Eurosystem for euro zone banks; (ii) non-bank participants – leveraged and non-leveraged funds, insurance companies, non-financial corporates, etc., and (iii) other banks via secured interbank transactions.
The main policy actions in 2011

The ECB Long Term Refinancing Operations (LTRO)

A large number of euro zone banks, large and small, availed themselves of funds taken up from both the December 2011 and the February 2012 LTROs. This has allowed them to bridge their market funding shortage recorded in the second half of 2011 and their refinancing needs for 2012. The LTROs’ availability and low cost have provided important support even in the case of those banks which did not experience funding shortages.

The use of the LTRO is difficult to track with high accuracy. However, at the time of writing the largest share of LTRO funds, about 75%, remain re-deposited with the ECB/Eurosystem. Banks have sought to boost their liquidity position to regain market confidence and to protect their balance sheet against major unexpected risks. Deposits with the central banks are viewed as a top-quality liquidity buffer. Second, they have also utilised LTRO funds to refinance shorter term funding from the ECB/Eurosystem and thus improve the maturity structure of their liabilities as well as storing excess funds to await longer-term investment or lending opportunities. To a lesser extent, some euro zone banks have engaged in purchasing domestic government bonds with part of the LTRO proceeds during 1Q 2012.

The EBA EU-wide stress test and the recapitalisation exercise

On the asset side of the balance sheet, concern about asset quality have led to market concerns about the size of capital buffers and their ability to cope with future credit losses. The EBA’s 2011 EU-wide stress test took a first necessary step to address such concerns. The test looked ahead two years to assess the impact of credit losses and higher funding costs on banks’ balance sheet, a scenario which included ongoing sovereign finance weakness. For the first time assessing banks against a common definition of core tier 1 the stress test prompted significant pre-emptive capital raising by banks (EUR 50bn between January and April 2011). The test was also accompanied by an unprecedented transparency exercise, which addressed ongoing uncertainty about banks holdings of concern such as government debt.

However, while the stress test was taking place and – even more – after the publication of the results, economic conditions deteriorated further and sovereign risk rose further. Following the escalation of the sovereign debt crisis, the EBA as part of the broader European stability package agreed by ECOFIN in November 2011 conducted a capital exercise amongst 71 banks aiming at assessing their capital needs and restoring confidence in the markets. Following the assessment of capital needs, the EBA issued a Recommendation asking banks to build a temporary capital buffer to reach a 9% Core Tier 1 ratio by 30 June 2012, after prudential valuation of sovereign debt holdings. Pursuant to this recommendation the EBA has set up a series of follow-up steps asking banks with a capital shortfall to present the recapitalisation plans outlining the measures they plan to take in order to meet the target capital level.

Funding shortages have been shored up by central bank lending and other policy measures such as state guarantees for bank debt. The post-Lehman funding drought has been mitigated by the concerted vigorous action of major central banks (ECB/Eurosystem, US Federal Reserve, Bank of England, Swiss National Bank, etc.) as well as state guarantees for bank debt. The second phase has been mitigated by the ECB/Eurosystem via short-term funding, as well as emergency liquidity assistance (ELA) for some countries with stressed sovereigns. The third phase has been mitigated by the ECB’s two LTRO programmes which generated gross lending to EU banks of over EUR 1 trillion, as well as by state guarantees for bank debt.

3.2.2 Bank deposits

Since the beginning of the crisis, EU banks have been focusing on strengthening their funding base by making deposit gathering a key strategy. By doing this banks aimed at lowering their loan-deposit ratio and thus continuing lending without increasing their reliance on either market or central-bank funding.

This strategy has brought mixed results so far, largely because of tighter competition in an already overbanked market and savers’ relative reluctance to tie up funds in low-rate deposits. On the other hand, growing risk aversion has also led to an outflow of savings from investment funds in some countries (France, Italy, etc.) directly benefitting banks’ deposit bases. In fact, the loan to deposit ratio remained relatively
flat between 2009 and 2012, after a contraction in the first quarter of 2011 it increased again and remain relatively stable, for both the top 15 banks and the rest of the sample, over the last quarters, at about 150% (Chart 4).

**Chart 4**

Overall, unlike the situation with market funds, deposit stocks have shown stability through the crisis, with the exception of a few countries at the time of stress. To an extent, this is so because of the existence of deposit guarantee schemes (DGS) which during the crisis were enhanced to an EU-wide harmonised minimum amount of EUR 100,000 per depositor. However DGS-covered deposits do not include business deposits (wholesale deposits). There has been movement of wholesale deposits in some countries, starting in 2H 2011 when heightened bank uncertainties were less mitigated by specific policy measures (such as the LTRO). It is important to point out that deposit-base stability is not to be taken for granted by any bank.
4 The short-term assessment

4.1 Credit risk and asset quality

The sovereign crisis and, more generally, the macroeconomic conditions have obviously affected banks’ risk and solvency profiles.

The EBA’s KRIs provide mixed indications about banks’ exposure to credit risk. The ratio of impaired loans to total loans increased from 4.5% to 5.6% between 2009 and 2011. The variability across the sample is explained, among other things, by size: the difference between the top 15 and other banks has been stable over the last 2 years at around 2 percentage points, with the former group of banks demonstrating more resilience to credit risk than the others (Chart 5).

Chart 5

Looking at the stocks, accumulated impaired financial assets to total gross assets remained stable at about 1.6%, with however a significant increase of the dispersion (Chart 6).

1 Using the balanced sample (please refer to the annex for the definition), the increase would be much more sizeable (from 4.9 to 6.3 per cent).
As far as the level of provisions is concerned, the coverage ratio (i.e. ratio of specific provisions on loans to total loans) increased until March 2011 and then slightly declined to 42% in December 2011. The reduction was more pronounced for banks different from the top 15 and the gap between these two categories increased at 5 percentage points (Chart 7).

Overall, the time series of credit risk indicators over the last 9 quarters signal that asset quality is being affected by the increasingly deteriorating macroeconomic environment. However, this is happening at a different pace across countries and type of banks, as mirrored by increased variability. This could be due to the fact that the crisis has been affecting countries at different times and the impact of the second macroeconomic contraction may be delayed for some countries and not yet visible in 2011-end data still. Furthermore, there are indications that several banks have adopted various forms of forbearance which allowed both borrowers to more easily honour their obligation and banks to postpone the recognition of possible losses.
In fact, the more forward-looking picture from the RAQ shows that the respondents mostly expect that the impairment levels will not decrease in the near term (Chart 8). Exposures towards small and medium enterprises are the most frequently mentioned driver for the expected increase in problem loans.

Chart 8

Based on your view on future trends in credit quality and impairment levels, impairment provision over the 2012–early 2013 time horizon:

- a. Will increase
- b. Will remain at roughly the same level
- c. Will decrease

4.2 Profitability

The figures on asset quality are confirmed looking at the share of operating income absorbed by impairments, which decreased from 2009 to the first quarter of 2011 and then started increase, reaching 24% (Chart 9).

Chart 9

Impairments on financial assets to total operating income
(interquartile range, medians)

- All banks
- Top 15 banks
- Other banks

Number of respondents that agree/strongly agree.
The efficiency indicators point to the deterioration of banks’ ability to keep relative costs under control in a phase of declining profitability. The cost to income ratio increased from 57% to 61%, as the result of operating expenses increasing more than profits. This points to the need for banks to further work on cost control as the only way to boost profitability ratios at the current juncture (Chart 10).

Chart 10

The median return on equity declined from 6% in 2009 – already a low level of profitability compared to the pre-crisis figures – to around 3% at the end of 2011. Net profitability has been affected by overall economic conditions, the increased cost of funding and reduced margins from both interest bearing and market activities (Chart 11).

Chart 11

Banks and supervisors’ assessment on the current and prospective levels of profitability is therefore a valuable complement to the historical figures. In the RAQ, respondents believe that profitability returns will remain challenged for the medium term. ROEs remain in the single digits, which is viewed as insufficient given that a majority of respondents estimate cost of equity in the 10%-12% range (with market estimates going as high as 15%).

There is also clear perception that costs remain too high and faced with lower revenue levels most banks plan to reduce expenses further through restructurings and better efficiency controls. Despite a historically low level of official interest rates banks’ funding costs remain high which challenges their net interest margins. Importantly, the negative margin effect is not compensated by a positive volume effect as material lending growth is not occurring, nor is it likely given the ongoing economic sluggishness across the EU. On the other hand, a majority of respondents to the RAQ consider that their earnings mix is improving and will
become more stable and predictable, which they rightly view as a net positive. It is fair to add, however, that for some this goal remains mostly an aspiration and less a reality on the ground.

Looking ahead, an important issue is whether profitability levels will recover and be able to reach pre-crisis value. In that respect, while some respondents seem to be aware that the ROE will not climb to the levels recorded before the onset of the crisis, many of them estimate that, to operate effectively, they need ROE to increase to a level between 10% and 15%, with a number of respondents aiming for returns above 15% (Chart 12).

Chart 12

4.3 Solvency

Notwithstanding the challenging conditions in financial markets, banks managed to strengthen their capital positions between 2009 and 2011, with the capital base increasing, on average, more than the risk-weighted assets.

The Tier 1 ratio excluding hybrid instruments – a proxy of the core tier 1 ratio – show a clear positive trend, with an increase from 8.5% to 9.5% for the EU banks. This is particularly so for relatively smaller banks (Chart 13).

Chart 13

3 Number of respondents that agree/strongly agree.
Capital increases are the result of various drivers, including the authorities’ requests to increase capital levels and also market expectations. More interestingly, the dispersion of the indicators shrunk markedly, suggesting that all banks in the sample are converging towards a more conservative solvency base.

Turning to leverage, the ratio of tier 1 capital to total non-weighted assets (net of intangibles items) – a rough proxy of the leverage ratio – decreased from 5.6% to 5.0% (Chart 14). EU banks have been less active than US banks in deleveraging and de-risking at the height of the financial crisis (2009-2011). EU bank deleveraging will align business models to markets’ expectations and to forthcoming regulatory requirements (see Chapter 6).

**Chart 14**
5 The medium-term assessment

5.1 Funding and liquidity after the LTRO

Largely due to decisive policy measures adopted in the midst of the sovereign and bank funding crisis in 4Q 2011, the liquidity and funding tail risk for the EU bank aggregate has been temporarily alleviated. The immediate effect of the Long Term Refinancing Operations (LTRO) was markedly positive and EU banks were able to issue over EUR 57 billion in 1Q 2012 – both unsecured and covered bonds (see Chapter 3).

However both markets and policy makers fully recognize that such measures are not a lasting solution – only a bridge to it. A lasting outcome, which would restore market confidence in EU banks on a firmer and more sustainable basis, cannot occur until the ongoing financial crisis of the euro zone is addressed decisively and the EU economy takes off on a stronger footing.

This assessment is also shared by the respondents to the RAQ who concur on the fact that central bank borrowing cannot be a sustainable long-term solution to bank funding. Indeed, following the immediate, positive effect of the LTRO on markets, EU banks in Q2 2012 have again been experiencing difficulties in obtaining wholesale funds in view of the markets’ renewed caution faced with persisting difficulties and uncertainties related to the sovereign crisis. Specifically, this concerns focus on (i) the historically high level of public indebtedness in the euro zone, increasingly perceived as unsustainable in some countries, (ii) uncertain and uneven macroeconomic conditions across the EU and (iii) increasing socio-political uncertainties.

In the second quarter of 2012, very little unsecured issuance took place in primary markets, and covered bond issuance by larger EU banks in economically stronger countries has been more modest.

The optimal outcome for banks, policy makers and regulators alike should be a return to normal funding conditions for all EU banks. However this should not imply a return to the pre-crisis excessively cheap funding-driven leverage and risk taking, which created a false sense of risk safety and readily available liquidity. Critical for such an outcome is the return of sustainable market confidence in the banking industry in general and in EU banks in particular, entailing banks’ ability to fund themselves in the market at economically-viable costs and to issue new equity in the market. Important in this respect would be the re-emergence of an active cross-border interbank market within the EU on a non-collateralised basis, thus reflecting a return of confidence within the banking system itself. Properly-functioning cross-border interbank markets would also diminish the need of many banks to obtain short-term funds on a collateralised basis from non-banks and central banks.

On the regulatory side, the implementation of the Basel 3 rules and the development of a single rulebook across the EU along with gradual co-ordination and convergence of supervisory practices will play a central role in restoring market confidence in banks on a pan-EU basis, which would benefit market funding.

Once such a return of market confidence is achieved EU banks would be able to refinance themselves away from LTRO and other central bank borrowing or public guarantees.
5.1.1 Use of collateral and asset encumbrance

As the result of the difficult liquidity conditions, EU banks have increasingly used secured funding for covering their financing needs. This allowed them to access medium- and long-term funds (for instance covered bonds) and to continue to finance the real economy even in the face of difficulties for traditional unsecured bank funding.

Access to a stable and predictable funding source strengthened the franchise value and funding stability of EU banks engaged in retail lending, aiding both their market position and the respective banking system’s financial stability in general. However, increased reliance on secured borrowing leads to rising levels of asset encumbrance (i.e., assets earmarked as collateral for specific secured funding). While, the current level of asset encumbrance is on average not excessively high, in many countries it is rising particularly in those banking systems which (i) have been making extensive use of covered bonds for mortgage funding and (ii) have been relying to a large extent on ECB/Eurosystem funding.

Rising asset encumbrance will, over time, implicitly lead to higher loss given default for unsecured creditors of banks (including senior), thus increasing their investment risk. In addition, banks may run out of collateral at some stage, also due to the increasing use of collateral in the interaction with central counterparties. This could be mitigated by collateral eligibility rules being eased further by the Eurosystem, but excessively soft rules could in time bring a new set of risks for secured creditors and raise doubts about the safety of secured funding in general. There is also the risk of multi-notch covered bond ratings downgrades (“cliff risk”) due to various exogenous factors, including changes in rating agencies’ methodology.

According to the RAQ, the trend towards higher usage of secured borrowing is widely acknowledged and considered as likely to continue. A degree of uneasiness with respect to rising asset encumbrance is visible, but this aspect is in the process of being assessed by policy makers and banks.

Looking ahead, it is important that these challenges are taken into account by banks’ in shaping their funding plans and monitored by authorities in their supervisory reviews.

5.2 Credit risk and asset quality

Deteriorating asset quality has already been identified as a source of concern and further deterioration is regarded a major risk going forward.

The extent to which asset quality is deteriorating greatly varies across countries and institutions, and can be related both to exposures to specific asset classes and to concentrations of exposures. In many banks, asset quality has mainly deteriorated because of concentrations of exposures towards higher risk asset classes, in particular the real estate sector. In other banks, deteriorations are mainly caused by concentrations of credit risk exposures towards counterparties in countries under sovereign stress. Other causes are involvement in specific activities such as loans in foreign currency or structured finance.
The reliability of banks’ risk parameters

In 2011 and 2012 questions about the consistency in the outcomes of banks models to assess risk weighted assets (RWAs) have come to the fore. Differences in RWA are to be expected due to different business models, geographic distribution and risk appetite. Moreover, these differences are helpful in understanding banks’ risk profiles and aligning incentives with those profiles as more regulatory capital is required to address the risks.

However, it is also possible that differences can be caused by unintended sources. Initial supervisory analysis suggests that concerns about widespread mis-alignment of RWAs, concentrated in some geographies or portfolios, are not well founded. However, in-depth analysis is required to evaluate the sources of material differences in RWAs across banks in the banking book, and possibly the trading book, in order to distinguish between intended and unintended drivers.

The EBA is undertaking EU specific work in 2012 which is aligned with, but separate from, global work under the Basel Committee. The EBA’s work will initially focus its activity on credit risk and mainly on the internal models approach. The work will analyse the risk estimates used in the RWAs calculations and investigate to what extent eventual differences may reflect individual experience and risk management practices, different features of the internal models and inconsistent interpretation/practical application of the CRD/CRR. Furthermore, attention will be dedicated to the computation of RWAs under the standardised approach with particular reference to risk classification, usage of external ratings (ECAs) and credit risk mitigation techniques.

Relevant findings will inform the EBA as to whether specific recommendations and guidelines for improving consistency in the computation of RWAs are required and whether additional Pillar 3 disclosures are also required. The EBA will also assess whether further validation and on-going monitoring of internal models is required by national authorities and banks.

A number of banks affected by deteriorating asset quality are already exposed to an elevated stock of problem loans accumulated in a difficult economic environment in 2011 and earlier, and their earnings are subdued because of substantial loan-loss provisioning (see Chapter 4). These banks would be particularly vulnerable to further asset-quality deterioration caused by the worsening economic outlook and by a continued weak operating environment. Expected increasing provisioning, in particular for portfolios where provisioning did not increase in line with heightened credit risk, could also further weaken earnings, and poses challenges to maintain adequate capital levels.

5.2.1 Dealing with deteriorating asset quality

EU supervisors report a range of approaches for dealing with credit risk, also depending on the dynamics of asset quality in different countries. The extent of loan forbearance has been of heightened interest in addressing credit risk, and EU supervisors identified its use as widespread throughout Europe. For most supervisors, loan forbearance entails variations of a concept to grant concessions to a borrower in response to financial stress.

In recessionary periods, forbearance can be an important tool for both banks and consumers, providing a window of opportunity for the creditors to improve their financial situation so that credit risk does not materialise, and leading to an improvement of the overall credit portfolio quality. However, if recessions are particularly severe and prolonged, there might be limited prospect of the creditors’ curing. The incentives for forbearance can shift and disguise credit risks in banks’ balance sheet, in particular for capital constrained banks which may wish to avoid showing significant losses on the balance sheet. In the currently deteriorating economic outlook, forbearance should thus be an issue of heightened supervisory attention.

While loan forbearance has, in some occasions, been seen as beneficial, it can in fact sometimes defer or even deter necessary restructuring efforts at the medium or long term. When restructuring is driven by efforts to de-risk balance sheets, experience suggests it is instrumental to address forborne loans as they may disguise heightened credit risks and contradict de-risking efforts. It is also important to address forborne loans when restructuring is a result of tighter loan underwriting criteria and of lower credit demand, as there could be heightened credit risks in existing portfolios.
5.2.3 Scope and definition of forbearance

The EBA devoted significant efforts in capturing the nature and quantifying the extent of forbearance and carried out a specific analysis through information gathered from national EU supervisors. This has proved challenging as there is no common legal or regulatory definition. National definitions also differ regarding features surrounding the phenomena of forbearance, e.g. for concepts such as “loan extensions” and “financial difficulties”.

These challenges make measuring and collecting EU-comparable data on forbearance difficult. Therefore, the results of this analysis should be interpreted with caution, and further analysis is required.

One method for evaluating the possible scope of forbearance is to assess the extent to which arrears have increased in line with anticipated credit quality deterioration (Chart 15). In line with rising residual credit risks, average loans in arrears for large European banks as a share of total loans increased in the past two years, in particular for residential mortgages. However, average arrears in commercial real estate did not markedly increase, in spite of their sensitivity to the economic cycle, indicating that they might have been subject to forbearance.

Chart 15

![Chart 15](image)

Also, average provisioning levels for real estate loans did not increase markedly in the past two years, in spite of rising credit risks in this sector in many jurisdictions and increasing arrears particularly in residential real estate (Chart 16). However, given the different national approaches such analysis can only be a starting point.
5.2.4 Identifying and capturing forbearance

Supervisors face the challenge of identifying drivers of forbearance and understanding inflection points, when forbearance can shift from an appropriate response to rising credit risk to a potentially unsustainable long-term solution.

In a number of cases, where asset quality has come to the fore, supervisors have identified a set of steps to capture forbearance and to assess its appropriateness to address residual credit risks.

The experience gained in direct supervision is that there is a macro prudential element to identifying these inflection points, namely when the whole economy is in such difficulties that the chances of cure are more remote. However, supervisors also look to micro assessments – on a customer level basis – in order to identify inflection points.

To this end national authorities have stressed the importance of intensive monitoring by supervisors and of building effective arrears management systems in banks to deal proactively with emerging credit risk at an early stage. Monitoring of the lending process, the customer evaluation process, provisioning, collateral valuation, as well as of work-out procedures were considered especially important.

Effective arrears management enables the bank to take account of the nature (term and structure) of a loan, of loan portfolios and of the individual situation of a borrower, and is considered particularly effective when conducted at an early stage before a loan becomes distressed. For forborne loans, monitoring tools according to different portfolios ensure the continued performance of loans under their restructuring and forbearance terms. In addition, appropriate monitoring can be instrumental to verify that loan-specific forbearance conditions deemed appropriate are maintained and to identify if and when forborne loans have returned to a “healthy” status. Conversely loan level monitoring allows pre-emptive steps to deal with longer term credit problems and work constructively with clients to close down loans if needed. Such pre-emptive action avoids prolonged periods of partial payments and non-recognition of losses which is not in the interest of either lender or borrower.

The role of accounting standards is another important prudential consideration. Under a strict application of international accounting standards (IAS), publicly listed banks should classify forborne loans as impaired. However, there is room for interpretation and practices in this regard greatly differ across jurisdictions and banks.
More generally, supervisory authorities have been working on pre-screening portfolios for potential future problem loans. For a number of loans, distinctive features which may later become typical for problem loans are often identified at an early stage. The EBA has worked with national supervisors to identify measures being put in place at a national level for identifying and addressing forbearance.

**Steps in monitoring forbearance, as identified by some supervisors**

- **Definition of forbearance**
- **Identify and monitor early loan performance warning signs (for different portfolios)**
- **Identify triggers for changed supervisory approaches, when forbearance shifts from an appropriate response to credit risk to an unsustainable solution**
- **Supervisory monitoring of forbearance; adequate provisioning**

**Role of:**
- Accounting
- On-site inspections
- Auditors
- Stress testing

**Beyond forbearance:**
- Arrears management
- Consumer protection issues

**Micro-prudential triggers**
- (e.g. loan portfolio)
- (e.g. economic cycle)
6 Reshaping banks’ balance sheets

6.1 Deleveraging

During the pre-crisis years, EU banks were particularly active in generating high returns by leveraging up their balance sheets. As the crisis erupted deleverage was viewed as an avenue to de-risking and restoring more balanced characteristics to the banking industry across developed markets, including in the EU. However, for various reasons, asset deleverage in the EU has not occurred on the same scale as in other jurisdictions (e.g. the US).

In general, deleveraging can be the result of (i) de-risking of the balance sheet, (ii) funding constraints, (iii) tighter loan underwriting criteria, (iv) lower demand from businesses and households (and lately from the public sector), and (v) lack of available capital. In that respect, it can be both positive – when it implies de-risking – and negative – if linked to contraction of lending to the productive sectors of the real economy.

Commonly, banks with ample capital levels are more inclined to grow their lending than banks with lower solvency levels, which would feel constrained in this strategy. In this context the EBA’s recommendation requiring banks to build up temporary capital buffers along with the measures put forward to prevent the reduction of lending to the real economy has set the stage for an orderly de-risking.

The threat of severe and disorderly deleverage prevailing in the second half of 2011 as the result of the funding crisis has been alleviated by the LTRO. Nevertheless, recent lending surveys reveal that banks seek tightening criteria for new lending and demand is also subdued, which suggest deleverage to continue at least through 2012.

A number of large banks in the EU have started implementing deleverage steps, which are applied selectively to various components of their balance sheets.

First to deleverage are trading-book assets as well as global financing such as trade finance or international leasing (aircraft, shipping, real-estate, etc.). While a few large banks outside of the EU are stepping in sometimes, the expertise and track record of some of the large EU banks heavily involved in many of these global activities – e.g., trade finance – will not be easily replaced.

Domestic lending deleverage is currently taking place in EU countries experiencing economic recession or severe constraints. This trend – which stems primarily from lower credit demand but also from banks tightening their credit-underwriting risk criteria – should continue, against the backdrop of ongoing asset quality problems for those countries’ banks.

One controversial aspect in this respect is some cross-border banking groups’ tendency to pursue deleverage in some non-domestic EU markets in which they are present (through subsidiaries or branches) while maintaining lending growth in the home market. To the extent that such practices are not merely the reflection of specific economic conditions and credit-demand dynamics in each market, they have the potential to fragment the single market, thus jeopardising the benefits of the free flow of capital across EU countries. In that respect, the work of the colleges of supervisors is key in preventing unjustified home bias in lending practices. So far available data however indicate that economic conditions are the main driver of cross-border banks’ strategies and that markets with good economic prospects continue to be perceived as attractive targets by cross-border banks.
Importance of colleges of supervisors ensuring the unity of the single market

One result of the integration of the single market has been increased efficiency, lower cost of funding and greater diversification of risks and income streams in banks. However, the recent economic slowdown and a wave of national responses to the crisis have been accompanied by a growing segmentation of the single market and retrenchment to core markets.

For supervisors a key issue is their ability to maintain effective supervision of cross-border groups, especially in the face of national measures which are designed to mitigate the risk of contagion at times but which can have unintended consequences for the stability of individual institutions.

The single market in banking has required a shift in regulation and supervision. On the supervisory side, cross-border coordination of supervisory resources and activities has been enhanced, mirroring to some extent the processes of consolidation and centralisation/specialisation into different competence centres in banking groups.

Colleges of supervisors are the forum for achieving this oversight. Colleges bring together all relevant competent authorities, under the leadership of the respective consolidating supervisor, operating under the auspices of a framework agreed and monitored by the EBA.

In practice, colleges are the mechanism for the exchange of information between home and host authorities, for the planning and performance of key supervisory tasks in a coordinated manner or jointly, including all aspects of ongoing supervision, and also for the preparation and the handling of emergency situations. Without an effective exchange of information between national supervisors it is impossible to build up an effective and complete picture of the risk profile of a banking group. The creeping nationalisation of the banking market, with unilateral capital and/or liquidity ring fencing measures, can create risks to effective supervision. For example, unless properly coordinated ex ante, such measures may create capital or liquidity constraints as a result of an inability to move capital and liquidify freely across the group, thus further exacerbating the situation.

Moreover, uncoordinated national policy actions may lead to the fragmentation of the single market, with potential negative spillover of risks across countries ultimately aggravating systemic risk in Europe by creating imbalances in capital and liquidity movements across the whole financial system. Colleges of supervisors can play a unique role in addressing the risks of uncoordinated actions, as well as unintended consequences of national actions, by fulfilling their role as the forum for supervisory coordination and exchange of information affecting individual institutions.

A full understanding of the nature and impact of any national measures, and an appropriate discussion of the implications for the cross-border banking group, along with an understanding of how other authorities may react, ensures that supervisory oversight of the banking group remains co-ordinated and able to adequately capture and address the risks of a banking group.

A further pernicious aspect of deleverage that merits scrutiny and monitoring from regulators is that the higher-quality assets tend to be sold first as they are the most easy to trade, at a more or less satisfactory price compared to lower-quality assets. As a result, the remaining pool of assets might be of lower quality and therefore the remaining pool of collateral for unsecured, or indeed for new secured creditors further declines in quality and quantity (see Chapter 5).

6.2 Changing business models

Deleveraging is part of a more general trend towards adjusting business models. In fact, banks’ business mix is changing significantly as a result of the fallout from the financial crisis, of the deteriorating macroeconomic environment as well as a response to the incoming regulatory reform.

This report does not attempt to identify and address all changes to banks business models. However, it tries to identify the main drivers for the changes and possible trends looking ahead.

A first clear trend is that most banks are consolidating their business, refocusing on their traditional “core” activities, which may be defined as simpler, lower-risk and domestic business. By contrast, banks are exiting from their non-core business that they have been involved in and accumulated in the past in run-off or selling it to buyers who are either outside the EU or to the shadow banking system. A particular aspect of this phenomenon is that banks are distancing themselves from the investment banking side. In fact, a
The majority of respondents to the RAQ acknowledge that their medium-term challenge is to adjust to safer, more reliable and predictable earnings and asset-liability mixes, aiming for lower volatility and a materially lower risk appetite. Specifically, this translates into moving towards more retail bank-generated revenues and less trading revenues, better asset-liability matches (and thus a smaller degree of mismatches). Investment banking is not viewed as a field of activities which is likely to grow further in the future.

Banks are displaying a similar reluctance to be involved in capital-intensive business. Capital is one of the main drivers of business decisions given the need to meet stricter capital requirements under the incoming Basel 3 regulation, the EBA decisions to strengthen EU banks’ capital base and, importantly, market expectations on safe solvency ratios. Once Basel 3 comes into place, capital will continue to be a limiting factor for banks, and this will be affecting decisions for the next few years. In the immediate future, we see capital conservation through decreased or no cash dividends and also limited new equity issuance.

Banks are shifting funding towards longer-term and more sustainable resources, away from short-term wholesale funds, and thus to reduce asset-liability mismatches. This should in time lead to less volatility in earnings but also to a more compressed net interest margin, especially if market funding costs remain high.

Also, new regulations on capital and liquidity levels and mix should further challenge banks’ profitability returns. Last but not least the demand is for simpler and more transparent bank products – both retail and wholesale.
Consumer issues

Since the events of the economic crisis unfolded, regulatory authorities have had to radically change their perception of traditional regulatory actions in order to better understand consumer issues for both prudential and consumer protection reasons. The increased focus on retail funding, and other changes to banks business strategies, bring consumer issues to the fore.

The EBA's Standing Committee on Consumer protection and Financial Innovation has spent considerable time analysing developments and notes that consumer protection enhances trust in a well-functioning market for financial services and subsequently, promotes financial stability, growth, efficiency and innovation over the long term. The EBA aims to identify and analyse issues and potential concerns relating to retail banking consumers, where consumer detriment may result from certain banking products or services, especially those of an innovative character, and take further action (or recommend legislation) if deemed necessary. The text below outlines the issues that the EBA consider to be particularly relevant from a consumer protection and prudential standpoint.

- **Mortgages and indebtedness**: The insufficient examination of the solvency of borrowers by banks (where the factors such as the future expected expenses, changes in living standard of the borrower, or borrower’s unemployment, are not always sufficiently considered by banks), pre-contractual information which is not always in a format comprehensible for non-professional consumers, and potential misunderstanding of particular factors of credits by consumers are three main areas which can lead to inappropriate lending and over-indebtedness of consumers. The EBA welcomes the forthcoming Directive on Credit Agreements Relating to Residential Property (Mortgage Credit Directive), but remains concerned above the post-sale requirements for banks, such as the rules on handling complaints, the arrears management and possible forms of forbearance, as they are not in the focus of this Directive. The area of mortgages, indebtedness and responsible lending is a topic for further work by the EBA in 2012.

- **Payment Protection Insurance (PPI)**: PPI enables consumers to insure the payment of a loan if the borrower faces circumstances that may prevent the borrower from earning the income to service the debt. The product is widely used by banks and credit providers in more than 10 Member States, generally in addition to a loan or overdraft product, as can be seen from Chart 17.1 which refers to the survey conducted by the EBA in 2011. The mis-selling of PPI has been flagged in a few member states as being an issue (such as in the UK).
• **Access to payment accounts:** European Commission’s Recommendation of July 2011 on access to a basic payment account grants the admission to a basic payment account free of charge, or at reasonable charge. Notwithstanding this legislation, simple access to payment (current) accounts remains hindered for consumers with requirements that differ for residents and non-residents of one country or that depend on the financial situation of the consumer (e.g., whether the consumer is employed or not). The EBA is therefore concerned about this issue and welcomes the European Commission’s services working document, Consultation on bank accounts.

• **Transparency and comparability of bank account fees:** Lists of costs provided by the banks regarding bank accounts consist of various hidden and unclear fees (i.e., packages). These lists are at times in a format which is not transparent for the consumer, and the financial terms are used without sufficient explanation. As a result, it can be difficult to compare fees, possibly disincentivising consumers from switching bank accounts. The EBA’s suggestions for improvement regarding transparent and comparable fees are included in the response to the European Commission’s working document.

• **Bank account switching:** The EBA notes that the self-regulatory initiative of the European banking industry which aimed to simplify the process for consumers to change the bank account did not achieve the desired results. According to a recent European Commission study⁴, two thirds of mystery shoppers experience difficulties switching their bank account. The study identified significant barriers to consumer mobility, namely the insufficient information about the possibility to switch the bank account provided by the bank staff and bank websites, infringement of the deadlines set for the former and new bank when switching the account and as the most significant barrier, not following the procedure outlined in the Common Principles on switching by the banks.

• **Information disclosure; financial literacy and education:** Structures for financial literacy and education vary across EU Member States and therefore consumers are not always able to receive the same amount and type of information. On one hand, there are cases where the consumer may be overloaded with information that cannot be handled easily, and on the other hand there are cases where consumer may receive insufficient information. Nevertheless, information disclosure is not enough to guarantee that available information is adequately understood by consumers. Therefore, in addition to disclosure issues, the development of guidelines and good practices regarding financial literacy and education should be an important task undertaken by the EBA. Moreover, this is an area of common interest for the three European Supervisory Authorities (ESAs), and will be handled at the Joint Committee Sub-committee on Consumer Protection level.

• **Unnecessary/unsuitable sales:** Insufficient information provided by financial institutions, and challenges in understanding information on the side of the consumer, may lead to unnecessary/unsuitable sales if the consumer’s requirements are not adequately reviewed. Sales processes leading to unnecessary/unsuitable offerings to consumers may have long term negative consequences, and in many cases these

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consequences may only be uncovered far into the future (e.g. in cases of long term saving or investment products, if a problem is only uncovered at maturity, it is too late to rectify it, and difficult to redress given the passage of time).

• **Professional indemnity insurance**: This type of liability insurance provides essential financial protection for professionals for complaints made against them in carrying out their professional services. The common claims covered are for negligence, misrepresentation, and inaccurate advice (areas that might lead to consumers not being well-informed). The EBA will work on drafting a set of Regulatory Technical Standards (RTS) on professional indemnity insurance for credit intermediaries, as required in the forthcoming MCD. The draft RTS are expected to be required to be submitted to the European Commission within 6 months from the adoption of the directive.

• **Product oversight and governance**: In order to ensure maximum safety for consumers, arguments have been made that the internal processes for product approval at banks need to be considered. The EBA, will together with the other two ESAs examine this area by means of the recently set up JC SC’s, substructure on “Product oversight and governance”, (initially known as “Product Approval”) which will deal with the strengthening of firms’ control before launching a product (i.e. the product development process).

In the aftermath of the financial crisis and amidst the current EU sovereign crisis, in combination with the necessary tightening of regulatory requirements, there is reason for supervisory concern about a new search for yield, leading to possibly insufficiently regulated financial innovations, with potential risks for retail investors. Examples of concerns (by no means exhaustive) are presented below:

• **Structured Products**: With structured products we mean notes or securities issued by a bank with or without capital protection and having a payoff based on a complex/exotic structure. Retailisation of this product is ongoing as typical buyers are retail clients. Also the variety of products is expanding with payoffs becoming more complex, which raises concerns regarding the suitability for retail investors. Other concerns associated to structured products are in the area of (i) risk management of the complex derivatives to which these products refer to and (ii) the reputational risks for banks that could have severe consequences as the capital protected variety of structured products are an increasingly important source of funding.

• **Exchange Traded Funds (ETF)**: ETFs are securities that are listed on an exchange and track a basket of securities, usually an index or a benchmark. The main concerns are related to counterparty credit risk for investors: for synthetic ETFs, the exposure on the benchmark is tracked through a Total Return Swap (TRS) with a swap provider, while for physical ETFs, the securities owned by the ETFs are generally sent out to generate additional fee income. Due to insufficient transparency, consumers might not be aware of the composition of the underlying portfolio, the structure of the ETF and whether or not the fund lends its securities. ESMA is currently drafting rules aimed at improving the transparency. On the banking side, the concern is that liquidity risk and concentration and contagion risks might be insufficiently managed by credit institutions, especially where ETFs are managed entirely within a single institution – provider, swap counterparty, and market maker.
Contracts for Difference (CfD): CfD are types of financial derivatives that speculate on the movement of the prices of products (depending on whether there is a short or long position). Investors exchange the difference in value of a particular currency, commodity share or index between the time at which a contract starts and the time at which it ends. CfD are currently forbidden in the U.S., but permitted in most of the EU countries. Most CfD providers launched financial spread betting operations in parallel to their CfD offering.

The EBA sets out to identify potentially harmful financial innovations, analyse such innovative products or financial activities in-depth and assess their prudential and/or systemic risks, as well as the potential detrimental effects for consumers, and take further action (or recommend legislation) if deemed necessary. There are fundamentally four main types of products that could be harmful for financial institutions and could lead to consumer detriment:

1 innovation that is emerging, hidden, probably unregulated or in the shadows, and that possibly "exploits" certain consumer behavioural patterns;

2 known products with an excessive growth, with an opaque market, with no connection to their initial purpose and no value added to the real economy;

3 known products with hidden risks, with high sensitivity to specific shocks, and with significant exposure to events that could cause a domino effect;

4 known products, with a systemic importance and a high level of complexity that do not match the education or risk appetite of the investor.

EBA tries to base the regulation on the identification of potential sources of threat for consumers that might endanger the stability of markets. The aim is not to prevent innovation or induce regulatory arbitrage, but to further harmonize and correct market imperfections. The recent financial crisis has revealed the importance of enhanced supervision and regulatory actions in the area by pointing out at the consequences of overlooking such risks for the financial system and for the overall economic activity.
Annex: EBA main data sources

1. Key Risk Indicators (KRIs)

KRIs are a set of 53 ratios reported on a quarterly basis by EU national authorities and cover 57 EU banks from 20 EEA countries.

Table 2: List of the banks that reported KRIs

<table>
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<tr>
<th>Bank code</th>
<th>Bank Description</th>
<th>Number of reported periods</th>
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<tr>
<td>AT302</td>
<td>Erste Group Bank AG</td>
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<tr>
<td>AT304</td>
<td>Oesterreichische Volksbanken</td>
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<td>AT305</td>
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The definition of the variables is consistent with the COREP and the FINREP and, for jurisdictions where these standards have not been implemented, authorities have been encouraged to map local reporting standards to the common EU frameworks.

In terms of coverage, the banks in the sample cover at least 50 per cent of each national banking sector and time-series have been collected, on a best effort basis, from the last quarter of 2008. Therefore, not all banks are covered for all dates and for all the indicators. Future changes in the sample size may result in revisions in the data.

In this report, data from December 2009 to the end of 2011 are analysed for a subset of KRIs and for an unbalanced sample of banks (see Table 3). Figures are provided for both the full sample of EU banks and for the 15-top largest banks in terms of consolidated total assets.

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3 Figures for a balanced sample of banks submitting the KRIs for the all the 9 reference quarters are also provided, when relevant, as robustness check.
Table 3: Number of banks that reported KRI to the EBA
(data broken down by NSA)

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The quality of the data has been ensured by the national authorities. The EBA also carried out a set of automatic quality checks in order to identify and amend possible inconsistencies. This process resulted in the elimination of outliers due to misreporting and some data cleaning.

2. Risk Assessment Questionnaire

The RAQ is a qualitative questionnaire circulated to the national supervisors in order to get a bottom-up view on the main risks and vulnerabilities as perceived by supervisors and banks themselves. The EBA has collected information in March/April 2012 at bank level for major cross-border EU institutions through their relevant National Supervisory Authorities. The Risk Assessment Questionnaire is in multiple choice form, with 5 possible answers:

A – Strongly Agree / Yes (for y/n questions)  B – Agree  C – Disagree  D – Strongly Disagree / No (for y/n questions)  E – No opinion / not applicable

The banks for which the EBA received responses for the RAQ are shown in Table 4.
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