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JOINT COMMITTEE REPORT ON
RISKS AND VULNERABILITIES IN THE EU FINANCIAL SYSTEM
MARCH 2013

CONTENTS

EXECUTIVE SUMMARY

The European financial system continues to face a daunting range of interrelated risks, necessitating a concerted response by policy makers both at the political level and from the European System of Financial Supervision, including the European Supervisory Authorities (ESAs), in order to restore the confidence and trust that has been eroded during recent years' financial crisis.

Compared with the September 2012 report, near-term risks to the EU financial system from the euro area debt crisis (especially bank funding) have generally abated with improving market confidence. However, financial institutions, in particular banks, remain vulnerable to a sudden switch in sentiment. There have also been delays to some of the key policy responses (e.g. Solvency II, CRD IV) which may exacerbate some of the longer term risks highlighted in this report.

Many of the risks arise from the still **weak EU**[1] **macro-economic outlook**, which affects the financial positions of governments and private sector borrowers and the outlook for property markets, and which may lead to further deterioration in the profitability and asset quality of banks, insurers and other financial market participants. Policy announcements by European leaders – especially on Outright Monetary Transactions (OMT) and the Single Supervisory Mechanism (SSM) – have significantly reduced market perceptions of tail risks and led to a narrowing of bank and sovereign credit spreads. But to truly break the bank-sovereign link and create foundations for sustainable macro-economic growth will require continued progress on implementation of announced policies. Financial regulations (including Solvency II and CRR/CRD-IV) must remain economically and actuarially sound to promote a stable financial system that can sustainably provide financial services to the real economy and view risks consistently across balance sheets.

Low interest rates are an essential macro-financial policy response, but can over a longer period of time have various negative side-effects: solvency pressures on insurers and defined-benefit pension funds from higher present value of long-term liabilities and depressed reinvestment returns, incentives for search for yield behaviour by institutional investors, profitability pressures on bank net interest margins and risk of hidden forbearance, with build-up of latent credit risk and inefficient market allocation of credit resources. Financial regulation and supervision need to ensure that, consistently across the EU, financial institutions fully recognise and manage these risks to ensure resilience against the risks both of a prolonged period of low interest rates and of any sharp adjustment to interest rates. The continued delay of Solvency II represents a particular challenge for achieving this in the insurance sector.

Risks of further fragmentation of the EU Single Market have been evident through increased home bias and reduced cross-border financial activity of financial institutions. This trend has been driven mainly by financial institutions' revised business strategies (e.g. focus on core businesses), changes in risk appetite, higher funding costs and the challenging macro environment. But it has also been exacerbated by uncoordinated national policy measures, including ring-fencing of local bank capital and liquidity, which hinders the free movement of capital, increases funding costs, signals supervisory divergence and risks further safeguard measures. Market clustering is also evident in securities markets, with diverging equity returns and credit spreads increasingly correlated within countries or country groups rather than across the EU. For the insurance sector, progress on supervisory convergence and the Single Market remains stalled due to fragmented national solvency standards

[1] This report focuses on the broad risks and conditions within the EU. For the sake of brevity it omits individual country specific details. Hence, it does not fully reflect the wide dispersion of risks and conditions throughout the EU and does not always represent risks and conditions within the individual countries perfectly. Therefore the drawn conclusions apply only on an aggregate European level. This qualification applies throughout the entire report.

and delays to Solvency II. To halt fragmentation and strengthen the Single Market, the ESAs need to foster supervisory convergence, amongst others, through a strong role in supervisory colleges and through the development of both the EU-wide Single Rulebook and Supervisory Handbooks. At the political level, EU leaders need to press ahead with the establishment of Banking Union, including SSM, and bank resolution schemes.

The financial crisis has increased financial institutions' attention to counterparty credit risk, and loss of trust in implicit guarantees and credit ratings have led to **increased reliance on collateral**. This increasing demand for collateral has been reinforced by regulatory initiatives, including mandatory central clearing of some derivatives (EMIR) and bank capital rules (e.g. CVA charges), as well as the need for banks to hold high-quality liquidity buffers and use of securities for access to central bank funding. Collateral safety and liquidity is increasingly being priced, incentivising more efficient use of collateral through collateral transformation (e.g. liquidity swaps) and reuse, leading to increased financial sector interconnectedness and cross-sectoral contagion risks, encumbrance and risks of pro-cyclical effects in response to shocks to market prices or ratings of either market participants or collateral. The ESAs need to ensure that prudential rules keep up with the evolution of market practices and encourage practices which are both macro- and micro-prudentially sound, and contribute to efficient, fair and stable markets.

Financial market participants remain concerned about the **balance sheet valuation and risk disclosures** of financial institutions, and value the equity of many EU financial institutions at a significant discount to their book values. Financial institutions should value all their assets and liabilities properly, in full accordance with applicable accounting standards and regulations, to ensure valuation consistency within the EU, and should also analyse and understand the sources of valuation uncertainty. This uncertainty affects both banking book and trading book assets, and ultimately the valuation of capital. Supervisors are strongly encouraged to monitor and review the quality of banks' assets and the practises of banks to measure the quality of their assets. A particular problem for the insurance sector (due to delays to IASB convergence work and Solvency II) is the continued absence of EU-harmonised accounting standards and regulatory valuation rules. Valuation and risk measurement (especially of complex instruments and longer term risks) is generally based on quantitative models. For assets and risks where firms use similar or identical models, they are consequently exposed to risks of valuation shocks arising from model failures and recalibrations. Additionally, much of the valuation uncertainty relates to financial institutions exposures to the aforementioned common risk factors of macro-economic outlook, interest rates and collateral values. Supervisors are encouraged to set appropriate incentives to correct for potential distortions to valuation and to contribute by these means to the ultimate goal of the protection of consumers and investors.

Confidence in **financial market benchmarks** suffered in 2012, as previous misconduct in banks' submission of benchmark interest rates came to light. ESMA and EBA have acted, in coordination with the EU Commission, IOSCO and national authorities, to address the flaws in benchmark rate setting for Euribor and other key benchmarks. While more work needs to be done in designing sustainable resilient solutions for setting of financial benchmarks, continuity of existing benchmarks (which are referenced by an enormous number and value of financial contracts) also needs to be maintained, e.g. by mitigating the risk of disruptive withdrawals from existing rate-setting panels.

The above is not an exhaustive list of risks facing the EU financial system, but comprises those which the Joint Committee of the ESAs felt were sufficiently cross-sectoral in nature to merit co-ordinated Community-wide cross-sectorally consistent policy response, with broad political support.

INTRODUCTION

The European financial system faces a range of risks and challenges:

1. Risks from the weak macroeconomic outlook for the financial health of real-economy and sovereign borrowers, and consequently for financial institutions' asset quality and profitability;
2. Risks of a prolonged period of low interest rates impacting insurers and pension funds, increasing search for yield behaviour and facilitating widespread forbearance by banks;
3. Risks of further fragmentation of the single market in financial services due to evidences of national retrenchment, home bias, reduced cross-border activity and clustering of markets;
4. Risks from increased reliance on collateral in financial transactions;
5. Risks to confidence in financial institutions balance sheet valuations and risk disclosures; and
6. Risks of loss of confidence in financial market benchmarks.

These risks, although presented individually in this report, are highly interlinked and require a concerted response by policy makers both at the political level and from the European System of Financial Supervision including the European Supervisory Authorities (ESAs). Suggested policy actions to restore the confidence in the financial system are presented at the end of some described risks. The challenge facing policy makers is nothing less than to restore the confidence and trust in the financial system that has been eroded during recent years' financial crises.

1 RISKS FROM A WEAK MACRO-ECONOMIC OUTLOOK

Despite recent improvements in financial markets, the macro-economic outlook (as presented in the ECB's Monthly Bulletin of January 2013) remains weak, with residual downside risks. This weak EU macro-economic outlook has implications for the financial position of governments and private sector borrowers and for the outlook for property markets, and may lead to deterioration in the profitability and asset quality of both banks and insurers.

1.1 BANKING SECTOR ASSET QUALITY, PROFITABILITY AND FUNDING RISKS

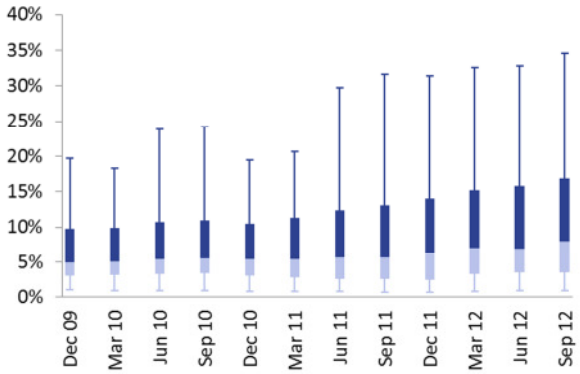
Prospects of a depressed macro-environment going forward exacerbate concerns on bank asset quality and their valuation. While banks have significantly strengthened their capital positions over the last two years, supported by the EBA recapitalisation exercise, there are concerns about impact on capital from potential future loan losses as asset quality deteriorates. Non-performing loans have been rising fast, while at the same time loan loss coverage ratios have remained steady (see Figure 1 and Figure 2). A continued adverse environment would contribute to further rising non-performing loans (NPL) and loan loss provisions. The necessary working out of problem loans in banks' books will additionally continue to generate risks, adding to challenges to restore market confidence on credit portfolios. Asset quality concerns are aggravated by widespread loan forbearance, as this practice may have contributed to underestimate the scale of problem loans.

In many banks deteriorating asset quality has resulted from over-exposure to the real estate sector. The outlook for residential and commercial real estate price developments remains weak, reflecting subdued demand for housing, as well as the need to correct the still relatively high degree of property market overvaluation in several countries.[2] The deteriorating economic outlook also adds to the uncertainty

[2] ECB FSR December 2012 page 39.

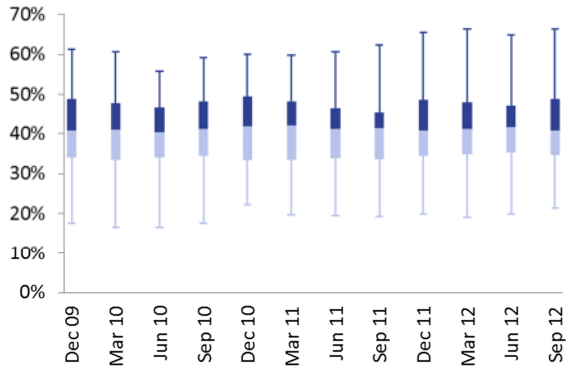
surrounding future developments of real estate prices.[3] For that reason, a number of banks remain vulnerable to increases in non-performing loans with any additional property price corrections leading to further deterioration in asset quality. Some banks may now need to address the issue of distressed debt and unsustainable loan forbearance in a more structured and efficient way, constructively dealing with the issue of unsustainable debt, while ensuring that borrowers still have appropriate incentives to service debt.

Figure 1 Impaired loans and loans past due (>90 days) to total loans, 5th and 95th percentiles, interquartile range and median



Source: EBA (Risk Assessment of the European Banking System, January 2013). Sample based on 56 large banks in the EU and EEA.

Figure 2 Coverage ratio (Specific allowances for loans to total gross impaired loans), 5th and 95th percentiles, interquartile range and median



Source: EBA (Risk Assessment of the European Banking System, January 2013). Sample based on 56 large banks in the EU and EEA.

The weak economic environment may furthermore lead to continued low revenues and continued low profitability of banks. Low-profitability banks have difficulties finding equity investors and therefore depend on lower retained profits in order to meet regulatory requirements. Profitability may be further hampered by conduct redress costs that some banks face as a consequence of past conduct of business practices.

Funding conditions for banks have significantly improved in most geographies in the past months following concrete measures and announcements of the ECB's Outright Monetary Transactions (OMT) and the Single Supervisory Mechanism (SSM), amongst other important initiatives, and there are hopes that the bank-sovereign link is weakened. However, a large number of banks continue to be heavily supported by central bank funding, leaving a return to lasting and stable sources of market funding a challenge for many banks. Benign market funding conditions of the past months are still fragile, in particular in light of potential implications for banks stemming from a weak economic outlook and asset quality concerns. Supervisors are strongly encouraged to make further progress on reviewing the quality of banks' assets and the practises of banks to measure the quality of their assets[4].

While policy announcements and concrete measures succeeded in significantly reducing tail risks for European banks, at least temporarily, the current environment nevertheless continues to provide significant challenges, in particular in banking systems with financially-stressed sovereigns, as significant structural stresses still prevail. Elevated sovereign risk premia for financially strained EU countries have narrowed markedly since August 2012, suggesting a reduction in market perceptions of euro area sovereign risk, particularly in the periphery. However, uncertainties remain over important aspects and implementation of EU institutional

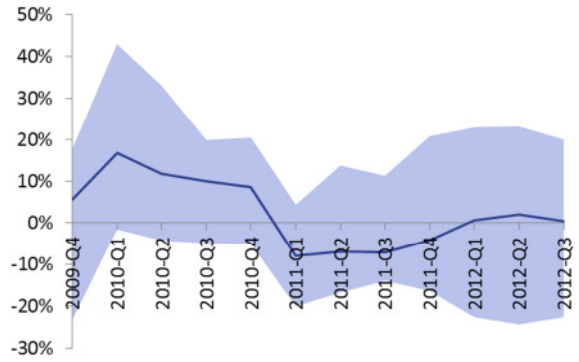
[3] ECB FSR December 2012 page 40.
[4] ESRB General Board meeting press release from 20 December 2012.

reforms, such uncertainties about future actions may negatively affect the current respite in sovereign debt and bank funding markets.

1.2 DECLINING PREMIUM GROWTH IN THE INSURANCE SECTOR

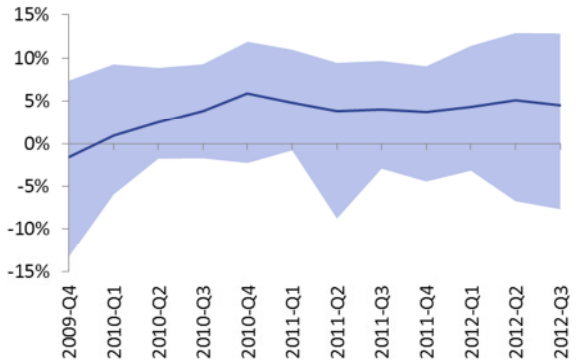
A weak macroeconomic environment impacts the insurance sector in a number of ways. Generally, premiums tend to drop during recessions (although often with a lag), in particular in the life sector. Figure 3 shows the effect on gross written premiums during the recent economic downturn for the largest European life insurers on an aggregated basis. Indeed, premium growth was negative throughout 2011 as the macro-economic environment has put pressure on the sale of life insurance policies in countries where household wealth and income has been reduced. Fiscal adjustment to reduce public sector deficits in many countries would also limit the potential growth of insurance volumes. This could happen both directly, through increased taxation on premiums or reduced tax incentives for long-term life and savings products, or indirectly following general tax increases and reduced disposable income. Moreover, high levels of unemployment combined with low levels of interest rates may also lead to early surrenders in the life sector, in particular for products without guaranteed returns as customers avoid surrendering policies with (high) guaranteed returns. This would naturally lead to an adverse selection from the point of view of the insurer. In addition, the deleveraging objectives established for the banking sector have led to increased competition from banks trying to increase their deposit funding base, which in turn is reflected in decreasing life insurance business. In some countries, household investment in government bonds is also a form of saving which competes directly with certain life insurance products. Finally, the current low level of risk free interest rates following the weak macroeconomic climate is a particular concern in the life insurance sector, both in terms of lower profit from investment income, but also in terms of increased value of liabilities. This is further discussed in Section 2.1.

Figure 3 Year on year growth in gross written premiums – Life. Median and 10th and 90th percentile



Source: EIOPA. Sample based on 30 large insurers in EU and Switzerland

Figure 4 Year on year growth in gross written premiums – Non-Life. Median and 10th and 90th percentile



Source: EIOPA. Sample based on 30 large insurers in EU and Switzerland

In the non-life insurance sector, Figure 4 shows that year-on-year growth has remained positive, but the difference between the best and the worst performers (indicated by the shaded area covering the 10th and 90th percentile) is increasing, indicating a diverging development in Europe. It is likely that increasing unemployment and reduced net household income will decrease the demand for non-life products such as motor policies (with exception of compulsory third-party liability) and workers compensation insurance. Fraudulent claims in the non-life sector may also rise in a recessionary environment, although the impact on insurers is generally seen as small compared to the peak in claims following natural catastrophes.

Solvency I ratios are generally adequate, even if some insurers are experiencing pressure on their solvency coverage. However, Solvency I ratios generally do not reflect the capital positions of insurers on a market value basis. Market valuation would most likely result in higher valuation of liabilities and possibly lower valuation of (parts of) the asset portfolio. The capital position of insurers would therefore be worse on a market value (i.e. Solvency II) basis.

1.3 IMPLICATIONS FOR FINANCIAL MARKETS

A continued weak macroeconomic environment and the prospect of an extended low-interest rate environment impose several potential threats to market participants in securities markets. First, low returns incentivize search-for-yield strategies, eventually increasing the likelihood that investors take on positions with elevated risk levels, and promote the acceptance of leverage. Second, liquidity on short-term markets as well as the revival of any form of unsecured funding are both negatively affected by low interest rates, because potential buyers' appetites are rather subdued. The latter effect also implies an increasing demand for collateral and the associated potential for a relative scarcity of collateral discussed in more detail in section 4. Third, prolonged macroeconomic weakness, low interest rates and the distinctive treatment of sovereign bonds in term of risk weights may incentivize regulated firms' investment in sovereign bonds and (indirectly) the issuance of sovereign debt. This could imply potential bubbles in sovereign bond prices, especially for markets exposed to severe public debt problems, but also for markets on which substitutes are traded. Fourth, a prolonged weak macroeconomic environment associated with potential increases in unemployment rates is likely to affect households' saving volumes negatively. Hence, ultimately domestic retail funding sources would be reduced in the most troubled markets and negative impacts on assets prices and a higher dependence on international funding would be generated. All those effects would impact on the assets side of financial intermediaries' balance sheets, be it banks, insurers or other financial intermediaries. Thus, cross-sectoral feed-back effects would be highly probable.

1.4 FINANCIAL REGULATION AND ECONOMIC PERFORMANCE

The emerging regulatory landscape for banking, insurance and financial market participants in general creates a resilient framework for the EU financial sector. Many important elements of the future framework are still in the process of being finalised, and uncertainties on timing and cumulative effects of various initiatives create some short term challenges. Moreover, the need to re-establish economic growth has led to political pressures for encouragement of the supply of credit to the real economy, whether from banks, insurers or pension funds or via market-based intermediation. For instance, due to their long-term liabilities, insurers and pension funds are seen as potential sources of finance for long-term investments. The European Commission has therefore asked EIOPA and EBA to analyse the effect of financial regulation on availability of financing for the real economy, particularly infrastructure investments, private equity or SME financing, to inform on-going negotiations of Solvency II and CRR/CRD IV.

One phenomenon revealed by the 2008 financial crisis was the cross-sectoral interconnectedness and complexity resulting from the repackaging of various debt forms by means of securitization, financial engineering and similar techniques involving the change of risk characteristics along the way. Inadequate accounting, disclosure and prudential requirements hid the underlying financial and behavioural risks behind such complex intermediation. The crisis led to a loss of confidence in such financial intermediation, and consequent regulatory reforms to tighten up prudential and disclosure requirements to restore confidence in the financial system. However the commercial and political pressures for the financial sector to provide long-term financing to the real economy, while not overtly exposing retail depositors, policy holders and retail investors to the risks inherent in the provision of long-term risk financing, are again increasing the incentives

for firms to arbitrage around new regulatory requirements and increase complex cross-sectoral transformation of financial promises.

Unless properly designed, initiatives to stimulate growth run the risk of diverting scarce funds away from their most productive uses, and not necessarily increasing aggregate demand in the economy. But, for the case of liquidity hoarding by financial market participants, additional demand stimuli can have potentially positive effects on expectations and investment plans. Nevertheless, making changes in light of a financial crisis runs the risk of a short term fix instead of a viable long term solution, and may lead to complacency and reduced commitment to structural reforms and the internationally agreed Financial Regulatory Reform agenda. Regulation should be designed in such a way that it is not a major obstacle to growth, but is has to view risk consistently across balance sheets. This would for instance imply that any recalibration of Solvency II capital requirements needs to be actuarially and economically sound. Finally, any changes for one financial industry need to take account of developments in other sectors, so as to prevent regulatory arbitrage and maintain consistency across sectors.

2 RISKS FROM PROLONGED LOW INTEREST RATES

The macro-economic down-turn following the financial crisis has necessitated a concerted policy response, especially from monetary authorities, who have lowered policy interest rates and expanded their range of monetary operations (see Figure 5). Market expectations, influenced by central bank communications, are increasingly for interest rates to remain low for significantly longer time. A prolonged period of low interest rates may have profound distributional effects, supporting borrowers and reducing interest income for savers. Within the financial sector, low interest rates generally support banks by reducing funding costs and credit risk, but hurt insurers by increasing the present value of liabilities and depressing reinvestment returns. Some banks may also be negatively affected by an overall reduction in net interest margins (see 2.2). The challenge for financial regulation and supervision is to ensure that, consistently across the EU, financial institutions fully recognise and manage the direct and indirect interest rate risks to ensure resilience against the risks both of a prolonged period of low interest rates and of any sharp adjustment to interest rates. The continued delay of Solvency II represents a challenge for achieving this in the insurance sector.[5] One of the reasons for the delay, however, is the continued discussion of certain technical aspects of Solvency II including the long term guarantee package. EIOPA is currently assessing this issue.

2.1 INSURANCE SOLVENCY PRESSURES

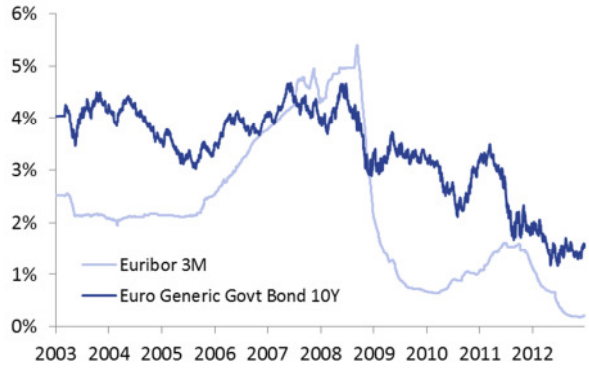
The existence of a prolonged low interest rate environment harms insurance undertakings by increasing the present value of liabilities and by depressing reinvestment returns. In turn, as capital market rates approach the guaranteed rate, insurers face increasing difficulties to meet performance guarantees provided on certain insurance contracts. Consequently, compression of this margin beyond a given point would cause an erosion of the capital position of some segments of the industry.

In general, low interest rates are particularly detrimental for life insurers and defined-benefit pension funds, given i) their large exposure to predominately fixed-income assets, ii) the fact that they typically have a negative duration gap, with liabilities of longer duration than assets, and iii) the fact that their products might include performance guarantees. Where historical cost accounting instead of market consistent valuation is applied, the effect of the low interest rates is not immediately visible. However, the impact of a prolonged

[5] See also letter from EIOPA Chairman to Commissioner Barnier on https://eiopa.europa.eu/publications/other-documents/index.html.

low-interest environment depends on the type of insurance business, its exposure to interest rate risk and period over which interest rates are depressed. It also depends on the market in which the insurer operates, and on the relevant government bonds yield curves. Individual reports on the interest rate sensitivity of European insurers collected by Swiss Re show that companies domiciled in central and northern European markets are the most exposed to further declines in interest rates.[6] The sensitivity is generally due to long and rigid guarantees offered to policy holders. Swiss Re finds that interest rate sensitivity is generally lower in southern Europe and France, as well as in the UK.

Figure 5 Three month EURIBOR and 10 year generic government bond yields



Source: Bloomberg

The dimensions of the potential problems associated with a prolonged period of low interest rates are difficult to estimate, although a number of studies have been produced. The EIOPA stress test on a low-yield scenario carried out in 2011 revealed that 5% to 10% of the companies included in the sample would face severe problems if the prolonged low interest environment remains, in the sense that their ratio of solvency to the minimum capital requirement (MCR) would fall below 100%. In addition, many companies would only be able to maintain solvency rates slightly above the 100% mark, making them vulnerable to other potential external shocks. The EIOPA stress test clearly showed that the effects of low interest rates on the liability side outweigh any temporary asset valuation gains on fixed income investments.

Internal research by EIOPA has highlighted the challenges faced by national supervisory authorities and individual insurers in responding to the risks posed by low interest rates. EIOPA is therefore working with national supervisors to identify suitable supervisory measures and to further quantify the extent of the detrimental effect of the current low interest rates. In this regard, EIOPA has published an opinion on the supervisory response to a prolonged low interest rate environment.[7] The opinion addresses the main challenges the for the insurance sector posed by a low interest rate environment, promotes adoption of private sector solutions and expresses EIOPA's views on the supervisory responses to this environment. EIOPA will also carry out a follow-up exercise with Members with the aim to assess the scale of this issue and where the greatest impacts lie.

[6] See "Facing the interest rate challenge", Swiss Re Sigma Report No. 4/2012.
[7] https://eiopa.europa.eu/fileadmin/tx_dam/files/publications/opinions/EIOPA_Opinion_on_a_prolonged_low_interest_rate_environment.pdf

As the likelihood of a prolonged period of low nominal interest rates increases, individual insurers also need to find suitable tools to mitigate the effect of such periods. One possibility is to re-price products. However, this solution is generally only possible for new business and does not address those contracts that are already on the books of the undertakings. Guarantees on current contracts would generally need to be honoured and funded through cross- or intra-product subsidization, or through reserves. Immediate challenges may be somewhat relieved if life insurance companies are allowed to smooth the returns over the life of the contract. Insurers could also aim to redesign their product portfolio. This would generally involve a move towards products that perform better in the current market conditions (e.g. unit-linked products, in which the risk is shifted to the policyholder) and the discontinuation of selling new guaranteed products. A shift towards products that are not heavily dependent on investment income (e.g. products with indexed annuities) would be beneficial.

Under certain circumstances, insurers and pension funds may be able to renegotiate or unilaterally adjust existing contracts with the aim of accommodating the terms of the guarantees to the current market conditions. Reputational considerations, however, often make this unrealistic, since future business would be likely to be severely harmed as policyholders would shy away from buying insurance products. Policyholders are naturally not willing to give up relatively lucrative guarantees and insurers will generally have to continue offering these types of products. Legal constraints would also, in most jurisdictions, not allow or only allow this as a last resort measure, when there is an overall risk of failure of the insurer.

2.2 Banking Sector: Margin Pressures and Creditor Forbearance

Persistent low interest rates are also putting pressure on the business model sustainability of banks which find deposit interest margins, and therefore overall net interest margins, squeezed, contributing to profitability pressures. This has led many banks to seek other sources of revenue, including fees and commissions from cross-selling other financial products, and incentivised search for yield behaviour, although some have faced conduct redress costs for past sales of unsuitable financial products.

Low interest rates reduce near-term default risk on credit exposures by supporting borrowers' ability to service their debt (helping to partially off-set the negative impact from the weak macro-economic environment), but also provide direct and indirect incentives for creditor forbearance. Low interest rates reduce the near term financial or opportunity cost of forbearing on loans with risk of future impairments. And, indirectly, the decreasing margins, cost-reducing pressures and depressed values of some of the assets pledged as collateral, may give banks further incentives to forbear on loans. There are, unfortunately, clear risks associated with forbearance, especially if not properly recognised and managed, as discussed in Section 5.

However, prolonged low interest rates also pose the risk of a sudden rise, which would further aggravate short term asset quality concerns, as borrowers' ability to repay loans deteriorates. A sudden rise of interest rates would also increase funding costs and could result in tightening of interest margin, especially in case of lending with longer repricing periods. While protracted low interest rates have contributed to price increases in some asset classes, in particular in the housing market, an environment of low interest rates in the current juncture is thus prudentially preferable for the banking sector over an environment of sudden rises of interest rates. Sudden interest rate rises would also generate losses in fixed income assets. Low interest rates nevertheless continue to contribute to delays in balance sheet repairs, to a slower pace of deleveraging, and to compressed margins.

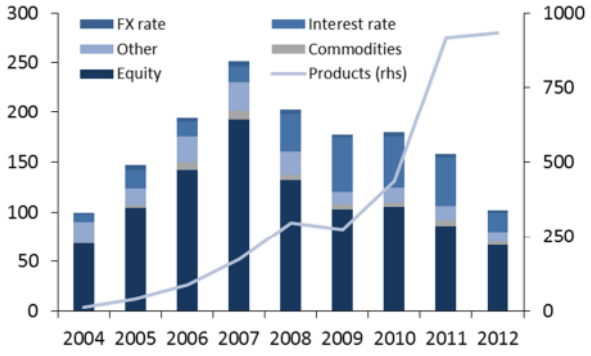
2.3 FINANCIAL MARKETS: SEARCH FOR YIELD BEHAVIOUR

Many market participants still have target rates of returns significantly above current risk-free interest rates, whether driven by existing contractual liabilities or by stakeholder expectations. Low interest rates incentivise market participants to seek higher yields in various ways, including investing in less liquid assets and taking risks with off-balance sheet investment vehicles.

Financial markets have rallied since August 2012, as the ECB's promise to do 'whatever it takes' reassured investors that tail risks for financial markets had receded. Sovereign and corporate bond yields in both advanced and emerging economies have narrowed markedly. Spreads are again close to long-term historical averages. However, a reassessment of credit risks may make these spreads to widen again given the potential increase of defaults against the backdrop of the weak macro-economic outlook. Recently, concerns have been raised by the ECB's Bond Market Contact Group that the negative nominal yields for some non-distressed sovereign bonds in the short end might not reflect fair values; and that the recent hunt for yield was leading to lower bond yields in those countries where the growth outlook was still unsatisfactory, which pointed to a decoupling between flows and fundamentals. These developments imply some risks of the development of mis-valuations in sovereign bond markets. Market improvements have also spread down the credit spectrum to high-yield bonds, with narrowing credit spreads and increasing issuance activity. This has mainly been in the established US high-yield bond and leveraged loan markets, where there have also been a sign of a re-emergence of less prudent pre-crisis activities, such as CLOs, covenant-lite loans, payment-in-kind toggles, CMBS and non-agency RMBS, suggesting a return of investor risk appetite.

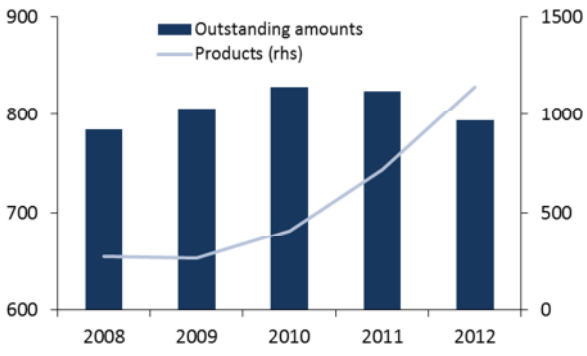
So far, the search-for-yield has mainly occurred in wholesale markets, and did not reach retail markets in which a continued decline of the volume of structured products sold to retail investors has been observed (see Figure 6). Nevertheless, the number of structured products sold increased (see Figure 7), while the maturity decreased over the last few years. Retail investors may well be more risk aware since the financial crisis and remain cautious about returning to a somewhat tainted asset class, while low interest rates have made it more difficult for financial institutions to offer compelling products.

Figure 6 Structured retail products: Volumes sold decreases



Note: Volumes and number of structured products sold to retail investors by asset class, EUR bn for volumes and in thousand for the number of products. Sources: Structuredretailproducts.com, ESMA.

Figure 7 Structured retail products: Increase in the number of products



Note: Outstanding amounts in EUR bn and number of products in thousand. Sources: Structuredretailproducts.com, ESMA.

Market volatility indices, which have become a tradable asset class, have also narrowed. This has the effect of reducing the value-at-risk (VaR) measures and capital requirements for some trading book activities, and

making it cheaper (in capital terms) to take financial risks. However, historical time series for volatility indices exhibit patterns of prolonged declines punctuated by sharp jumps in volatility. Such volatility jumps, if they were to happen, would sharply increase VaR measures and capital requirements, which could trigger and reinforce negative market dynamics from forced selling by VaR- or capital-constrained market participants, risk-sensitive margin and collateral requirements – a phenomenon known as VaR shocks.

Life insurance undertakings and occupational pension funds which offer products with guaranteed interest rates might struggle in earning these interest rates without adapting their original investment policy. It is, however, difficult to quantify the actual extent of search for yield behaviour. A survey run by EIOPA among national supervisory authorities in Autumn 2012 revealed no clear picture for the period from 2011 to 2012. Although the number of jurisdictions reporting at least some observations of an increased search-for-yield behaviour was greater than the number of jurisdictions not reporting such findings, aggregated data on the investment portfolios of large insurance groups cannot underpin any trend of switching between major asset classes (e.g. from sovereign to corporate bonds, or from bonds to equity). Potential search for yield behaviour involving investing into lower rated assets or bonds with a longer maturity is also difficult to identify with aggregated data as any such investment pattern could be masked by various other factors like a downward rating migration in the bond portfolio with a subsequent change in the value of these assets. Lack of flow data makes portfolio shifts difficult to identify and the general problems in quantifying the search for yield are also recognised by other institutions, like e.g. the OECD.[8] However, as long as the regulatory framework is not risk sensitive, insurers have incentives to increase risks in order to increase returns on their portfolios.

3 RISKS OF FURTHER FRAGMENTATION OF THE SINGLE MARKET

The Single Market is one of the European Union's greatest achievements. However, the current economic situation is characterised by strong on-going evidences of fragmentation of the EU Single Market and of national retrenchment with a bias for domestic markets.

3.1 INCREASED HOME BIAS AND REDUCED CROSS-BORDER BANKING ACTIVITY

The process of EU and Euro-area financial integration and cross-border banking has stalled during the financial crisis, and banks have reduced international exposures, increasing the risk of fragmentation of the Single Market. A significant decrease of interbank flows across borders, a reduction of foreign claims (see Figure 8) and a substantial widening of cross border lending rates provide further evidences of increasing retrenchment. There is also some evidence of increased home bias in asset holdings in the insurance sector (although a certain level of home bias is inherent in the business models and risk management of insurers with a domestic customer base). These on-going strong evidences of fragmentation and retrenchment roll back some integration gains achieved so far and risk undermining the foundations of the Single Market. This exacerbates concerns about financial stability in Europe and as such signals a lack of confidence.

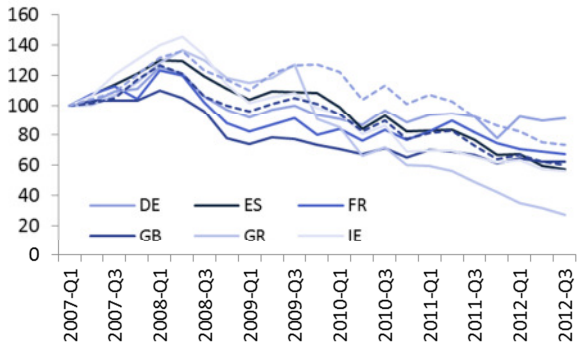
Signs of fragmentation can be traced to both "public" and "private" drivers, with each reinforcing the other. Private drivers of fragmentation reflect changes in the risk appetite of institutions towards de-risking. This includes business strategies towards exiting or scaling back from regions or businesses. In recent times, many banks have started to diminish their foreign exposures due to higher funding costs, general risk aversion, and challenging conditions to explore operational synergies. Also, banks have been under pressure to deleverage

[8] OECD (2011), The Economic Impact of Protracted Low Interest Rates on Pension Funds and Insurance Companies (http://www.oecd.org/finance/financialmarkets/48537395.pdf)

assets where difficulties are experienced to obtain funding to support these assets. For instance, a lack of funding in USD for some banks has caused a scaling down of businesses where global transactions are mainly denominated in USD, such as aircraft financing. At the same time, close-out transactions among banks across borders are leading to a severe slowdown in cross-border interbank activities. The EBA's Risk Assessment Report, in its semi-annual survey, provides some evidence of this on-going retrenchment (see Figure 9 and Figure 10).

Public drivers reflect, among other issues, uncoordinated national policy measures taken by some national regulators, including ring-fencing local capital and liquidity, diverging supervisory practises and informal requirements, e.g. to locally match liabilities and assets to mitigate perceived currency redenomination risks. While banks may want to optimize funding positions through intra-group transfers, some home and host authorities have undertaken a series of unilateral ring-fencing measures to local capital and liquidity. For instance, measures were imposed to reduce exposures of banks to affiliated entities mainly impacting transactions between subsidiaries and their foreign parent banks, limiting intra-group lending.

Figure 8 Consolidated foreign claims (ultimate risk basis) of reporting European banks vis-à-vis selected countries. 2007Q1=100



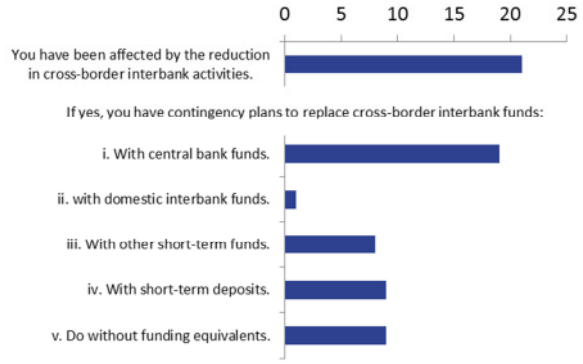
Source: BIS and EBA

Uncoordinated national policy measures such as regulatory ring-fencing requirements (even where there is no clearly specified and EU-wide structural framework) risk hindering the free movement of capital, increasing the cost of funding, signalling supervisory divergences, influencing negative rating actions, and provoking further safeguard measures. Moreover, funding challenges can also exacerbate pressures on domestic banks and their sovereigns. For instance, national bailouts and other local support measures to support local banks can have a negative impact on debt dynamics and increase systemic risk in a self-enforcing manner. Concerns about fiscal costs of bailing-out a large financial institution can adversely affect the borrowing costs of the sovereign the institution is domiciled in, partly because of the anticipated impact on debt dynamics. In the context of fragmentation in financial services, this is a particular risk where already close links between banks and their stressed sovereigns are increasing further. Consequently, coordinated policy responses across Member States and a clearly specified and sustainable EU-wide structural framework for supervisory coordination are needed to reinforce supervisory convergence and to rapidly reverse harmful trends of fragmentation of the EU Single Market.

Furthermore, the 0% risk weight as assigned to sovereign exposures in banking and insurance regulation may have been a further driver of market fragmentation to the extent that it has supported purchases of

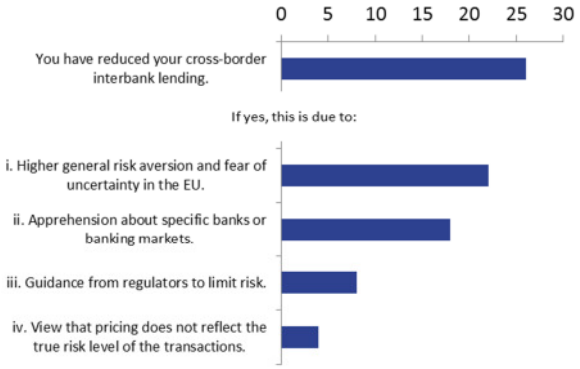
predominantly domestic government debt, contributing not only to fragmentation, but also to increasing bank-sovereign links.

Figure 9 Cross border interbank activities



Source: EBA (Risk Assessment of the European Banking System, January 2013)

Figure 10 Cross border interbank activities



Source: EBA (Risk Assessment of the European Banking System, January 2013)

3.2 INCREASED CLUSTERING OF FINANCIAL MARKETS

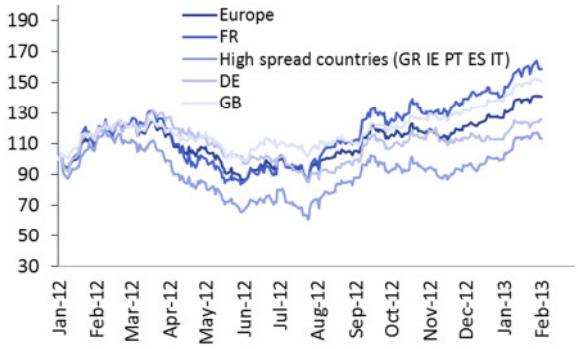
Financial markets within the EU have displayed since 2011 signs of a clustering of markets into two broad main groups. Main manifestations of this clustering can be seen in an increasing dispersion of EU equity indices, a continuing high dispersion in the yields on EU sovereign bonds and the formation of two groups with internally high correlation coefficients between sovereign bond yields and low correlations between each other, nevertheless with potential spill-over effects. To be sure, this clustering does not mark a fragmentation of the EU single financial market. It rather reflects a realignment of risk assessments within the market, while the integrity of the single EU financial market and its legal and institutional infrastructure remains unimpaired by this economic development.

In detail, the general upward trend in equity indices has not included all EU countries, as at least one smaller country experienced a further decline in its equity index thereby further increasing the dispersion of equity market indices. Since January 2011 the weakest performer has lost about 80 percentage of its value, while the best performer has gained roughly 20 percentage points in value. In particular, the European banking sectors have, since July 2012, been characterized by an increased dispersion of equity indexes (see Figure 11).

At sovereign bond markets, the yields for almost all EU countries have fallen since July 2012. However, sovereign bond yields for several member states remain on an elevated level, i.e. well above 4 percentage points, and produce a still considerable amount of heterogeneity across EU members reflected in an absolute dispersion of around 10 percentage points. This impression is also confirmed by correlations between sovereign bond yields of EU member states (see Figure 12). In particular, from April 2012 onwards the correlation data indicates that a first group of countries comprising distressed economies has become separated from one of less distressed members. This second group, represented by Finland in Figure 12, is characterized by a high correlation to members of the same group, but volatile and decreasing correlations to members of the first group. Hence, in particular sovereign bond markets display the tendency to see two market clusters within the EU. The development of sovereign bond yield volatilities since April 2012 reflects this evidence by displaying a similar structure with a group of distressed countries characterized by high volatilities and a group of less distressed countries featuring substantially lower volatilities, whereby the difference in the volatility level below those groups is a little below 100 % of the second group's volatility.

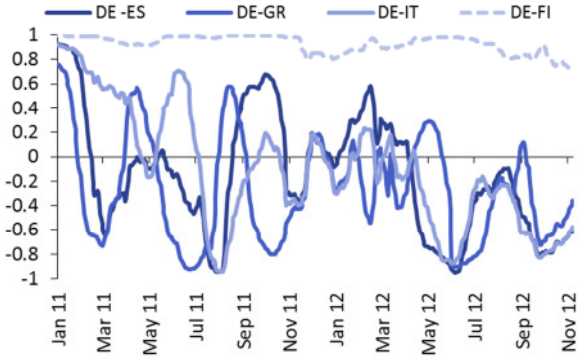
Similarly, the difference in the maturities of new debt issued by sovereigns in 2012 between distressed and non-distressed markets provides additional evidence for the clustering of markets, as sovereigns of distressed markets issued in 2012 new debt with an average maturity more than three years lower than the average maturity of issues by non-distressed sovereigns. Liquidity indicators deliver additional evidence for the increasing heterogeneity of sovereign bond markets throughout the EU by featuring a persistently high level of dispersion of bid-ask spreads between selected markets in late 2012.[9]

Figure 11 Equity indexes for banking sector (1/1/2012=100)



Source: Thomson Reuters Datastream, ESMA

Figure 12 Markets with and without sovereign stress display low correlations



Note: Correlations over 60-days rolling windows of 10-year sovereign bond redemption yields in the EU. Sources: Thomson Reuters Datastream, ESMA

The increased heterogeneity in EU sovereign bond markets is also reflected in the development of rating decisions for newly issued sovereign debt in which the share of new issuances with lower ratings increased throughout the entire year 2012. Thus, in 2012, 54% of sovereign bonds issued were rated AAA or AA+, against 60% in 2011; 13% between AA and A- (40% in 2011) and 33% below A (0.2% in 2011).

While the tendency for an increasing market clustering may contribute to concerns from a Single Market perspective, it also mitigates contagion risk as investors are increasingly using diverging risk levels to distinguish categories of sovereign debt in Europe. Nevertheless, contagion risks remain high within the group of countries exposed to sovereign debt problems and potential spill-over effects within the EU cannot be neglected. In addition, the negative correlation pattern between distressed and non-distressed European sovereign debt markets indicates that investors are increasingly treating the two types of sovereign debt as substitutes in their portfolios. Consequently, the issuance of new debt gets more demanding for individual sovereign issuers under distress. In addition, the associated maturity reduction preserves this market pressure which currently generates sizeable sovereign spreads. From a cross-sectoral perspective, the simultaneity between the increasing dispersion in the markets for equity, and in particular the equity of banks, and sovereign debt documents the risk of feed-back loops between sovereign debt problems and balance sheets of the domestic banking sectors. In so far as domestic banks are the main purchasers of sovereign debt, while sovereigns have to bail out endangered banking systems, any negative events in one of the two subsystems implies negative contagion effects for the other. Hence, the involved feed-back effects have the potential to create a self-reinforcing persistence of the underlying problems contributing to eventual strains on the Single Market framework.

[9] Further details are available in the ESMA Report on Trends, Risks and Vulnerabilities, No. 1, 2013.

3.3 ESA'S RESPONSE TO REVERSE THE TREND OF FRAGMENTATION

All EU institutions and member states need to work together to reverse the harmful trends of fragmentation of the EU Single Market. A range of initiatives will be relevant, especially in the Eurozone, including the SSM, which will be instrumental in breaking the adverse bank-sovereign link. The SSM should be implemented without delay, and should be followed by a sound bank resolution mechanism.[10] To supplement those measures, an increased emphasis should be placed on the ESAs role to promote convergence of supervisory practices and to coordinate policy responses across Member States. Here, a strong role of the ESAs in supervisory colleges and the development of both the EU-wide Single Rulebooks and Supervisory Handbooks to foster supervisory convergence are of particular importance.[11]

The proper functioning of colleges of supervisors, as a key forum for effective supervisory coordination and exchange of information, is a very important element in achieving supervisory convergence and coordinated supervisory responses. Supervisory colleges are very well placed to play a significant role in addressing current risks of uncoordinated national actions and in assessing unintended consequences of such actions. To this end, the ESAs' engagement in colleges of supervisors helps to ensure that supervisory measures are properly discussed and coordinated ex-ante, and that colleges take potential unintended consequences into full account in their joint assessments and decisions on institution-specific prudential requirements. Consequently, the ESAs should have a strong role in supervisory colleges in order to efficiently coordinate the potential implications of national policy measures across Member States, and thus to prevent further fragmentation of the EU Single Market. A strong involvement of the ESAs in colleges can be viewed as a natural development due to their EU wide expertise and oversight of the operational functioning of colleges, enabling them to collate interpretations of existing standards and regulation, and to provide orientation and feedback on how supervisors can substantiate their assessments of risks in financial institutions.

Moreover, the development of the EU-wide single rulebook should set the right signal for a long-term structural regulatory framework. Such a framework would set a level playing field and improve competitiveness of the financial sector as well as overall confidence in EU financial markets. It should build on the efforts and progresses made so far by the ESAs towards this objective. Already, primary legislations, including EMIR, AIFMD, SSR and CRA2, as well as technical standards and guidelines, e.g. for AIFMD, EMIR, UCITS, CSD, MiFiD and CRA2 mark significant progress towards the single rule book. Further measures to promote the single rulebook are planned in the area of the transparency of investment products, the enforcement for financial information and the work towards MiFiD2.

With regard to the banking sector, the development of an EU-wide Supervisory Handbook (Handbook) by the EBA could be a very important element to complement the EU-wide Single Rulebook. In particular, a Handbook would ensure consistency of supervisory practises and could address fragmentation risks by minimising the risk of regulatory arbitrage and by ensuring consistency of supervisory practises between countries inside and outside the SSM. This is particularly important in relation to cross-border banking groups within the EU in order to provide a common reference point to decide on the application of supervisory measures, and in the process of joint decision on institution-specific prudential requirements.

The Handbook would be based on good supervisory practises and would provide common reference points to decide on the application of supervisory measures. All these important elements should counteract signals of supervisory divergences that are currently compromising the unity and integrity of the EU Single Market.

[10] EU Commission press release on the banking union from 12 September 2012
[11] ECON public hearing on: "Bank supervision and resolution: Next steps?"

In this sense, an effective and credible framework for the SSM must not compromise the unity and integrity of the EU Single Market, and should, in fact, contribute to an effective application of these crucial elements of converge between the SSM and non-SSM countries.

With regard to the insurance sector, the present solvency rules are outdated. They are not risk sensitive and they do not properly deal with group supervision. Importantly, they have also been superseded by industry, international and cross-sectoral developments. Solvency II will ensure the harmonization of valuation methods and supervisory practices and help rectify these shortfalls. The continued delays in the implementation of Solvency II, however, are a source of uncertainty both for supervisors and insurers. There is a clear risk that, in the absence of a final agreement on Solvency II, European supervisors may be forced to develop national solutions in order to ensure sound risk sensitive supervision. Instead of reaching consistent and convergent supervision in the EU, different national solutions may emerge to the detriment of a good functioning internal market. It is therefore of key importance that national authorities ensure a consistent and convergent approach with respect to the preparation of Solvency II. In particular, an interim implementation of key areas of Solvency II is important in order to ensure proper risk management in undertakings and to ensure that supervisors have sufficient information at hand. These key areas compromise the system of governance, including risk management system and a forward looking assessment of the undertaking's own risks, pre-application of internal models, and reporting to supervisors.

4 RISKS FROM INCREASED RELIANCE ON COLLATERAL

The financial crisis, and especially the failure of Lehman, increased financial institutions' awareness of and aversion to counterparty default risk. Having lost confidence in credit ratings, firms and investors have increased their reliance on collateral in managing counterparty default risk. This tendency has been reinforced by regulatory initiatives such as mandatory central clearing of derivatives as stipulated in the European Market Infrastructure Regulation (EMIR) as well as CVA charges. Hence, funding through unsecured interbank and bond markets has partially been replaced by funding through secured repo and covered bond markets. At the same time, the collapse of large parts of the US shadow banking system, including formerly AAA-rated securitised products, and the on-going European sovereign crisis have weighed on the supply of high-quality collateral. An additional factor has been a reduction in the velocity (or reuse) of collateral among market participants, which may put further pressure on the supply of collateral and the smooth functioning of financial markets.[12]

According to ESMA's estimates, the supply of high quality collateral within the EU is around EUR 11.8tn as of 2012, the bulk of which consists of sovereign bonds. The EU-wide demand for collateral is around EUR 4.1tn, mainly for repo operations, exchange-traded and OTC derivatives and securities lending. On the whole, these estimates do not point to substantial imbalances in the current juncture, although the expected increase in demand in the next few years (to meet further mandated collateralisation requirements) may exceed the increase in supply, resulting in relative scarcity of collateral. In addition, a pure aggregation does not fully reflect the distribution of collateral availability and collateral needs over individual institutions. Hence, eventual local scarcities of collateral cannot be ignored.

[12] This section builds on the ESMA Report on Trends, Risks and Vulnerabilities, No. 1, 2013.

4.1 COLLATERAL TRANSFORMATION, RE-USE AND INTERCONNECTEDNESS

The safety and liquidity value of collateral is increasingly being priced, providing incentives for more efficient use of collateral. Institutions with idle portfolios of high-grade liquid securities have more incentives to lend these securities to institutions that have greater need for liquidity buffers. Institutions with lower-grade securities have incentives to optimise their collateral use (e.g. posting cheapest-to-deliver collateral where allowed) and to transform their collateral (through collateral upgrade transactions) to improve their access to liquidity or extract liquidity premium from high-grade securities.

Specific examples of such increased interconnectedness and contagion risk include the collateral-based transaction chain between hedge funds, prime brokers and the repo market, and the collateral upgrade transactions between banks (needing better collateral) and insurers (needing extra income from idle holdings of high-grade securities).

Such collateral transformation should increase the efficiency of collateral use, but may also reinforce several risks for the financial system:

- Financial institutions may pledge some assets to get secured funding, resulting in further asset encumbrance, which raises risks for unsecured creditors (depositors and bondholders);
- Financial institutions facing funding issues and lacking high quality collateral may enter into collateral swaps (also called collateral upgrade) with other institutions such as insurance companies, resulting in an increase in the interconnectedness in the financial system;
- Lower-quality assets could be used as collateral. Sharp decline in prices would then lead to margin calls or change in haircuts, which under stress could lead to procyclical effects.
- Collateral reuse may increase further in order to address the relative scarcity of collateral. This would also increase interconnectedness in the financial system and may also generate uncertainties for beneficial owners.
- Variations in collateral demands generated by fluctuations in the ratings of the counterparty, the ratings of the collateral, and the Value-at-Risk (VaR) of the financial contract against which collateral is required can trigger forced sellings or close-outs, which would reinforce negative market dynamics. Again, in a distressed situation, this would generate additional procyclical effects.
- The extent to which banks have already pledged assets in secured funding markets (including repo and covered bonds), and the risks of further collateral calls under stress, is not generally well disclosed, and presents another source of uncertainty. These effects would all make it more challenging to achieve (and less credible to promise) orderly resolution in the event of financial institution failure, thereby increasing moral hazard.

4.2 THE ROLE OF CENTRAL COUNTERPARTIES (CCP)

The European Markets Infrastructure Regulation (EMIR) requires all OTC derivative contracts meeting pre-defined eligibility criteria to be cleared through an authorised CCP. Mandatory clearing requirements will increase the quality of risk management, reduce counterparty risk across the EU and allow the netting of contracts across different counterparties. Thus they generate the benefits of a potential reduction in the demand for collateral. Competition pressures between CCPs are another aspect that has attracted regulatory attention and has led to stringent minimum requirements for risk management on collateral, margin and the overall default waterfall. On the other hand, EMIR also leads to an increase of transactions volumes cleared by large European central counterparties. In addition, it will contribute to a further increase in the demand for high quality collateral in the financial system, since collateral has to be provided for certain non-cleared OTC derivative contracts. Thus risk concentrations will increase, since a few large European market players

characterised by very high transaction volumes will play a critical role for the functioning of financial markets. Consequently, financial institutions will be highly exposed to potential problems in a CCP. Also, procedures in case of a CCP distress (recapitalization, bail-in procedures) remain unclear. Harmonised resolution and recovery regimes for CCPs across the EU would help avoiding potential regulatory arbitrage and thus preventing customer and taxpayer detriment.

5 RISKS TO CONFIDENCE IN BALANCE SHEET VALUATIONS AND RISK DISCLOSURES

The financial crisis has led to a loss of confidence in the balance sheet valuation and risk disclosures of financial institutions. This is clearly evidenced by the low equity market valuations of financial institutions, with many trading significantly below tangible book value. In order to pre-empt those pressures, financial institutions should value all their assets and liabilities properly, in full accordance with applicable accounting standards and regulations, to ensure valuation consistency within the EU. Institutions should analyse and understand the sources of valuation uncertainty, using prudent valuation methodologies, and share these with supervisors and potentially in published risk disclosures. This calls for consistency in the approaches taken in banking and insurance regulation.

A particular problem for the insurance sector (due to delays to IASB convergence work and Solvency II) is the continued absence of EU-harmonised accounting standards and regulatory valuation rules, and in particular the wide variability in accounting for insurance contract liabilities and holdings of less liquid securities, such as corporate bonds.

For banks, the value of their assets (and in the end their level of capital) is directly linked to the economic situation of the borrowers and their ability to repay their loans. As the number of borrowers in financial difficulty increases during periods of macro-economic weakness, banks may choose to offer a certain relaxation of terms of the contract (forbearance). This would avoid an actual or prospective breach of the original terms of the contract. The low interest rates also provide direct and indirect incentives for forbearance, as discussed in section 2.2. Forbearance may disguise the actual credit risk of individual banks and lead to the overestimation of its capital and resilience. The risk that banks may not have adequately provisioned against likely future impairments is also a source of uncertainty surrounding accounting valuations of banks' balance sheets. Individual problems of this kind can easily reduce the trust in other financial companies and increase systemic risk. In addition, the associated risk delays the necessary de-leveraging of households and non-financial corporates and constrains lending to more productive borrowers, consequently delaying recovery. Existing loans to borrowers with questionable long-term viability may also tie up capital and funding and limit financial institutions' ability to provide credit to new borrowers, distorting the market allocation of credit. Supervisors and policy makers have to ensure a common understanding of forbearance across Europe. A step in this direction was achieved in December 2012 when ESMA issued a public statement on the treatment of forbearance practices in the IFRS financial statements in which it suggested a common definition of forbearance and pointed out to the related measurement and disclosure requirements of IFRS. The EBA is in an advanced stage of identifying a common definition for forbearance, aiming at providing supervisors with a tool to monitor asset quality development in a coordinated fashion and on a comparable basis. Authorities will have to design the path to the exit of the situation by establishing the appropriate rhythm of cleaning the balance sheets. At the same time, banks' governance of such a practice will have to be closely monitored and evaluated. This valuation uncertainty affects not only banking book loan portfolios but also trading book holdings of securities, where fair-value point estimates of the expected re-sale value of securities do not capture the valuation uncertainty in less liquid market conditions. One potential remedy is prudent valuations, based on a higher confidence interval for the re-sale value of the securities.

Valuation and risk measurement – especially for complex financial instruments and for longer term (e.g. actuarial) risks – is generally based on quantitative models. For assets and risks where financial institutions use similar or identical (external) models, they are consequently exposed to valuation risks stemming from model failures, imperfect calibrations, inappropriate modelling choices and diverging decisions of supervisors in respect of model approvals. Similar methodological risks exist in the valuation of goodwill, i.e. the value of intangible assets with a quantifiable value. These are specific examples of exposure to a common risk factor, in this instance exposure to model parameter risk.

This report has already discussed several other examples of financial institutions' significant exposures to common risk factors, such as macro-economic risk (Section 1), interest rate risk (Section 2) and collateral risk (Section 4).

Financial institutions should stress test their business plans comprehensively against a range of scenarios for those main common risk drivers, including interest rates (low for longer or sudden adjustment), latent credit risk and legacy redress and litigation costs. Such forward-looking stress tests should be used by financial institutions to develop credible management actions to mitigate the risks, and by financial regulators to inform supervisory judgments about requirements for capital or management action.

6 Risk of Loss of Confidence in Financial Benchmarks

Financial market reference rates and their calculation procedures have recently come under close public scrutiny. Especially in the area of reference rates for unsecured inter-bank lending, recent events [13] have led to a weakening of the credibility of reference rate systems in the EU and beyond.

The ESAs are concerned by the weakening of the credibility of reference rate systems and have taken an immediate interest in this issue, given the serious flaws in the way inter-bank interest rate benchmarks are being set, and their widespread use in securities and other financial markets, and potential implications for market integrity. Consequently, ESMA and EBA recently took decisive action, in coordination with the European Commission and IOSCO, to contribute to addressing these flaws in the intervening period until a formal regulatory and supervisory framework is in force in the EU.[14]

Inter-bank reference rates – in particular those calculated within the EU, such as Libor and Euribor – are the most widely-used reference rates in the European and global financial markets. They provide the basis for the specification of contracts in key markets worldwide, including forward rate agreements, short-term interest-rate futures contracts, interest rate swaps, inflation swaps, floating rate notes, syndicated loans and variable rate loans and mortgages, but also play a role in currency trading and in the calculation of benchmarks and hurdle rates for managed funds, including money market funds, and private equity funds. According to their widespread use, the value of financial contracts based on inter-bank reference rates is high, underlining the

[13] Since June 2012 three large financial institutions, Barclays, UBS and RBS, have been found liable for attempted manipulation of LIBOR, and EURIBOR by the UK and US financial authorities and agreed to pay fines totalling over $ 2.5 billion in their settlements. Besides, the Commission services are currently is investigating several antitrust cases which concern benchmark rates including LIBOR/TIBOR and EURIBOR and in relation to a number of currencies including inter alia the Yen, the Euro and the Swiss franc.

[14] On 11 January 2013 the European Securities and Markets Authority (ESMA) and the European Banking Authority (EBA) published the results of their joint work on Euribor and proposed principles for benchmark rate-setting processes. The publications included (i) A review of Euribor's administration and management and clear recommendations to the Euribor-European Banking Federation (EEBF) to improve the governance and transparency of the rate-setting process; (ii) formal EBA Recommendations to national authorities on the supervisory oversight of banks participating in the Euribor panel; and (iii) a joint ESMA-EBA consultation on Principles for Benchmark Setting Processes in the EU which establish a framework for the conduct of benchmark rate-setting and the activities of participants in the process.

centrality and importance of well-defined, robust, and credible benchmarks. Libor has been estimated to be utilised as a reference rate for USD 500tr to USD 600tr in notional interest-rate derivatives contracts alone. Other benchmark rates and their uses included, the total volume of dependent contracts is likely to be substantially higher.

From the perspective of cross-sectoral systemic risks in the EU, the problems associated with benchmarks may pose considerable challenges, resulting from their potential impact on the continuity of such systems.

Any disruption in the provision of such reference rates may naturally have far-reaching consequences for the financial instruments and entire markets resting on their availability. Such disruptions may result from a lack of liquidity of the market on which a transactions-based benchmark draws, or the non-availability of sufficient quotes to calculate a reporting-based benchmark. Recently, inter-bank reference systems such as Euribor-EBF have experienced withdrawals by banks from their panels, reflecting their growing concerns over litigation or political consequences of misconduct as panel contributors.[15]

No concrete indication of an imminent wave of withdrawals from reporting panels can be discerned at the time of writing. However, herding logic in combination with a rising potential burden associated with panel contributions may in adverse circumstances trigger an exodus from reporting panels.[16] The European Commission's intention to propose the mandatory participation of banks within reporting panels, which is also supported by the ECB, has the potential to correct for those incentives.[17]

Any critical situation may be complicated by the fact that there is no practical experience with benchmark continuity issues. In addition, there is currently no designated supervisory authority to take ownership in a critical situation around Euribor-EBF reference rates. Finally, there is a marked lack of contingency planning among benchmark providers as well as users for such situations.

The initiatives taken by EBA and ESMA on 11 January 2013 should be continued, and the European Commission should be encouraged to initiate legislation aimed at providing a regulatory and supervisory framework for benchmarks in the EU.

In particular, the continuity risks discussed above strongly suggest that a future regulatory framework should require:

- contingency planning by benchmark providers and users, and in relevant financial contracts. In addition, there may be need for:
- Enforcement powers on the part of competent authorities enabling them to mandate contributors to maintain their commitment to certain benchmark system at times of distress

In addition, competent authorities should take into consideration in their on-going supervisory work, for example on implementing capital and liquidity requirements, any potential effects on the incentives for

[15] Withdrawals from the Euribor-EBF system included Banque et Casse de l'Epargne de l'Etat (LU), Eurepo Index, 4 Jan 13; DZ Bank, USD EURIBOR and EONIA, 3 Jan 13; Helaba, USD EURIBOR and EONIA Swap, 3 Jan 13; BayernLB, EURIBOR, EONIA and Eurepo, 2 Jan 13; Rabobank, EONIA and EURIBOR, 3 Jan, Eurepo Index 11 Dec 12; DekaBank, EURIBOR and EONIA and Eurepo Index, 30 Nov 12; Societe Generale, Eurepo, 1 Dec; Commerzbank, EONIA, 29 Nov 12; Natixis, Eurepo Index, 29 Oct 12; UBS, EONIA and Eurepo Index, 01 Nov 12; HSBC, Eurepo Index, 7 Dec. Cf. http://www.euribor-ebf.eu/usd-euribor.org/usd-euribor-panel-banks.html.

[16] The perceived burden may include litigation risks associated with past misconduct, potential ad-on regulatory requirements in the future, as well as reputational risks of being associated with benchmark systems under the scrutiny by supervisors for misconduct, market abuse, and antitrust activity.

[17] http://ec.europa.eu/commission_2010-2014/barnier/headlines/speeches/2013/02/20130208_en.htm, http://www.ecb.int/press/pr/date/2013/html/pr130208.en.html

contributors to maintain their commitment to benchmark panels. ESMA and EBA will continue their surveillance of benchmark activities in the EU, and their contribution to regulatory and supervisory activity in this area.

Consumer concerns and redress costs that some financial institutions face as a consequence of past business conduct practises can lead to financial stability implications not only because of potentially high fines, compensation payments and legal costs arising for these institutions, but also through generally growing mistrust in the financial sector.