JOINT COMMITTEE OF THE EUROPEAN SUPERVISORY AUTHORITIES

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

SPRING 2019

EXECUTIVE SUMMARY AND POLICY ACTIONS

The need to prepare for the impact of a no deal Brexit on financial services activities requires a continued close attention and preparation by both the private and the public sector. Besides the risks related to the relocation of financial services activities, a withdrawal in a disorderly fashion and without a ratified withdrawal agreement could impact the cross-border provision of financial services and the ability to perform contractual rights and obligations under existing contracts. The autumn 2018 report already mentioned the dedicated ESA Opinions in the context of Brexit preparations and highlighted that the level of contingency planning and communication of financial firms to customers was not sufficiently advanced in a number of areas and needed to speed up. This was still the case for some affected institutions when writing this report. Furthermore, as the risk of a no deal Brexit scenario is increasing, financial firms should include in their planning the potential for increased market volatility.

The risk of financial market repricing, asset price volatility and the tightening of financial conditions via increasing risk premia remains imminent and could be aggravated in conjunction with a less favourable macro-economic environment and a no deal Brexit scenario materialising. A weakening outlook for the macro-economic environment could go hand in hand with repricing of lower-quality assets, continued outflows from the fund sector and increasing financial stability risks in broader financial markets.

In the banking sector, market funding needs ahead are substantive. Funding needs might be affected by potentially rising funding costs amid heightened market volatility and increasing risk premia. This might negatively affect profitability in the medium-term, with current returns already insufficient for the long-term sustainability of banks' business models. Increasing downside risks to economic growth, potentially rising funding costs and high levels of indebtedness may all jeopardize banks' efforts to further reduce non-performing loans (NPLs). In addition, elevated volatility in financial markets has shown vulnerabilities of banks stemming from their trading book and other financial instruments measured at fair value, especially sovereign exposures, where value adjustments directly affect banks' capital.

In the insurance and pension fund sectors, the risk of abruptly increasing yields can cause immediate losses of value in fixed-income investment portfolios, with the overall balance sheet impact depending on the interaction between rising bond spreads and risk-free rates. Abruptly increasing yields coupled with higher than expected lapse and surrender rates and claims inflation, can be an additional source of instability in the insurance sector. Moreover, the low level of interest rates remains a challenge for life insurance and pension fund sectors, as low interest rates make it difficult for insurers to generate sufficient investment returns to meet policyholder obligations.[1] This in turn might still cause incentives to search for yield.

In light of the above mentioned risks and uncertainties, supervisory vigilance and cooperation across all sectors remain key. **The Joint Committee advises the following actions by the European Supervisory Authorities (ESAs), competent authorities, financial institutions and market participants moving forward:**

1. To prepare for the UK's withdrawal from the EU, **it is crucial that EU financial institutions, market participants and their counterparties enact contingency plans in a timely manner**. Preparations should address relevant risks that inconclusive negotiations on the withdrawal terms would pose ('no deal Brexit'), including the market volatility that such scenario may trigger. ESAs' opinions and public statements provide important guidance for financial institutions, market participants and national competent authorities in this regard. In addition, the ESAs are monitoring closely the process of Brexit and potential risks of a no deal Brexit scenario.
2. **Banks should develop strategies to carefully manage and address large refinancing needs**, including building loss-absorbing capacity, in the upcoming years in order to avoid any cliff-edge effect at a later stage. Supervisors should be vigilant in ensuring that banks address their funding needs in good time and continue on their path to build up bail-in-able capacity. In addition, **banks should continue with efforts to address the stocks of NPLs, and should review their business model** to improve profitability. Furthermore, it is **important that banks carefully manage their credit risk and interest rate risk**. New bank lending has started to increase and warrants **close supervisory monitoring of lending standards** and credit quality trends of new lending portfolios. Banks need to ensure that lending standards do not ease and pricing or covenant requirements do not weaken. Finally, **the financial sector and banks in particular need to manage their sovereign exposures carefully**, which might imply significant impact on their profitability and capital.
3. **European insurance supervisors and the insurance industry need to ensure that risks of a potentially sudden reassessment of risk premia and continued low interest rates are properly monitored and assessed and that appropriate mitigating actions are undertaken**. In this context, the vulnerabilities identified in the 2018 Insurance stress test, including insurance specific risk, need to be addressed. Therefore, EIOPA is further analysing the stress test results and conducting a follow-up dialogue with the participating groups' supervisors, discussing possible recommendations focusing on the identified vulnerabilities.
4. Against the backdrop of the potential for sudden risk premia reversals with a risk of rising funding costs, **the development and regular use of stress tests across all sectors remains crucial.** Therefore, the aforementioned risks were reflected in the scenarios for the 2018 bank sector and insurance stress tests scenarios of EBA and EIOPA, which are summarized in this report. In addition, ESMA will present guidelines on fund liquidity and Money Market Fund stress testing during 2019, and the EBA has started to prepare

[1] For a broader discussion of the risks related to the low interest rate environment, see ESRB (2016), "Macroprudential policy issues arising from low interest rates and structural changes in the EU financial system", Nov 2016, as well as Annex C of that report.

the methodology for its 2020 stress test exercise. Similarly, ESMA has started to prepare its next CCP stress test exercise and EIOPA its 2019 Occupational Pensions Stress Test.

1 INTRODUCTION

In the second half of 2018, the positive tailwinds from the macroeconomic environment slowed down compared to the autumn report and financial sector risks tilted upwards. The European Commission revised down its forecast of EU28 GDP growth for 2018 and 2019 to 2.1% and 1.9%, respectively, against 2.3% and 2.0% six months ago. The forecast for global economic growth has also been cut by 0.2 percentage points to an expected 3.5% in 2019, whereas for 2018 it remains unchanged at 3.7%.[2] Political risk related to Brexit remains an important source of concern in Europe, while increased trade tensions and the risk of further escalation of protectionist measures contributed to a rise in political uncertainty and weakening of the global growth outlook. Along with challenges related to high indebtedness, these risks represent key concerns for the global economy and financial stability and are not least reflected in rising risk premia.

Against this background and in line with the Autumn 2018 Joint Committee Report on Risks and Vulnerabilities, the risks related to (i) the terms of the departure of the UK from the EU and (ii) further repricing of risks premia, and broader uncertainties related to a less favourable macroeconomic environment are considered as key risks to the EU financial system in this report.

2 RISKS RELATED TO THE UK'S DECISION TO WITHDRAW FROM THE EU

Following an intense period of negotiations over and after summer, the UK government and the EU agreed on a draft text of the Withdrawal Agreement, setting the terms of the UK's withdrawal from the EU (Brexit) and on a political declaration that envisages how the UK and EU might collaborate after Brexit. While this agreement is an important development, the process is still ongoing and significant political uncertainty with respect to the withdrawal terms remains. This chapter discusses the relevant risks related to this uncertainty and highlights that the need to prepare for these risks has become a very critical issue. The autumn 2018 report already mentioned the dedicated ESA Opinions in the context of Brexit preparations and highlighted that the level of contingency planning and communication of financial firms to customers was not sufficiently advanced in a number of areas and needed to speed up. This was still the case when writing this report.

A consequence of the UK's withdrawal from the EU is the relocation of financial services activities. The spring and autumn 2018 reports already stressed that financial institutions and market participants should identify and timely seek all necessary authorisations and regulatory permissions/approvals both in the UK and the EU 27 in order for them to be in place by March 2019. In addition, these reports referred to various related Opinions the ESAs have published. EIOPA has since then monitored the implementation of its Opinion on supervisory convergence[3]; the EBA monitored the implementation of its Opinion calling on institutions to speed up preparations for Brexit[4]. ESMA continued to monitor how the principles outlined in its four opinions from 2017 were being implemented in practice through the established Supervisory Coordination Network (SCN). The SCN brings together experts from a broad range of competent authorities who table actual cases that they are facing involving UK entities looking to move to the EU27. This new forum proves to be a successful and important mean of information sharing and promotion of convergent practices. In February ESMA published a supervisory briefing designed to help NCAs to make their judgements during the authorisation and the ongoing supervision of firms that intend to establish (or have established) a branch in a non-EU jurisdiction. In another ESMA public statement, firms were also reminded of their obligations to provide clients with accurate disclosure on the Brexit

[2] IMF, World Economic Outlook Update, January 2019, and European Commission, Autumn and Spring 2018 Forecasts.

[3] https://eiopa.europa.eu/Publications/Opinions/EIOPA-BOS-17-141%20Opinion_Supervisory_Convergence.pdf.

[4] https://eba.europa.eu/documents/10180/2137845/EBA+Opinion+on+Brexit+preparations+%28EBA-Op-2018-05%29.pdf

impact on the provision of services and investors' rights. ESMA also published statements on Credit Rating Agencies (CRAs) and Trade Repositories (TRs) as well as on its approach to the application of some key MiFID II/MiFIR and BMR provisions in case of a no-deal Brexit[5].

Besides relocation of financial institutions to the EU 27, a withdrawal in a disorderly fashion and without a ratified withdrawal agreement could impact the provision of financial services and the ability to perform contractual rights and obligations under existing contracts. Against this background, the ESAs have taken steps to facilitate novation of derivative contracts from a counterparty established in the UK to a counterparty established in the EU 27, and to assist the process of re-papering by proposing to amend the technical standards for clearing (ESMA mandate) and bilateral margin requirements (ESA collective mandate) for OTC derivatives contracts.[6] ESAs are aware of the varying third country regimes across Member States and the impact this has on the provisions of services related to OTC derivative life cycle events, and has already highlighted their concerns in this respect. Market participants will need to take these varying regimes into account in their no-deal contingency plans regarding non-centrally cleared OTC derivatives. In addition, ESMA supported to allow time-limited, conditional measures ensuring continued access of EU 27 institutions to UK central counterparties (CCPs) to limit the risk of disruption in central clearing. To this end, ESMA recognised UK CCPs sufficiently ahead of Brexit date, and issued public statements[7] explaining the process in further detail. ESMA has also recognised the UK CSD in a similar manner[8]. In addition it issued a public statement to ensure investment firms inform clients about the implications of Brexit and Brexit-related measures that firms have planned[9] and a public statement on use of data[10].

EIOPA has urged insurance undertakings and national supervisors to make contingency planning and take the necessary steps to ensure service continuity on cross-border insurance contracts even in the event of a no deal Brexit.[11] By law, insurance undertakings have to ensure continuity and regularity in the performance of their activities, including the development of contingency plans. Supervisory authorities have to ensure compliance respectively. To avoid disruptions in service continuity, immediate and reinforced actions from undertakings and supervisory authorities are required. Insufficient contingency planning that may result in consumer detriment is a severe governance failure. So far, the insurers with the largest cross-border business have taken action and are implementing contingency measures. In February 2019 EIOPA issued Recommendations to national supervisors on the treatment of insurance business that becomes unauthorised after a no deal Brexit.[12] The objective of the Recommendations is to minimise the detriment to EU 27 policyholders.

As a follow up to its June 2018 Opinion on institutions' preparedness for a no deal Brexit, the EBA reminded financial institutions in December 2018 to maintain their efforts in effective contingency planning and to increase their efforts in communicating to customers[13]. As there was little evidence only that financial

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[5] https://www.esma.europa.eu/sites/default/files/library/esma70-155-7253_public_statement_mifidii_bmr_provisions_under_a_no_deal_brexit.pdf
[6] https://www.esma.europa.eu/press-news/esma-news/esma-proposes-regulatory-change-support-brexit-preparations-counterparties and https://eba.europa.eu/-/esas-propose-to-amend-bilateral-margin-requirements-to-assist-brexit-preparations-for-otc-derivative-contracts
[7] https://www.esma.europa.eu/sites/default/files/library/esma71-99-1114_esma_to_recognise_three_uk_ccps_in_the_event_of_a_no-deal_brexit.pdf
[8] https://www.esma.europa.eu/sites/default/files/library/esma71-99-1119_esma_to_recognise_the_uk_central_securities_depository.pdf
[9] https://www.esma.europa.eu/sites/default/files/library/esma35-43-1328_brexit_statement_information_to_clients.pdf
[10] https://www.esma.europa.eu/sites/default/files/library/esma_70-155-7026_use_of_uk_data_in_esma_databases_in_case_of_a_no-deal_brexit.pdf
[11] https://eiopa.europa.eu/Publications/Opinions/2017-12-21%20EIOPA-BoS-17-389_Opinion_on_service_continuity.pdf and https://eiopa.europa.eu/Pages/News/EIOPA-calls-for-immediate-action-to-ensure-service-continuity-in-cross-border-insurance-.aspx.
[12] https://eiopa.europa.eu/Pages/News/FEB2019-eiopa-calls-upon-national-supervisory.aspx
[13] https://eba.europa.eu/-/the-eba-calls-for-more-action-by-financial-institutions-in-their-brexit-related-communication-to-customers

institutions communicate effectively to their customers on how they may be affected by the UK withdrawal, the EBA urged institutions to carefully consider its Opinion and to swiftly proceed with advising customers on the specific implications stemming from the withdrawal, or on their own contingency planning. The EBA has also published an Opinion relating to deposit protection issues stemming from Brexit. In its Opinion, the EBA calls on the Deposit Guarantee Schemes Designated Authorities to ensure that depositors in the branches of the UK credit institutions in the EU are adequately protected by the EU deposit guarantee schemes, in case of a withdrawal of the UK from the EU with no ratified agreement in place.[14]

In the case of a no deal Brexit, NCAs and ESMA should have in place with UK counterparts the type of Memorandum of Understanding (MoUs) that already exist with a large number of third country regulators. These MoUs are essential to meet regulatory objectives and allow the information exchange for effective supervision and enforcement, for example for market abuse cases. ESMA has coordinated the preparations for such MoUs together with the EU27 NCAs. ESMA has agreed MoUs with both the Financial Conduct Authority (FCA) and the Bank of England. The agreed cooperation agreements will first of all support continued access to market infrastructures in the UK, but also allow the continuation of the delegation model for, for example, the asset management sector. The MoUs and MMoU will come into effect on the day after the UK's withdrawal from the Union, but only in a no-deal scenario, thereby avoiding significant cliff-edge risks.

Similarly, a Multilateral MoU on supervisory cooperation, enforcement and information exchange between the EEA insurance supervisors and the UK authorities has been agreed. In addition, a Bilateral MoU between EIOPA and the UK Authorities on information exchange and mutual assistance in the field of insurance regulation and supervision has also been agreed.[15] These memoranda ensure cooperation in the fields of insurance prudential and conduct supervision, for mutual assistance and regular exchange of information with the aim to maintain sound prudential and conduct supervision over (re)insurance undertakings and groups based either in the UK or in an EEA member state and to maintain financial stability of the financial markets within the EEA and/or the UK.

The EBA has also progressed with the preparation of the MoU to ensure continuous cooperation and information exchange between the EU and the UK supervisory and resolution authorities should the no deal Brexit scenario materialise. In particular, the EBA Board of Supervisors has approved the template for the supervisory MoUs on which basis the EEA and UK authorities will conclude bilateral MoUs[16].

3 RISK RELATED TO ASSET VALUATIONS, THE REPRICING OF RISK PREMIA AND A LESS FAVOURABLE MACROECONOMIC ENVIRONMENT

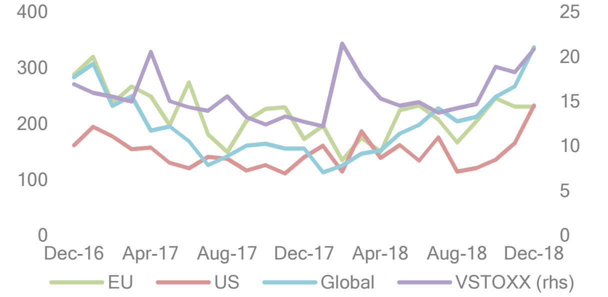
Risks that abruptly increasing risk premia could lead to losses across asset classes and generate substantive asset price volatility were already identified in previous iterations of this report. These risks remain imminent, given recent market developments, such as equity market volatility, a less favourable macro-environment and a tightening of financial conditions. Against this background, this chapter describes the potential implications of these developments for financial institutions, which are also reflected in recent stress tests the ESAs have performed. This chapter concludes by highlighting that supervisory vigilance and cooperation across all sectors remains key, especially in light of the above mentioned risks and uncertainties.

[14] https://eba.europa.eu/-/eba-recommends-maintaining-protection-of-depositors-in-case-of-a-no-deal-brexit
[15] https://eiopa.europa.eu/Pages/News/EIOPA-No-deal-Brexit-Memoranda-of-Understanding-with-the-Bank-of-England.aspx
[16] https://eba.europa.eu/-/eba-board-of-supervisors-agrees-a-template-for-the-mou-to-facilitate-supervisory-cooperation-between-the-eu-and-uk-supervisors-in-case-of-a-no-deal-br

A. Market developments

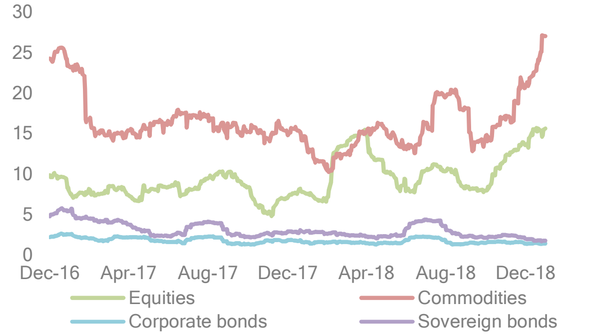
In the second half of 2018, economic growth momentum slowed down, while EU bond and equity markets were characterised by episodes of volatility. Political risk related to Brexit remains among key sources of concern for EU financial markets, as not least reflected by the surge in GBP exchange rate implied volatility. Trade tensions and the risk of a wider escalation of protectionist measures, along with a global slowdown in economic growth represent key concerns for investors. Consequently, implied equity price volatility in the EA rose above 20% in October, for the third time in 2018 (Figures 1 and 2). In addition, EU equities overall fell by more than 12% and EU banking equities fell by 17% since end-June to end-Dec, compared to a decline of around 9% in the MSCI World Equity Index and a fall of 8% for US equities. USD appreciation raised additional concerns over companies' abilities to repay dollar-denominated debt in some emerging market economies (EME), driving outflows from emerging market bond funds.

Figure 1: Economic policy uncertainty



Note: Economic Policy Uncertainty Index (EPU), developed by Baker et al. (www.policyuncertainty.com), based on the frequency of articles in EU newspapers that contain the following triple: "economic" or "economy", "uncertain" or "uncertainty" and one or more policy-relevant terms. Global aggregation based on PPP-adjusted GDP weights. Implied volatility of Euro Stoxx 50 (VSTOXX), monthly average, on the right-hand side.
Sources: Baker, Bloom, and Davis 2015; Thomson Reuters Datastream, ESMA.

Figure 2: Market volatilities



Note: Annualised 40D volatility of return indices on the EU equities (Datastream regional index), global commodities (S&P GSCI) converted to EUR, EA corporate and sovereign bonds (iBoxx Euro, all maturities), in %.
Sources: Thomson Reuters Datastream, ESMA.

Financial conditions tightened in the second half of 2018, as the US Federal Reserve has continued to raise its policy interest rate and European Central Bank (ECB) has ended its net purchases of sovereign bonds in December 2018. The gradual reduction in ECB monthly asset purchases appears to have been absorbed by the market without major disruptions. The broad-based widening in EU corporate bond spreads continued in H2 2018, while EU sovereign markets experienced bouts of volatility with temporary increases in yields and spreads which reverted at year-end, with the exception of Italy (see box 1). Corporate bond yields rose by another 20bps.

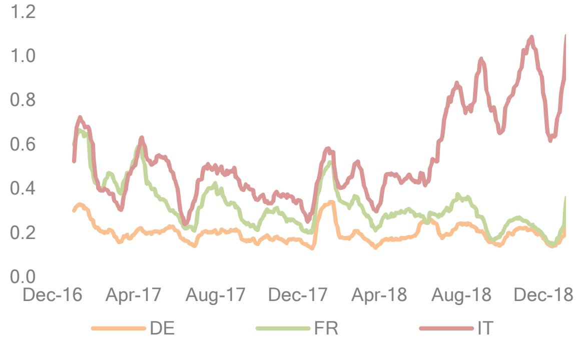
BOX 1: Sovereign bonds

While bond markets have to date repriced in a broadly orderly manner, one key question going forward is whether an orderly price readjustment can be sustained given the end of ECB net asset purchases in December 2018. Risks are particularly acute in Italy, the largest supplier of EU government bonds, which has experienced a sharp widening of the 10-year BTP spread to German Bund to more than 300bps, the highest since 2013. This has been accompanied by deterioration in liquidity in futures markets (Figure 3) and by an increase in borrowing fees (Figure 4).

These developments together with high exposure volumes of Italian banks to the Italian government, have once again raised concerns of the sovereign-bank nexus. Sovereign exposure in the EU banking sector stood at EUR 3.0 trillion as of June 2018 (ca. 10% of total assets). It has decreased by ca. 10% compared to 2 years ago, but nevertheless remains material for many banks. Elevated volatility in financial markets has shown vulnerabilities of banks stemming from their trading book and other financial instruments measured at fair value, especially sovereign exposures. Value adjustments of such exposures directly affect banks' capital. Similarly, substantial exposures of insurers and pension funds to sovereign bonds can be observed. European insurers' investments in government bonds amount to EUR 2.2 trillion as of Q2 2018, corresponding to 28.4% of total assets excluding index and unit linked business, whereas for pension funds they total EUR 1.2 trillion (32% of total assets). Exposures of insurers to the Italian sovereign sum to EUR 381 billion (17.3% of total government bond investments). In the banking sector, total exposure of EU/EEA banks to the Italian sovereign amounted to ca. EUR 280 billion in Q2 2018, corresponding to ca. 0.9% of their total assets. Overall, there is a considerable home bias of banks and insurance undertakings' investments in government bonds in some countries, including Italy. For the insurance sector, this is illustrated in Figure 10 on page 14 in this report. This interconnectedness makes financial institutions vulnerable to developments in the sovereign debt market.

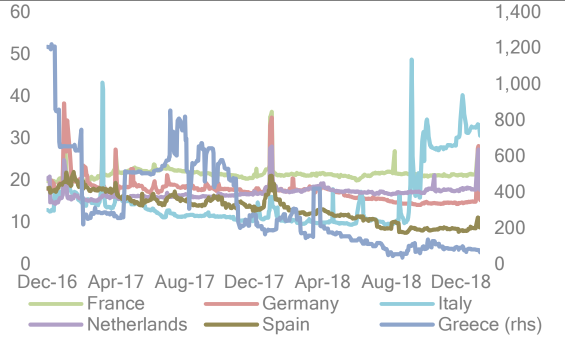
Therefore, competent authorities need to monitor sovereign exposure held by the financial sector and ensure that respective vulnerabilities are well managed by institutions. This is in particular relevant, given that the prudential framework in the banking sector requires no or limited capital set aside nor sets limits on concentration risk – contrary to other types of exposures. In the insurance sector this alleviation applies only to the Member States' central government and central banks denominated and funded bonds in the domestic currency of that central government and central bank.

Figure 3: Liquidity in sovereign bond futures



Note: One-month moving averages of the Hui-Heubel illiquidity indicator for selected 10Y sovereing bond futures, in%.
Sources: Thomson Reuters Datastream, ESMA.

Figure 4: Borrowing fees for government bonds



Note: Average borrowing fees on selected government bonds, in bps.
Sources: Markit Securities Finance, ESMA.

B. Risks in the investment fund sector

In addition, funds experienced significant outflows in the second half of 2018. In particular, bond funds experienced record high outflows in H2 2018 (EUR 75 billion), followed by equity funds (EUR 40 billion) and mixed funds (EUR 21 billion). Within bond funds, all types of funds had outflows in H2 2018, independently of their regional investment focus, or the underlying asset class, as government and corporate bond funds both had sizeable outflows. A further tightening of global financial conditions could have a sizeable impact, with high-yield (HY) and EM funds most vulnerable. In an environment of low fund returns and fund outflows the cost of investment products become important to investors. In this context the ESAs have carried out significant work on the cost and past performance of retail investment products (see Box 2 for a summary). Non-bank financial intermediaries have increased their holdings of government bonds, in contrast to banks. Looking at alternative investment funds, during Q4 2018, the global alternative fund industry recorded one of its worst performances since the Global Financial Crisis, resulting in negative returns of 3.6% in H2 2018 amid large outflows and geopolitical uncertainty. In this context ESMA has recently published its first annual statistical report providing an overview of the EU alternative investment industry. Given these developments, abrupt changes in government debt yields could have important implications for the stability of the financial system. The potential impact of a sudden repricing of risk premia on EU bond funds can be assessed with a scenario analysis. If sovereign yields and credit spreads would increase significantly in a short period of time, ensuing negative fund performance would lead to lower bond fund prices and to investor outflows.[17]

BOX 2: Retail investment products
The European Commission requested ESMA, EIOPA and EBA to provide recurrent reports on the cost and past performance of retail investment products. This request is motivated by the Capital markets Union, and its key objective of fostering the participation of retail investors in the EU capital markets while ensuring that investor protection risks are mitigated. The ESAs published their respective reports on 10 January 2019. ESMA investigates conventional retail investment funds regulated and supervised in the EU (UCITS), Alternative Investment Funds sold to retail investors (retail AIFs) and Structured Retail Products (SRPs). At just under EUR 10 trillion net asset value (NAV),) and 30000 funds, UCITS represents the largest retail investment fund segment in the EU. Key findings for UCITS are: (i) gross fund performance largely follows the performance of the underlying asset classes; (ii) cost levels are broadly stable with the largest cost impact coming from ongoing costs, while subscription and redemption fees have a significantly lower impact; (iii) across asset classes, costs are highest for equity and alternative UCITS, followed by mixed, bond and money market UCITS. (iv) costs are higher for retail compared to institutional investors; (v) costs are higher for actively managed equity funds compared to passively managed equity funds, which leads to lower performance net of costs for active compared to passive funds; (vi) high heterogeneity in costs observed across Member States. For retail AIFs and SRPs an overview of the EU market is provided, as the lack of available and usable cost and performance data for retail AIFs and SRPs does not allow for a full cost and performance analysis. EIOPA prepared a report on insurance-based investment products (IBIPs) and personal pension products. Given limitations to available market data on the costs and performance of these products, the report was prepared on the basis of a quantitative questionnaire covering a sample of insurance undertakings about a sample of their products. Overall the report found that costs, weighted by gross written premiums over the period 2012-2015 inclusive, amount to a reduction in yield (the measure used in the KID) of 2.58%. The major factor in variations in costs was different asset management costs, with higher risk investments typically carrying higher asset management costs. In general, unit-linked contracts were more costly than profit participation. There were significant variations in costs across Member States, perhaps reflecting different product features and different risk allocations; however, the sample was not sufficiently reliable to justify conclusions at this stage. In particular diversity in the treatment of costs and in the calculation of past performance for profit participation products reduced the comparability of the data. The report was undertaken as a pilot, and for future reports steps will be taken to improve market coverage, data reliability and the consistency of information on past performance for profit participation products.

C. Risks for banking sector

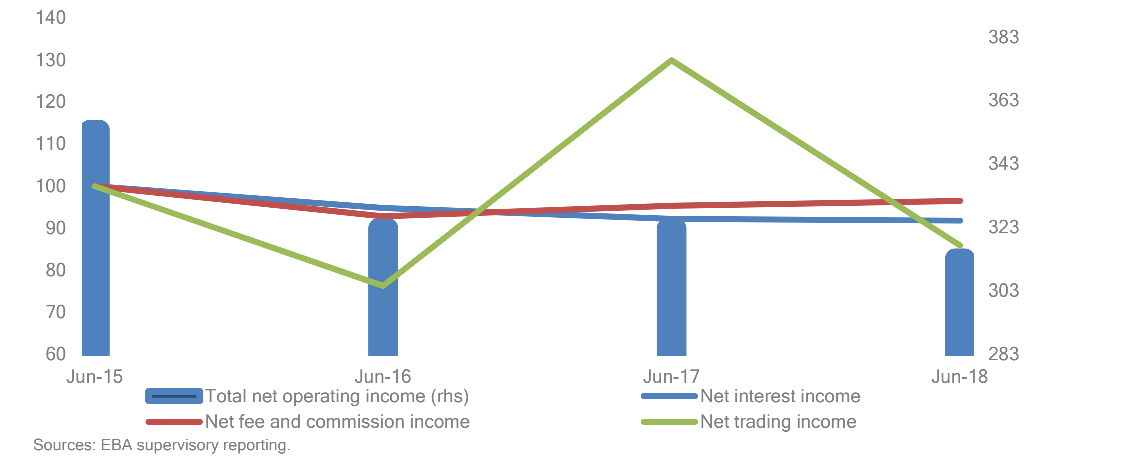
In the banking sector, **heightened market volatility and increasing risk premia may lead to additional pressure on funding costs**. In light of substantive market funding needs ahead this may become a concern. Banks have to meet forthcoming loss absorbing buffer requirements, which include issuance needs of more expensive instruments eligible for MREL[18]. They also need to manage high volumes of further liabilities maturing in the medium term. Moreover, central banks assets purchases no longer support bank funding markets, which may put further pressure on pricing of debt instruments and on attaining eligible funding at reasonable costs. These developments may add to challenges not least for small- and medium-sized banks, and for banks with weaker market perceptions. Increasing funding costs might also affect profitability in the medium-term.

[17] IMF Global Financial Stability Report, October 2018
https://www.imf.org/en/Publications/GFSR/Issues/2017/09/27/global-financial-stability-report-october-2017#Summary
[18] Minimum requirements for own funds and eligible liabilities

Although profitability has been on an increasing trend since 2014, and has been broadly been stable in 2018, it continues to be a major source of concern. Current average return on equity (RoE) of 7.2% as of Q3 2018 appears insufficient to guarantee long-term sustainability of banks' prevailing business models.

Longer-term outlook for profitability is related to the interest rate outlook. 60% of banks responding to the EBA autumn 2018 Risk Assessment Questionnaire (RAQ) point to Net interest income (NII) as one important driver to improve profitability, up from 50% in the spring 2018 RAQ. However, NII, which is the most important income source of EU banks, has decreased by over 8% from September 2015 to September 2018 in the protracted low interest rate environment. Net interest margins have also decreased gradually. Net trading income as most volatile source of income moreover decreased in the first three quarters of 2018 by more than 30% from the high levels seen in 2017, and was well below its longer term average. Efficiency in the EU banking sector has neither improved and operating expenses continue to be high. The cost-to-income ratio has increased from 61.7% in September 2017 to 63.2% in September 2018. Costs related to replacements of old legacy ICT systems and investments in new financial technology are further drags on profitability. In addition, conduct and legal risks have been on the rise in 2018 and can negatively affect profit moving forward (Box 3).

Figure 5: Evolution of EU banks' net operating income (rhs, EUR bn) and its main sources (lhs, June 2015 = 100)



Sources: EBA supervisory reporting.

BOX 3: Conduct risks
The number and volume of alleged cases related to money laundering (ML), terrorist financing (TF) and sanction breaches in which European banks have been involved were on the rise in 2018 compared with previous years. Responses to the EBA autumn 2018 RAQ reflect this development, as almost 20% of the responding banks identify money laundering, terrorist financing or sanction non-compliance as one of the main drivers for the increased operational risk (15 pp higher than in the previous RAQ). The determinants of conduct and legal risk appear to be ineffective internal controls, weak governance, complex processes and high risk appetite. In their 2017 Joint Opinion on the risks of ML/TF affecting the EU financial sector[19], the ESAs found that widespread problems with financial institutions' anti-money laundering and countering the financing of terrorism (AML/CFT) systems and controls rendered institutions vulnerable to abuse by financial criminals. The ESAs pointed to a number of causes for these shortcomings, which included, e.g., failure by senior management to take responsibility for AMF/TF risk, as well as

[19] The 2017 Joint Opinion on ML/TF risks under Article 6(5) of Directive (EU) 2015/849 is at https://eba.europa.eu/documents/10180/1759750/ESAS+Joint+Opinion+on+the+risks+of+money+laundering+and+terrorist+financing+affecting+the+Union%E2%80%99s+financial+sector+%28JC-2017-07%29.pdf The next Joint Opinion is due to be published in Q1, 2019.

insufficient AML/EFT awareness and expertise. The ESAs' ongoing work on the 2019 Joint Opinion on MF/TF risk suggests that national approaches to AML/CFT supervision of financial institutions continue to differ significantly. Last year's AML/CFT cases involving EU banks have highlighted the importance of effective cooperation between prudential and AML/CFT supervisory authorities, and prudential authorities, taking due account of MF/TF risks affecting institutions under their supervision.

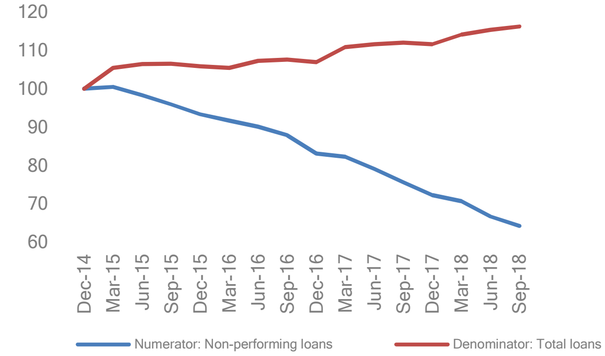
Banks should address operational weaknesses that they identify and strengthen the control and governance framework in order to fully comply with all relevant legal and regulatory requirements, including AML/CFT and sanctions compliance. Prudential supervisors should ensure to adequately address money laundering and terrorist financing risk in the context of their work, including in their Supervisory Review and Evaluation Process (SREP). Effective exchange of information with AML/CFT supervisors should be ensured. Finally, the materialisation of ML/TF risk in a number of EU jurisdictions points to a need for more effective and consistent AML/CFT approaches in the EU.

As part of the ESAs' wider work on fostering a consistent and effective approach to AML/CFT by financial institutions and AML/CFT supervisors, the ESAs have published a number of joint Guidelines.[20] The Guidelines promote a common understanding of the risk-based approach to AML/CFT and provide financial institutions and competent authorities with the tools they need to implement that approach. Currently, the ESAs are finalising joint Guidelines on cooperation and information exchange between competent authorities supervising financial institutions for the purposes of AML/CFT supervision, intended to clarify modalities of cooperation and information exchange between prudential and AML/CFT competent authorities domestically and on a cross-border basis. The Guidelines propose the creation of AML/CFT colleges of supervisors and set out rules governing their establishment and operation.

While asset quality in the EU banking sector improved in the past years, downside risks to economic growth, rising funding costs, high levels of indebtedness, and elevated political risk with a revival of protectionism may all jeopardise banks' efforts to further reduce non-performing loans (NPLs). The NPL ratio of EU banks has decreased from 4.2% in September 2017 to 3.4% in September 2018. It is the lowest level since the NPL definition was harmonised across European countries in 2014, when the NPL ratio stood at 6.5%. However, a worsening economic outlook might have an impact on asset quality and may facilitate the inflow of new NPLs. Credit risk, e.g. related to real estate financing, might increase. Hence, it will be important that banks carefully manage their credit risk and interest rate risk.

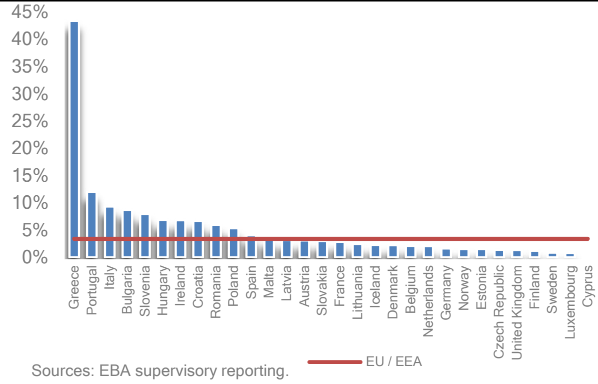
[20] See in particular, the guidelines on Risk Factors and simplified and enhanced customer due diligence at https://eba.europa.eu/documents/10180/1890686/Final+Guidelines+on+Risk+Factors+%28JC+2017+37%29.pdf and the guidelines on risk-based AML/CFT supervision at https://eba.europa.eu/regulation-and-policy/anti-money-laundering-and-e-money/guidelines-on-risk-based-supervision

Figure 6: NPL ratio of EU banks in Q3 2018, numerator and denominator trends (December 2014 = 100)



Sources: EBA supervisory reporting.

Figure 7: NPL ratio of EU banks in Q3 2018, country dispersion. Weighted average by country[21]



Sources: EBA supervisory reporting.

Relatively high GDP growth observed in the past two years in most European countries has been reflected in an increased bank lending, which could entail new risks. Loans to non-financial corporates (NFCs) and to households increased by 2.8% from Q3 2017 to Q3 2018, mainly driven by exposures to small and medium-sized enterprises and commercial real estate. Supervisors should monitor the expansion of lending and new lending standards. Lending growth might entail some adverse effects in underwriting standards, as banks enter into increased competition for lending, with potentially increased pressure on spreads. In spite of growing competition identified as a main contributor to easing credit standards in the Euro area[22], banks must avoid easing lending standards and weakening their pricing or covenant requirements. This holds true across all sectors, but is particularly relevant for high-risk lending, including covenant-lite and EME exposures (see Box 4).

BOX 4: Leveraged lending

Low interest rates and banks' search-for-yield behaviour coupled with increased competition among lenders have contributed to an increase in the issuance of leveraged loans (Figure 8) and in the share of exposures with covenant-lite structures (Figure 9). Leveraged loans include, for example, exposures to NFCs with low credit quality or exposures to NFCs that already have significant outstanding debt financing. Exposures to borrowers that are owned by, for example, private equity investors might also be considered as leveraged loans. Convenant-lite structures include exposures with rather weak covenants when compared with other loans for similar creditors. There also seems to be a strong link between the credit quality of the borrower and covenant arrangements. Within the group of borrowers rated B-, the share of covenant-lite loans has significantly grown in recent years.

In addition, issuance of collateralised loan obligations (CLOs) has also increased (with amounts outstanding close to USD 700 billion globally)[23], with almost half of leveraged loans typically distributed to non-bank investors through CLOs. Around 2/3 of CLOs are held by non-banks, mainly pension funds and insurers for the less risky tranches, and investment funds for riskier tranches. In the EU, the leveraged loan market (EUR <100bn outstanding) has remained relatively small, however post-crisis record new issuance in 2018 warrant enhanced monitoring.[24] Overall, recent trends in the leveraged loan and CLO markets point to a worrying combination of (i) looser underwriting standards, (ii) higher indebtedness of borrowers, (iii) opacity on the final CLO holder, and (iv) compressed credit spreads. This indicates a potential underpricing of risks by

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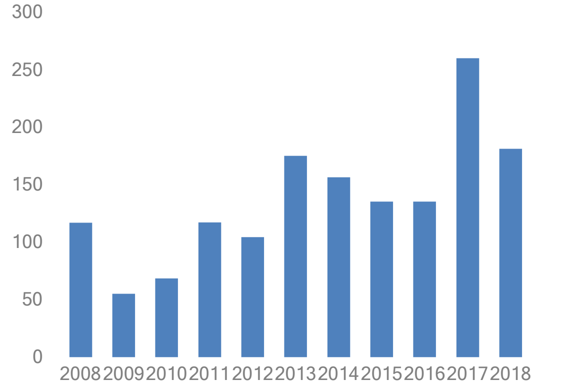
[21] To ensure confidentiality, figures on NPL ratio by country breakdown are only shown if there are at least 3 banks that reported data in each specific country.
[22] Lending standards in the Euro area have eased since Q2 2017, but remained broadly unchanged in Q4 2018. See https://www.ecb.europa.eu/stats/ecb_surveys/bank_lending_survey/html/ecb.blssurvey2018q4.en.html
[23] https://www.bankofengland.co.uk/-/media/boe/files/financial-stability-report/2018/november-2018.pdf?la=en&hash=7239DE596DD5DB14BEB17E1141C2CDEB73A8623C#page=56
[24] https://www.reuters.com/article/euro-clo/european-clo-market-hits-post-crisis-high-idUSL2N1XW0YD

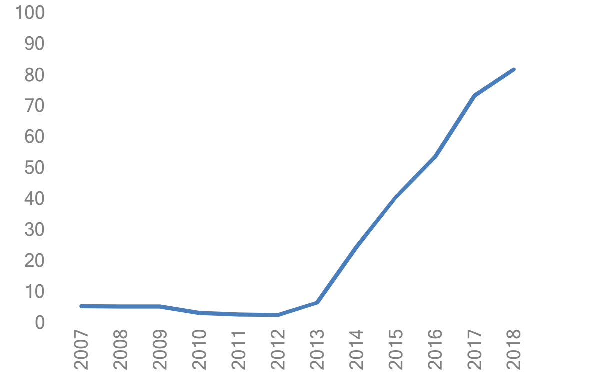
investors which could amplify the economic cycle in the context of a downturn. In the case of a reversing credit cycle, this might make aggravate the sudden decline in banks' asset quality in such a situation, and the ability of non-banks, especially funds performing liquidity transformation, to absorb losses is untested.

Figure 8: Issuance volumes of leverage loans (EUR bn)



Sources: Bloomberg, EBA calculations.

Figure 9: Share of loans with covenant-lite (in %)



Sources: S&P Global Market Intelligence, EBA calculations.

Against the backdrop of the potential for sudden risk premia reversals, the development and regular use of stress evaluation across all sectors remains crucial. Therefore, the aforementioned risks were reflected in the stress testing activities of all ESAs, which are presented in Box 5.

BOX 5: Stress testing by the ESAs

The EBA has conducted and published in November 2018 the results of its 2018 EU-wide stress test exercise, based on a sample of 48 banks from 15 EU and EEA countries and covering ca. 70% of total banking sector assets. The adverse stress scenario assumed the materialisation of systemic risks, which are also reflected in this report, including an abrupt and sizeable repricing of risk premia in global financial markets.

The adverse scenario has an impact of -395 bps on banks' CET1 fully loaded capital ratio (-410 bps on a transitional basis), leading to a 10.1% CET1 capital ratio at the end of 2020 (10.3% on a transitional basis). The stress test impact is mostly driven by credit risk losses of EUR 358 billion, which have an impact of -425 bps on EU banks' CET1 capital ratio. Aggregate market risk losses in the stress test exercise, including counterparty credit risk (CCR), amount to EUR 94 billion, and operational risk losses to EUR 82 billion, driving an impact on capital of -110 bps and -100 bps respectively. The outcome of the exercise demonstrated that banks' efforts to build up their capital base in the recent years have contributed to strengthening their resilience and capacity to withstand a severe shock. The stress test exercise is designed to inform the SREP carried out by Competent Authorities. Supervisors consider the impact together with managerial decisions and capital actions to assess banks' capital position and to decide on the potential need to set a Pillar 2 capital guidance. The disclosure of data on a bank-by-bank level the stress test provides contributes to market discipline and serves as a benchmarking tool.

EIOPA has also conducted in 2018 an insurance EU-wide stress test exercise publishing the results in December of the same year. The exercise tested the vulnerability of 42 large European (re)insurance groups with a market coverage of 75% based on group consolidated assets against 3 severe but plausible scenarios. The first scenario - yield curve up (YCU) - included a sizeable repricing of risk premia and an increase of the risk free rate combined with increases in lapses and claims inflation. The second scenario - yield curve down (YCD) - consisted of a protracted period of low interest rates combined with an increase in life expectancy. The last scenario assumed the occurrence in a narrow timeframe of a set of natural catastrophe (4 windstorms, 2 floods, 2 earthquakes). While maintaining its non-pass/fail nature, the 2018 exercise enhanced deepness of the analysis requesting the estimation of the post-stress solvency capital requirement (SCR) and increased its transparency by pursuing, upon participant's consent, the publication of the individual post-stress balance sheet position.

With an aggregate pre-stress Assets over Liabilities ratio (AoL) of 109.5% and with an aggregate Solvency Capital Requirement ratio (SCR ratio) of 202.4% (twice the capital requested by the Solvency II regulation), the groups proved to be adequately capitalised to absorb the adverse shocks prescribed in each scenario. However, the post stress results confirm the significant sensitivity of the European insurance sector to market shocks. In YCU scenario, the assets over liabilities ratio diminishes to 107.6% with the excess of assets over liabilities reduced by approximately one third (-32.2 %) and the aggregate post-stress SCR ratio drops to 145.2 %. 6 groups reported a post-stress SCR ratio below 100 %. YCD scenario shows post-stress assets over liabilities ratio of 106.7% with an excess of assets over liabilities reduced by 27.6 % and an aggregate post-stress SCR ratio of 137.4 %. 7 groups reported a post-stress SCR ratio below 100 %. The situation further deteriorates if the LTG and transitional measures are not taken into account. In that case, 21 and 20 groups falling below the threshold in the YCU and YCD, respectively.

With regard to the series of natural catastrophes tested, the participating groups demonstrate a high resilience, showing the importance of the risk transfer mechanisms in place, namely reinsurance, which absorbed 55 % of the losses. Consequently, the most affected groups are reinsurers and those direct insurers largely involved in reinsurance activities. EIOPA is further analysing the results and conducting a follow-up dialogue with the participating groups' supervisors, discussing possible recommendations focusing on the identified vulnerabilities. In 2019, EIOPA will also launch its regular Occupational Pensions Stress Test.

ESMA has started to prepare its next CCP stress test exercise. In addition, ESMA is working on a number of topics in relation to investment fund stress testing in order to address the potential risks to financial stability that may stem from investment funds, in light of the rapid expansion of this sector over the past decade. This will contribute to addressing vulnerabilities arising from asset management activities and to provide new instruments to prevent or mitigate potential new sources of systemic risks. First, ESMA recently published a Consultation Paper on its draft Guidelines on liquidity stress testing (LST) in UCITS and AIFs, with a target publication date of the final Guidelines in summer 2019. The draft Guidelines are composed of a set of 14 principles-based Guidelines for managers to fulfil when executing LST on their funds, and one for depositaries in their oversight role. The Guidelines aim to ensure a robust and convergent set of standards are followed when European asset management conduct liquidity stress tests. Second, Article 28 of the MMF Regulation provides that ESMA shall develop guidelines to help establish common reference parameters of stress test scenarios to be included in MMF managers' stress tests. In H2 2018 ESMA published a Consultation Paper regarding its proposed Guidelines on stress test scenarios for MMFs. ESMA will design the stress parameters and scenarios in cooperation with the ECB and the ESRB during the first half of 2019. The stress test results will be reported to ESMA and the NCAs, in order to coherently capture the risks of the sector. Finally, ESMA will continue to work on the conceptual development of ESMA approach to stress testing in the asset management industry, developing a model-based simulation allowing for the identification of potential pressure points in the fund industry from a financial stability perspective.

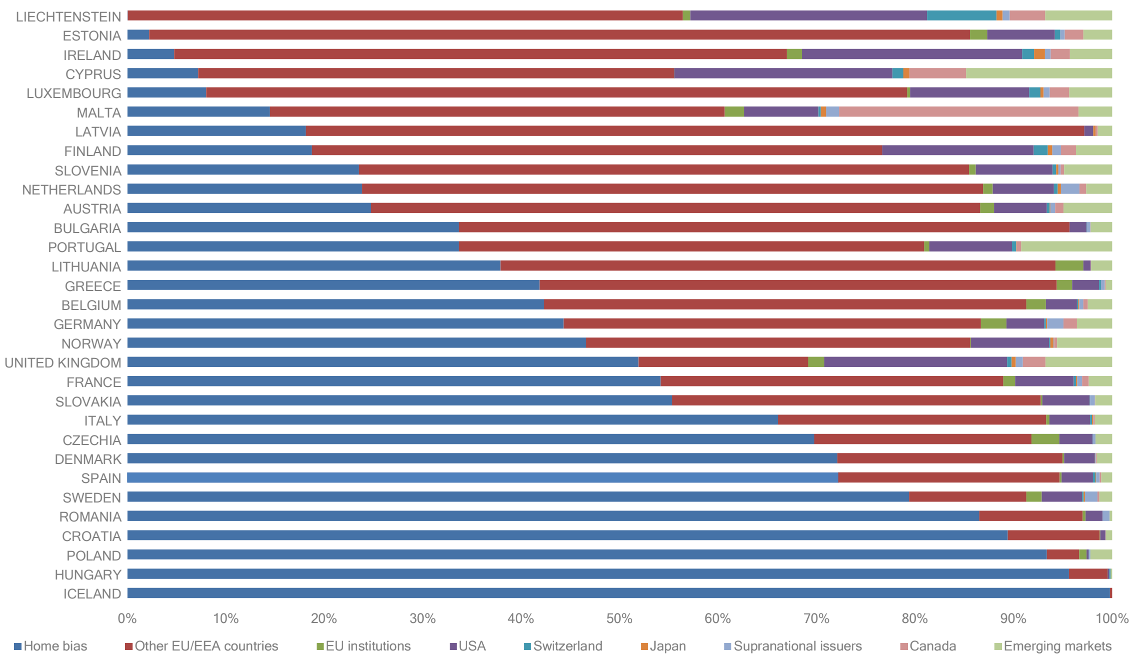
C. Possible impact on insurance and pension sector

An environment of gradually rising risk free interest rates is generally favourable for life insurers and defined benefit pension funds. This is because rising risk-free rates decrease the value of liabilities (which are discounted based on the risk-free rate), typically compensating for the losses suffered on the asset side, depending on the maturity mismatches, types of guaranteed contracts and interest hedging of individual undertakings. For negative duration gaps, an increase in risk-free rates would normally imply an improved financial position.

The interaction between rising bond spreads and the risk-free rates determines the overall impact on insurers and pension funds. Insurance companies and pension funds' investments are dominated by fixed-income assets - government and corporate bonds make up around two-thirds of the total investment portfolio of the European insurance sector and around 49% of pension funds' investments. Therefore, if, in addition to rising risk-free rates, credit spreads also rise (due to for example a reassessment of risk premia), insurers and pension funds will suffer immediate losses of value in their fixed-income investment portfolios, which may only be partly offset through a lower value of liabilities. Losses on the assets side may not be fully compensated through lower liabilities in this case, leading to a worsening financial position in the short term.

As mentioned earlier in the report, the risk of an abrupt reassessment of risk premia remains significant, due to political risk, ongoing trade tensions at global level and less accommodative monetary policy, which triggered considerable distress in EME. While the direct exposures of European insurers towards EME are limited (3.75% of total investments), the risk of contagion from other financial sectors remains and this risk is especially pronounced for insurers with high levels of interconnectedness with affected banks. Furthermore, the risk remains that further 'flight to quality' investment behaviour might also spill over to lower-rated European sovereigns, putting further pressures on the bond holdings of insurers. The high degree of concentration of insurers' bond investments towards their home country sovereign poses a higher risk in affected countries, while at the same time limits potential risks of spillover to other countries (Figure 10).

Figure 10: Insurer's government bonds investments in Q2 2018, by country/region of issuance



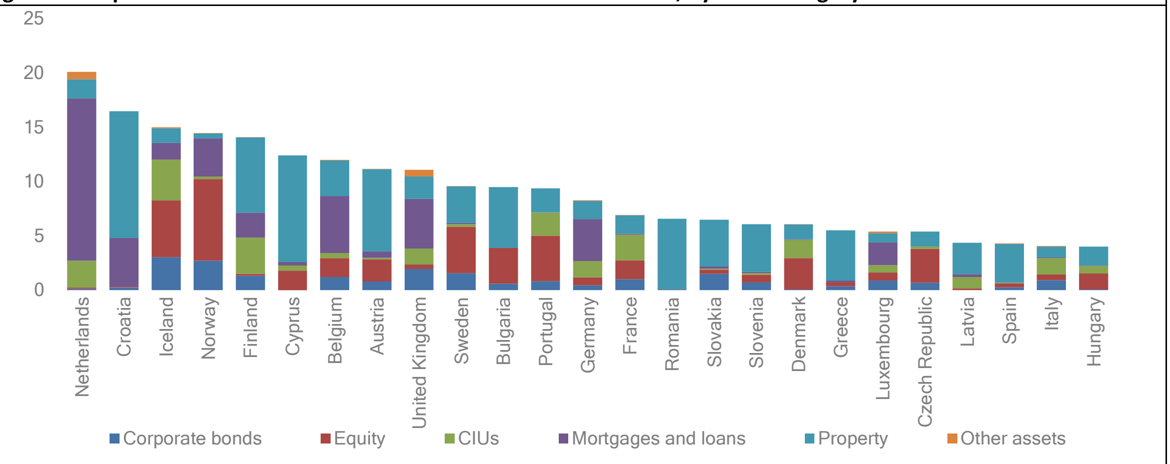
Note: Look-through approach applied. Assets held for unit-linked business are excluded.

Abruptly increasing yields driven by a rise in risk premia, coupled with higher than expected lapse and surrender rates for life insurance and claims inflation for non-life insurance can be an additional source of instability, as shown in the yield curve up scenario of the 2018 Insurance Stress Test (Box 5). Life insurers could be faced with a sudden increase in lapses and surrenders as other financial investments become more attractive. This could eventually lead to liquidity constraints. Although several contractual implications could limit the direct impact of lapses and surrenders in some countries, its ramifications could add additional strains on insurers' financial position. Non-life insurers could be negatively affected by higher than expected claims inflation triggered by an increase in consumer prices.

Despite the currently more prominent risk of a potential reversal of risk premia, the scenario of a prolonged low level of interest rates also remains a challenge for insurance and pension fund sectors. Accordingly, this risk was also included in the yield curve down scenario of the 2018 EIOPA Insurance Stress Test exercise, where a protracted period of low interest rates is accompanied by increased life expectancy (Box 5). Low interest rates make it difficult for insurers more exposed to the life business to generate sufficient investment returns to meet policyholder obligations putting pressure on their profitability. Though insurance undertakings in many jurisdictions have been applying risk-mitigating actions due to the low interest environment, such as a reduction of the volume in products entailing minimum guarantees, a trend towards unit-linked businesses, increased monitoring through key regulatory indicators, stress tests, sensitivity analysis and scenario analysis, the legacy products with investment guarantees still make up the majority of technical provisions in the EEA.[25]

As long as these challenges remain, insurers and pension funds might have incentives to continue looking for alternative investments that improve investment returns. The EIOPA qualitative Autumn 2018 Survey indicated an expectation by national authorities of a further decrease in traditional investments, such as government bonds, in favour of investments in corporate bonds, equity and less liquid assets, such as property. These findings are also in line with EIOPA's investment behaviour report published in 2017, which revealed trends such as increased exposures towards more illiquid investments including non-listed equities and loans and lower credit rating quality fixed income securities in the insurance sector.[26] These investments might entail risks that warrant close monitoring by supervisory authorities. For example, countries where insurers have high exposures to real estate, both direct (mortgages and property) and indirect (through CIUs, equity and corporate bonds), might be more vulnerable to potential sudden reversals in real estate prices that affect the asset side of insurers' balance sheets through changes in the value of property holdings and/or mortgage loans (Figure 11). Furthermore, the potential decline in households' wealth due to changes in real estate prices and/or interest rates could affect their debt-servicing capacity increasing credit risk for exposed insurers.

Figure 11: Exposures of EEA insurers to real estate in % of total assets, by asset category



Note: All exposures exclude assets held for unit-linked and index-linked securities. CIUs stands for Collective Investment Undertakings.
Sources: EIOPA Quarterly Solo (Q2 2018).

[25] EIOPA qualitative Autumn 2018 Survey in https://eiopa.europa.eu/Pages/EIOPA--Financial-Stability-Report---December-2018.aspx.
[26] https://eiopa.europa.eu/Publications/Reports/Investment_behaviour_report.pdf