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EXECUTIVE SUMMARY

Despite encouraging signs of economic recovery and benign levels of traditional financial market risk proxies, such as volatilities, ongoing political and economic uncertainties in Europe and beyond pose risks to the EU financial sector. Uncertainties around the terms of the UK’s withdrawal from the EU have the potential to expose the EU27 and the UK to economic instability and to weaken market confidence, in particular if negotiations end in a disorderly fashion. Such a situation could risk disruptions in the legal framework for financial services and the continuity of financial contracts between parties in the EU27 and the UK. As passport arrangements enabling EU- and UK-domiciled financial entities to operate in each other’s jurisdictions will expire, business continuity planning is key. Joint EU27 efforts to ensure a consistent and rigorous approach to granting authorisations to companies seeking to relocate from the UK are important to protect the integrity of the EU Single Market.

While the low-interest-rate environment persists, and the search for yield continues, with EU equity and real estate prices continuing to display high levels, not necessarily supported by economic fundamentals, indications of a reversal in interest rates and risk premia have emerged, as some EU sovereign and low-risk corporate yields started to increase. Abrupt increases in yields could affect the profitability of financial institutions, generate substantive portfolio reallocation and spill over into wider asset markets, potentially leading to mark-to-market losses in investment positions and reducing the net wealth of households. Consequences could also include substantive volatility bouts in asset prices and effects on market liquidity. Regarding the insurance sector in the context of Solvency 2, in many cases the effects resulting from typically negative impacts on assets will be overcompensated for by positive impacts on liabilities.

Persistent low profitability of banks and insurers remains a major challenge, although some recent improvements have been observed. Returns of EU banks remain, on average, below estimates for the cost of equity, while recent strong increases in trading income may not prove sustainable. Still high levels of non-performing loans (NPLs) and the need to adapt business models, including the need for substantial investment
in technological infrastructures, aggravate profitability challenges. Simultaneously, overcapacities persist in many banking markets. Attaining adequate profitability is important to attract investors to instruments eligible for loss-absorbing capacity that many banks still need to build up. The combination of low yields, low economic growth and low asset quality in some countries continues to affect EU insurers, as both life and non-life insurers are largely exposed to interest-rate-sensitive assets, and business models may encompass interest-rate-sensitive product lines.

The rapid growth of FinTech increasingly affects the financial sector. It drives business model changes at financial institutions, attracts new market entrants and creates opportunities to increase cost efficiency, improve service quality and broaden access to financial services. The European supervisory authorities (ESAs) are assessing the impact of FinTech on financial institutions’ business models and their strategic response as well as on supervision and regulation. They have identified data privacy issues, potential client discrimination, vulnerability to cyber-crime and associated legal issues as key risks to consumers and financial institutions, and are providing recommendations and advice on issues such as outsourcing to cloud service providers and robo-advice. Regulatory and supervisory monitoring efforts also cover the use of consumer data and of ‘big data’ analytics by financial institutions.

1 **INTRODUCTION**

The March 2017 Joint Committee Report on Risks and Vulnerabilities considered the following to be key risks to the EU financial system: (i) the persistent low profitability of financial institutions, (ii) risks around the adequate valuation of asset prices and price volatilities, (iii) increasing interconnectedness via direct and indirect exposure and (iv) information-technology-related risks in a fast-changing technological environment.

This autumn 2017 report is in many respects a continuation of those themes, with a focus on continued challenges stemming from an environment of political uncertainty and fragmentation, not least in the light of the UK’s withdrawal from the EU, persistent valuation risk also related to an uncertain outlook for yields, and the low profitability of financial institutions. It also highlights challenges resulting from rapid developments in the area of FinTech\(^1\), and presents regulatory and supervisory initiatives to monitor and mitigate the risks identified.

This report acknowledges the risks to which the financial system continues to be exposed in a climate of political and economic uncertainties in Europe and beyond. Tendencies towards protectionism, geopolitical tensions and evidence of a less stable US policy agenda add to risks globally. Uncertainties about emerging market economies are lingering, mostly in the light of accumulated external imbalances. In the EU, the macroeconomic environment remains fragile, although the economic recovery is expected to continue in 2017, driven by domestic consumption and exports. Slow implementation of structural reforms has the potential to affect the expected recovery in economic growth. In this environment, highly indebted public and private sectors in the EU are very susceptible to an increase in risk premia. The process of the UK’s withdrawal from the EU and the potential for easing fiscal and tightening monetary policy stances, moreover, contribute to a climate of uncertainty.

\(^1\) The FSB defines FinTech as ‘technologically enabled financial innovation that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services’ [link].
Despite the remaining macroeconomic risks and political uncertainties in the EU and worldwide, traditional proxies for financial market risks and volatility, such as the VSTOXX index, are at low levels and do not display perceptible positive correlations with such risks, raising some concerns around a potential disconnect of financial markets from political risk measures. Nevertheless, responses from market analysts to the June 2017 EBA Risk Assessment Questionnaire (RAQ) indicate that geopolitical risks are among the most significant drivers of a more pessimistic component of market sentiment.

Figure 1: Political uncertainty and market risk proxies

Note: Economic Policy Uncertainty Index (EPU), developed by Baker et al., based on 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 EuroStoxx 50 (VSTOXX), monthly average.

Sources: Baker, Bloom, and Davis 2015; Bloomberg, ESMA.

2 RISKS RELATED TO THE UK’S WITHDRAWAL FROM THE EU

The decision of the UK to withdraw from the EU (‘Brexit’) and the subsequent negotiation process are important factors of economic policy uncertainty, with the potential to expose the EU27 and the UK to financial instability. Concerning the longer-term impact, both the ECB and the Bank of England warned in their recent Financial Stability Reviews that a fragmented landscape and the resultant loss of synergies from economies of scale and scope could increase the cost of capital for households and non-financial corporations.

The UK’s decision includes a policy intention to leave the EU Single Market. Upon withdrawal from the Single Market, UK entities would lose their right to conduct business across the EU27 by way of freedom of establishment and freedom to provide services. Consequently, UK-based market participants may seek to relocate or establish new business in the EU27 in order to maintain access to the Single Market. Likewise, this could affect EU financial market participants presently located in the UK.

Significant risks may arise should ongoing negotiations between the EU27 and the UK on the withdrawal terms remain inconclusive or end in a disorderly fashion, if firms do not prepare adequately. Such a situation would risk an abrupt impact on the legal framework for financial flows and services between the EU27 and the UK, with potential implications for market participants and consumers. Associated questions relate to market access in general, to the continuity of financial contracts between parties from the EU27 and the UK and to the structure of production and marketing chains. In this context, long-term contracts, such as insurance

2 See: HM Government, The United Kingdom’s exit from, and new partnership with, the European Union, February 2017 [link].
contracts traditionally entailing long-term obligations, would be particularly affected. Hence, portfolio transfers may increase.

Corporates and households in the EU27 could face restrictions accessing wholesale and retail financial services provided in the UK. Risks could also arise where consumers are not aware that their financial service provider is based in the UK and/or that their legal protection and rights may have changed. This could include redress, potentially reduced access to some banking or investment products, or scope for higher costs when accessing certain financial products. The risk of a cliff-edge at the end of the negotiation period is particularly relevant where market participants are not taking contingency measures, which imply additional resource costs, to address the consequences of a possible loss of market access, and adequate transitional provisions are not in place.

The prominent role of the UK in payment systems, the trading and settlement of derivatives, clearing activities, custodian activities and the reporting of trade repositories in the Single Market implies substantial uncertainty, which has the potential to weaken market confidence. Even though financial services are highly mobile and can be relocated from the UK to the EU27, the relocation of some financial activities, not least of those with high market shares in the UK, could take time. **Common EU efforts to ensure a consistent EU supervisory approach around potential relocations** are necessary to mitigate the risk of distortions and protect the integrity of the Single Market. Transparency in expected negotiation outcomes could help to mitigate possible reductions in the potential for economies of scale through forward-looking management by market participants. Market participants should ensure that they meet their obligation to prepare contingency plans in a timely manner for service areas predominantly operated from the UK. Such efforts would include their preparations to ensure the continuity of contracts, in a worst-case scenario among others, including efforts to repaper contracts and agreements when needed. National and EU supervisory authorities should be in the position to provide constructive and timely information and guidance for this process.

EU27 competent authorities need to be prepared to handle adequately, coherently and rigorously the requests for authorisations from market participants relocating from the UK, and should rigorously assess such applications with a view to subsequently carrying out effective supervision. To this end, the EBA, EIOPA and ESMA have issued, or are in the process of issuing, Opinions proposing to national supervisors several principles concerning the authorisation, supervision and enforcement issues related to financial service providers seeking to relocate to the EU27. These principles also exclude automatic future recognition of existing authorisations by UK regulators and provide further details of governance issues.

In a relocation process, **market participants may make use of outsourcing or delegation arrangements**. For example, UK financial entities may set up EU subsidiaries or third country branches, which subsequently request services from their parent companies. Such outsourcing can pose challenges to effective supervision and compliance with EU requirements, including data protection risks, which apply to supervisors as well as the entities they supervise. Risks may be heightened where outsourcing affects functions or activities that are critical to the functioning of market participants. Such outsourcing should be possible only under strict conditions, following the relevant determinations in the ESAs’ Opinions mentioned earlier. In particular, market participants establishing new entities in the EU27 need to remain fully responsible for outsourced tasks or functions, and the ability to supervise outsourcing arrangements effectively needs to be ensured.

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1 ESMA (2017), *Opinion on general principles to support supervisory convergence in the context of the United Kingdom withdrawing from the European Union*; EIOPA (2017), *Opinion on supervisory convergence in light of the United Kingdom withdrawing from the European Union*. 
The UK’s withdrawal from the EU may also raise possible level-playing-field issues, in particular in relation to investment firms. Licensed investment firms should be subject to appropriate conduct of business and prudential standards. It is important that these firms do not experience incentives through lower regulatory or supervisory standards to establish in specific locations within the EU27. In an Opinion related to investment firms, issued together with two similar Opinions covering investment funds and secondary markets, ESMA provided details in order to safeguard supervisory convergence and to provide clarity to securities market supervisors and market participants. The EBA published an Opinion concerning prudential requirements applicable to investment firms, and intends to propose an updated prudential framework to apply to those firms, with a view to ensuring more proportionate and risk-sensitive prudential treatment.

The sectoral impacts of the UK’s withdrawal are expected to vary with the exposures of the respective EU27 industries to the UK. Concerning securities markets, the structural impact of the UK’s withdrawal appears limited to date, with potential adjustments expected to materialise at a later stage, as market participants’ reactions and any resulting changes in legal forms require time for decisions and implementation. Currently, 15% of the fund share classes managed by UK registered fund managers are marketed in other EU countries, comprising some 13% of the UK fund sector’s assets under management (AuM), with no significant reduction observable yet since the UK referendum. Institutional investors, however, may use UK or extra EU intermediaries to invest in UK funds that are not directly marketed in the EU27, increasing potential EU27 exposures further. In terms of registrations, clear-cut trends are not yet observable, either for the fund industry or for financial market infrastructures or individual financial instruments.

Total credit risk exposure of banks domiciled in EU27 Member States to the UK is considerable at ca. EUR 1.19 trillion in Q1 2017. Thus, ca. 5.6% of total EU banks’ credit risk exposure is towards UK assets and counterparties. However, heterogeneity across Member States is strong.

Insurers based in the European Economic Area (EEA), excluding the UK, allocated approximately EUR 165 billion into UK assets at the end of Q4 2016. Thus, only 3.2% of total EU insurers’ investment portfolios have been allocated in different asset categories such as UK government bonds, corporate bonds, equity, cash and deposits, mortgages, and loans. A certain degree of heterogeneity among the countries implies that some national insurance industries are marginally more exposed, but exposure in general remains limited. Similarly, there has been so far only some incremental relocation of (re)insurance business from UK to the EU. It is expected that more concrete measures will need to take effect from autumn 2017 onwards, considering that the lead-time for new authorisations or transfer of portfolios is 1 to 1.5 years.

Additional work will be needed in order to further assess the impact of the UK’s withdrawal on financial institutions’ risk profile, e.g. concerning potential changes in sovereign risk-weights and the impact of a potential deterioration in macroeconomic conditions.

3 PERSISTENT VALUATION RISK IN THE CONTEXT OF AN UNCERTAIN OUTLOOK FOR YIELDS

In the context of the persisting low-interest-rate environment, expectations for a reversal in interest rates have started to emerge. Abruptly increasing yields could lead to losses for investment positions in many asset

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4 ESMA (2017), Press release: ESMA issues sector-specific principles on relocations from the UK to the EU27.
5 EBA (2016), Opinion of the European Banking Authority on the First Part of the Call for Advice on Investment Firms, EBA-Op-2016-16.
6 Source: EBA supervisory reporting. Sample of 149 banks domiciled in the EU27 and Norway, excluding Poland and Romania.
7 Unit-/index-linked products and collective investments are excluded.
classes, and could generate substantive volatility bouts in asset prices, while elevated asset price levels reflect the presence of valuation risk.

Since late 2016, EU sovereign and low-risk corporate yields started to increase, matching gradual improvements in the macroeconomic context. Inflation, both materialised and expected, has increased since mid-2016, although flattening out to some degree lately. Related expectations for a gradual phasing out of unconventional expansionary monetary policies, including the ECB’s asset purchase programme, may result in a more general repricing of risk premia, in particular in EU economies exposed to financial fragility.

The currently elevated sensitivity of euro area (EA) sovereign debt markets to US conditions and elevated selling pressures for EA debt, and in particular sovereign debt, could act as alternative potential triggers of a repricing of risk premia. Such potential may become even more pronounced, if current market expectations for US monetary policies prove to be misaligned. A tightening trend of US monetary policy would reinforce the international strength of the US dollar, pushing up global yields. Emerging economies could experience further capital outflows and increasing difficulties in paying off their debts. Ultimately, all these factors may contribute to rising global credit spreads.

**Figure 2: Yield curves**

**Figure 3: Sovereign bond yield indices**

Term structures in private debt markets have not yet experienced major changes: the EONIA swap curves stood roughly unchanged and the SONIA swap curve flattened only slightly, while the US dollar overnight index swap (OIS) curve flattened substantially. A roughly flat pound sterling and a depreciated US dollar did not interfere strongly with yield levels in the first half of 2017. Hence, recent yield changes at the longer end of the EU private sector debt spectrum derive rather from inflation and credit risk than from term structure or

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8 A number of EU sovereign bond 10-year yields rose by up to 35bps since the start of the year, while the yields of AA- and A-rated corporate EU bonds remained roughly stable. For euro area (EA) corporate bonds, negative excess risk premia indicate potential overvaluation (ECB (2017), Financial Stability Review, May 2017). Repo rates in major EA markets started to edge up again, with the spread between general and special collateral widening, while securities lending rates, e.g. on German sovereign bonds, increased on the margin.


11 International differences in spreads between the yields of 3M interbank funds and overnight index swaps (OIS) reflect the potential for international spillovers. Data supporting this paragraph is reported in ESMA (2017), Report on Trends, Risks and Vulnerabilities, no. 2 2017.
foreign currency premia. Indeed, non-financial corporate and covered bond EU credit risk spreads suggested that risk premia moved up at the lower end of the risk spectrum, while yield compression continued in more risky market segments. **Search for yield continued** in the EU investment fund (IF) sector too, with cash positions of bond funds decreasing and the average credit quality of EU IF debt portfolio components further receding.

Since mid-2016, major EU equity markets have gained well over 20% in value, with the EU-wide P/E ratio surpassing its eight-year average in March 2017. Insurance and other financial service sectors contributed to this trend by coming from previously lower levels and outperforming banking. Lower implied volatilities, i.e. below pre-crisis levels, do not portend massive price corrections ahead, but rather point to momentum in increasing valuations. **Equity price risks nevertheless remain prominent, to the extent that** moderately positive economic growth and macroeconomic fundamentals do not confirm financial market performance.

However, decoupling tendencies observed for EU bond yields and equity market performances, in particular for corporate bonds, hint at the return to complementary bond and equity markets, allowing improved diversification opportunities and potentially lowering price contagion risk. Improved diversification opportunities are likely to reduce total risk exposure in the financial sector, while less potential for contagion is expected to mitigate negative balance sheet and wealth effects generated by potential changes in yield levels.

Eased credit standards for EU households and increased investments of institutional investors in commercial real estate added to strongly **growing prices in residential and commercial real estate**, e.g. in some EU capitals. The current potential for changes in risk premia could, upon materialisation, imply **substantial risk linked to an increase in interest rates**, as rising rates might not be sustainable for real estate debtors. This might generate subsequent **valuation effects** in real estate loan portfolios, in particular when meeting local indebtedness issues of households and the private sector.

The coexistence of a continued search for yield and the gradual trend of reversals in yields and risk premia levels generates a particular risk mixture including on the one hand **valuation and ancillary risks around leverage**, and on the other hand **funding and liquidity risk**. Enhanced valuations inflate balance sheets and concentrate, in the context of continued bank deleveraging, in particular in portfolios of equities and securities intermediated through either financial markets or non-bank institutions, further increasing price sensitivity and redirecting investment risks to the non-financial sector. Hence, they imply valuation risks for household net wealth, balance sheets and investment portfolios in case of future price corrections, generating funding and liquidity risks for financial institutions and downside risks for the macroeconomic cycle. Coupled with concerns about debt sustainability of public and private sectors, also including households, such effects would be of particular relevance.

The divergence between gradually less accommodative monetary policies and current market sentiments may pave the way for potentially abrupt movements in global financial markets going ahead. Hence, the current low level of expected market volatility needs to be evaluated in the context of historically low interest rates and yields.

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12 The median correlation of national corporate bond indices yields’ to redemption to respective returns of national stock indices rose in 2017 from -0.1 to a peak of 0.5 in late May before reverting. Such levels, which markedly exceed the recent two-year average of -0.04, were observed for the last time in 2011, and before that only during the financial crisis and several times in the period between 2002 and 2005.


14 The IMF GFSR of October 2016 holds a similar discussion in its chapter 1 [link](#).
Risks related to an abrupt reversal of yields and risk premia

An abrupt increase in yields would result in capital losses for investment positions in low-yield and long-duration portfolios. Reasons include the extraordinarily high sensitivity of bond prices to yields in an environment of low interest rates. Hence, EU pension funds and investment funds, which hold on average around 50% and more than 30%, respectively, of their total portfolios invested in bonds, but also EU banks, which invest 15% of their assets in fixed-income markets, would be vulnerable to significant mark-to-market losses on their asset side. Entities concentrated on debt of risk-sensitive sovereigns would be hit particularly hard, entailing the potential for a re-emergence of the sovereign bank nexus.

Immediate reactions in funding costs could temporarily imply an additional drag on the profitability of financial institutions. EA financial entities’ floating-rate instruments were still 33% of their total long-term debt in early 2017. Even for cases in which higher yields would affect the profitability of financial institutions positively in the first round, as opposed to the negative consequences of long periods of low interest rates, their final impact may be more nuanced. Reasons therefore include (i) potential losses stemming from trading positions; (ii) differences in the speed of adjustments of the assets and liabilities of financial institutions; and (iii) persistent weaknesses in the balance sheet of these institutions. Mark-to-market losses would be particularly acute for unhedged holders of long-term debt securities issued in the recent years of low interest rates.

Finally, abrupt reversals in yields and/or risk premia could generate volatility bouts in asset prices. Portfolio reallocations, in the form of funding withdrawals and subsequent reinvestments, could temporarily feed liquidity and contagion risks, potentially reinforcing initial triggers for yield increases. Geographically asymmetric reversals, e.g. due to the materialisation of political risks or asynchronous economic policies, would tend to widen interest rate gaps and increase exchange rate volatility, and could also contribute to volatile international capital flows.

Persistent increases in asset prices moreover contribute to the rise of nominal balance sheets. If valuation methods continue to be opaque and asset quality concerns remain present, valuation risk can reduce the efficiency of the financial sector and impinge on the transformation of savings into real investments. Because financial intermediaries increase their equity to appropriately provision against risk, and households tend not to react to valuation gains perceived as temporary, aggregate demand does not react and funds are diverted into purely financial investments. These, however, do not necessarily generate any additional positive impact on real investment, in particular if underlying drivers are considered temporary.

The related build-up of a potential for future price corrections adds to risks around future volatility in asset prices, also reinforcing the risks around reversals in yield levels and risk premia. These increase uncertainties regarding the stability of financial intermediaries in general as well as potential negative feedbacks to aggregate demand, in particular investment demand, and therefore economic growth. In the insurance sector, liabilities typically have a longer duration than the assets. Unlike in other financial sectors, the overall impact may therefore be positive, as liabilities will be valued lower because higher (risk-free) rates are used for valuation.

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15 The ECB Financial Stability Review, May 2017, reports a 15-20% loss in such portfolios due to 2ppt increase in yields.
16 See the ESRB report on the macroprudential policy issues arising from low interest rates and structural changes in the EU financial system (link).
17 See, for example, ‘Rising interest rates may cause losses for investors who emphasise safety’ (link). This is closely related to the question of who is bearing interest rate risk, a question which falls outside the scope of this note, but which becomes of the utmost relevance in view of the current macroeconomic environment.
discounting technical provisions. However, an abrupt increase in yields, as well as changes in some national tax legislations, may lead to an increase in lapses.

4 LOW PROFITABILITY OF FINANCIAL INSTITUTIONS

While a trend of improving profitability could recently be observed, and is expected to continue, low profitability of banks and insurers in a low-yield environment nevertheless remains a challenge for the EU financial system. Lingering risks about elevated asset price levels and a sudden reversal of yields, with potentially heightened volatility and losses in investment positions of financial institutions, contribute to this issue.

Starting with the EU banks, their capital position remains at a high level. The CET1 ratio increased by 70 basis points (bps) to 14.1% in Q1 2017 compared with Q1 2016, but decreased by 10bps compared with year-end 2016. **Profitability shows a slight improvement, but the EU average remains below long-term sustainable levels.** The average return on equity (RoE) in Q1 2017 increased to 6.8%, from 3.3% in Q4 2016. On a year-on-year comparison, the average RoE also rose 1.2 percentage points (p.p.) from 5.6% in Q1 2016, mainly thanks to the significant increase in the net trading income.18 The dispersion of average RoE among Member States has narrowed, ranging from about –3% to 16%. Likewise, the average return on assets (RoA) increased from 0.21% in Q4 2016 to 0.45% in Q1 2017. Higher returns in Q1 2017 also contributed to a cautiously improved cost-to-income ratio of 63.9% (65.3% in Q4 2016).

**RoE remains below various estimates of the cost of equity (CoE).** Only ca. 50% of respondents to the June 2017 EBA RAQ agree that their current earnings cover their CoE. Higher returns in Q1 2017 and an increased net operating income are moreover largely offset by continuously increasing costs.

**Figure 4: Bank RoE versus RoA (weighted average)**

**Figure 5: Bank cost-to-income ratio – numerator and denominator trends, Q1 2017**

Net interest income has remained under pressure and further decreased to 56.1% of total operating income in Q1 2017 (57.8% at year-end 2016), while net interest margins (net interest income to interest-bearing assets) continue on a decreasing trend. There are some doubts about the sustainability of strongly increasing trading income reported in Q1 2017 as the main driver of improving profitability.

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18 10.2% of total operating income in Q1 2017, from 6.1% in Q4 2016.
Challenges to reach adequate levels of profitability are aggravated by the need to adapt business models, including the need for substantive investments into technological infrastructures in a rapidly evolving operating environment. In addition, litigation costs are not abating, and continue to provide a further drag on profitability. The operating environment of EU banks, with persisting overcapacities in some Member States, poses further challenges to attaining adequate profitability, while sector consolidation has to date been very limited. It is also important for supervisors and policy makers to identify and address potential structural impediments for bank sector consolidation.

Responses to the June 2017 EBA RAQ nevertheless confirm a cautiously improving outlook for bank profitability. About 80% of responding banks expect (‘agree’ and ‘somewhat agree’) that their profitability will increase in the next 6-12 months. Similarly, more than 80% of the market analysts assume that overall profitability will improve. This compares with expectations of improving profitability of only ca. 30% in December 2016. Banks consider that net fees and commission income are the main driver for a more positive trend, followed by further cost reductions.

While NPL ratios continue to improve, banks still struggle with high volumes of legacy assets, adding to challenges to generate acceptable levels of income from their traditional lending activities. More than one third of Member States still have NPL ratios above 10%. The NPL ratio decreased by 30 bps to 4.8% in Q1 2017, and by 80 bps compared with Q1 2016. The dispersion of NPL among countries nevertheless remains wide, and improvements are particularly slow in the countries with the highest NPL levels. The coverage ratio for NPLs further improved as well, increasing by 50 bps to 45.2% in Q1 2017. Responses to the June 2017 EBA RAQ suggest that banks and market analysts assume there will be growth in those portfolios where they expect asset quality to improve, such as in portfolios of SME, residential mortgages, consumer credit and corporate lending. The need for a comprehensive European response to address identified NPL challenges, along the lines identified in the conclusions of the July meeting of the European Council, has not abated, and NPL resolution continues to be a priority for EU banks.

Adequate performance is an important factor for EU banks to attract market funding at moderate prices. As many banks still need to attain substantial volumes of instruments eligible for loss-absorbing capacity to meet
incoming regulatory requirements (MREL\textsuperscript{19}), the ability to issue such instruments and their pricing is becoming increasingly relevant. The importance of sufficient loss-absorbing capacity available at banks is demonstrated by recent cases of bank resolution actions taken on European and national levels. Banks should accelerate the build-up of loss-absorbing capacity, and competent authorities should provide further clarification on detailed MREL requirements and on eligibility of financial instruments for loss-absorbing capacity.

The EBA and ESMA are currently conducting joint work intended to identify potential implications of retail holdings of loss-absorbing instruments for resolution planning and consumer protection. Here, the consistent and effective application of resolution tools under the BRRD has been identified as a relevant topic for retail holders of bail-in-able debt instruments.

As both life and non-life insurers are largely exposed to interest-rate-sensitive assets, low yields affected the profitability of life insurers, especially in some countries where there is a significant stock of contracts with high guarantees. As the low-interest-rate environment is still ongoing, revenues could gradually dampen further in the future. The RoE for the median company is 9.1\% in 2016, against 9.7\% in 2015 and 11\% in 2014 (Figure 7.1). The RoA for the median company continues to be stable (Figure 7.2). It was about 1\% in 2016, but insurers whose business models depend heavily on interest-rate-sensitive product lines, such as traditional long-term savings products with fixed guarantees, already see declining RoA (Figure 7.2).

In addition to the low-yield environment, low economic growth, the low quality of assets in some countries and growing competition from FinTech corporations, amplified by high uncertainty and growing geopolitical risks, there is some potential that the profitability of some insurers within the EU may be affected negatively. EIOPA’s current data and projections indicate a relatively stable picture of the European insurance market in terms of RoA, with a median value of around 1\%. In 2014 and 2015, profitability exhibited a positive trend, but the median RoA started to decrease slightly in 2016, with EIOPA projections indicating the potential for further deterioration to a median value of 0.65\% in 2017.\textsuperscript{20}

\textsuperscript{19} Minimum requirements of own funds and eligible liabilities under the Bank Resolution and Recovery Directive (BRRD).

\textsuperscript{20} For further details, see the latest EIOPA FSR (link).
In an ongoing low-yield environment, the low profitability of insurers focused on asset-liability matching may trigger the reallocation of investments. Especially in the case of life insurers, the low yield affects both assets and liabilities, which would eventually lead to a deteriorating solvency position.

Returns of EU fund shares remained moderate in the first half of 2017, having rebounded from even lower levels experienced since late 2015. Sectoral means of monthly returns averaged over one year ranged in 2017 from −0.2% to 1.4% across the different asset class segments. Such heterogeneity reflected the relative performance of the underlying asset markets: in the UCITS segment, equity funds and ETFs outperformed bond, mixed, alternative, real estate and commodity funds. Money market funds moved closer towards positive returns, which they entered temporarily in March 2107. Hedge funds performed marginally better than in the last two years.21

Given the business model of the fund industry, which essentially transfers the performance of managed assets to fund shares owners, the industry’s profitability is not necessarily affected negatively by moderate performance levels. With fund fees remaining roughly stable in the short run, and the industry experiencing continued growth in AuM over the last two years, except for the hedge fund segment, stable fee income would not provide evidence of profitability issues. Still, moderate yields, if continued, could generate incentives for investors to reconsider investments in the fund industry, potentially affecting net flows of funds to the industry. Such vulnerability could be further intensified by the proportionally stronger impact of static fee tariffs on the short-term returns, net of all fees paid by clients, which fund shares provide in a low-yield environment. Considering, however, the sound growth of the industry, imminent risks stemming from profitability issues appear to be rather limited. Investor protection concerns, however, persist, as product features in general, and fee tariffs in particular, do not appear to be well understood by retail clients. Regulatory reporting requirements expected to enter into force within the next two years, i.e. PRIIPs and MiFID II reporting, as well as already effective UCITS requirements were designed to facilitate increased transparency of investment products’ costs and would therefore contribute to the mitigation of related risks to investors. The monitoring efforts of regulatory and supervisory authorities with respect to the soundness of the fund industry and the impact of fees on investor returns are appropriate alternative tools to mitigate risks around potential profitability issues.22

5 RAPID DEVELOPMENTS IN FINTECH

The rapid growth of FinTech is fostering the use of technical solutions at financial institutions to support provision of services to customers and to ensure compliance with regulatory obligations. Significant investments in new technologies and a large number of new market entrants, including incumbent financial service firms, specialised start-ups and global technology companies, imply additional changes in the financial sector. Increased competition may drive changes in the business models of financial institutions, as they adapt product offerings and their interaction with customers.

Thus, FinTech has the potential to transform further the provision of financial products and services in the coming years. The EU banking sector, for example, is experiencing the entry of new competitors in payment

21 More detailed data are provided in ESMA’s report on Trends, Risks and Vulnerabilities, no. 2 2017, forthcoming in September 2017.
22 The impact of costs on mutual fund returns available to investors is discussed in ESMA’s report on Trends, Risks and Vulnerabilities, no. 2 2017, forthcoming in September 2017.
Indeed, in their responses to the EBA June 2017 RAQ, market analysts expect technological advances to be the most important trend affecting the banking sector in the next 6-12 months, with a higher expected significance than increasing interest rates and mergers and acquisitions.

In terms of FinTech’s potential benefits, its proliferation creates opportunities for increased cost efficiency. New services, for example automated advice, may positively affect the final investor’s action space, e.g. through providing financial advice at lower cost, as long as such services are aimed at improving consumer financial experience and the risks they may give rise to are adequately addressed. Similarly, the use of big data analytics and processes allows the development of custom-tailored products and/or more granular evaluation of risks. In this context, regulatory and supervisory authorities have a role to play, by encouraging financial innovations while, at the same time, ensuring a well-functioning consumer protection framework and financial stability.

The ESAs have identified certain risks to consumers and financial institutions emerging with the proliferation of technological advances such as the use of analytical tools (e.g. robo-advice). In addition, EU supervisory authorities monitor and discuss vulnerabilities arising from outsourcing to external service providers for technological solutions such as to cloud service providers, distributed ledger technologies and the development of tailored products and new risk management tools used in the insurance sector.

Turning to the outsourcing to cloud services, the EBA is consulting on recommendations intended to clarify the EU-wide supervisory expectations if institutions intend to adopt cloud computing, to enable them to leverage the benefits of using cloud services, while ensuring that any related risks are adequately identified and managed. Under its direct supervision mandate for credit-rating agencies and trade repositories, ESMA is also looking to identify the impact and the risks of the use of cloud-computing models from a supervisory perspective and determine its supervisory response regarding this topic.

As regards robo-advice, the ESAs have published a report that outlines main risks and opportunities of this innovation across the insurance, banking and investment sectors. The main consumer protection risks identified in the report were related to the following aspects. (i) Consumers may have limited access to information and/or limited ability to process that information. Thus, they may lack the ability to raise clarification requests, make unsuitable decisions, may receive unsuitable advice or may not be fully aware of the extent to which the tool produces recommendations tailored to them. Furthermore, (ii) advice tools may be exposed to possible malfunctioning due to errors, hacking or manipulation of the algorithm and/or a lack of sensitivity of algorithms with respect to specific needs of individual investors. Such flaws could compromise the quality of the advice and/or render the advice unsuitable. Redress claims and subsequent negative effects on the stability of financial entities could result. In addition, risks to financial entities could include litigation exposure, subsequent reputational risk and legal disputes over unclear liability allocation within value chains including several providers.

The ESAs are also investigating the use of big data analytics by financial institutions. A Joint Committee Discussion Paper published in December 2016 by the three ESAs outlined a number of potential benefits and risks of this innovation. The main risks to consumers identified in this area include (i) risks related to reduced

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23 This refers to the new categories of firms introduced under PSD II, i.e. payment initiation services providers and account information service providers.

24 See Draft recommendation on outsourcing to cloud service providers, EBA/CP/2017/06, May 2017.

25 See ESMA (2017): ESMA’s supervision of credit rating agencies, trade repositories and monitoring of third country central counterparties.

26 See the Report on automation in financial advice, published by the Joint Committee of the ESAs. JC 2016 80, December 2016.
**Comparability of financial services** as a consequence of the increasing personalisation that big data makes feasible; and (ii) **risks related to discrimination**, such as possible limitations of some consumers’ access to service and/or information or the application of different conditions and/or prices based on the analysis of behavioural data.

In parallel, the EBA has also undertaken an extensive analysis of innovative uses of consumer data by financial institutions, highlighting the potential benefits and risks. An EBA report\(^{27}\) concludes that, while further industry-specific regulations are currently not be required, given that an extensive set of legal requirements is already in place, competent authorities should continue to monitor closely the development of innovations. The report also encourages cooperation between supervisory authorities across relevant policy areas, as well as initiatives to raise consumers’ awareness on how their data are being used. An EBA Discussion Paper\(^{28}\) identifies proposals for future FinTech-related work, e.g. in the area of authorisation and sandboxing regimes, with respect to the impact on prudential and operational risks for credit institutions, electronic money institutions and payment institutions, and in the area of consumer protection and retail conduct of business issues.

The ESMA February 2017 Report on Distributed Ledger Technology in securities markets\(^{29}\) identified some possible financial stability risks due to the potential of automatic triggers employed in smart contracts to **contribute to market volatility** as well as unintended adverse effects on market liquidity and interconnectedness. In addition, **data privacy issues** were observed around the possible identification of parties through their trading behaviour.

InsurTech\(^{30}\) is of strategic importance for the insurance sector and therefore a topic that EIOPA is following closely. An example is enhanced fraud analytics, which improve the detection and investigation of fraudulent practices, thereby reducing costs.\(^{31}\) There are numerous opportunities arising from InsurTech, both for the industry and for consumers, but it has also become increasingly clear that digitalisation is raising a wider range of issues and aspects that deserve the attention of supervisory authorities in close cooperation with stakeholders. Technological innovations are also having impacts on all stages of the insurance value chain, to a great extent as a result of the digitalisation of data and processes.

There are also a number of issues arising, some of an ‘ethical’ nature, that supervisory authorities need to carefully examine in order to ensure the fair treatment of consumers, taking into account the latest legislative developments too, such as the new European General Data Protection Regulation.

### 6 Policy actions

In light of the risks and uncertainties discussed in this report, especially those around the process of the UK’s withdrawal from the EU, **supervisory cooperation** across all sectors remains key to ensure an orderly functioning of financial markets.

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\(^{27}\) EBA report on innovative uses of consumer data by financial institutions ([link](https://www.eba.europa.eu)) (June 2016).


\(^{30}\) FinTech for the insurance business is called InsurTech.

\(^{31}\) EIOPA’s response to the Commission’s public consultation on FinTech ([link](https://www.eiopa.europa.eu)) (June 2017).
In the potential scenario of a hard Brexit and thus the expiry of passporting in the financial sector, policy makers will have to decide on the post-Brexit legal framework for cross-border financial services. Across all sectors, supervisors in the EU27 need to be prepared to adequately handle in a coherent and rigorous way a potentially increasing number of authorisation requests from market participants relocating from the UK. More outsourcing or delegation arrangements in the relocation process may put supervisory cooperation to a further test. Guidance has already been provided to national authorities in the EU27 regarding investment management, investment firms and secondary markets. To prevent disruption, supervisory authorities will need to continue such efforts of providing guidance to consumers and to non-financial and financial corporates.

Policy makers will have to make sure that the regulatory framework keeps up with the challenges arising from the UK’s withdrawal from the EU. Especially in the event of a hard and abrupt Brexit, with the related cliff-effects, the future prudential framework for investment firms as well as the supervisory regime over market infrastructure has already entered the discussions. In the supervisory field, a commitment to supervisory convergence, cross-border cooperation and transparency and avoidance of regulatory arbitrage are key for all stakeholders concerned. The ESAs are closely monitoring risks and market developments related to the UK’s withdrawal from the EU, and considering possible actions for mitigation.

The ESAs promote the mitigation of risks around valuation issues and abrupt reversals in yield levels by evaluating EU financial institutions’ capacities to deal with elevated stress scenarios. To this end, stress tests are widely used by regulatory authorities across the different sectors, with consideration now being given to similar exercises for the investment fund sector, which would complement already existing stress-testing activities of individual fund managers.

Additional ongoing measures include (i) enhanced transparency in EU derivative markets and securities-financing transactions, (ii) current improvements in the data basis for the supervisory scrutiny of the alternative investment and money market fund industries and (iii) enhancements in supervisory convergence, e.g. around central clearing parties.

In the face of potential reversals in yields and risk premia, supervisors should pay particular attention to the composition of balance sheets. Portfolio compositions with a large proportion invested in bonds, as observed for many banks, insurers and some investment funds, render them vulnerable to any abrupt reversal. Forward-looking and harmonised implementation of regulatory frameworks aiming to improve transparency and supervisory convergence are appropriate tools for alleviating risk factors.

Supervisors and policy makers should remain aware of, and transparent with market participants about, potential valuation risks. Adequate accounting for market risks in prudential requirements would be an appropriate tool to promote the resilience of financial institutions appropriately to ensure the smooth provision of credit to the real economy.

In a low-yield environment with subdued profitability, policy makers and supervisors alike should address structural impediments to bank sector consolidation. They need to shed light on persisting overcapacities in many banking markets, adjustments required to bank business models and the need to improve technological infrastructures.

The clustering of high NPL ratios in one third of EU countries requires policy makers to implement a comprehensive EU response by addressing the impediments on the demand side with a lack of an efficient secondary market for NPLs and collaterals. Furthermore, market participants suggest taking steps to address lengthy judiciary processes to resolve NPLs.
Tackling NPLs is primarily the responsibility of the affected banks and Member States but in a number of areas joining up national- and EU-level efforts is warranted to take action on NPLs. The ECOFIN Council conclusions on NPLs issued in July invite and encourage actors on different levels to take steps on several fronts to reduce the risk to financial stability due to NPLs and to enhance economic growth, both by tackling the legacy NPLs and by reducing the risk of build-ups of NPLs in the future. The focus is on four key areas: bank supervision, insolvency and debt recovery frameworks, secondary markets for NPLs, and tools to facilitate sector-wide restructuring in the banking sector.

On the insurance side, policy makers and supervisors should focus their attention on the protection of policyholder interests, especially in some countries where there is a significant stock of contracts with high guarantees. They should also keep an eye on the profitability of (life) insurers.

The ESAs continue to work on assessing the impact of FinTech on financial institutions’ business models and their strategic response. With the rapid growth of FinTech, supervisors should ensure compliance with regulatory obligations, while policy makers should consider amending and extending the regulatory framework where necessary. The particular challenge to policy makers is that innovations such as big data and robo-advice affect a wide range of services across the different sectors of financial services. Supervisors should closely monitor these developments and ensure access to information for consumers, and protect customers in the light of cyber-crime and the increased use of potentially private data.