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

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EXECUTIVE SUMMARY AND POLICY ACTIONS

The outbreak of the Coronavirus has brought huge social disruptions and unprecedented economic challenges, with inevitable impact on the EU¹ financial sector. Valuation, liquidity, credit and solvency risks have increased across the board. While liquidity positions of EU banks remained relatively strong, the EU investment fund industry faced a significant deterioration of asset liquidity in some segments combined with substantial outflows from investors in selected asset classes. The pandemic has thus led to liquidity challenges in segments of the investment fund sector. It has also further amplified **profitability concerns for all financial sectors, and is expected to result in deteriorating asset quality in the EU banking sector.** Moreover, the expected further prolonged low interest rate environment weighs on the profitability and solvency of financial institutions. EU institutions for occupational retirement provision (IORPs) are also impacted by the pandemic and the prolonged low interest rate environment, which could lead to significant drops in the cover and funding ratios.

Uncertainties about the medium- and long term economic consequences of the COVID-19 pandemic are still very high, and lead to a fragile market environment going forward. Financial markets are vulnerable to potential decoupling of financial market performance from underlying economic activity, raising questions about the sustainability of the market recovery. A swift, coordinated supervisory response of the ESAs to the outbreak of

¹ EU refers to EU 27/EEA excluding the UK

the virus has contributed to address and mitigate implications on the EU financial sector, and is contributing to prevent fragmentation of the Single Market.

Usage of and dependency on information and communication technology (ICT) has further increased with the spread of the Coronavirus. Related risks represent a key challenge for financial institutions and put sound ICT and security risk management high on the agenda.

Against this background, **the Joint Committee of the ESAs advises national competent authorities (NCAs), financial institutions and market participants to take the following policy actions:**

- 1. Given the high uncertainty regarding economic and market developments, financial institutions should be prepared for possible further market corrections and deterioration in financial market liquidity. In this context, financial institutions and supervisors should take into account various scenarios and, for example, perform stress testing or sensitivity analyses² in order to map the impact of potential shocks.** For the investment fund sector this should be complemented by continued monitoring of liquidity management tool adequacy and usage. In addition, financial institutions cannot fully rely on their existing risk management frameworks, as they may not sufficiently take into account the unique characteristics of this crisis for managing their risks.
- 2. The impact of the crisis on bank asset quality is expected to be a key challenge going forward.** In the past few years, credit institutions in the EU have on average increased their exposures towards potentially riskier portfolios and, given the widespread impact of the crisis, average exposures to sectors most affected by the pandemic are high. Banks are likely to face deteriorating asset quality with growing volumes of non-performing loans and rising cost of risk amid the prospective macroeconomic deterioration. **Banks and supervisors should properly assess the quality of loan portfolios and also consider in their preparations that widely introduced legislative and non-legislative loan moratoria, as well as further policy measures such as loan guarantee schemes, are of a temporary nature.**
- 3. Given the overall uncertainty of the scale and duration of the crisis, it is important that the financial sector remains well-capitalised.** Financial institutions should ensure that the assessment of their capital positions is forward-looking and that it takes into account current uncertainties, following prudent dividend and other distribution policies, including variable remuneration³. At the same time, **supervisors and banks should make use of the flexibility embedded in the existing regulatory framework**, including to use capital and liquidity buffers to absorb losses, and thus to **ensure continued lending to the economy.**
- 4. Monetary policy responses to the crisis entail an even longer low interest rate environment. Supervisors and financial institutions need to accommodate a further prolonged “low-for-long” interest rate environment and its risks,** including addressing overcapacities in the financial sector. While low interest rates are important to support economic activity, they negatively impact bank profitability and remain the main risk for the life insurance and pension fund sector. They contribute to the further build-up of valuation risks in securities markets through search-for-yield strategies, which underestimate risks, and have contributed to bank lending growth in riskier segments. Notwithstanding the importance of continued

² See bank sector sensitivity analyses on credit risk, market risk and revenue sensitivities in [EBA thematic note “The EU banking sector: First insights into the COVID-19 impacts”](#).

³ See EIOPA statement: <https://www.eiopa.europa.eu/content/eiopa-statement-dividends-distribution-and-variable-remuneration-policies-context-covid-19>

See [EBA Statement on actions to mitigate the impact of COVID-19 on the EU banking sector, and EBA Statement on dividends distributions, share buybacks and variable remuneration](#)

See [ESRB Recommendation on restriction of distribution during COVID-19 pandemic \(ESRB/2020/7\)](#)

lending in the crisis, banks should ensure sound lending practices and that risks are not mispriced, which should be monitored by supervisors.

- 5. It is key for financial institutions and their service providers to carefully manage their ICT and security risks, including when outsourcing ICT activities.** They should ensure that appropriate technologies and adequate resources are in place to address data integrity, business continuity and increasingly sophisticated cyber threats. Institutions should also pay particular attention to a growing number and new forms of financial crime in this period of large economic turmoil.

Financial institutions should also ensure to be well-prepared for any disruptions they and their clients may face at the end of the UK's transition period agreed in the context of the UK withdrawal from the EU. The ESAs are monitoring financial institutions' preparedness for the end of transitional period, when UK institutions will lose their passporting rights into the EU as of 1 January 2021. Market participants should also be aware that a Free Trade Agreement (FTA) between the EU and UK that is currently being discussed would not eliminate most potential disruptions in the financial services sector, as the FTA will not address passporting rights. Financial institutions must use the remainder of the transition period to finalise their preparations and adapt their business models accordingly. Where relevant, the preparation should factor in situations in which no relevant equivalence decisions have been made by 31 December 2020. To this end, financial institutions should ensure that their contingency planning minimises detriment to their customers, and should provide appropriate information to their customers regarding their preparations for the end of the transition period and availability and continuation of services offered to EU-based customers.

Financial institutions relocating from the UK to the EU need to ensure that they adhere to the establishment plans agreed with the relevant competent authorities in the EU as part of their authorisations. Separately, it should be noted that in the area of central clearing, on 9 July 2020 the European Commission announced that a time-limited equivalence decision providing for the continued access of EU 27 institutions to UK central counterparties (CCPs) will be adopted in order to address possible financial stability risks.

INTRODUCTION

With the COVID-19 pandemic, EU and global financial markets have been hit by an external shock of unprecedented size. The EU has been an epicentre of the global pandemic, with unprecedented economic effects. Indicators of economic activity contracted with some countries experiencing the sharpest drop in GDP in the first half of 2020 since the Second World War. Since March, GDP growth forecasts have been continuously revised down. Forecasts in June and July by the OECD and IMF suggest a 2020 euro area GDP contraction of 9.1% (OECD) and of 10.2% (IMF), with a 2021 growth recovery between 6 and 6.5%. Also in July, the European Commission lowered its forecast of EU GDP growth to -8.3% for 2020, followed by a rebound of 5.8% for 2021⁴. Overall, fragile market conditions as well as high uncertainty about the economic and financial market outlook associated with potential lasting effects of the COVID-19 crisis warrant close monitoring of market developments to avoid possible further disorderly market correction.

Against this background, this report focuses on the impact of the COVID-19 pandemic on the financial sector and the risks going forward amid widespread uncertainty around the recovery. The increased exposure of the financial sector to cyber risk and operational resilience are the focus of the second chapter of the report.

1 RISK RELATED TO THE IMPACT OF COVID-19

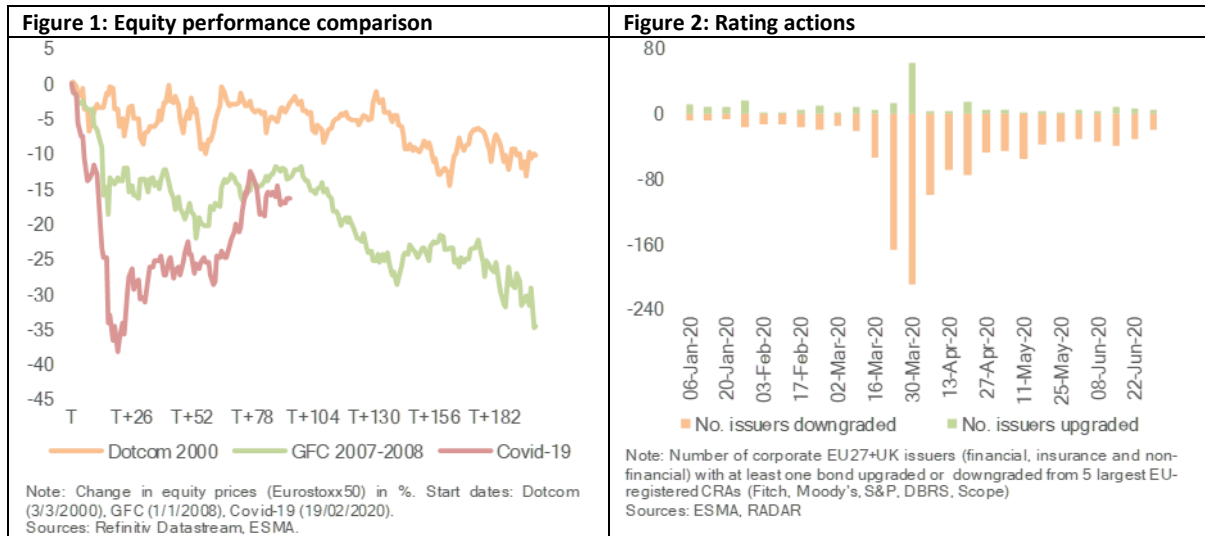
A. MARKET DEVELOPMENTS

During the initial stage of the crisis from mid-February until March, financial markets fell at one of the fastest paces in modern history: major equity indices lost close to 40% in 20 days (Figure 1), while volatility surged to the highest levels observed since the Global Financial Crisis. The swift decline in market valuation occurred across asset classes, from equities to IG and HY corporate bonds.

The sell-off was partly related to investors' flight to liquidity ('dash for cash'). Market liquidity across selected markets declined amid massive selling pressure from investors and a dry-up of liquidity supplied by traditional market makers. High levels of volatility made many financial institutions unwilling or unable to provide liquidity support, resulting in sharp price falls and further volatility. In bond markets the bid-ask spread on corporate bonds increased by more than 20 basis points in March, partly reflecting forced sales from investors. Non-financial corporates remain fragile as liquidity conditions are still tight.

Between end-March and end-April, markets rebounded swiftly on the back of policy actions. Central banks provided support by injecting liquidity and announcing large-scale purchases of corporate and government bonds, and fiscal authorities announced a wide range of measures at both national and European level. In late July, EU member states agreed upon a EUR 750bn recovery fund, with EUR 390bn as non-repayable grants, aimed at supporting the post-pandemic recovery across the EU. From May onwards investors started to differentiate between issuers and asset classes amid ongoing deterioration of economic fundamentals. In that context, concerns around credit risk started to materialise. Credit rating downgrades surged since early March, although the pace has slowed from April (Figure 2). Previously observed rising corporate indebtedness, fueled by search for yield and benign financing conditions, has made issuers more vulnerable to the sharp fall in revenues that occurred during the crisis. Within the Investment Grade universe, BBB-issuers, which account for 40% of rated corporates are particularly vulnerable, as a downgrade to High Yield (HY) could trigger forced sales by investors. As the single EU direct supervisor of CRAs, ESMA has closely monitored CRAs' rating actions through enhanced data analytics to assess the possible impact of ratings actions on financial stability.

⁴ European Commission Summer 2020 Economic Forecast



Following the initial drop in equity prices, which was indiscriminate across sectors, banks continued to underperform other sectors reflecting deteriorating prospects for profitability and asset quality. The potential decoupling of financial market performance from underlying economic activity raises the question about the sustainability of the market recovery going forward. While current levels of price to earnings ratios are in line with long-term averages, the severity of the COVID-19 crisis and the associated recession might not be entirely reflected in current asset prices, therefore still giving rise to concerns about overvaluation. In the short-term, valuations might be supported by the ample liquidity injections. Following the ‘dash for cash’ that occurred in March, and the implementation of support programs by central banks, cash-rich investors reinvested their funds in equity and credit markets, leading to rising valuations.

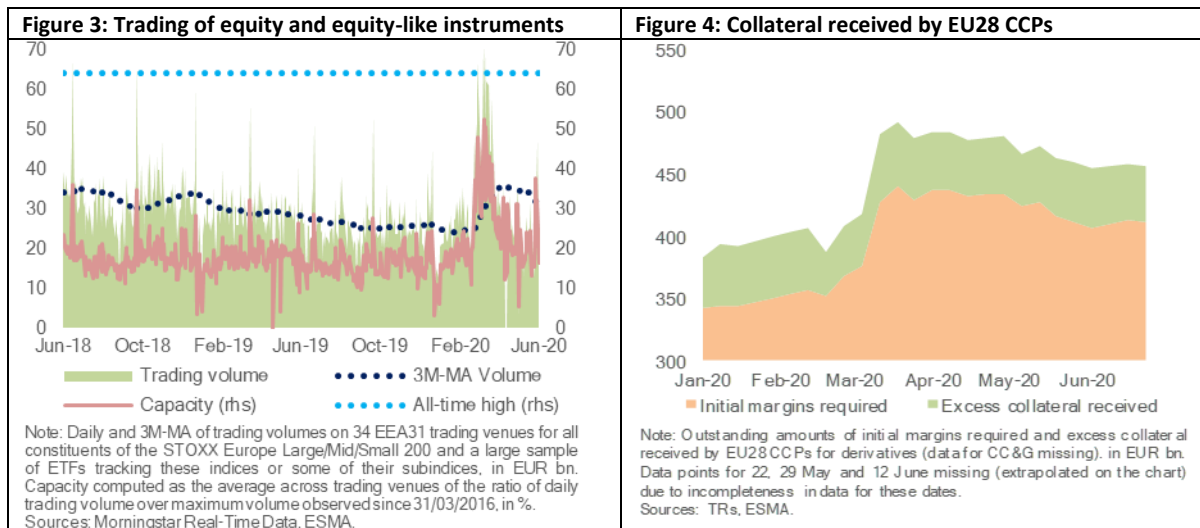
The stock market recovery has not been accompanied by a rebound in equity fund flows. Risk-taking sentiment among those investors could quickly evaporate if the economic recovery were to take longer than they currently expect. Corporate bond markets have also seen a significant improvement since March. Unlike for stock markets, bond markets have been supported by renewed inflows to investment funds, although high yield fund flows are yet to recover fully from the sell-off in March. Liquidity in corporate bond markets has also improved since March, although bid-ask spreads, especially for high yield bonds, remain markedly higher than before the sell-off.

The overvaluation of asset classes may give rise to risks of significant market corrections. From a short-term perspective, current positive expectations by many market participants rely on a continued highly supportive monetary and fiscal policy environment. From a long-term perspective, the crisis could lead to permanent effects on economic activity. The increase in private and public sector debt could also give rise to solvency and sustainability issues which might not be factored into valuations.

B. INFRASTRUCTURES AND SERVICES

During the large sell-off from end-February onwards, EU trading volumes in equity and equity-like instruments sharply increased with volumes reaching historical highs. Daily volumes peaked at a maximum of around EUR 70bn on 12 March, compared to a long-term average of EUR 32bn. As markets recovered, trading volumes declined from April to levels slightly above those observed before the crisis. In this context, trading venues have proved to be broadly resilient, despite the surge in trading activity and market movements (Figure 3). Along with that, the level of settlement fails surged end-March reaching levels unseen since the beginning of the reporting

in 2014, climbing to 14% for equities and 6% for government and corporate bonds. High market volatility led to increased collateral movements (margin calls and substitutions) and consequently heavily increased settlement instructions volumes and overall turnover. The sharp increase in settlement activity led to operational issues for market participants and CSDs, due to remote work and third-party outsourcing to countries in lockdown. Most settlement fails were resolved between one and five days after the intended settlement date. Since April, settlement fails levels have decreased across instruments, together with the volatility and the settlement activity. ESMA continues to closely monitor the developments around settlement fails.



In derivatives markets, the massive increase in volatility translated into higher margins. The key driver were increased volumes and volatility leading to higher variation margins, reflecting mechanically large mark-to-market gains and losses for derivatives counterparties. A significant number of intra-day margin calls were observed and Central Clearing Counterparties (CCPs) generally increased gradually the initial margin parameters to cope with the increase in volatility, while at the same time limiting procyclicality. Widespread intraday-margin call and overall increases in margins collected by CCPs can put additional liquidity demands on some clearing members and their clients during times of liquidity shortage. However, liquidity in the EU central clearing framework was never put under critical stress, as the development of excess collateral received by EU CCPs (Figure 4) has not reached critical lows at an aggregate level over the period of the crisis⁵.

C. RISKS IN THE INVESTMENT FUND SECTOR

The EU investment fund industry faced a significant deterioration of liquidity in some segments of the fixed income markets combined with substantial investment outflows from investors. Bond fund outflows especially reached record highs in 1Q20 representing 4% of the sector Net Asset Value (NAV). This compares to e.g. outflows for mixed and equity funds at around 2%. Over the reporting period, cumulative flows were close to zero, with high inflows observed in April and May compensating for the March outflows across most bond funds. In contrast, the recovery has been limited for smaller segments of the fund sector like alternative Undertakings for the Collective Investment in Transferable Securities (UCITS), which had outflows of more than 5% of NAV since March⁶. In March, redemption demands were particularly challenging for funds that invest in less liquid assets, such as corporate High Yield (HY) bonds and Emerging Markets (EM) bonds which faced cumulative

⁵ For further details, see also ESMA Report on Trends, Risks and Vulnerabilities No. 2, 2020 and ESRB (2020), "[Liquidity risks arising from margin calls](#)", June 2020.

⁶ Estimates for fund flows are retrieved through the Morningstar database. The definition of alternative UCITS in this context is based on the classification of open-ended funds with alternative investment strategies provided by Morningstar.

redemptions of respectively 5% and 4% in a deteriorating liquidity environment. In the later stages of the crisis, corporate bond funds recorded high inflows as risk sentiment improved, while the recovery for EM bond funds has been more muted.

Corporate bond funds increased their cash holdings in March and April to cope with high expected redemptions. As markets normalised, cash holdings reverted back to lower pre-crisis. As market liquidity fell substantially during the market turmoil in March and April, some asset classes were subject to high valuation uncertainty. In that context, some fund managers decided to temporarily suspend redemptions when necessary. Due to fund share valuation uncertainty, there was a risk of unfairly penalising remaining (redeeming) investors, by redeeming shares above (below) their fair price. In light of the deterioration in corporate bond fund market liquidity and rising redemption requests, asset managers used tools such as gates, suspension of redemption and swing pricing although there is significant variation in the availability of those tools across EU jurisdictions. After a surge of suspensions at the end of March (around EUR 22bn) the size and number of suspended funds declined to less than EUR 0.4bn by the end of June, as many suspensions on UCITS and liquid funds were of temporary nature. On the other hand, the NAV of suspended AIFs increased to EUR 40bn by end-June, mainly due to real estate funds that suspended redemptions due to valuation issues in the real estate market. Overall, most of the suspensions were linked to valuation uncertainty in corporate bond, OTC derivatives and real estate markets. As a response to the pandemic, ESMA has intensified the exchange of information among NCAs on the use of liquidity management tools by EU/EEA UCITS and AIFs. Furthermore, ESMA has enhanced its coordination role with NCAs in undertaking focused supervisory engagement with investment funds that have significant exposures to corporate debt and real estate, which are less liquid asset categories.⁷ Although European MMF behaved differently according to their domiciliation, currency or the type of MMF, **some segments of the EU short-term Money Market Funds (MMF) industry faced liquidity challenges during the period of acute stress.** Low Volatility Net Asset Value (LVNAV) MMFs denominated in third country faced large outflows, as standard VNAV denominated in EUR although the situation varied significantly across funds. Public debt Constant Net Asset Value (CNAV) MMFs denominated in USD recorded large inflows. LVNAV funds are short-term MMFs that invest mainly in private securities and use mainly amortized cost accounting. LVNAV money market funds liquidity challenges were related to a combination of factors. On the liability side, investors redeemed their MMF shares as part of the ‘dash for cash’, while on the asset side, liquidity deteriorated quickly in money markets, particularly in the commercial paper and certificate of deposits markets in the EU and in the US (although in the US liquidity improved quickly thanks to the FED programmes). In particular, bank issuers who usually buy back their paper from MMF when needed were unwilling to make markets, increasing liquidity pressures on MMFs. No suspensions were reported for MMFs.

Against the background of these events, ESMA, together with NCAs, has monitored closely any threats to financial stability and have taken measures to promote stability, investor protection and market integrity. In particular, ESMA has issued recommendations to financial market participants on Business Continuity Planning, market disclosure, financial reporting and fund risk management, and launched initiatives to address the effects of the COVID-19 pandemic in areas including the Benchmarks Regulation, corporate disclosure issues, Credit Rating Agencies supervision, bilateral margining requirements, Fund Management periodic reporting, MiFID II/MiFIR, as well as short selling⁸.

D. RISKS IN THE INSURANCE AND PENSION FUND SECTOR

The sound capital positions of the insurance sector before the Covid-19 shock provided undertakings with certain buffers. In Q4 2019 the insurance sector was well capitalised with a median Solvency Capital Ratio (SCR)

⁷ https://www.esma.europa.eu/sites/default/files/library/esma50-158-2232_statement_esrb_recommendation.pdf

⁸ <https://www.esma.europa.eu/about-esma/covid-19>

of 213%. Improved asset valuations for 2019, supported by the rebound in equity prices and declining yields in the first half of the year, provide a certain buffer to withstand the impact of macro-financial shocks on the sector. **Nevertheless, the unexpected COVID-19 virus outbreak might negatively affect insurers' solvency position.** Amid an unprecedented downward shift of interest rate curves during March, reflecting the flight-to-quality behaviour, CDS premia increased, leading effectively to a double-hit scenario. The expected persistence of low interest rates, the depreciation of asset prices and economic uncertainties had a negative impact on insurers' balance sheets. Additionally, the materialization of increased credit risk, with mass rating downgrades, would negatively affect insurers SCR ratios and investment. On the positive side, the reductions and/or cancellations of distributed dividends might mitigate the solvency risk of some insurers by supporting them to preserve capital. For insurance groups, a deteriorating solvency position has been observed in Q1 2020, with SCR ratio decreasing by 12pp to 200%.

In the context of COVID-19, the expected further prolonged low interest rate environment weighs on the profitability of insurers through their return on their fixed income investments. Significant amounts of earned coupons and redemptions from matured bonds will be reinvested at lower rates: for instance, in 10 years' time, insurers will need to replace approximately 60% of their government bonds portfolio substituting a 3.24% average yield to maturity (as of Q4 2019) with an average of 1%.⁹ The effect of the income channel is magnified in the case of life portfolios with high guarantees stemming from products sold in the past, as they require higher yields in order to meet promises made during different market (yield) conditions.

Insurers' profitability might be further dampened by direct effects of COVID-19 in the medium to long-term horizon. The COVID-19 shock of March 2020 has pushed risk free rates and high credit quality yields lower while at the same time increasing the uncertainty and risk premia of riskier assets. Additionally, there could be also potential negative effects via an increase in claims for the life insurance sector, as well as for non-life business. Furthermore, future premiums might follow the trajectory of economic growth and increased claims push to the downside the underwriting performance of insurers. Litigation risk can rise given the debate on the ambiguity regarding the coverage of several risks with respect to the terms and condition of the contracts. Finally, unit-linked profitability could be reduced, for insurers, because of the decrease of the unit fund value, which in turn reduces the inflow of the fund management charges. **Liquidity risks are under close monitoring.** In this context, as a response to COVID-19, EIOPA already developed and put in place a proportionate framework to enhance the nature and the consistency of the information collected on liquidity risks.¹⁰

The home bias of insurers as well as their interconnectedness with other sectors might trigger higher risks for the insurance sector due to the potential of an asymmetric recovery from COVID-19 shock across countries. As of Q4 2019, European insurers continue to show significant home bias in their direct investment of government bonds, despite difference across jurisdictions. **The significant exposures of insurers towards the banking sector,** and their home bias, could potentially also become a channel of risk transmission and contagion given the negative consequences of the virus outbreak on the sector. In case of credit events, risks from the banking sector could be transmitted to the insurance sector, through holdings of specific financial instruments, and could be amplified in cases of high concentrations of subordinated bank bonds with low country diversification. In particular, on average approximately 75% of insurers' exposure to banks is concentrated towards bank bonds, of which 46% are covered bonds (i.e. secured bonds), 42% senior unsecured bonds and 7.9% junior bonds (including subordinated bonds, hybrid bonds and convertible bonds). **Interlinkage with the fund sector** are also under monitoring, especially for the unit-linked portfolios. Although the insurance sector

⁹ EIOPA estimate (<https://www.eiopa.europa.eu/content/ultra-low-yields-and-covid-19-crisis-significantly-affecting-european-insurance-sector>)

¹⁰https://www.esrb.europa.eu/pub/pdf/other/esrb.letter200608_to_EIOPA_on_Liquidity_risks_in_the_insurance_sector~e57389a8f1.en.pdf?94513cd100e65181f65326349fe409d

has not faced liquidity strains stemming from delayed unit-linked funds redemptions, this remains, to a certain extent, a potential tail risk in consideration of possible future market downturns.

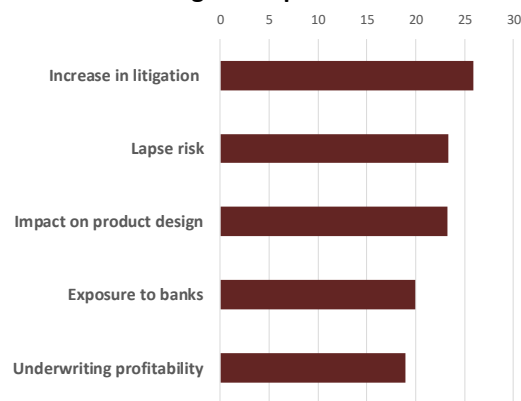
Against this background, EIOPA is working in close cooperation with NCAs to help insurers to focus on ensuring business continuity to serve their customers. In order to mitigate the impact of the Coronavirus outbreak on the insurance sector, both EIOPA and NCAs have provided flexibility regarding reporting deadlines and public consultations and information requests. On the capital side, EIOPA encourages insurance companies to take measures to preserve their capital position in balance with the protection of the insured, following prudent dividend and other distribution policies, including variable remuneration¹¹. On the consumer protection side, EIOPA urged insurers and intermediaries to treat consumers fairly and provide clear and timely information on contractual rights¹².

BOX: Business interruptions and other potential risks for insurers

Legal uncertainties related to the coverage of business interruption related risk by insurance policies can potentially result in an increase in the pay out of claims or lead to reputational risks for the insurance sector. While a number of insurance contracts explicitly exclude coverage, a few contracts explicitly cover for losses linked to the existence of property damages stemming from administrative or government decisions. However, in the majority of the insurance contracts coverage is unclear. This vast grey area leads to increasing reputational damage for the insurance sector because the reimbursement of claims is subject to interpretation. EIOPA is already observing some court based litigations in this respect.

The implication of COVID-19 in this area may materialise in the medium- longer- term. Based on the responses received by EIOPA on a COVID-19 questionnaire, NCAs expect an increase in litigation over the next 6 months that could trigger an **increase in claims and expenses** with a negative effect on their profitability positions.

Risks with the highest expected increase in materiality over the next 6 month in the context of Covid-19



Source: EIOPA Qualitative Covid-19 questionnaire (May 2020)

Note: Based on the responses received. Risks are ranked according to the expectation for the future movements of each exposure (from -2 indicating strongly decrease to +2 indicating strongly increase). The figure shows the aggregation of the average scores assigned to each risk. The results were subsequently normalised on a scale from -100 to 100.

A number of consumer protection- and conduct concerns also emerge, other than those driven by prudential risks in the business interruption area. Given possible conduct implications, EIOPA has also carried out an initial analysis on how pandemics, travel bans and other ‘acts of God’ are treated in insurance policies. A heterogeneous landscape can be observed in relation to the treatment of pandemics, with differences ranging across markets, products and undertakings. Some of the conduct concerns that emerged are:

¹¹ https://www.eiopa.europa.eu/content/eiopa-statement-dividends-distribution-and-variable-remuneration-policies-context-covid-19_en

¹² https://www.eiopa.europa.eu/content/call-action-insurers-and-intermediaries-mitigate-impact-coronaviruscovid-19-consumers_en

instances of mismatch between consumer expectations and the actual coverage; misleading information provided to consumers on the exclusion of pandemics and their effects from policies – e.g. pandemics being excluded only in new contracts whereas the information provided refers to all products; unclear/vague terms and conditions; unilateral changes in terms and conditions by insurers in contracts in being or at renewal.

Institutions for occupational retirement provision (IORPs) are heavily impacted by the COVID-19 crisis and the prolonged low interest rate environment, which could lead to significant drops in the cover and funding ratios.

Following a positive year for European IORPs with positive investment returns, substantial increases in asset market values and resulting improved cover ratios, the sector has been heavily affected by market turmoil in the wake of the COVID-19 pandemic, which swept away substantial value gains of 2019. The liability side is already pressured due to low interest rates and, where market-consistent valuation is applied, due to low discount rates. The funding and solvency ratios of IORPs are determined by national law and, as could be seen in the 2019 IORP stress test results.¹³ They have been under pressure and are certainly negatively impacted by this crisis.

Heterogeneity of the occupational pension systems across Europe results in differences in the extent to which risks are borne by members and beneficiaries, the IORP itself, sponsors and pension protection schemes.

Indeed, the IORP II Directive sets minimum prudential rules for IORPs in the EU and, in consequence, prudential regulation varies considerably between Member States and occupational pension arrangements depend on national social and labour law.

The long-term effects on current occupational pension schemes remain uncertain and it will depend on how severe the economic crisis will be and on how long it will last. In this respect, of crucial importance will be the evolution of macro variables such as unemployment and disposable income. **Sponsoring undertakings** in heavily affected sectors by the COVID-19 pandemic are expected to be in significant financial distress and correspondingly, members of such pension funds are at risk of unemployment in the near future. In addition, the COVID-19 pandemic may result in liquidity pressures. Companies might face difficulties due to a) delayed or missing contributions from employers and employees, b) the potential need to cover cash margin calls on derivative hedging positions, c) moratoria on payments on loans and mortgages, d) expected declines in dividend payments on IORPs' equity holdings and e) potential difficulties in selling assets under current market circumstances.

E. RISKS IN THE BANKING SECTOR

European banks also entered the COVID-19 crisis with strong capital positions. The Common Equity Tier 1 (CET1) ratio rose from 9% in 2009 to 14.9% in Q4 2019 (fully loaded), and well above the regulatory requirements. On top of their Overall Capital Requirements and Pillar 2 Guidance (P2G), banks hold additional capital according to internal capital targets and risk appetite. This management buffer amounted to EUR 270bn in Q4 2019. Strong capital levels helped banks to increase their lending to the economy in the short term, particularly to those sectors most in need of liquidity, and should help banks to withstand the impact of forthcoming expected credit risk losses stemming from the crisis. However, the dispersion of capital levels among European banks remains high, and some banks having entered the COVID-19 crisis with relatively lower capital levels and riskier exposures may face challenges.

¹³ [EIOPA IORPs Stress Test, December 2019](#)

In response to the outbreak of COVID-19, the EBA encouraged supervisors and banks to make use of the flexibility embedded in the existing regulatory framework. This includes using capital and liquidity buffers to absorb losses, and thus to ensure continued lending to the economy. The EBA also urged banks to refrain from dividend distribution and share buybacks.¹⁴ In line with the EBA's recommendations, several competent authorities released countercyclical capital buffers and allowed flexibility for banks to operate below their P2G. The measures implemented by competent authorities and macroprudential authorities also include, among others, the option to meet a proportion of the Pillar 2 Requirement (P2R) with non-CET1 instruments. The EBA has also emphasised that the capital relief should be used to finance the corporate and household sectors. **The impact of these measures can be quantified as nearly EUR 100bn CET1¹⁵.** Some competent authorities have also allowed banks to temporarily operate below Pillar 2 Guidance (P2G), potentially freeing up an additional EUR 79bn. Moreover, the Commission has in its 'banking package' frontloaded some of the preferential prudential treatments foreseen in the Capital Requirements Regulation (CRR), such as a revised SME supporting factor and a new infrastructure supporting factor.¹⁶ These measures come in addition to an already strong capital reserves base and should help to support new lending. Going forward, it will be **important that banks make use of capital buffers in support of lending to the real economy during the downturn**, while remaining adequately capitalised.

The average CET1 ratio (fully loaded) contracted to 14.4% in Q1 2020¹⁷. The contraction is driven by both decreasing CET1 capital and an increase in risk weighted assets (RWA), in particular credit and market risk components. Lending increased in Q1 2020, supported by the introduction of public loan guarantee schemes and the use of existing credit lines. Going forward, RWA are expected to rise further as a result of a deterioration in asset quality, potentially further drawings of loan commitments and market risk.

EU banks also had relatively strong liquidity positions entering the COVID-19 crisis. Liquidity coverage ratios (LCRs) were significantly above the regulatory minimum of 100%, with an overall LCR of 148.9% in Q1 2020, and nearly at the same level as in Q4 2019 (149.9%). Liquidity buffers are intended to ensure banks' short-term resilience to potential liquidity disruptions. They are important not only to enable banks to weather the crisis, but also to support households and corporates in the pandemic and to reactivate the economy. As the LCR is also designed to be used by banks under stress, the ratio might decline in the upcoming quarters as banks may make use of some of their buffers. As regards liquidity positions in non-EUR, LCRs are on average close to 100% for USD and GBP. The trend in Q1 2020 shows a slight increase in the LCRs of both USD and GBP.

Bank funding conditions materially deteriorated with the outbreak of the crisis in late February. New unsecured debt issuance almost came to a halt until mid-April. Spreads for senior and subordinated instruments temporarily widened from near-record lows to levels not seen since the Great Financial Crisis (GFC). Yet ample central bank funding, including the ECB's additional Long Term Refinancing Operation (LTROs) and Pandemic Emergency Longer-term Refinancing Operations (PELTROs), provided credible alternative sources of funding during this time. **Funding conditions have steadily improved since April and spreads have contracted**, not least driven by the wide range of fiscal- and policy support measures introduced in response to the crisis. Euro area banks have made significant use of the fourth operation of the ECB's scheduled Targeted Long Term Refinancing Programme (TLTRO III) in June, and took up a total of EUR 1.3tn of medium-term funding. The high take-up at favourable pricing below wholesale funding market pricing significantly contributed to reduced funding market pressure. Spreads for debt instruments nevertheless remain wider than at very low pre-crisis levels in February.

¹⁴ See [EBA Statement on actions to mitigate the impact of COVID-19 on the EU banking sector, and EBA Statement on dividends distributions, share buybacks and variable remuneration](#)

¹⁵ See EBA thematic note "The EU banking sector: First insights into the COVID-19 impacts"

¹⁶ [European Commission banking package to support bank lending](#)

¹⁷ Q1 2020 figures refer to the EU 27

Challenges for some banks to build up buffers of Minimum Requirements for Own Funds and Eligible Liabilities (MREL) have exacerbated with the crisis.

Significant challenges to bank sector profitability present already before the pandemic have exacerbated. Low margins, intense competition, including from the financial technology (FinTech) sector, and high operating costs, with challenges to reduce them, have particularly affected bank profitability in the past. These trends, coupled with the subdued economic environment already prior to the pandemic, implied that average return on equity (RoE) of EU banks has declined to 5.9% in Q4 2019. Many banks did not earn their cost of equity. **The COVID-19 pandemic is expected to have a further significantly adverse impact on profitability.** The expected asset quality deterioration and credit losses in the economic downturn will result in increasing impairments and provisioning needs, and strongly increasing cost of risk. Persisting underlying weaknesses, such as low interest margins and lending margins, are expected to exacerbate in an even longer for lower interest rate environment and impact net interest income (NII). Profitability already markedly declined to 1.3% RoE in Q1 2020, mainly driven by substantially increasing cost of risk and decreasing operating income.

As regards banks' lending, non-financial corporate lending has increased in Q1 2020, driven by the drawing of committed credit lines and new lending under public loan guarantee schemes. Going forward, new lending as a key source of banks' revenues might decline amid the economic contraction. Banks whose loan portfolios could experience reduced loan origination volumes might not only suffer from NII, but also from reduced net fee and commission income. **As revenues and profitability are expected to be under mounting pressure in the crisis, the need to address overcapacities and advance with banking sector consolidation has become more pressing.** Online banking and technological solutions have thrived in the crisis, and many banks will face additional needs to embark on even more ambitious but costly digitalisation strategies, which may additionally impact profitability.

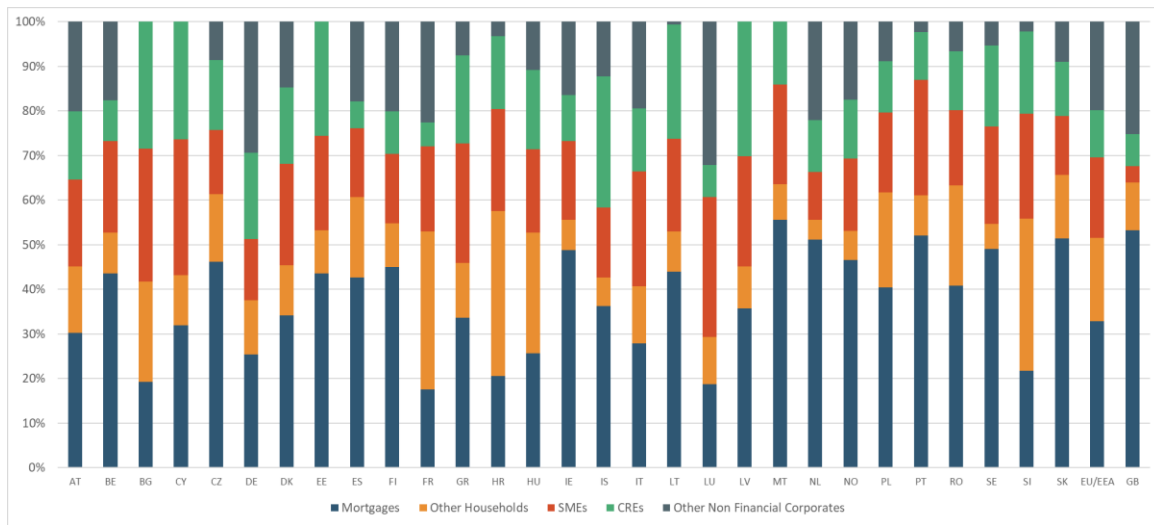
BOX: Asset quality and credit risk in the EU banking sector

Banks have significantly improved their asset quality in recent years. Since their peak in Q4 2014 (at 7.1%), the volume of non-performing loans (NPLs) has more than halved to 3.1% in Q4 2019¹⁸. While this progress helped banks to enter the COVID-19 crisis in a better state than it would have been the case some years ago, **the impact of the crisis on asset quality is a key concern.**

Banks' asset composition is expected to determine the extent to which they will be affected by the crisis. Some sectors are expected to be hit harder than others, though predictions on the intensity of the impact on different sectors are difficult. In the past few years, banks have on EU average significantly increased their exposures towards potentially riskier portfolios, such as towards small and medium-sized enterprises (SMEs) or consumer financing. Exposures towards these segments grew by 8% and 9%, respectively, in 2019 alone. Total non-financial corporates (NFC) exposures account for around 36% of the total loan portfolio of EU banks in Q4 2019. A breakdown of NFC exposures shows that, on average, around **57% of EU banks' loans to NFC were towards the sectors most affected by the pandemic, i.e., accommodation, food services, manufacturing, transport and storage, and electricity.** These exposures are particularly high in Central- and Eastern Europe, and some countries more affected by the previous GFC, which is not least driven by their high share of SME lending.

¹⁸ EU/EEA ex UK

Distribution of loans and advances of EU banks by segment and country (Q1 2020)¹⁹



Source: EBA supervisory reporting data

To address eminent asset quality concerns, the EBA and the European Commission clarified that there is no strict automatism in the application of IFRS 9. Thus, **the temporary inability of a borrower to repay debt because of the pandemic should not trigger an automatic increase in expected credit loss (ECL) provisions**. Similarly, the assessment of a significant increase in credit risk (SICR) should be based on the remaining lifetime of the loan and not on sudden increases in the probability of default due to COVID-19 or on the application of a private or statutory moratoria.²⁰ **The EBA has issued Guidelines on legislative and non-legislative loan moratoria which clarify that generalised payment delays due to public or industry-wide moratoria do not lead to an automatic classification of exposures as defaulted, forborne or unlikely to pay.**²¹ Almost all jurisdictions have introduced some form of moratoria. The EBA has extended the deadline for the application of the Guidelines to 30 September 2020. A majority of jurisdictions has indicated to apply extended deadlines for the use of moratoria.

Banks are facing growing NPL volumes and rising cost of risk amid the prospective macroeconomic deterioration. Asset quality is expected to be a key challenge for banks going forward. Q1 2020 results show the first signs of deterioration, with strongly increasing loan loss provisions. Guidance banks provided for the remainder of the year points to a further deterioration of asset quality. It is clear that only a part of the expected impact of the crisis on banks' loan loss provisioning has so far been incurred, with a bigger part still to come. **Banks and supervisors should also be cognizant of the temporarily nature of widely used legislative and non-legislative loan moratoria, which is expected to lead to further provisioning needs and impairments.** The decline in asset quality might also be accompanied by rising risk-weighted assets (RWA). Higher volatility on financial markets is an additional concern, and could further increase RWA.

As at Q4 2019, the gross carrying amount of sovereign (general government) exposures of EU banks stood at EUR 3.08tn. **Further increasing sovereign exposures in some countries most affected by the crisis while banking sector vulnerabilities may raise some concerns about a possible re-emergence of adverse feedback loops between banks and the sovereigns they are domiciled in, as it was observed in the GFC.** It is crucial that

¹⁹ Data is based on a sample of banks in each member state (182 European banks in total). The sample of banks is reviewed annually by competent authorities. The chart only includes loans and advances to non-financial corporates and households.

²⁰ See the [EBA statement on the application of the prudential framework regarding Default, Forbearance and IFRS9 in light of COVID19 measures](#) and the [European Commission's communication on the banking package to facilitate lending to households and businesses in the EU](#).

²¹ See the [EBA Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis](#)

the response of EU institutions to the pandemic is fully coordinated and not left to national solutions. In that respect, ample central bank funding opportunities, extensive asset purchases and the agreement to the EU Recovery Fund are nevertheless providing some reassurance. Already in Q4 2019, the share of banks' direct exposure towards the general governments of the sovereign they are domiciled in increased slightly to 44%, from 43% in the previous quarter. The largest share of sovereign exposures in Q4 2019 was measured at amortised cost (54%), followed by fair value through other comprehensive income (FVtOCI, 26 %) and fair value through profit and loss (FVtP&L, 14%, inclusive held for trading). Since variations in the market value of the exposures under the last two categories are immediately reflected in equity, banks' capital levels might be significantly affected in periods of elevated spread volatility. Prudential filters for sovereign bond exposure were temporarily reintroduced in June 2020, which will mitigate the impact of the current volatility on financial markets on public debt.²²

2 NEW TECHNOLOGICAL DEVELOPMENTS

In a world of rapid technological developments and further increased usage of technology since the pandemic, risks related to ICT represent a key challenge for financial institutions. Work on cybersecurity, retail financial services, and depositor, preventing financial crime, consumer and investor protection issues has been emphasised in the Joint Committee's work programme for 2020.

A. CRYPTO-ASSETS AND DISTRIBUTED LEDGER TECHNOLOGY

Crypto-Assets are still fairly small in size, with a market capitalisation of around EUR 230bn globally as of end June 2020. Despite a marked rebound since the trough of December 2018, the market capitalisation of CAs remains well below its peak in the beginning of 2018 around EUR 700bn. There are more than 6,000 CAs outstanding but less than twenty have a market capitalisation that exceeds EUR 1bn. Bitcoin continues to dominate by far, representing more than 60% of the total market capitalisation, although its market share has decreased since the beginning of 2020.

EBA and ESMA believe that recent developments in relation to so-called stablecoins, i.e. crypto-assets that aim to keep their value stable by pegging or algorithms, require close monitoring. The largest stablecoin so far, Tether, accounts for around 3% of the total market capitalisation of CAs but has trading volumes that exceed Bitcoin. Other global stablecoins arrangements have the potential to reach a large scale quickly. They require close scrutiny because of the risks they could pose to financial stability and monetary policy, as well as in relation to money laundering and terrorist financing. The EBA and ESMA are actively cooperating with other global regulators on those matters, considering the cross-border nature of the phenomenon.

Several Distributed Ledger Technology (DLT) projects at banks and market infrastructure providers have been cancelled or postponed. However, there continue to be experiments around the technology, e.g. around the issuance and recording of traditional securities on DLT and custodial services for digital assets. Several companies have tested DLT to automate the issuance of debt and equity.

In January 2019, EBA and ESMA published, respectively, their Report and Advice on Initial Coin Offerings (ICOs) and CAs. EBA and ESMA advise EU policymakers to consider and address challenges relating to applying existing rules to CAs, and highlight important risks that exist to consumers, where CAs fall outside of the regulated scope established by current EU law, and call on EU policymakers to address these gaps. In December 2019, following

²² [Council of Europe banking package of exceptional rules to facilitate bank lending in the EU](#) (19 June 2020)

on the EBA and ESMA reports, the European Commission published a consultation for a crypto-assets framework. The consultation was open until March 2020, and is expected to be followed by a formal legislative proposal in Q3/Q4 2020.

EIOPA is currently monitoring the evolution of crypto asset investments in the insurance sector. Based on the information available at EIOPA, the materiality of these investments is currently very low. However, market developments such as global stablecoins or the entrance into force of a new regulatory framework such as the one envisaged by the European Commission could potentially trigger an increasing interest in these types of assets. Therefore it is important to continue to carefully monitoring these developments from a consumer protection and financial stability standpoint.

B. ICT- AND CYBER RELATED RISKS

The COVID-19 crisis is accelerating digital transformation at financial institutions, while at the same time increasing exposure to ICT related risk. **In particular, cyber risk has become increasingly relevant and its threats have become clearer during the ongoing COVID-19 outbreak, when most institutions and companies switched to remote working and increased digital activity, putting confidential data and ICT systems in the target of hackers and other cyber criminals.** An increased number of cyber-attacks has been reported on both individuals and healthcare systems since the start of the COVID-19 outbreak.²³ In the insurance sector, cyber risk was ranked by NCAs among the top six risks in terms of materiality, in the latest EIOPA qualitative Covid-19 questionnaire. In the banking sector, the EBA provided guidance²⁴ on the importance of digital operational resilience and called institutions to ensure business continuity, adequate ICT capacity and security risk management. The EBA also underlined importance of ICT security and security risk management in the crisis, and underlined the importance of compliance with the EBA Guidelines on ICT and security risk management, applicable from 30 June 2020, in guiding institutions and supervisors to focus on priority areas. While EU banks did not report any major cyber incidents or cyber-attacks, a rise in phishing attacks was noted in the crisis as due to the surge in the use of digital channels, and increasing malicious activity was observed targeting those channels and specifically online payments, cards and e-banking services. Overall, EU banks were able to adequately address such attacks and appropriately adopt mitigating actions.

In response to an increased number of cyber-attacks and cybersecurity risks amidst the COVID-19 outbreak, in March 2020, the European Commission, ENISA, CERT-EU and Europol issued a joint statement on COVID-19 related cyber threats.²⁵ In this statement, the entities commit to remain in close contact with one another to track malicious activities, raise awareness and help protect citizens.

Cyber risk challenges the insurance sector also on an underwriting perspective. With a view to contributing to building a strong, reliable, cyber insurance market, **EIOPA has published its strategy for cyber underwriting earlier this year²⁶.** This document outlines EIOPA's strategic priorities regarding the European cyber insurance market, where EIOPA identifies the following conditions as essential for a resilient cyber insurance market: (1) appropriate cyber underwriting and risk management practices and the corresponding promotion of such practices by supervisors; (2) adequate assessment and mitigation tools to address potential systemic and extreme risks; (3) a mutual understanding between policyholders and insurers of contractual definitions, conditions and terms; and (iv) an adequate level and quality of data on cyber incidents available at European level. Additionally, EIOPA's cyber underwriting strategy also specifies the actions to be taken by EIOPA as part

²³ EIOPA Financial Stability Report July 2020 (<https://www.eiopa.europa.eu/content/eiopa-financial-stability-report-july-2020>)

²⁴ <https://eba.europa.eu/eba-provides-further-guidance-use-flexibility-relation-covid-19-and-calls-heightened-attention-risks>

²⁵ "Joint fight against COVID-19 related threats", ENISA, 20 March 2020

²⁶ See "EIOPA Strategy on Cyber Underwriting", February 2020

of both its own supervisory and regulatory priorities and in its capacity as a facilitator and catalyst to provide advice on cyber insurance.

Regulatory developments concerning ICT

The growing interconnectedness across financial institutions and third parties make financial institutions' operations calls for a sound ICT and security risk management to achieve financial institutions' strategic, corporate, operational and reputational objectives. **In response to high ICT related risks and the importance of sound ICT and security risk management, EIOPA and the EBA have respectively developed and published guidelines on ICT and security risk management²⁷ in December 2019.** Respective EBA guidelines have already been published, EIOPA's similar guidelines are currently under finalization.²⁸ The Guidelines create a common consistent and robust approach for information security throughout member states for enhancing the convergence of supervisory practices in this area. The EBA Guidelines establish requirements for credit institutions, investment firms and payment service providers on the mitigation and management of their ICT and security risk.

Following up on the advice²⁹ submitted by the three ESAs in April 2019, the Commission published in December 2019 a consultation on a Digital Operational Resilience Framework for financial services.³⁰ The consultation concerns four main areas, namely (1) requirements on ICT and security risk management, (2) requirements on incident reporting, (3) digital operational resilience testing framework and (4) oversight of ICT third party providers. The Commission is currently analysing the feedback received and expects to have a draft legislative proposal in Q3/Q4 2020. The ESAs provided further targeted feedback and stand ready to support the work of the Commission as needed. In particular, ESMA provided feedback to the EC on specific areas of their envisaged Digital Operational Resilience Act, based on its direct supervision experience. EIOPA is also following European Commission's work on building a European Strategy for data with the aim of shaping the future policy agenda on the EU data economy.³¹

In the context of its direct supervision mandate on Credit Rating Agencies (CRAs) and Trade Repositories (TRs), ESMA has focused some of its supervisory activities on managing ICT and cybersecurity related risks. The ESMA supervision team has built a common framework to supervise IT and information security risk and engages actively with its supervised firms on these topics; particularly in 2019, ESMA streamlined the incident notification process (initially set for TRs since EMIR reporting start date in 2014) across the two industries, standardising a notification template and reporting frequencies. Specifically for TRs, more than two-thirds of the reported incidents have had an impact on the availability of derivatives details to EMIR data users. ESMA pointed out specific weaknesses in the internal control system of the respective TRs, engaged with them, requested remediation actions to be undertaken and monitored progress against them. For CRAs, ESMA conducted a cybersecurity review of a subset of EU-registered CRAs, with a view to gaining an understanding of their level of exposure to cybersecurity risk, considering also their implemented cybersecurity controls. For further details on these supervisory actions, please refer to ESMA Supervision Annual Report 2019 - Work Programme 2020³². In addition, ESMA Direct Supervision adapted its priorities considering the COVID-19 emergency crisis. It engaged

²⁷ <https://eba.europa.eu/eba-publishes-guidelines-ict-and-security-risk-management>

²⁸ https://www.eiopa.europa.eu/content/eiopa-consults-guidelines-information-and-communication-technology-security-and-governance_en?source=search

²⁹ <https://esas-joint-committee.europa.eu/Pages/News/ESAs-publish-Joint-Advice-on-Information-and-Communication-Technology-risk-management-and-cybersecurity.aspx>

³⁰ https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/2019-financial-services-digital-resilience-consultation-document_en.pdf

³¹ "A European Strategy for data", European Commission, 19 February 2020

³² https://www.esma.europa.eu/sites/default/files/library/esma80-199-332_confidential_supervision_ar_2019_wp_2020.pdf

with its firms and performed more bespoke and focused monitoring with a view to identify potential risks related to firms' business continuity and ability to fulfil their regulatory obligations.

Financial institutions often decide to outsource ICT activities to third-party providers, as outsourcing is a way to get relatively easy access to new technologies and to achieve economies of scale. This can pose challenges related to third-party risk management as well as consumer data confidentiality and protection. A potential concentration on a limited number of outsourcing providers can pose a systemic risk especially when the provided services relate to institutions' critical or important functions. In response to these risks, the ESAs are closely monitoring related developments and adjusting and developing Guidelines. From the banking side, the EBA has revised and updated its Guidelines on Outsourcing Arrangements³³, which also integrated the EBA Recommendations on cloud outsourcing³⁴, aimed to establish a more harmonised framework for credit institutions and investment firms subject to the CRD, as well as for payment and electronic money institutions. The Guidelines aim to ensure that financial institutions can apply a single framework on outsourcing for all their banking, investment and payment activities and services. Such a framework also ensures a level playing field between different types of financial institutions.

On the insurance side, EIOPA is currently finalising Guidelines on ICT security and governance³⁵ in order to properly reflect the importance for insurance undertakings of taking care of ICT risk management (including cyber risks). Also, EIOPA issued guidelines³⁶ to provide clarity to the market participants on how to apply the outsourcing provisions in the context of purchasing cloud services, while recognising that there is a potential systemic risk on the large transition to the cloud. Similarly, ESMA is developing guidelines on outsourcing to cloud service providers and has recently published a consultation for that purpose.³⁷ From a regulatory perspective, the purchase of cloud computing services falls within the broader scope of outsourcing, which is the framework to manage these risks.

The growing use of Big Data and Advance Analytics (BD&AA), including machine learning, across the financial sector is expected to rapidly evolve in the next few years. As highlighted in a 2018 JC Report, benefits of these technologies include more tailored products and services, improved fraud analytics and efficiency of internal organisational procedures. Risks include the potential for errors in BD tools, which may lead to incorrect decisions by financial service providers. The ESAs have continued working on this area at sectorial level and are monitoring related developments, such as the AI Ethical and Trustworthy Guidelines developed by the European Commission's High Level Expert Group on AI³⁸ as well as the European Commission's White Paper on AI³⁹. The EBA in January 2020 published a report⁴⁰ on the recent trends of BD&AA in the banking sector and identified four key pillars - data management, technological infrastructure, organisation and governance and analytics methodology – necessary to support the roll-out of Advanced Analytics, along with a set of 'elements of trust'.

With the fast digital transformation and the increased use of big data and cloud computing, cyber threats are a source of concern, finding collective solutions to deal appropriately with these threats calls for an appropriate framework for cyber risk assessment. According to the results of EIOPA's qualitative exercise on cyber risk announced in the Spring 2018 JC Report on Risks and Vulnerabilities in the EU Financial System, the European cyber insurance industry is growing rapidly with a 72% increase in gross written premium between

³³ <https://eba.europa.eu/eba-publishes-revised-guidelines-on-outsourcing-arrangements>

³⁴ <https://eba.europa.eu/regulation-and-policy/internal-governance/recommendations-on-outsourcing-to-cloud-service-providers>

³⁵ <https://www.eiopa.europa.eu/content/consultation-proposal-guidelines-information-and-communication-technology-ict-security-and-en>

³⁶ <https://www.eiopa.europa.eu/content/guidelines-outsourcing-cloud-service-providers>

³⁷ <https://www.esma.europa.eu/press-news/esma-news/esma-consults-cloud-outsourcing-guidelines>

³⁸ <https://ec.europa.eu/digital-single-market/en/news/ethics-guidelines-trustworthy-ai>

³⁹ https://ec.europa.eu/info/sites/info/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf

⁴⁰ <https://eba.europa.eu/eba-report-identifies-key-challenges-roll-out-big-data-and-advanced-analytics>

2017 and 2018, however insurers are currently not fully aware of the potential exposures to cyber risk.⁴¹ Against this background, EIOPA in January 2020 adopted in its strategic priorities to contribute to an effective and reliable European cyber insurance market.

⁴¹ [Cyber risk for Insurers – Challenges and Opportunities, September 2019](#)