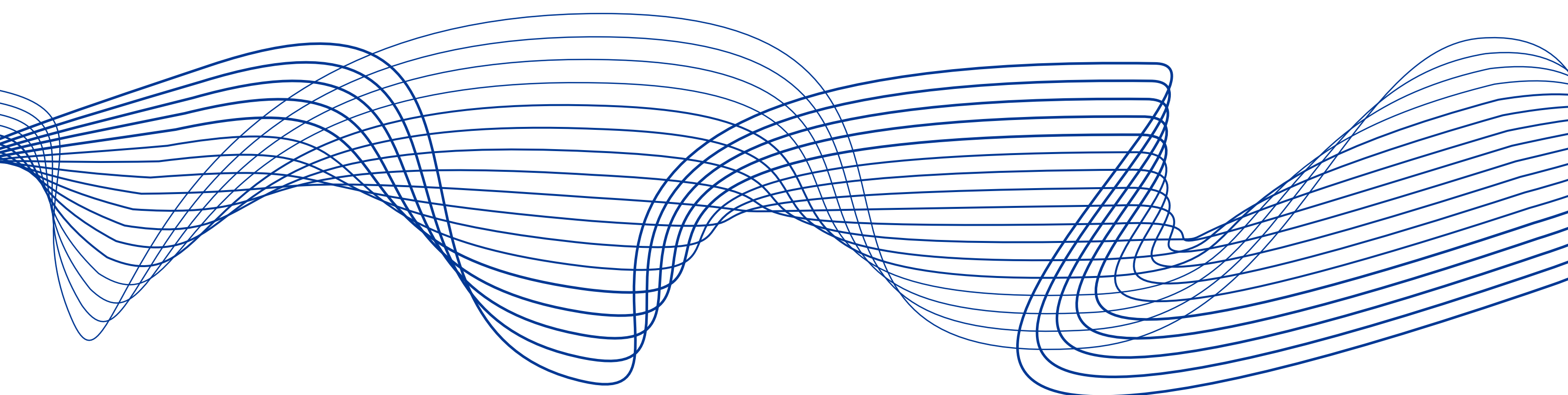
Annual Report

2020



ESRB
European Systemic Risk Board
European System of Financial Supervision

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Foreword

I am very pleased to present the tenth Annual Report of the European Systemic Risk Board (ESRB), covering the period between 1 April 2020 and 31 March 2021. The ESRB Annual Report is an important part of the ESRB's communication framework, which aims to ensure transparency and accountability towards co-legislators in the European Union and towards the European public at large.

The year 2020 was defined by the coronavirus (COVID-19) pandemic, which – beyond its shocking death toll – devastated economies across the globe and destroyed the livelihoods of many people. The financial system entered this crisis more resilient than it was prior to the global financial crisis. But losses in the real economy can translate into increasing fragilities in the financial system. Any such fragilities were liable to impair the functioning of the financial sector at a time when channelling liquidity to the economy was crucially important.

Against this background, the ESRB moved into "crisis mode" during April and May 2020, with policy meetings taking place virtually and at increasing frequency. Thereafter, it maintained its policy focus and took measures designed to prevent and mitigate the effects of the pandemic on financial stability.

Priority areas included (i) the implications for the financial system of loan guarantee schemes and other fiscal measures aimed at protecting the real economy; (ii) market illiquidity and its consequences for asset managers and insurers; (iii) the impact of procyclical bond downgrades on markets and entities; (iv) system-wide restrictions on dividend payments, share buybacks and other pay-outs; and (v) liquidity risks arising from margin calls.

The Annual Report describes in detail the measures adopted and sets out the related policy work undertaken by the ESRB. The banking sector has been a particular point of focus, as rising credit risk related to the economic impact of the pandemic will only become fully visible over time. The ESRB's work includes studying how to use capital buffers to ensure that banks can provide lending to the real economy throughout the economic cycle, as well as identifying how to build capacity – both in the public and private sector – to manage a possible rise in corporate insolvencies.

As the economic and financial consequences of the pandemic continue to evolve rapidly, this year's Annual Report sets out – exceptionally – the ESRB's assessment of risks up to June 2021. The main risks identified are (i) a potential rise in insolvencies in the private sector resulting from the deep global recession; (ii) the challenging macroeconomic environment for banks, insurers and pension funds; (iii) sharp repricing of risks and emergence of market illiquidity; (iv) large price corrections in the residential and commercial real estate markets; and (v) the possible re-emergence of sovereign financing risk. The ESRB's risk assessment also includes threats originating from system-wide cyber incidents, disruption to critical financial infrastructure, and climate change and transition risks, all of which remain critical for longer-term financial stability.

Over the last year the ESRB also followed up on work it had started prior to the pandemic. For example, with a view to developing a macroprudential framework beyond the banking sector, the ESRB responded to the European Commission's consultation on the review of the prudential framework for the insurance sector and the review of the rules governing alternative investment funds. The ESRB also gave its opinion on reports by the European Securities and Market Authority concerning different aspects of central clearing.

During the period under review, several dear and valued colleagues left their roles and new appointments were made. I would like to warmly thank Richard Portes, former Chair and Vice-Chair of the Advisory Scientific Committee (ASC), and Thomas Schepens, former Co-Chair of the Analysis Working Group (AWG), for their contributions to the work of the ESRB.

Moreover, I would like to warmly welcome Claudia Buch, Vice-President of the Deutsche Bundesbank, as Vice-Chair of the Advisory Technical Committee, Steven Cecchetti as ASC Vice-Chair and Emmanuelle Assouoan as AWG Co-Chair.

Christine Lagarde
Chair of the ESRB

Executive summary

The period under review, from the start of April 2020 to the end of March 2021, was dominated by the coronavirus (COVID-19) pandemic. The pandemic gave rise to an extreme economic shock affecting the global and EU economy and increasing risks to financial stability.

Following the onset of the COVID-19 pandemic, EU bodies, national governments, central banks, and supervisory and resolution authorities took unprecedented action to support the economy. In its initial response, the ESRB General Board identified and took measures in five priority areas: the implications for the financial system of guarantee schemes and other fiscal measures to protect the real economy; market illiquidity and its implications for asset managers and insurers; the impact of large-scale downgrades of bonds on markets and entities across the financial system; system-wide restraints on dividend payments, share buybacks and other pay-outs; and liquidity risks arising from margin calls. In the course of 2020, the ESRB supplemented its initial response to the crisis by examining whether there might be measures that would help banks finance the recovery. This work covered the use and availability of capital buffers and the macroprudential toolkit more broadly; the working of corporate insolvency procedures; the functioning of the bank recovery and resolution framework; and dealing with non-performing loans, including via transferring risks to other parts of the private sector where they can be absorbed better.

The ESRB has been regularly reassessing the risks to financial stability caused by the COVID-19 pandemic and the risk assessment described in this report therefore includes developments up until June 2021. It classified the risk of widespread defaults in the real economy as a severe systemic risk to financial stability in the EU (Risk 1); the risk originating from the difficult macroeconomic environment for banks, insurers and pension schemes as a severe risk to financial stability (Risk 2); the risk stemming from the re-emergence of sovereign financing risk and debt sustainability concerns as elevated (Risk 3); and the risk originating from instability and pockets of illiquidity in financial markets as elevated (Risk 4). Moreover, the ESRB deemed operational risks, such as those that might originate from a system-wide cyber incident, as elevated (Risk 5), while it concluded that systemic risks linked to finance-driven disruptions in critical financial infrastructures (Risk 6) and risks linked to climate change (Risk 7) should be monitored. To improve the monitoring of risks, in particular interconnectedness across the financial sector, the ESRB issued a Recommendation on the use of a legal entity identifier.[1]

The ESRB contributed to ensuring the resilience of the banking sector, notably in light of the expected impact of the COVID-19 crisis. On the priority topic of assessing the financial stability implications of public guarantee schemes and other fiscal measures, the ESRB sent a letter to the Economic and Financial Affairs Council encouraging cooperation and information exchange between national fiscal and macroprudential authorities,[2] as well as a subsequent Recommendation introducing minimum requirements for national monitoring and establishing a

[1] **Recommendation of the European Systemic Risk Board of 24 September 2020 on identifying legal entities** (ESRB/2020/12).

[2] **Letter to the Members of the ECOFIN regarding the implications of protecting the real economy.**

framework for reporting to the ESRB.[3] Based on this monitoring, the ESRB published a report on the financial stability implications of COVID-19 support measures in February 2021.[4] Another key initiative to keep the financial system resilient was the ESRB Recommendation on restricting distributions.[5] The Recommendation covered credit institutions as well as investment firms, (re)insurers, and central counterparties, and was extended in amended form in December 2020.

The ESRB continued to contribute to the coordination of macroprudential policy in the Union in the banking sector. In this respect, it issued an Opinion on a Belgian macroprudential measure based on Article 458 of the Capital Requirements Regulation (CRR), extending the period of application of their existing stricter measure targeting risk weights for residential real estate exposures.[6] The ESRB also issued an Opinion on a French macroprudential measure based on Article 458 of the CRR, extending the period of application of their existing stricter requirements for large exposures with regard to highly indebted large non-financial corporations. Another ESRB Opinion covered the extension of a Swedish stricter macroprudential measure under Article 458 of the CRR setting a risk weight floor for residential real estate exposures. The ESRB also issued a Recommendation on a Norwegian macroprudential measure setting a systemic risk buffer.[7] In addition, the ESRB recommended that a national measure not covered by the CRR or the Capital Requirements Directive (CRD) in Luxembourg, and the above-mentioned systemic risk buffer and Article 458 CRR measures for the residential and commercial real estate sectors in Norway, be reciprocated. More generally, the ESRB continued to monitor macroprudential measures adopted in the Union and to facilitate an exchange of views among its members on such measures.

Besides the measures taken in response to the COVID-19 pandemic, the ESRB continued to work on developing the macroprudential toolkit beyond the banking sector. In particular, the ESRB provided input to the European Securities and Markets Authority (ESMA) on a number of topics concerning central clearing, ways to enhance the macroprudential aspects of the Solvency II rules for insurers, and ways to enhance the Alternative Investment Fund Managers Directive (AIFMD)[8]. Regarding central clearing, the ESRB collaborated with ESMA on central clearing solutions for pension scheme arrangements, post trade risk reduction services with regards to the clearing obligation, and standards on reporting, data quality, data access and registration of trade repositories under European Market Infrastructure Regulation (EMIR Refit). The ESRB also provided an opinion to ESMA on the classification and subsequent recognition of third country central counterparties providing services in the European Union. Regarding the insurance sector, the ESRB submitted its response to the European Commission consultation on the review of

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[3] **Recommendation of the European Systemic Risk Board of 27 May 2020 on monitoring the financial stability implications of debt moratoria, public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic** (ESRB/2020/8).

[4] **ESRB report on the financial stability implications of COVID-19 support measures to protect the real economy.**

[5] **Recommendation of the European Systemic Risk Board of 27 May 2020 on restriction of distributions during the COVID-19 pandemic** (ESRB/2020/7).

[6] **Opinion of the European Systemic Risk Board of 18 February 2021 regarding Belgian notification of an extension of the period of application of a stricter national measure based on Article 458 of Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms** (ESRB/2021/1).

[7] **Recommendation of the European Systemic Risk Board of 4 December 2020 regarding Norwegian notification of its intention to set a systemic risk buffer rate in accordance with Article 133 of Directive (EU) 2013/36/EU** (ESRB/2020/14) and **accompanying report**.

[8] Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010 (OJ L 174, 1.7.2011, p. 1).

Solvency II. It included proposals for macroprudential tools covering capital, liquidity and cross-sectoral aspects set out in a report published in February 2020. It also stressed the need to continue ensuring that risks are properly captured under Solvency II and to establish a harmonised recovery and resolution framework across the European Union. Regarding investment funds, the ESRB submitted its response to the European Commission consultation on the review of the AIFMD. The response considered the suitability of the reporting framework and access to data for monitoring systemic risk, the need to operationalise existing macroprudential policy instruments, and the ongoing development of the macroprudential policy framework for investment funds.

The ESRB also provided adverse scenarios for the stress tests of the European Supervisory Authorities. Concerning the banking sector, the European Banking Authority (EBA) postponed until 2021 the stress test it had planned for 2020, for which the ESRB had already provided an adverse macrofinancial scenario in 2020. To reflect its most recent risk assessment, the ESRB provided a new scenario to the EBA in January 2021. Concerning the insurance sector, the ESRB provided an adverse scenario for the European Insurance and Occupational Pensions Authority 2021 EU-wide insurance sector stress test. Concerning money market funds, the ESRB provided ESMA with a recalibrated set of risk factors to ensure that the scenario would be more severe than any movement in the markets during March 2020, covering all risk factors.

As part of the ESRB’s accountability and reporting obligations, the Chair of the ESRB attended hearings before the Committee on Economic and Monetary Affairs of the European Parliament. At these hearings, the Chair provided Members of the European Parliament with first-hand information on the rationale for policy initiatives that had been adopted by the ESRB. This included the measures taken by the ESRB in response to the COVID-19 pandemic.

As in previous years, the ESRB organised a number of events to engage stakeholders in discussions on macroprudential policy. In view of the COVID-19 pandemic, these events, as well as the ESRB's regular meetings, took place virtually, using videoconferencing technology. As part of its mandate, the ESRB held its annual meeting with the Committee of European Audit Oversight Bodies and statutory auditors of EU-based global systemically important banks and insurers (G-SIFIs). The meeting, which is designed to inform the ESRB of sectoral developments or any significant developments at G-SIFIs, focused on the immediate and long-term impact of the COVID-19 pandemic on banks and insurers, on how the audit work may be affected by the pandemic, and on the role of auditors in the prevention of fraud in accounting. In view of the COVID-19 pandemic the ESRB did not hold its Annual Conference.

1 Overview of the main systemic risks in the European Union

The COVID-19 pandemic caused an unprecedented global public health crisis and a deep economic recession. The swift and massive support measures in the areas of monetary, fiscal and prudential policies helped contain the COVID-19 crisis, most notably by preserving favourable financing conditions, stabilising household income and providing liquidity support to the corporate sector. Nonetheless, economic activity contracted sharply in the second quarter of 2020. The economic impact of the pandemic has been highly uneven on account of the pronounced dispersion of value-added growth across sectors of economic activity and across Member States. The easing of lockdown measures towards the end of the second quarter facilitated a strong rebound in economic activity in the third quarter. The decline in real GDP in 2020 amounted to 6.9% in the euro area and 6.2% in the EU, largely driven by steep drops in private consumption (on the back of surging forced and precautionary savings) as well as investment.

While the rollout of vaccinations created an anchor for medium-term expectations, new waves of COVID-19 infections weighed on the economic recovery. The rebound in global demand and additional fiscal measures supported economic activity. But the second and third waves of COVID-19 infections and the concomitant tightening of containment measures weighed on economic activity in the fourth quarter of 2020 and the first quarter of 2021. While activity in the manufacturing sector has held up well, services activity – particularly in contact-intensive sectors – has been severely curbed, albeit to a somewhat lesser extent than in the spring of 2020. Short-term uncertainty has remained high on account of delays in the rollout of vaccinations and concerns about the effectiveness of vaccines with respect to COVID-19 virus mutations. To bridge the gap until the uncertainty recedes and the economic recovery is firmly entrenched, policies to support favourable financing conditions and an expansionary fiscal stance remain essential.

Significant uncertainty also prevails over the medium term, as the scope of permanent structural changes in supply and demand patterns remains unclear. These structural changes can be expected to have pronounced (positive and negative) effects for the cash flow and profitability of individual sectors and could possibly deepen existing economic divergences between Member States on account of the different country-specific composition of value added. Such structural changes may also have an impact on financial stability, as sectors that are temporarily but severely affected as well as sectors suffering from permanent scarring are subject to rising solvency pressures and corporate insolvencies. This could be exacerbated through cliff effects caused by a premature withdrawal of public support measures, notably in countries where concerns about limited fiscal space and high sovereign debt may constrain further fiscal support.

The main source of systemic risk in the EU originates from the impact of the pandemic on economic activity, which may give rise to increasing solvency pressures in the private sector and their feedback effects on the financial system. So far, swift and broad-based policy support measures have helped mitigate the decline in the cash flow of the corporate sector. But government support programmes are becoming more targeted and will be gradually phased out, not least depending on the perceived fiscal space in individual Member States. However, the longer the crisis lasts, the more pronounced the deterioration in non-financial corporation (NFC) balance

sheets will be. More companies will exhaust the scope for short-term cost-saving measures and deplete their cash buffers to compensate for the drop-in cash flow. At the same time, the NFC sector will be increasingly confronted with a rising debt burden – the dark side of the far-reaching reliance on large-scale liquidity-support measures in 2020. Research based on firm-level data suggests that the number of firms in distress could significantly increase. The dominance of liquidity support during the early phases of the crisis was reflected in a 6.7% nominal increase in the outstanding stock of loans of euro area monetary financial institutions to the NFC sector between end-2019 and end-2020. This increase was particularly pronounced in EU countries with elevated pre-crisis NFC sector debt levels, thereby compounding cross-country heterogeneity. On aggregate, a large part of the additional NFC sector borrowing in the second quarter of 2020 was used to increase cash buffers, implying that net debt in this quarter remained broadly stable. However, there was significant heterogeneity across various sub-sectors and countries, reflecting the highly asymmetric impact of the COVID-19 crisis, with net debt increasing substantially for the most affected sub-sectors. Moreover, companies in countries with elevated corporate debt levels experienced the largest loss in gross operating surpluses, reflecting the differentiated magnitude and sectoral composition of the economic shock. The success of the efforts to contain solvency pressures in the non-financial corporate sector will also determine the magnitude of the spill-over effects to the financial sector.

Banks in the EU have been relatively resilient during the COVID-19 crisis so far. Banks entered the pandemic in much better shape than at the start of the previous crisis. Importantly, they were able to continue lending to the real economy during the COVID-19 crisis and to accommodate the surge in loan demand in the second and third quarters of 2020, in part driven by public loan guarantees. As a result, lending to firms and households continued to grow in 2020, although lending activity slowed down in the second half of 2020.

However, many banks are facing a combination of rising asset-quality concerns, ongoing pressures on profitability, persistent structural problems and, in some countries, persistently high levels of legacy non-performing loans (NPLs). While NPL ratios have not yet risen, the volume of IFRS 9 stage 2 loans and restructured loans has started to increase, particularly for loans under moratoria and other public support schemes. Deteriorating asset quality and increasing provisioning needs would have an impact on the capital position of banks, which are already suffering from structural weaknesses, including low profitability. Most notably, the pronounced dispersion of provisioning practices across European banks could point to under-provisioning in some segments of the banking sector.

To address these imminent challenges, banks need to recognise and provision for new NPLs early on and enhance their internal NPL management and resolution capacity. Recognising losses at an early stage will be key for banks' balance sheet transparency. Recognising losses only when moratoria and guaranteed loan programmes expire would compound the risk of cliff effects, which could trigger an abrupt deleveraging process. It will be crucial to avoid repeating the errors made during previous crises, when NPLs accumulated for years on the balance sheets of European banks and constituted a significant drag on credit expansion and, concomitantly, economic growth.

Banks should avail themselves of all NPL resolution options. These include debt restructuring, the sale of NPLs and debt-for-equity swaps. For many banks this implies the need to significantly

enhance their organisational capacity for pursuing the most efficient NPL resolution policies. This is crucial, as a lengthy NPL resolution process can push viable but overindebted companies into the "gone concern" category, thereby creating additional welfare losses.

Efforts to prepare for a rise in NPLs also need to encompass measures outside the micro- and macroprudential domains. In particular, there is a need to reform insolvency and foreclosure frameworks and strengthen the capacity of the judiciary to avoid bottlenecks. Moreover, having deep and efficient secondary markets for NPLs would help accelerate the resolution process through sales of NPLs. The ESRB General Board, therefore, welcomed the Communication on NPLs released by the European Commission in December 2020.[9]

There is scope for improving the targeting of public support measures. Improved targeting of public support measures could increase their efficiency by avoiding support to (i) firms that are able to survive without support; and (ii) unviable firms that are eventually bound to fail even with public support. Looking forward, public support measures will need to shift from a defence of the pre-pandemic status quo to more targeted solutions that help viable companies to adjust to the post-pandemic world. Phasing out across-the-board measures is particularly warranted, when these delay the recognition of loan losses.

Policies to address the debt burden of viable but over-indebted firms became more important. The extraordinary public support measures adopted during the crisis were more effective in addressing liquidity shortfalls than in closing solvency gaps. EU governments have, therefore, started to complement liquidity support with solvency support measures, including through the injection of equity and quasi-equity into viable firms to contain the negative economic impact of rising private sector debt levels. Given that small and medium-sized enterprises (SMEs) have been harder hit by the crisis than larger companies, and that bank financing remains by far the dominant form of financing for SMEs, an increase in equity through the restructuring of debt on bank balance sheets may need to play a key role. A complementary avenue could consist of a (partial and targeted) conversion of public loan guarantees into equity under the strict condition of appropriate burden-sharing arrangements with other creditors. However, such an approach might require the need for governments to increase their capacity to monitor and assess the financial situation of corporates to avoid providing debt relief to unviable companies.

Furthermore, Member States should review and improve collateral enforcement procedures and strengthen the capacity of the judiciary to avoid bottlenecks. Reforms of foreclosure procedures could reduce the length of procedures, facilitate the transfer of collateral to creditors and accelerate the sale and valuation of collateral. Moreover, a reform of corporate insolvency and debt recovery legislation could facilitate the convergence of insolvency frameworks across the EU. A swift adoption of the proposed EU Directive on credit servicers, credit purchasers and the recovery of collateral[10] would facilitate extrajudicial collateral enforcement to reduce the cost of NPL resolution and remove obstacles for NPL sales to specialised credit purchasers. In addition, preventive restructuring frameworks could help companies with viable business models to repair their balance sheets. Developing preventive restructuring frameworks in accordance with the EU

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[9] Tackling non-performing loans in the aftermath of the COVID-19 pandemic, Communication from the Commission to the European Parliament, the Council and the European Central Bank, 16 December 2020.

[10] **Proposal for the EU Directive on credit servicers, credit purchasers and the recovery of collateral**.

Restructuring and Insolvency Directive of 2019 ahead of the transposition deadline could help avoid lengthy and costly court procedures and reduce a potential backlog in the insolvency courts.

The negative impact of a possible further increase in provisions on bank capital also compounds the need to step up efforts to boost operational efficiency, including through consolidation. Well-designed consolidation can help address the issue of overcapacity in retail banking by streamlining overlapping distribution networks.

Housing markets have proven resilient to the COVID-19 crisis, but vulnerabilities related to residential real estate have further increased. In 2020 house prices continued to rise, further compounding overvaluation risks that already prevailed in several Member States prior to the crisis. In some countries the increased overvaluation coincides with persistently high household indebtedness, which adds to the vulnerability of household balance sheets – especially if combined with high debt service-to-income ratios. The resilience of the residential real estate market has been supported by several factors, including the mitigating impact of public support measures on real disposable household incomes and the continuation of extremely favourable financing conditions.

Compared with the rather resilient residential real estate market, the commercial real estate market was severely affected by the COVID-19 crisis. Transactions in the commercial real estate market dropped by about 50% year-on-year in the last three quarters of 2020 on the back of falling demand from both domestic and international investors, with the drop in foreign demand more pronounced. Office and retail property prices were most severely affected, albeit with large cross-country variations. The retail real estate sector may be more severely hit by long-term behavioural change relating to a permanent increase in the market share of e-commerce. Moreover, while a significant number of staff will return to their offices as the pandemic recedes, remote working arrangements can be expected to play a much bigger role in the future. This could result in a “K-shaped” recovery, with higher quality properties which can be adapted to stricter health requirements being less affected. Towards the end of 2020, the price indices were affected by positive vaccine news, with the sectors most affected by the pandemic (i.e. retail and office) seeing the largest gains.

The market turmoil at the onset of the COVID-19 pandemic was a reminder of the risk of instability and pockets of illiquidity in financial markets. The outbreak of the COVID-19 pandemic led to an increase in investor risk aversion and triggered a broad-based repricing of risk and an increased demand for safe and liquid assets. The sharp fall in equity and bond prices at the beginning of the pandemic contributed to draining liquidity from other markets (“dash for cash”), thereby creating severe liquidity stress in some market segments. This was compounded by margin calls on derivative transactions, with ramifications for other markets. The combination of investor redemptions and deteriorating market liquidity of the assets held by investment funds created liquidity management challenges for some types of money market funds and corporate bond funds.

The pandemic-related turmoil in financial markets in March 2020 was followed by a remarkable rebound in asset prices. Following the market turmoil in March 2020 financial conditions eased on the back of swift and broad-based monetary and fiscal policy measures. Better-than-previously-forecast macroeconomic data, the increased credibility of policy support – including on account of the political agreement on the Next Generation EU (NGEU) package on 21

July 2020 – and the start of COVID-19 vaccinations have significantly improved investor sentiment. These factors have been reflected in a narrowing of credit spreads and rising equity market valuations. In the EU sovereign bond market yields have gradually declined, notwithstanding a perceptible increase in public debt-to-GDP ratios. At the same time, credit spreads in corporate bond markets have narrowed from their peak reached during the market turmoil in March 2020 and approached pre-pandemic levels across the rating spectrum. Following the rebound, corporate bond spreads have been well below the levels observed during the global financial crisis and the euro area sovereign debt crisis and appear to be tight in view of corporate earnings projections and the credit rating outlook, particularly in the high-yield segment of the corporate bond market.

Non-bank financial intermediaries have increased their risk-taking. The low interest rate environment continues to strengthen incentives for investors to increase their exposure to riskier assets to generate higher return. As inflows into euro area investment funds recovered in the course of 2020, non-bank financial intermediaries increased their exposures to lower-rated NFC debt, while also extending the duration of their NFC debt portfolios. This has raised their vulnerability to outflows, notably as valuation changes are passed to investors, who may reassess the credit risk of NFCs. While corporate bond funds temporarily increased their cash holdings following the market turmoil in March 2020, cash positions have subsequently declined to pre-crisis levels. The investment fund sector has increased its exposure to less liquid assets; thereby increasing the vulnerability to sizeable outflows should severe market tensions re-emerge.

The risk of a possibly abrupt correction in asset prices has increased amid rising concerns about an overvaluation of asset prices in some market segments. There is a risk that asset valuations, at least in some market segments, may not fully reflect the increase in corporate vulnerabilities in some sectors since the onset of the crisis, most notably rising leverage, falling profitability and impaired debt-servicing capacity. Moreover, besides reflecting improved macroeconomic prospects, the continued rise in prices of risky assets also reflects the search for yield in the "lower for longer" environment (Box 2) as well as expectations of continued extraordinary policy support.

Financial stability risks may also emanate from spillovers from rising long-term sovereign bond yields in the United States to Europe. The rapid recovery of the US economy, in part supported by its large fiscal stimulus package, led to an increase in inflation expectations, resulting in an upward shift in long-term sovereign bond yields. This served as a reminder of the sensitivity of asset pricing to shifts in expectations about the future course of monetary and fiscal policies in the United States. The risk of such shifts could be compounded by uncertainty about the Federal Reserve System's reaction function following the recent monetary policy regime change. Spillover effects from a further rise in long-term US sovereign bond yields could weigh on EU economic activity if the steepening of the yield curve were to perceptibly precede the economic recovery in the EU. Rising sovereign bond yields could spill over to other asset classes, including corporate bonds, possibly leading to a tightening in NFC sector financing conditions. In a similar vein, while the spillover from the rise in US sovereign bond yields in February and March to Europe has so far been moderate, a perceptibly-stronger-than-currently-observed rise in European sovereign bond yields could have an adverse impact on debt dynamics, most notably in countries that already entered the COVID-19 crisis with an elevated debt burden.

Box 1
Advisory Scientific Committee Insight on preparing for the post-pandemic rise in corporate insolvencies

An Advisory Scientific Committee (ASC) Insight[11] authored by Bo Becker and Martin Oehmke entitled "Preparing for the post-pandemic rise in corporate insolvencies" was published in January 2021. It provides an economic perspective on the trade-offs involved in dealing with a potential post-pandemic rise in corporate insolvencies. The authors argued that the main challenge in dealing with post-pandemic corporate insolvencies will be to distinguish between viable firms and those which, owing to structural changes in their economic environment, have become non-viable. Targeting of intervention measures is therefore essential. For viable firms, policy should aim to facilitate debt restructuring, relying on formal or informal insolvency procedures. For non-viable firms, policy should seek to facilitate the reallocation of resources to more productive uses.

The ASC Insight also noted a number of issues specific to the COVID-19 shock: (i) while small firms have been particularly affected by the COVID-19 shock, formal insolvency procedures often do not deal efficiently with small firms, in particular when it comes to restructuring; (ii) policymakers should be mindful of congestion in formal and informal insolvency procedures and policies should aim to increase institutional capacity; and (iii) given the dominant role of banks in financing the European NFC sector, the restructuring of NFC debt on bank balance sheets will be key for supporting viable but overindebted companies; this could possibly be supported by addressing regulatory and accounting disincentives to restructuring.

Box 2
Lower for longer – macroprudential policy issues arising from low interest rates

The macrofinancial environment continues to feature very low or negative nominal interest rates; this low interest rate environment (LIRE) and the structural changes induced by it can generate risks which may endanger financial stability and require macroprudential action and mitigation.

Looking ahead, the forces underpinning the LIRE are consistent with a scenario where interest rates and inflation remain low for a long time. Since the 1980s, changes in the structure and functioning of the real side of the economy have reduced both the natural (or neutral) equilibrium real rate of interest R* and the risk premium component of nominal interest rates.[12] After the global financial crisis (GFC), regulatory changes and more risk-averse positioning by financial institutions further boosted the demand for safe assets, further compressing term premia and lowering inflation expectations and real and nominal interest rates. The “secular stagnation” hypothesis

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[11] ASC Insights are written by one or more members of the ASC and briefly present topics of macroprudential relevance for the ESRB General Board.

[12] During the “Great Moderation”, financial factors such as the deregulation of the financial and credit markets, excessively expansionary monetary policies and overly optimistic expectations about future macroeconomic and financial prospects may have favoured an excessive increase in the supply of funds, a compression of risk premia and a reduction of real and nominal interest rates.

encompasses many of the demand and supply factors that led to structural imbalances between the demand for investment and the supply of saving at a global level and consequently to lower global equilibrium real rates.[13] A "financial cycle" view of the developments following the GFC balance sheet recession may be consistent with the "lower for longer" scenario.[14]

Furthermore, research suggests that the COVID-19 shock may strengthen the downward trend of nominal and real interest rates and increase the probability and persistence of a low for long scenario, transforming it into an "even lower for even longer" one. It is still difficult to predict the overall effects of the COVID-19 shock on the macroeconomy and interest rates. However, most analyses that use very long time-series to trace back to episodes similar to those of the COVID-19 pandemic, or model the economic interactions driven by the pandemic shock and policy responses in a more structured way, conclude that the COVID-19 shock has added further downward pressure on market real interest rates and the natural real rate of interest.[15]

Over the years following the financial crisis some regulatory reforms have attempted to increase the resilience of financial institutions;[16] the protracted duration of this environment has continued nonetheless to put a strain on financial institutions and generate risks that may endanger financial stability. Risks related to the sustainability of sectoral business models have increased since 2016 for banks, insurers and pension funds, remaining generally high. Against the background of the LIRE, broad-based risk-taking has intensified between 2016 and 2021 in the banking and investment fund sectors and continues to pose high risks to financial stability across all financial sectors (banks, ICPFs, investment funds, financial markets). Looking ahead, as a consequence of the LIRE and the pandemic, we can expect a further significant increase in indebtedness in certain segments of the household, NFC and government sectors, which could cause difficulties in the event of a shock to risk premia. Structural changes in the financial system may also present risks in the LIRE; a more market-based financial system provides benefits through diversified sources of funding of the economy, but can also bring higher interconnectedness, higher sensitivity to market risks and higher vulnerability to liquidity shocks.

The analysis identified four main areas of concern that may require macroprudential action mitigating the risks arising in the LIRE. These four areas are: profitability and resilience of banks; indebtedness and viability of borrowers; systemic liquidity risk; and sustainability of the business models of insurers and pension funds offering longer-term return guarantees.

The LIRE has aggravated existing structural problems in the EU banking sector, such as overcapacity and cost inefficiencies. The identification of unviable banks and the timely management of viability issues, through intervention or orderly exit, is therefore of primary

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[13] Factors behind the fall in R* include: (i) demographic developments, such as the increase in life expectancy and the decline in population growth; (ii) the falling (relative) price of investment goods; (iii) the slower pace of technological innovation; (iv) the increase in wealth and income inequality; (v) rising savings rates in developing countries and the consequent increase in demand for assets issued by advanced economies; (vi) the evolution of the consumption/wealth ratio.

[14] The "financial cycle" view would normally expect interest rates to go back to "normal" levels once balance sheet restrictions are resolved.

[15] See Jordà et al. (2020), Holston et al. (2017), Holston et al. (2020), Leduc and Liu (2020), and Kozlowski et al. (2020).

[16] Basel III and IFRS 9 were implemented after the GFC to raise the capabilities of the banking sector to withstand adverse shocks, while the Bank Recovery and Resolution Directive and the establishment of the Single Resolution Board were aimed at facilitating an orderly exit from the banking sector. A successful transposition of EIOPA's Opinion on the 2020 Review of Solvency II into legislation would reduce the risks to the insurance sector posed by the LIRE. For pension funds, the implementation of the IORP II Directive and a transfer of risk to customers reduces the risks posed by the LIRE. Finally, for investment funds, strengthened monitoring and stress-testing guidelines have been implemented since the GFC.

importance given the central role of the banking system in the EU economy. In this regard, the ESRB would propose: removing existing barriers to the efficient functioning of the market and reconsidering the framework for dealing with distressed banks; removing potential obstacles to banking sector consolidation; reconsidering incentives for banks' digital transformation and improvement of cost efficiency; reconsidering legal restrictions on the application of negative interest rates to deposits.

The level of indebtedness across the real economy and financial system has risen considerably against the background of the LIRE and is expected to increase further because of the COVID-19 shock. To address the risks stemming from this excessive indebtedness, the ESRB proposes: building up a strong credit and debt monitoring capacity to target the most dangerous levels and trends of indebtedness and monitor vulnerability to shocks; introducing borrower-based measures targeted at households; introducing measures for ensuring the financial viability of corporates and enabling policies to be targeted towards restructuring viable businesses and conducting efficient insolvency procedures.

The LIRE and the LIRE-induced structural changes have made the financial system more sensitive to market shocks and systemic liquidity risks through three broad channels of transmission: endogenous build-up of risk, liquidity illusion and interconnectedness within the financial system. The systemic liquidity tensions experienced by financial intermediaries during the March 2020 turmoil seem to confirm this. In this area, the ESRB proposes: improving liquidity reporting and encouraging a more efficient use of already available data; implementing system-wide liquidity stress tests; and moving towards macroprudential liquidity requirements. Moreover, to the extent that structural change involves a move of traditional banking activities and related risks to non-bank financial intermediation, the LIRE requires the development of macroprudential policy beyond banking and more activity-based regulation; the lack of these instruments leaves in fact the macroprudential toolkit ill-equipped to deal directly with risks related to structural changes in the financial system.

The protracted LIRE has weakened the resilience of insurers and occupational pension funds offering longer-term guarantees.[17] For both these two sectors, if asset prices were to fall abruptly, the higher net present value of liabilities given low interest rates would coincide with a fall in the value of assets, i.e. with a "double hit" scenario. In this regard, the ESRB would invite relevant stakeholders to consider the measures proposed in ESRB (2016)[18] and would welcome the adoption of EIOPA's Opinion in the context of the review of Solvency II.[19] For occupational pension funds, the forthcoming review of the IORP II Directive should take into account the issues raised by the ESRB on the sustainability of pension funds in a LIRE.

Some existing macroprudential tools have been used to address financial stability risks in the LIRE.

While the LIRE is mostly associated with structural risk factors, it can also amplify cyclical developments. So far no EU Member State has explicitly introduced macroprudential instruments

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[17] The protracted LIRE presents significant risks for insurers, because of their high stocks of liabilities providing a guaranteed return, particularly in the life insurance business. For pension funds, the most significant risk posed by the LIRE stems from defined benefit liabilities.

[18] **Macroprudential policy issues arising from low interest rates and structural changes in the EU financial system,** ESRB, 2016.

[19] **Opinion on the 2020 review of Solvency II,** EIOPA, December 2020.

(i.e. countercyclical capital buffers (CCyBs), systemic risk buffers (SyRBs), sectoral systemic risk buffers (SSyRBs), or borrower-based measures (BBMs)) to specifically address systemic risks related to the LIRE; however, several macroprudential authorities in the EU have addressed cyclical risks using CCyBs, considering these risks as arising from cyclical forces potentially amplified by the LIRE. With a view to complementing the use of CCyBs, macroprudential authorities should consider implementing either system-wide or targeted capital buffers (i.e. SyRBs and SSyRBs) to counter the build-up of non-synchronised imbalances in specific market segments that can contribute to increasing systemic risk in the banking sector. Finally, the LIRE may require adjustments to the design and calibration of BBMs to reflect the debt-servicing capacity of households and account for the expected increase in household indebtedness, while considering BBMs' implications for households' market access and their impact on inequality.

2 ESRB response to the COVID-19 pandemic

The initial impact of the COVID-19 pandemic on the financial system was predominantly on the financial markets, with large falls in asset prices and stresses in some markets observed in March 2020 (see Section 1). Accordingly, many of the measures the ESRB took to prevent and mitigate the effects of the COVID-19 pandemic on financial stability in the Union concerned market-based finance and the non-bank financial sector. The measures were taken in the areas of market illiquidity and its implications for asset managers and insurers; the impact of large-scale downgrades of bonds on markets and entities across the financial system; and liquidity risks arising from margin calls. Regarding the banking sector, the ESRB's initial response was designed to help avert a credit crunch. Measures covered the implications for the financial system of guarantee schemes and other fiscal measures to protect the real economy as well as system-wide restraints on dividend payments, share buybacks and other pay-outs. In the course of 2020, the ESRB supplemented its initial response to the crisis with an examination of whether there might be measures that would help banks finance the recovery. This work covered the use and availability of capital buffers and the macroprudential toolkit more broadly; the working of corporate insolvency procedures; the functioning of the recovery and resolution framework; and dealing with NPLs, including by transferring risk to other parts of the private sector where they can be absorbed better. This section describes these measures in more detail.

2.1 Implications for the financial system of guarantee schemes and other fiscal measures to protect the real economy

To support the real economy during the COVID-19 pandemic, governments have provided swift and unprecedented support packages. Fiscal measures such as public guarantees on loans and direct grants have helped contain the impact of the pandemic and prevent a loss of viable businesses. Loan moratoria schemes have provided liquidity support during the crisis. Monetary policy measures have secured favourable financing conditions. Together with supervisory measures, these policies have been supporting the real economy. Given the high degree of integration of Member States' economies, these national measures can also have significant implications for EU-wide financial stability, in particular positive or negative spillovers and cross-border and cross-sectoral implications. Securing financial stability therefore requires close monitoring and cooperation between national macroprudential authorities and national fiscal and supervisory authorities. Against this background, the ESRB considers it important to put in place a comprehensive mechanism for monitoring the EU-wide financial stability implications of the fiscal measures taken by national authorities to protect the real economy in response to the COVID-19 pandemic.

In April 2020 a work stream under the auspices of the Steering Committee was created to develop work on this topic and ensure that relevant information could be gathered and shared among the authorities. On 14 May 2020 the ESRB addressed a letter to the national fiscal authorities of the European Union, encouraging closer dialogue from an early stage between the

relevant authorities at the national level.[20] On 27 May the ESRB issued Recommendation ESRB/2020/8.[21] It recommends that national macroprudential authorities: (A) monitor the design features and uptake of COVID-19 related measures and their implications for financial stability, and (B) report these design features and the uptake of measures to the ESRB (see Box 3 below). The data gathered under Recommendation B encompass all fiscal measures relevant to financial stability, providing the most complete picture possible of the size, uptake and design features of fiscal measures taken by ESRB member countries.[22]

Box 3

ESRB Recommendation on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic (ESRB/2020/8)

Recommendation ESRB/2020/8 recommends that national macroprudential authorities monitor COVID-19 related measures and their implications for financial stability, as well as report on their design features and uptake to the ESRB. Such monitoring requires close cooperation between national macroprudential, fiscal and supervisory authorities. The Recommendation is composed of two sub-recommendations:

Recommendation A – National monitoring of financial stability implications of measures taken to protect the real economy in response to the COVID-19 pandemic

National macroprudential authorities are recommended to monitor and assess the financial stability implications of COVID-19 related measures taken by their Member States to protect the real economy, such as debt moratoria, and public guarantee schemes and other measures of a fiscal nature. For this purpose, it is recommended that national macroprudential authorities monitor the design features and uptake of these measures, as well as their possible implications for financial stability using key indicators, such as the following.

(a) Design features and uptake of measures: in particular the volume of the measures; types of financial support (such as debt moratoria, loan guarantees, subsidised loans, or equity participations); beneficiaries and eligibility conditions; duration; and information on the use of the measure (e.g. volume and number of applications received and accepted).

(b) Implications for financial stability: in particular the flow of credit to the real economy; the liquidity, solvency and indebtedness of the non-financial sector; and the financial soundness of the financial

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20 **ESRB letter to Governments on the financial stability impact of the national guarantee schemes and other fiscal measures.**

21 **Recommendation of the European Systemic Risk Board of 27 May 2020 on monitoring the financial stability implications of debt moratoria, public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic** (ESRB/2020/8).

22 Recommendation (B) requires three reporting templates to be submitted to the ESRB, with the first submission due by 31 July 2020 and the others submitted quarterly. These three templates cover the fiscal measures' features (template 1), their uptake (template 2) and include a qualitative questionnaire (template 3). While the first two templates gather information on the fiscal measures taken, the third collects information on the main qualitative concerns of the authorities regarding the implications of the measures. Data from template 1 is also published on the ESRB's website: **Policy measures in response to the COVID-19 pandemic**.

institutions, including observed and expected trends in NPLs and the ability to meet liquidity and capital requirements.

Recommendation B – Reporting by national macroprudential authorities to the ESRB

National macroprudential authorities are recommended to regularly report to the ESRB the information necessary for the ESRB to monitor and assess the implications of the national measures referred to in Recommendation A for financial stability in the Union. This should include information necessary to monitor and assess the cross-border and cross-sectoral implications of the measures, as made available to national macroprudential authorities through existing reporting arrangements with financial institutions and any additional information made available by fiscal authorities and other government agencies engaged in the delivery of the measures.

On 15 December 2020 the ESRB General Board approved a Report on the financial stability implications of COVID-19 support measures to protect the real economy.[23] Released in February 2021, the report summarises the work developed by a working group established in June 2020 under the auspices of the General Board. It shows that the fiscal response designed to support the real economy has stabilised lending and that the financial system has continued to function. The report also identifies priorities for future policy in terms of the design and duration of the fiscal measures, enhanced transparency and reporting, and preparedness for potential adverse scenarios. The key findings of the report are set out below.

i) The financial system has continued to provide funding to the real economy and losses in banking books have been contained. Yet the pandemic has intensified risks and vulnerabilities in the real economy. In its initial phase, the sectors and households most affected by the pandemic were under severe liquidity stress. However, prompt action taken by governments has provided crucial relief. The fiscal measures have indirectly protected the financial sector from the impact of the pandemic and ensured the continued provision of financial services: up to 35% of new bank lending to corporates during the pandemic has been subject to those measures. Fiscal measures have thus helped to prevent the loss of viable businesses, and moratoria schemes have provided liquidity support. In addition, monetary policy has played a supportive role. Furthermore, regulators have used the existing regulatory flexibility and relaxed bank balance sheet constraints.

ii) Differences in fiscal measures reflect, to a large extent, differences in the exposure of countries to the pandemic. For example, countries hit harder by the pandemic tend to have larger programmes with greater uptake, while countries with a higher share of employment in vulnerable sectors rely more on direct grants than on public guarantees. The uptake of moratoria is positively correlated with the pre-crisis debt levels of NFCs and households. However, the observed heterogeneity also reflects differences in fiscal space and a potential lack of policy coordination.

iii) The longer the crisis lasts and the weaker the economic recovery, the greater the risk that losses in the non-financial sector could spill over into the financial sector. While there is a high degree of uncertainty, an adverse scenario can't be ruled out. There could be adverse feedback loops to the real economy if banks were to deleverage to meet capital requirements

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[23] ESRB report on the financial stability implications of COVID-19 support measures to protect the real economy.

imposed by regulators or markets. Cross-border banking activities could be particularly severely affected by any deleveraging. Eventually, corporate insolvencies might increase and banks could face higher losses. Timely action is therefore required to address evolving vulnerabilities and to increase balance sheet transparency. If banks' balance sheets were to remain impaired for an extended period after the crisis, economic recovery and financial stability would be at stake.

Drawing on these key findings, the ESRB has identified several domains which require attention from policymakers, in particular in the areas of policy design and coordination, debt monitoring, balance sheet transparency, and preparedness.

Avoiding cliff effects. In timing the withdrawal of public support, there needs to be a balance between the risk of short-term cliff effects, which could arise if measures are withdrawn too early and at the same time, and unintended longer-term distortions to necessary structural changes in some economic sectors. The scale of potential future solvency problems depends on how the pandemic evolves, how robustly the different sectors perform and how appropriate policy responses are.

Targeting fiscal measures. Over time, fiscal measures will have to be applied in a more targeted way. It will be particularly important to balance liquidity versus solvency measures. In addition, authorities and governments need to promote policies that enhance sustainable economic growth.

Monitoring private debt sustainability. Elevated debt levels for households and firms might become unsustainable if the economic crisis lasts longer than expected and the income and profitability of borrowers cannot keep pace with the debt burden. This could in turn lead to a significant accumulation of losses in the financial sector.

Preparing for a scenario with increased distress in the corporate sector. It is important that the institutions responsible for administering restructuring and insolvency procedures do not reach capacity constraints and that they do everything they can to avoid value destruction. Addressing the issue of NPLs as early and decisively as possible is essential to ensuring that the financial system is strong and stable and supports sustainable growth.

Enhancing financial institutions' balance sheet transparency and upgrade reporting. Continued access to credit might have a stabilising effect in the short term, but extending loans to unviable firms may come at the expense of structural change, which would be delayed, and may entail a more painful adjustment over the longer term. Timely and prudent recognition of credit risk is necessary to increase the transparency of banks' balance sheets.

Coordinating policies across policy areas and countries. Addressing potential solvency issues will require policy responses that are coordinated across several policy areas, including insolvency legislation, labour and social policies, and competition policy.

The ESRB continued to monitor the financial stability implications of COVID-19 related measures during the first quarter of 2021. The work focused on the potential risks to financial stability that could arise from insufficient reflection of macroeconomic risks, including the risk of a significant increase in corporate defaults and in banks' risk assessments and from a premature withdrawal of fiscal support. In order to better monitor these risks, the reporting framework under Recommendation ESRB/2020/8 was revised. It now also collects information on how the national

authorities plan to address solvency pressures in the corporate sector, e.g. by adjusting support measures or encouraging early debt restructuring processes.

2.2 Market illiquidity and implications for asset managers and insurers

The sharp fall in asset prices observed at the onset of the coronavirus pandemic was accompanied by large redemptions from some investment funds and a deterioration in financial market liquidity. Market conditions had stabilised following actions taken by central banks, supervisory authorities and governments in the EU and globally. This helped alleviate the risk of further redemption pressures, in particular given the high level of uncertainty regarding the macroeconomic outlook.

Against that background, the ESRB General Board adopted a Recommendation to ESMA to coordinate a supervisory exercise with investment funds.[24] The exercise had the objective of assessing the state of preparedness of certain segments of the investment fund sector to redemption pressures, further declines in market liquidity or increased valuation uncertainty, while also considering steps that could improve that preparedness. The scope of the exercise covered investment funds with large exposures to corporate debt and investment funds with large exposures to real estate, which the ESRB deemed particularly vulnerable given their liquidity profile. The Recommendation and ESMA's response are described in more detail in the ESRB's Macroprudential Review.

The ESRB also highlighted that liquidity management tools available to fund managers can help to mitigate "first-mover advantage" dynamics and the risk of asset fire sales. Individual fund managers often have a range of tools at their disposal to use in such situations, although the availability of such tools has not yet been harmonised at EU level.[25] These tools include, for example, swing pricing and redemption gates. Some fund managers employed these tools in the light of the deterioration in market liquidity and rising redemption requests observed at the onset of the coronavirus shock. In addition to helping to protect investors, the timely use of liquidity management tools also reduces the risk of forced sales of less liquid assets in periods of stress, helping to guard against the adverse system-wide effects stemming from fire sale dynamics across the financial system. To this end, the ESRB General Board emphasised in a public statement[26] that it is important that liquidity management tools are used in a timely manner, especially by funds that invest in less liquid assets or assets that become temporarily illiquid and have short redemption periods.

The ESRB also stressed that the monitoring of liquidity risks in the insurance sector needs to be improved. EIOPA and national insurance supervisors had considered developing a liquidity monitoring framework for (re)insurers in response to the COVID-19 pandemic. In a communication

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[24] **Recommendation of the European Systemic Risk Board of 6 May 2020 on liquidity risks in investment funds** (ESRB/2020/4).

[25] See Section 3.2.2, "Enhancing the Alternative Investment Fund Managers Directive".

[26] **Use of liquidity management tools by investment funds with exposures to less liquid assets**, ESRB, May 2020.

to EIOPA[27], the ESRB strongly encouraged EIOPA and its members to finalise and operationalise that framework promptly. Beyond the need to address risks and vulnerabilities stemming from the COVID-19 pandemic, the ESRB reiterated that the Solvency II review provides an opportunity to better enable supervisors to address liquidity risk in the insurance sector, including by enhancing Pillar 2 provisions so that supervisors can require individual (re)insurers with a vulnerable liquidity profile to hold a liquidity buffer.

2.3 Impact of large-scale downgrades of corporate bonds on markets and entities across the financial system

The economic disruptions caused by the coronavirus pandemic posed the risk of a wave of credit rating downgrades in the corporate bonds sector. Credit rating downgrades of BBB-rated bonds or entities to the high yield universe can create cliff effects – which may become problematic as BBB-rated bonds represent more than half of the investment grade universe[28] – and trigger sales. For example, index-tracking funds would need to sell those issuers' bonds quickly if they were removed from the reference basket. Other investment funds, banks, pension funds and insurers may decide, or be forced, to sell – for example because of their risk limits, because of their investment mandates, or to protect their solvency positions as they would do when facing credit quality deterioration in their portfolios. Such sales could result in large spread increases, given the limited absorption capacity of the high yield market, leading to mark-to-market losses for investors and higher funding costs for corporates. These issues are discussed in a note that the ESRB published in May 2020.[29]

The ESRB General Board coordinated a top-down scenario analysis to assess the impact of large-scale corporate bond downgrades across all parts of the financial sector. The ESRB saw a need to better understand the effects of credit rating downgrades such that they would not cause systemic risk by impairing the functioning of financial markets. The exercise coordinated by the ESRB was conducted in cooperation with the European Supervisory Authorities and the European Central Bank and covered banks, investment funds, insurers, pension funds and financial markets. It focused on a sensitivity analysis to evaluate the possible repercussions of large-scale corporate bond downgrades and potential fire sale impacts under a range of hypothetical scenarios and assumptions. The results of this analysis show that in a severe downgrade scenario with a corresponding yield shock, EU financial institutions would suffer €150-200 billion market losses stemming from repricing effects (when considering bonds issued by financial and non-financial corporations). Losses due to assets sold at distressed values in the context of very low market liquidity might add another 20-30% to this, while additional second-round effects leading to further losses cannot be excluded.[30]

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27 **Liquidity risks in the insurance sector**, ESRB, June 2020.

28 This figure corresponds to the calculations made in the **Issues note on liquidity in the corporate bond and commercial paper markets, the procyclical impact of downgrades and implications for asset managers and insurers**. It covers the euro area countries, plus Bulgaria, the Czech Republic, Denmark and Romania as at Q4 2019.

29 **Issues note on liquidity in the corporate bond and commercial paper markets, the procyclical impact of downgrades and implications for asset managers and insurers.**

30 **A system-wide scenario analysis of large-scale corporate bond downgrades**, ESRB technical note, July 2020.

The ESRB proposed that ESMA and the European Commission take two actions in the medium term to mitigate risks related to large-scale rating downgrades.[31] The proposed actions focus in particular on the two risk transmission channels identified by the ESRB: the potential for procyclical behaviour from index-tracking funds and asset management on the one hand, and from insurers, banks and pension funds on the other. First, it should be assessed whether more systematic monitoring and reporting of contractual references to ratings in investment mandates and fund prospectuses would be feasible in order to provide supervisors with a clearer picture of where systemic issues may arise. Second, the transparency of credit rating agencies' (CRAs) methodologies should be assessed in light of the COVID-19 pandemic experience, and with a view to exploring the possibility of setting minimum requirements for the validation of CRAs' methodologies. These two actions should support the broader goal of analysing how to foster countercyclicality in the implementation of EU law.

2.4 System-wide restraints on dividend payments, share buybacks and other pay-outs

Since the outbreak of the COVID-19 pandemic, authorities worldwide have taken forward-looking measures to ensure the resilience of the financial sector, strengthening its capacity to lend to the real economy in stressed conditions and reducing the risk of financial institutions failing. System-wide restraints on distributions (dividend payments, share buybacks and other pay-outs) aim at preserving capital within the system, increasing its loss-absorbing capacity and maintaining stable lending levels. These policies have complemented a wide array of actions undertaken to stabilise the economy, including government fiscal packages to support non-financial firms (see Section 2.1.) and temporary capital and operational relief, allowing banks to operate temporarily below the level of capital defined by the Pillar 2 Guidance (P2G), the capital conservation buffer and the liquidity coverage ratio. Furthermore, they complement the release of cyclical and structural capital buffers.

A number of European and national authorities took action to encourage financial institutions under their remit to refrain from voluntary pay-outs (e.g. dividends, bonuses and share buybacks aimed at remunerating shareholders). At Union level, on 17 March 2020 EIOPA issued a statement urging (re)insurers to take measures to preserve their capital position in balance with the protection of the insured by following prudent dividend and other distribution policies, including variable remuneration.[32] As regards the banking sector, on 27 March 2020 ECB Banking Supervision issued a recommendation[33] that, at least until 1 October 2020[34], no dividends should be paid out and no irrevocable commitment to pay out dividends should be undertaken by credit institutions for the financial years 2019 and 2020, and that credit institutions should refrain from share buybacks aimed at remunerating shareholders. This recommendation was addressed to

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[31] ESRB letter to the European Commission and ESMA on the **Procyclical impact of downgrades of corporate bonds on markets and entities across the financial system**, October 2020.

[32] **EIOPA Statement**.

[33] **Recommendation of the European Central Bank of 27 March 2020 on dividend distributions during the COVID-19 pandemic and repealing Recommendation ECB/2020/1** (ECB/2020/19).

[34] The ECB amended Recommendation ECB/2020/19 on 27 July 2020 (ECB/2020/35), extending the pay-out restrictions until January 2021, and clarified the timeline for restoring buffers in a press release dated 28 July 2020.

significant institutions directly supervised by the ECB and to national competent authorities (NCAs) with regard to less significant institutions. The recommendation was followed by an EBA statement on 31 March 2020 urging banks "to refrain from dividend distribution or share buybacks which result in a capital distribution outside the banking system, in order to maintain its robust capitalisation"[35]. In support of the previous initiatives of the ECB, EBA, EIOPA and national authorities (see next paragraph) and to strengthen the case for a uniform approach across the Union and across different segments of the financial sector, the ESRB issued a Recommendation (See Box 1) on 27 May 2020 asking the relevant authorities to request the financial institutions under their supervisory remit to refrain, at least until 1 January 2021, from making dividend distributions or irrevocable commitments to make dividend distributions, from buying back ordinary shares and from creating obligations to pay variable remuneration to material risk-takers.

Several national authorities notified the ESRB of the actions they have taken to strengthen the financial sector. In response to the ESRB Recommendation of 27 May, in the course of the second and third quarters of 2020 all the relevant national authorities urged banks, investment firms, (re)insurance companies and central clearing counterparties (CCPs), either in a legally binding or non-binding way, to withhold distributions, to refrain from buying back ordinary shares and to apply prudent and sustainable remuneration policies and practices until 1 January 2021. The measures were activated through regulatory announcements addressed to all institutions under their remit, or via individual correspondence with specific financial institutions.

The ESRB is currently in the process of assessing compliance with Recommendation ESRB/2020/7 and aims to publish its findings in the course of 2021. In addition, the ESRB Secretariat regularly monitored the effectiveness of the measures taken by the relevant authorities in response to its Recommendation. The majority of credit institutions refrained from committing to new dividend pay-outs, which resulted in a very limited amount of distributions in the banking sector during 2020.[36] With regards to the non-banking sector, insurance and reinsurance companies, as well as CCPs, showed a lower level of constraint in comparison with the banking sector, albeit in an overall context of high levels of constraint.

Owing to the ongoing COVID-19 crisis, the European authorities decided to extend the measures in place or to issue new regulatory announcements to cover distributions planned for 2021. On 15 December 2020 ECB Banking Supervision recommended that significant supervised entities and groups that intended to proceed with some limited pay-outs not make distributions or share buybacks amounting to more than 15% of their accumulated profits for the financial years 2019 and 2020, or more than 20 basis points in terms of the Common Equity Tier 1 ratio, whichever was lower.[37] On the same date, the ESRB amended its Recommendation (see Box 4) asking the relevant authorities to request financial institutions to refrain from making any distributions unless they applied extreme caution and did not exceed the conservative threshold set

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[35] **EBA Statement**.

[36] Please note that the ESRB has gathered information on the effectiveness of the measures by conducting surveys among its member institutions. The information provided in this section is only partial and provisional, since official information was not available as at the cut-off date for drafting this section (February 2021).

[37] **Recommendation of the European Central Bank of 15 December 2020 on dividend distributions during the COVID-19 pandemic and repealing Recommendation ECB/2020/35** (ECB/2020/62).

by their competent authority. The EBA issued two statements[38] calling on banks to continue applying conservative distribution policies and to carefully consider the resulting impact of dividends or other distribution on the capital trajectory. As regards the insurance sector, on 18 December 2020 EIOPA stated that any dividend distributions, share buybacks or variable remunerations should not exceed "thresholds of prudency" and that institutions should ensure that the resulting reduction in the quantity or quality of their own funds remains at levels appropriate to the current levels of risk.[39]

Having been extended, the system-wide restrictions remain largely effective. Few banks have informed the relevant authorities of an intention to disregard their requests for restraint on distributions, at least during the first and second quarters of 2021. Most competent authorities engaged in supervisory dialogue with individual institutions to assess their intention to proceed with distributions within the thresholds they had been set by those authorities. As regards the insurance sector, the vast majority of NCAs have been informed about the intention of reinsurers (life and non-life) to proceed with some limited pay-outs (especially in December 2020 and February 2021 for the accounting year 2019).

Box 4

Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic

The ESRB has fully supported the initiatives of its member institutions and has considered it necessary to issue a recommendation to ensure that financial institutions across the financial sector that may pose a risk to financial stability maintain high levels of capital. Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic[40] asked the relevant authorities to request the financial institutions under their supervisory remit to refrain, at least until 1 January 2021, from taking any actions which could reduce the quantity or quality of their own funds at the EU group level (or at the individual level where the financial institution is not part of an EU group), and, where appropriate, at the sub-consolidated or individual level. Those include dividend distributions or irrevocable commitments to make dividend distributions, buybacks of ordinary shares and creating obligations to pay variable remuneration to material risk-takers. The Recommendation covers credit institutions, investment firms subject to the CRD, insurers, reinsurers and central counterparties and takes into account the critical role these sectors of the financial system play for the real economy, in particular during times of crisis.

Recommendation ESRB/2020/7 was originally designed to cover the period until 1 January 2021, but the resurgence of COVID-19 infections prior to that date raised uncertainty and short-term risks to recovery from the crisis. Markets and authorities lacked information on the long-term impact of the crisis on the financial sector and credit markets. Notwithstanding the continuation of unprecedented policy measures, many businesses were confronted with impaired cash flows, weak earnings and rising indebtedness. Given this context, the ESRB concluded that

[38] **EBA Statement on actions to mitigate the impact of COVID-19 on the EU banking sector**, 12 March 2020, and **EBA Statement calling on banks to apply a conservative approach on dividends and other distributions in light of the COVID-19 pandemic**, 15 December 2020.

[39] **EIOPA Statement**.

[40] **Recommendation of the European Systemic Risk Board of 27 May 2020 on restriction of distributions during the COVID-19 pandemic** (ESRB/2020/7).

an exceptional extension of pay-out restrictions to account for uncertainty about future macroeconomic development would serve this objective by allowing financial institutions to maintain a sufficiently high level of capital to mitigate systemic risk and contribute to the economic recovery.

Therefore, on 15 December 2020 the ESRB General Board adopted Recommendation ESRB/2020/15 amending Recommendation ESRB/2020/7.[41] According to the revised Recommendation, relevant authorities are recommended to request banks, investment firms and (re)insurers (but no longer CCPs) to refrain, until 30 September 2021, from making distributions which have the effect of reducing the quantity or quality of their own funds, unless these financial institutions apply extreme caution in carrying out distributions and the resulting reduction does not exceed the conservative threshold set by their competent authority. The revised Recommendation is in line with the decisions taken in parallel by the EBA, EIOPA and ECB Banking Supervision and aims to ensure that financial institutions maintain a sufficiently high level of capital to mitigate systemic risk and contribute to economic recovery in the event of further economic disruptions.

At the same time, Recommendation ESRB/2020/15 recognises the importance of distributions in enabling financial institutions to raise capital externally. Given that the prospect of available COVID-19 vaccines has reduced the probability of more severe scenarios, the revised Recommendation allows some limited distribution under specific circumstances. Financial institutions may proceed with distributions provided that (i) they engage in discussion with their competent authority, (ii) they apply extreme caution so that they do not put the stability of the financial system and the recovery process at risk and (iii) the resulting reduction does not exceed the conservative threshold set by their competent authority. The competent authorities are asked to calibrate the conservative threshold paying due regard to: the need for financial institutions to maintain a sufficiently high level of capital, also taking into account the risks of a deterioration in the solvency position of corporations and households in view of the pandemic; the need to ensure that the overall level of distributions of financial institutions under their supervisory remit is significantly lower than in the recent years prior to the COVID-19 crisis; the specificities of each sector within their remit. The Recommendation also includes forward guidance which stresses the temporary nature of these restrictions and the commitment of the General Board to decide, before the expiry of the Recommendation, if the Recommendation should be amended, considering, inter alia, macroeconomic developments and the latest available information.

2.5 Liquidity risks arising from margin calls

The ESRB issued a Recommendation on liquidity risks arising from margin calls (ESRB 2020/06). This Recommendation was designed to mitigate the adverse impact margin calls might have on both bank and non-bank entities. The ESRB had published two reports in recent years setting out these impacts and related policy options.[42] The unprecedented magnitude of margin calls during the market turmoil at the onset of the COVID-19 pandemic made it necessary to

[41] **Recommendation of the European Systemic Risk Board of 15 December 2020 amending recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic** (ESRB/2020/15).

[42] See the ESRB reports on margins and haircuts of **January 2020** and **February 2017.**

take further action. This included assessing whether the increase in margin calls is strongly linked to the increase in market volatility. The Recommendation was addressed to CCP supervisors, clearing member and securities market supervisors as well as ESMA, and they were requested to report to the ESRB on how they were following up on it. The ESRB received responses on five of the eight recommendations where submissions were due in the course of 2020 and expects to complete the assessment of these recommendations in the course of 2021. The remaining responses are expected by the end of 2021 and 2022.

Box 5

ESRB Recommendation on liquidity risks arising from margin calls

Recommendation ESRB/2020/6 addressed to the competent authorities in the area of central counterparties (CCPs), banks and other relevant market participants, contains four sub-recommendations in total:

Recommendations A and D – Limiting cliff effects in relation to the demand for collateral and Mitigation of procyclicality in the provision of client clearing services and in securities financing transactions

Recommendations A and D are aimed at ensuring that sudden and significant (hence procyclical) changes and cliff effects relating to initial margins (including add-on margins) and collateral are limited: (i) by CCPs vis-à-vis their clearing members; (ii) by clearing members vis-à-vis their clients; and (iii) in the bilateral sphere, where they result from a mechanical reliance on credit ratings and possibly from procyclical internal credit scoring methodologies. Liquidity planning should be predictable and manageable to the extent possible by limiting unexpected and significant margin calls. Providing reasonable and enforceable notice periods for any changes in the margin and haircut protocols could ensure that market participants adapt in an orderly fashion. It is also recommended that global standards governing respective minimum requirements are developed, and that EU legislation gives them effect.

Recommendation B – Stress scenario for the assessment of future liquidity needs

This Recommendation is aimed at ensuring that CCPs capture comprehensively in their liquidity stress testing any events that could lead to them experiencing a liquidity shortfall, with a view to incentivising them to improve their management of their reliance on liquidity service providers. This will improve overall market resilience, given that there is a large degree of concentration and interconnection among CCPs and their liquidity service providers, and that prudent liquidity management at individual CCP level in this regard would enhance risk management from a systemic and macroprudential perspective.

Recommendation C – Limiting liquidity constraints related to margin collection

This Recommendation is aimed at ensuring that CCPs, while maintaining their financial resilience, limit asymmetry in the payment of variation margins collected intraday – and that they design their margin frameworks and schedules to be predictable and avoid excessive liquidity constraints for clearing members that could lead to default events.

3 ESRB contributions to the policy framework

3.1 Banking

Beyond the ESRB's response to the COVID-19 pandemic (see Section 2), which comprised several measures relevant for banks, the ESRB continued its general work to contribute to ensuring the resilience of the EU banking sector. In particular, it opined on several national macroprudential measures and reciprocation requests and issued a Recommendation on a legal entity identifier covering legal entities engaged in financial transactions.

3.1.1 Opinions related to Article 458 of the Capital Requirements Regulation

The French High Council for Financial Stability (Haut Conseil de stabilité financière) informed the ESRB on 23 April 2020 of its decision to extend for one additional year the period of application of the existing stricter national measure on large exposures, in accordance with Article 458(9) of the Capital Requirements Regulation (CRR). This measure imposes a large exposure limit on French globally systemically important institutions (G-SIIs) and other systemically important institutions (O-SIIs) (5% of their eligible capital) with regard to highly indebted large French NFCs, aiming to limit concentration risks. The measure has been in force since 1 July 2018, was due to expire at the end of June 2020. It was then extended to the end of June 2021. Pursuant to Article 458(4) of the CRR, the ESRB provided the Council, the European Commission and France with its opinion on 19 May 2020.[43] It concluded that the extension of the period of application of the measure was justified, suitable, proportionate, effective and efficient, focusing on the net benefits of the national measure for maintaining financial stability. It considered the measure to be a helpful backstop to ensure risk diversification and safeguard the resilience of the French banking system. The ESRB noted that the economic crisis triggered by the COVID-19 pandemic intensified risks in the corporate sector across the EU and globally, and was of the view that the extension of the measure did not contradict the overall aim of guaranteeing lending to the real economy throughout the crisis. The ESRB also noted that its previous recommendation to reciprocate the measure[44] continued to apply to the measure in its extended form. The ESRB reiterated that in line with its assessment of the original measure[45], continued follow-up should be undertaken by the French authorities (i) in the form of close monitoring of the measure's impact and the evolution of risk, and (ii) in view of exploring alternative options to address financial stability concerns, e.g. borrower-based measures or a sectoral systemic risk buffer.

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[43] **Opinion of the European Systemic Risk Board of 19 May 2020 regarding the French notification of an extension of the period of application of a stricter national measure** (ESRB/2020/5) and **accompanying report**.

[44] Recommendation of the European Systemic Risk Board of 5 December 2018 amending Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures (ESRB/2018/8).

[45] Opinion of the European Systemic Risk Board of 9 March 2018 regarding French notification of a stricter national measure based on Article 458 of the CRR (ESRB/2018/3).

On 16 September 2020 the Swedish Financial Supervisory Authority (*Finansinspektionen*) officially notified the ESRB in accordance with Article 458(2)(d)(vi) of the CRR of its intention to extend a national measure limiting risks stemming from Swedish mortgage loans. The measure consists of a risk weight floor of 25% for Swedish mortgage loans applied to credit institutions that use the internal ratings-based (IRB) approach. Pursuant to Article 458(4) of the CRR, the ESRB provided the Council, the European Commission and Sweden with its opinion on 14 October 2020.[46] The assessment was made against the backdrop of signs that vulnerabilities in the Swedish residential real estate (RRE) market were continuing to increase and were likely to amplify in the light of the uncertain negative impact of the COVID-19 pandemic and the related economic downturn. The ESRB was of the view that the proposed extension of the measure did not contradict the overall aim of guaranteeing lending to the real economy throughout the economic crisis. The ESRB was also of the view that the alternative macroprudential instruments listed in Article 458 of the CRR, which must be considered before any stricter national measure can be taken, would not be adequate to address the risk at hand. Therefore, the ESRB was of the view that the stricter measure was justified, proportionate, effective and efficient for the purpose mentioned above. However, this assessment was made for the specific purposes of the procedure under Article 458 of the CRR and does not prejudge the outcome of the review of the Recommendation of 27 June 2019. Overall, the ESRB considered that the measure would not entail disproportionate adverse effects for the internal market or other financial systems. The economic assessment that accompanied the opinion also highlighted the importance of continued reciprocation of the measure by other Member States with credit institutions active in the Swedish residential mortgage market. In addition, it pointed to the importance of reassessing the situation once the high uncertainty around the implications of the COVID-19 pandemic have dissipated.

On 22 January 2021 the Nationale Bank van België/Banque Nationale de Belgique (NBB/BNB) notified the ESRB of its intention to extend for the second time the period of application of its current macroprudential measure based on Article 458(2)(d)(vi) of the CRR, from 1 May 2021 until 30 April 2022. The measure consists of imposing a macroprudential risk weight add-on on all domestic credit institutions applying the IRB approach whose retail exposures are secured by residential immovable property for which the collateral is located in Belgium. Pursuant to Article 458(4) of the CRR, the ESRB provided the Council, the European Commission and Belgium with its opinion on 19 February 2021.[47] The ESRB supported the NBB/BNB's intention to extend the period of application of its current macroprudential measure increasing risk weights for IRB banks' exposures to the Belgian RRE sector and considered that the extension of the measure was warranted to maintain the resilience of Belgian IRB banks to potentially severe downward corrections in the domestic RRE market.

Luxembourg's Systemic Risk Committee (*Comité du Risque Systemique*) submitted to the ESRB, on 18 December 2020, its reciprocation request concerning a national macroprudential measure

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[46] **Opinion of the European Systemic Risk Board of 14 October 2020 regarding Swedish notification of regarding Swedish notification of an extension of the period of application of a stricter national measure based on Article 458 of Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms** (ESRB/2020/13).

[47] **Opinion of the European Systemic Risk Board of 18 February 2021 regarding Belgian notification of an extension of the period of application of a stricter national measure based on Article 458 of Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms** (ESRB/2021/1).

not covered by the CRR/CRD.[48] As the measure is a national macroprudential measure not covered by the CRR/CRD, it is not subject to an ESRB Opinion and therefore no ESRB Opinion was issued. The measure entered into force on 1 January 2021. Pursuant to Article 5(4) of Decision ESRB/2015/4, the ESRB Assessment Team prepared an assessment of the need to adopt a recommendation on reciprocation together with a draft amendment of Recommendation ESRB/2015/2. The measure introduced legally binding loan-to-value (LTV) limits for new mortgage loans on RRE located in Luxembourg, with different LTV limits across categories of borrowers. The ESRB supported reciprocation in principle. As the measure is borrower-based as opposed to previous reciprocation requests, and as Luxembourg is a relatively small country with easier access for consumers resident in Luxembourg to cross-border credit than in other countries, the ESRB decided to propose a rather low institution-specific materiality threshold of 0.1%. As the measure is not covered by the CRR/CRD and is therefore not available in all Member States, the ESRB exceptionally proposed an additional country-specific materiality threshold of 1% in addition to the above-mentioned institution-specific threshold so as to reduce the administrative burden for other Member States who have exposures below that level. The Recommendation was approved by the ESRB General Board on 24 March 2021.

3.1.2 ESRB Recommendation on the Norwegian systemic risk buffer

3.1.2.1 Notification of systemic risk buffer by Norwegian Ministry of Finance

On 5 November 2020 the Norwegian Ministry of Finance notified the ESRB of its intention to adopt a systemic risk buffer of 4.5% for exposures in Norway under Article 133(11) and (14) of Directive 2013/36/EU49, as applied to and in Norway on 1 January 2020 pursuant to the terms of the Agreement on the European Economic Area50 (CRD IV). The measure provides for a change in the level and scope of an existing national buffer, with the application of a 4.5% SyRB to the domestic exposures of all credit institutions authorised in Norway, including the subsidiaries of institutions with parents established in other European Economic Area countries. The existing national buffer had not been formally notified pursuant to Article 133 of CRD IV, as the framework had not been made part of the European Economic Area (EEA) Agreement until 1 January 2020. Pursuant to Article 133(14) of CRD IV read in conjunction with the EEA Agreement, the ESRB issued a Recommendation on 4 December 2020.[51] The measure entered into force on 31 December 2020. A transitional rule applies to those banks that do not follow the advanced IRB approach. The SyRB was intended to promote domestic financial stability in Norway by

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[48] Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, (OJ L 176, 27.6.2013, p. 1).

[49] Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (OJ L 176, 27.6.2013, p.338).

[50] As amended by Decision of the EEA Joint Committee No 79/2019 of 29 March 2019 amending Annex IX (Financial services) to the EEA Agreement [2019/2133] (OJ L 321, 12.12.2019, p.170).

[51] **Recommendation of the European Systemic Risk Board of 4 December 2020 regarding Norwegian notification of its intention to set a systemic risk buffer rate in accordance with Article 133 of Directive (EU) 2013/36/EU** (ESRB/2020/14) and **accompanying report**.

safeguarding the resilience of the financial system and by ensuring that banks continue to be adequately capitalised given the high level of long-term systemic risk. The ESRB was of the view that the level of the measure was appropriate given the identified systemic risks threatening the stability of the Norwegian financial system and considered the measure to be effective and proportionate. Based on the information provided, the ESRB concluded that the measure would not entail disproportionate adverse effects on the EEA as whole or on other financial systems. The ESRB was furthermore of the view that none of the existing measures in the CRR and CRD IV, excluding Articles 458 and 459 of the CRR, alone or in combination were sufficient to address the identified macroprudential or systemic risk in Norway, taking into account the relative effectiveness of those measures.

3.1.2.2 Request for reciprocation of SyRB and risk weight measures under Article 458 of the CRR

The Norwegian Ministry of Finance notified the ESRB Secretariat on 2 February 2021 of its reciprocation request concerning measures taken pursuant to Article 133 of CRD IV and Article 458 of Regulation (EU) No 575/2013[52], as applied to and in Norway on 1 January 2020 pursuant to the terms of the EEA Agreement (CRR as applicable in Norway). The ESRB was notified of these measures on 5 November 2020 regarding the intention to adopt a systemic risk buffer requirement for exposures in Norway (see above); a temporary average risk weight floor for RRE exposures in Norway, pursuant to Article 458 (10) of the CRR as applicable in Norway; and a temporary average risk weight floor for commercial real estate exposures in Norway, pursuant to Article 458 (10) of the CRR as applicable in Norway. The systemic risk buffer amounts to 4.5% for the domestic exposures of all credit institutions authorised in Norway, including the subsdiaries of institutions with parents established in other EEA countries. The temporary risk floor measures for residential and commercial real estate exposures in Norway consist of risk floors of 20% and 35%, respectively. Regarding the above-mentioned Article 458 measures, the increase in risk weights was below 25% and hence did not warrant authorisation (Article 458(10)). All three measures entered into force on 31 December 2020. Pursuant to Article 5(4) of Recommendation ESRB/2015/4, the ESRB Assessment Team prepared an assessment of the need to adopt a recommendation on reciprocation together with a draft amendment of Recommendation ESRB/2015/2 (approved by the ESRB on 30 April). The process was still ongoing at the cut-off date for drafting the Annual Report. While the two measures taken pursuant to Article 458 of the CRR as applicable in Norway were more straightforward to assess, the situation of the systemic risk buffer was complicated by the continued application of CRD IV in Norway, while Directive (EU) 2019/878 of the European Parliament and of the Council[53], which introduced significant amendments to Directive 2013/36/EU, should have been transposed into national law by the EU Member States by 28 December 2020. The ESRB has carefully analysed the impact on all involved parties and addressed this point by extending the transition period for reciprocation and allowing for equivalent

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52 Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p.1).

53 Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures (OJ L 150, 7.6.2019, p. 253*)*.

measures for reciprocating the systemic risk buffer until Norway transposes Directive (EU) 2019/878 into national law.

3.1.3 ESRB Recommendation on a legal entity identifier

The global economy is based on a web of contracts and financial transactions, including a large number of cross-border contracts covering the entire planet, and is tightly knit in extremely complex patterns. This web not only covers financial institutions, but also any type of entities that have relationships, contracts and exposures with each other and with the financial sector. Within the financial sector, links between banks and non-banks are significant, both in terms of direct and intragroup exposures. A clear identification of individual entities and any connections among them is key in terms of drawing a reliable map of the global economic and financial landscape, reducing financial contagion and promoting financial stability.

In 2012 the G20 endorsed the recommendations of the Financial Stability Board regarding the framework for development of a global legal entity identifier (LEI) system for parties to financial transactions and encouraged global adoption of the LEI to help authorities and market participants identify and manage financial risk. The use of a unique, exclusive and universal LEI has made the authorities better equipped to evaluate systemic and developing risks and adopt remedial measures. The LEI has also become a crucial tool for connecting existing datasets of granular information on entities from multiple sources.

At Union level, several existing legislative and non-legislative acts require use of the LEI. However, there is no uniform approach across markets and use of the LEI does not currently extend to non-financial sectors, leaving LEI coverage fragmented and important sectors excluded.

Against this background, on 24 September 2020 the ESRB issued Recommendation ESRB/2020/12 on identifying legal entities, which aimed to foster the implementation of a Union-wide legal framework for uniquely identifying legal entities engaged in financial transactions via an LEI and making its use in supervisory reporting and public disclosures systematic.

More specifically, the Recommendation asks the Commission to propose the introduction of a Union-wide legal framework to uniquely identify legal entities engaged in financial transactions by way of a LEI and to make the use of the LEI more systematic in respect of supervisory reporting and public disclosure. Furthermore, taking into account the time frame for the adoption of such a Union framework, the ESRB recommended that the relevant authorities pursue and systematise their efforts to promote the adoption and use of the LEI, making use for this purpose of the various regulatory or supervisory powers which they have been granted by national or Union law.

3.2 Beyond banking

Many of the measures the ESRB took to prevent and mitigate the effects of the COVID-19 pandemic on financial stability in the Union concerned market-based finance and the non-bank financial sector (see Section 2). This section considers other work designed to develop the

macroprudential toolkit beyond the banking sector. In particular, the ESRB considered ways to foster central clearing and make the central clearing landscape safer, ways to enhance the macroprudential aspects of insurance regulation and ways to enhance the AIFMD.

3.2.1 Fostering central clearing and making the clearing landscape safer

3.2.1.1 ESRB response to ESMA report on Central Clearing Solutions for Pension Scheme Arrangements

The ESRB provided an opinion on the ESMA report on "Central Clearing Solutions for Pension Scheme Arrangements". Under Article 85(2) of the European Market Infrastructure Regulation (EMIR), ESMA, in cooperation with the ESRB, is required to submit a report every 12 months on potential central clearing solutions for pension scheme arrangements (PSAs). In its opinion the ESRB considered three main elements: the likelihood of PSAs accessing CCPs as direct members, the increased risk for CCPs in intermediating repos, and solutions involving central bank access. The ESRB considered it unlikely for PSAs to become direct clearing members, because of their difficulties with acquiring the technical capabilities to replicate the ancillary services provided by clearing members to clients, including the funding of cash margins and collateral transformation services. The ESRB furthermore took the view that if CCPs were to provide repo facilities to PSAs[54], it would increase the non-core risks at CCP level, which in turn would reduce the resilience of CCPs in reliably delivering their core functions. In relation to this, the ESRB indicated that it strongly supports CCPs as stand-alone entities wholly focused on safeguarding financial stability by establishing a resilient central clearing architecture. Finally, the ESRB indicated that it is agnostic as to the role of central banks providing liquidity support to PSAs. However, the industry should not consider this as a viable option without the prior explicit consent and approval of central banks. The ESRB Opinion concluded by stating that the best way to remove obstacles for PSAs is to promote indirect clearing.

3.2.1.2 ESRB response to ESMA report on post trade risk reduction services with regards to the clearing obligation

The ESRB commented on ESMA's report on post trade risk reduction services (PTRRS) with regards to the clearing obligation. Under Article 85(3a) of EMIR the ESRB is required to cooperate with ESMA to deliver a report exploring whether, and under what conditions, trades that directly result from PTRRS, including portfolio compression and counterparty rebalancing, should be exempted from the clearing obligation referred to in Article 4(1) of the same regulation. In its response the ESRB focused on the implications of PTRRS in non-centrally cleared OTC markets for preventing and mitigating systemic risk and promoting the smooth functioning of the internal market. The ESRB supported the widespread and frequent use of post trade risk reduction

[54] Meaning collateralised lending that is a banking activity, which is regulated under the banking framework and is not designated as a core CCP activity under the EMIR framework.

techniques because they reduce operational complexity and interconnectedness while at the same time increasing transparency. While the use of PTRRS in non-centrally cleared OTC markets can help to reduce aggregate risk exposures, exempting their use from the clearing obligation may, however, introduce the risk of regulatory arbitrage and circumvention. To reflect this, the ESRB stated that exemptions from the clearing obligation should only be considered when they contribute to reducing systemic risk, subject to appropriate safeguards against the risk of regulatory arbitrage.

3.2.1.3 ESRB Secretariat staff response to ESMA’s consultation paper on technical standards on reporting, data quality, data access and registration of trade repositories under EMIR Refit

Since the early stages of the EMIR reporting mandate, the ESRB, in partnership with the ECB, ESMA and the ESRB member institutions, has worked on analysing the data collected under EMIR. This includes the development of a technological infrastructure and analytical frameworks that enable the ESRB to monitor daily developments in the EU derivatives market. This experience informed the ESRB Secretariat staff response to ESMA’s consultation paper on technical standards on reporting, data quality, data access and registration of trade repositories under EMIR Refit. The main message of the response was that the ESRB Secretariat strongly supports both the scope of the amendments and the technical principles highlighted in the paper. The breadth and depth of the proposed amendments were seen as helping improve the reporting framework and quality of data, and therefore the usefulness of that data for the authorities. The response highlighted the benefits of standardisation of the reporting framework and the higher level of granularity and data quality requirements. These changes were implemented in time to enable, for instance, the daily monitoring of liquidity risks arising from margin calls in the context of the COVID-19 crisis and the daily analysis of developments in central clearing and margins between the EU and the UK in the context of Brexit.

3.2.1.4 Consultation on recognition of third country CCPs

Following the amendments to the EMIR regulation, (EMIR 2.2), ESMA set up a CCP Supervisory Committee charged with preparing decisions on the recognition and supervision of third country CCPs (TC CCP) providing services in the European Union. The Committee became operational in the second half of 2020 and processed the recognition and related tiering of three UK CCPs. At ESMA's request, the ESRB provided an opinion on the classification and the subsequent recognition of these TC CCPs. The ESRB assessed LME Clear Ltd as Tier 1 (non-systemically important) and LCH Ltd and ICE Clear as Tier 2 (systemically important). This was also the assessment that ESMA issued on 28 September 2020 and was the basis for the temporary recognition of the three CCPs for a period of 18 months. The ESRB expressed opinions to ESMA in line with the September 2020 assessment.

The ESRB also provided a positive opinion on ESMA’s proposal to extend the temporary exemption of the clearing obligation for intragroup derivative transactions that are concluded with a third country group entity.

3.2.2 Enhancing the Alternative Investment Fund Managers Directive

The ESRB proposed improvements to the Alternative Investment Fund Managers Directive (AIFMD) by responding in January 2021 to the European Commission's public consultation.[55] The AIFMD contributes to the safety of the financial system, including by providing the ESRB and supervisory authorities with important data to help analyse systemic risk. In its response to the consultation the ESRB proposed several improvements. These cover (i) the suitability of the reporting framework and access to data for monitoring systemic risks, including more detailed reporting on investments as well as investors in order to better assess the risk of fire sales or disorderly markets and spillovers to financial institutions; (ii) the need to operationalise existing macroprudential policy instruments, in particular – as previously recommended by the ESRB[56] – the need for Union legislation to incorporate a common Union legal framework governing the inclusion of liquidity management tools in the design of investment funds regulated under both the AIFMD and the UCITS Directive; (iii) the ongoing development of the macroprudential policy framework for investment funds to mitigate risks stemming from liquidity mismatches and leverage.

3.2.3 Enhancing the macroprudential dimension of Solvency II

The ESRB responded to the European Commission public consultation in October 2020 with proposals to enhance the macroprudential dimension of Solvency II.[57] Five years after entering into force in 2016, the market-based Solvency II regime for insurers is being reviewed by the European Commission. In the low interest rate environment and following the COVID-19 crisis, the European Commission is investigating the adequacy of insurers' solvency capital requirements, their role in the Capital Markets Union and their impact on financial stability. In particular, the long-term guarantee measures and the way interest rate risk is considered in the standard formula of Solvency II are under scrutiny. Both measures have become ever more relevant as risk-free rates turned negative in 2019. In its response to the European Commission public consultation, the ESRB proposed (a) reflecting macroprudential considerations in Solvency II, (b) implementing a harmonised recovery and resolution regime and (c) continuing to ensure that risks are properly captured, for example with a more market-based risk-free rate term structure to discount insurers' liabilities.

The ESRB identified three types of tool that would better reflect macroprudential considerations in Solvency II. These include solvency tools for preventing and mitigating procyclical investment behaviour on the part of insurers; liquidity tools for addressing risks stemming from specific activities; and tools for addressing risks stemming from the provision of credit to the economy. The COVID-19 pandemic also informed the ESRB's response to the consultation. This includes the systemic importance of certain insurance activities such as credit insurance for the real economy. The implementation of a macroprudential toolkit would help to ensure the provision of these critical insurance services. Also, and in line with its

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[55] **ESRB response to the European Commission consultation on the review of AIFMD**, January 2021.

[56] **Recommendation of the European Systemic Risk Board of 7 December 2017 on liquidity and leverage risks in investment funds** (ESRB/2017/6).

[57] **ESRB Response Letter to a Consultation of the European Commission on the review of Solvency II**, 16 October 2020.

recommendations,[58] the ESRB proposed granting supervisors the power to restrict dividend distributions in exceptional circumstances.

3.3 Stress testing

During the review period the ESRB contributed to several stress tests carried out by the ESAs by providing the adverse scenarios for those exercises. The ESAs and the ESRB are requested to collaborate on stress testing, which generally takes the form of close cooperation in designing the scenario to ensure it reflects the current risk landscape and appropriately assesses each sector against the key vulnerabilities it is exposed to.[59]

3.3.1 ESMA Money Market Fund stress-testing guidelines

ESMA is required to annually review and update its stress-testing guidelines for money market funds. Following the outbreak of COVID-19, ESMA and the ESRB conducted a review, benchmarking the 2019 MMF stress-testing guidelines against the realised market risk factor moves of the March 2020 market turmoil. While most of the risk factor moves in the 2019 scenario were found to be more severe than those of the March turmoil, the ESRB TFST refined the scenario of the 2020 MMF stress test guidelines to ensure that all risk factors would be stressed at least to the level of the recently observed stress. The ESRB General Board approved the adverse scenario at its meeting on 24 September 2020. ESMA released the updated MMF stress-testing guidelines on 15 December 2020.[60]

3.3.2 EBA 2021 EU-wide banking sector stress test

The European Banking Authority (EBA) normally follows a biennial cycle for its EU-wide banking stress test. Owing to the outbreak of the COVID-19 pandemic, the EBA Board of Supervisors decided to postpone the 2020 exercise to 2021 in order to allow banks to prioritise their operational continuity.[61] The ESRB provided a "prolonged COVID-19 scenario" that was set against the background of a "lower for longer" interest rate environment. The scenario probes the banking sector against important risks stemming both from the potential fallout of the pandemic as well as against financial stability risks. The General Board approved the scenario at its regular meeting on 15 December 2020, and the EBA subsequently launched the exercise on 29 January 2021.

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[58] **Recommendation of the European Systemic Risk Board of 27 May 2020 on restriction of distributions during the COVID-19 pandemic (ESRB/2020/7)** and **Recommendation of the European Systemic Risk Board of 15 December 2020 amending Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic** (ESRB/2020/15).

[59] The ESRB publishes all the stress test scenarios used for regulatory stress tests of ESAs on a dedicated **website**.

[60] **ESMA updates guidelines on stress tests for money market funds**, December 2020.

[61] **EBA statement on actions to mitigate the impact of COVID-19 on the EU banking sector**, March 2020.

3.3.3 EIOPA insurance stress test

In May 2021 EIOPA launched a stress test of the EU insurance industry to assess the sector's resilience against adverse economic and financial developments. To this end, the ESRB has provided EIOPA with the adverse scenario forming the basis of the stress test calculations. While the scenario has been refined to ensure that it adequately targets the main risks faced by the insurance sector, its narrative closely follows the "prolonged COVID-19 scenario in a lower for longer interest rate environment" of the EBA 2021 scenario. The General Board approved the scenario at its regular meeting on 25 March 2021.

Box 6

ASC Insights on reforming bank stress testing in the EU: reflections in light of the EBA's discussion paper on the issue

In July 2020 the ESRB published an ASC Insight entitled "Reforming bank stress testing in the EU: reflections in light of the EBA's discussion paper on the issue", written by Javier Suarez and Willem Buiter. The ASC Insight came as a response to the EBA Discussion Paper with some proposals for the reform of the banking stress-testing framework in the EU, published earlier in 2020. The ASC Insight started from the premise that supervisory sector-wide stress testing of banks is one of the major innovations adopted by prudential authorities in recent years. As such, supervisory stress testing is a tool in the regular surveillance of the financial system and played a fundamental role in the global financial crisis and in the European sovereign crisis. The authors of this ASC Insight expressed serious concerns about the two main proposals put forward by the EBA in its paper.

While acknowledging the need to reform the supervisory stress-testing framework in the EU, the authors of the ASC Insight did not consider that the proposals put forward in the EBA's discussion paper would improve that framework. First, they expressed reservations about the proposal to redefine stress testing as primarily a microprudential tool. Second, they considered that the proposal to have two separate "legs" in each stress test exercise (a supervisory leg and a bank leg) would impair the reliability and comparability of the information provided to stakeholders in these exercises. A proposal for a framework of stress testing serving both micro- and macroprudential exercises was provided in the afterword of the ASC Insight.

3.4 Cross-cutting issues

3.4.1 European Systemic Cyber Group

Cyber incidents pose a systemic risk to the financial system given their potential to disrupt critical financial services and operations and thereby impair the provision of key economic functions. In extreme cases, an incident generates (expected) financial costs and causes reputational damage to the financial system. The amplification of the initial shock can either occur through operational or financial contagion or through an erosion of confidence in the financial system. While the later stages of a cyber crisis resemble those seen in a more traditional financial

crisis, the impairment of the financial system's operability adds a new dimension to crisis management, including systemic mitigant activation.

Systemic mitigants prevent a cyber incident from becoming a systemic cyber crisis and threatening financial stability. In other words, they help to manage the consequences of a cyber incident for the financial system. Supervisory and oversight authorities are already fulfilling their mandates by continuing to develop their regulatory frameworks on operational resilience in the financial system and therefore promoting the mitigation of cyber risk to individual institutions. These preventive tools increase overall operational resilience and reduce the likelihood of severe cyber shocks to the financial system, and in doing so act as cyber risk mitigants in themselves.

Existing macroprudential tools are not designed specifically to manage the impact of a cyber incident and thus might have limited capability to serve as mitigants. Such tools mostly aim to increase the loss-absorbing capacity of, and to shore up confidence in, the financial system. In this way, they can provide backstops for financial and reputational related contagion and therefore mitigate the amplification of a cyber incident. However, their design and calibration rely on the assumption that functioning operational systems are in place, which might not be the case in a systemic cyber crisis. A cyber incident may have the consequence of rendering the use of macroprudential tools (operationally) ineffective. Additional systemic mitigants are therefore likely needed to address operational-related vulnerabilities and contagion.

Effective systemic cyber crisis management, including the activation of mitigants, requires joint effort and coherent action by financial authorities to address all the different crisis facets. This kind of orchestration needs close coordination and open communication between financial authorities, which should also have the requisite levels of situational awareness. To reduce response time, the implications of a cyber incident on financial stability need to be understood quickly. Aside from financial aspects, the overall risk assessment must also take into account the magnitude of operational disruptions, and for this reason technical experts, micro- and macroprudential supervisors and oversight authorities need to be involved.

Effective communication is a core ingredient in crisis management coordination. Without it, authorities risk taking unilateral action that contradicts or jeopardises the response of other ESRB member jurisdictions, causing uncertainty and confusion. Such a coordination failure can amplify the threat to the financial system posed by the cyber incident. In this scenario mistrust could spread throughout the financial system and thus may lead to an erosion of confidence in the financial system. The ESRB European Systemic Cyber Group (ESCG) report perceives such a situation as a cyber incident tipping point, at which the shock to the financial system can easily amplify and become a systemic event.[62]

Through the ESCG the ESRB continued its work on fostering the preparedness of financial authorities for a systemic cyber event, so that they can manage the financial consequences of a cyber incident and thus maintain financial stability. Moreover, the ESCG investigated the appropriateness of existing macroprudential tools and assessed the need to expand the macroprudential toolbox to address systemic cyber risk.

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[62] **Systemic cyber risk**, ESRB, February 2020.

3.4.2 Climate risk monitoring

The Analysis Working Group/Macroprudential Analysis Group Project Team on Climate Risk monitoring was tasked with developing quantifiable risk metrics for monitoring climate-related risks to financial stability as well as developing an initial scenario analysis of climate-related stress. It published a report in June 2020 with the following four main conclusions:[63] (1) climate shocks appear inevitable; (2) climate risk does not appear to be fully reflected in asset prices so far; (3) exposures of euro area banks to high-emitting firms appear limited on average, but are concentrated in a few large exposures for some banks. Transition risk mitigation appears to be gradually taking place; (4) an exploratory scenario analysis suggests that transition costs in the form of both economic output and bank capital will be manageable and temporary for banks and insurers.

The work continued into 2021 in the Advisory Technical Committee /Financial Stability Committee format. The latest work seeks to fill key gaps in the empirical understanding of the impacts of climate-related risk drivers on financial stability in two keyways. First, it builds on findings from the report published last year to more comprehensively map climate-related drivers to financial risk in the European Union – notably bringing in new insights on physical risk, as well as deepened insights on the financial impacts of transition risk. Second, the upcoming report harnesses a growing number of modelling initiatives in the European Union official sector to present recent advances in scenario analysis for euro area banks, insurers and investment funds.

[63] **Positively green: measuring climate change risks to financial stability,** ESRB, June 2020.

4 Institutional framework: implementation and accountability

4.1 Assessment of compliance with ESRB recommendations

ESRB recommendations are not legally binding, but they are subject to an "act or explain" regime in accordance with Article 17 of the ESRB Regulation.[64] This means that the addressees of recommendations – such as the EU as a whole, Member States, the ESAs, the national supervisory authorities and the European Commission – have an obligation to communicate to the European Parliament, the Council, the Commission and to the ESRB the actions that they have taken to comply with a recommendation, or to provide adequate justification in the case of inaction. In order to provide guidance to addressees on how to assess the implementation of ESRB recommendations, the ESRB published the Handbook on the assessment of compliance with ESRB recommendations in July 2013 and a revised version in April 2016.

The following subsections outline the compliance assessments undertaken over the review period.

4.1.1 Assessment of compliance with Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures

Recommendation ESRB/2015/2[65] is aimed at promoting a coordinated policy approach across borders within the EU and preventing financial service providers from circumventing national macroprudential measures. The Recommendation focuses in particular on the assessment of the cross-border effects of relevant activating authorities' own macroprudential policy measures ahead of the request for reciprocation. Moreover, it sets out the procedures to be followed both when submitting a request for reciprocation and when giving notification of reciprocation of other relevant authorities' macroprudential policy measures. Finally, the Recommendation contains a continuously updated list of macroprudential policy measures adopted by other relevant authorities and recommended by the ESRB for reciprocation. The first assessment of the follow-up to the Recommendation started in the first quarter of 2018 and was based on the information provided by the addressees by 30 June 2017. The exercise is ongoing and is expected to be completed in the course of 2021.

[64] Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board (OJ L 331, 15.12.2010, p. 1).

[65] **Recommendation of the European Systemic Risk Board of 15 December 2015 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures** (ESRB/2015/2).

4.1.2 Assessment of compliance with Recommendation ESRB/2017/6 on liquidity and leverage risks in investment funds and Recommendation ESRB/2020/4 on liquidity risk in investment funds

Recommendation ESRB/2017/6[66] contains five recommendations: Recommendation A, designed to address the risks that may arise when fund managers do not have adequate liquidity management tools; Recommendation B, designed to mitigate and prevent excessive liquidity mismatches in open-ended alternative investment funds (AIFs); Recommendation C, designed to promote coherent liquidity stress-testing practices at the investment fund level; Recommendation D, designed to establish a harmonised reporting framework for undertakings for collective investment in transferable securities (UCITS) across the Union; and Recommendation E, designed to facilitate the implementation of Article 25 of the AIFMD, which provides for a macroprudential tool to limit leverage in AIFs.

ESMA published the guidance referred to in Recommendation B in its Final Report: Guidelines on liquidity stress testing in UCITS and AIFs in September 2019. [67] As regards Recommendation E, ESMA published its guidance on Article 25 of Directive 2011/61/EU in September 2020.[68]

Recommendation ESRB/2020/4[69] contains one recommendation: Recommendation A is designed to enhance investment funds' preparedness to respond to potential future adverse shocks that could lead to deterioration in financial market liquidity, resulting in potential adverse implications for financial stability conditions in the Union. The ESRB has identified two segments as particularly high priority areas that merit closer scrutiny from a financial stability perspective: the first of these segments is investment funds with significant exposures to corporate debt; the second segment is investment funds with significant exposures to real estate.

Following the publication of the ESRB Recommendation, ESMA set up a work stream with NCAs to agree on a sample of funds, a common methodology, a questionnaire to be sent to management companies by NCAs and an assessment template that should be used by NCAs to report their assessments to ESMA. NCAs collected data from asset managers, reporting back to ESMA staff by 2 September 2020, and submitted their own assessment reports by 15 September. On 12 November 2020, ESMA published a report setting out ESMA's analysis and conclusions on the preparedness of the investment funds that were reviewed and presenting five priority areas identified to enhance the preparedness of funds that have significant exposures to corporate debt and real estate assets to potential future adverse shocks.[70]

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[66] **Recommendation of the European Systemic Risk Board of 7 December 2017 on liquidity and leverage risks in investment funds** (ESRB/2017/6).

[67] **Final Report, Guidelines on liquidity stress testing in UCITS and AIFs**, 2 September 2019, ESMA34-39-882.

[68] **Final Report, Guidelines on Article 25 of Directive 2011/61/EU**, 17 December 2020, ESMA34-32-552.

[69] **Recommendation of the European Systemic Risk Board of 6 May 2020 on liquidity risks in investment firms** (ESRB/2020/4).

[70] **Report on Recommendation of the European Systemic Risk Board (ESRB) on liquidity risk in investment funds**, 12 November 2020, ESMA34-39-1119.

The joint assessment of the follow-up to the ESRB recommendations started in the fourth quarter of 2020 and was based on the information provided by the addressees by 30 June 2019 and 31 December 2020. The exercise is ongoing and is expected to be completed in the course of 2021.

4.1.3 Assessment of compliance with Recommendation ESRB/2016/4 on closing real estate data gaps

The objective of Recommendation ESRB/2016/14[71] as amended by Recommendation ESRB/2019/3[72] is that national macroprudential authorities should implement a framework for monitoring developments in the real estate sector relevant for financial stability based on commonly agreed target definitions and indicators. The Recommendation is divided into six sub-recommendations (e.g. A, B, C, D, E and F), with sub-recommendations A, B, C and D being addressed to national macroprudential authorities, sub-recommendation E addressed to European Supervisory Authorities (ESAs) and sub-recommendation F addressed to the Commission (Eurostat).

Macroprudential authorities delivered their interim reports to the ESRB pursuant to recommendations A to D, which were due by 31 December 2019. On 19 February 2021 the General Board approved the extended note pertaining to the assessment of compliance with sub-recommendations A and D.

The follow-up assessment of sub-recommendations A and B started in January 2021 and was based on the final report submitted by national macroprudential authorities by 31 December 2020. The exercise is ongoing and is expected to be completed in the course of 2021.

4.1.4 Assessment of compliance with Recommendation ESRB/2015/1 on recognising and setting countercyclical buffer rates for exposures to third countries

Recommendation 2015/1[73] aims to promote a coherent approach across the Union for recognising and setting countercyclical capital buffer (CCyB) rates for exposures to third countries, helping to protect the banking sector in EU Member States from risks associated with excessive credit growth to the private non-financial sector in third countries and in order to ensure a level playing field within the Union and prevent regulatory arbitrage. The Recommendation is intended to ensure that designated authorities recognise CCyB rates set by third country authorities and set CCyB rates for exposures to third countries also with the purpose of addressing risks that might abate or materialise.

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[71] **Recommendation of the European Systemic Risk Board of 31 October 2016 on closing real estate data gaps** (ESRB/2016/14).

[72] **Recommendation of the European Systemic Risk Board of 21 March 2019 amending Recommendation ESRB/2016/14 on closing real estate data gaps** (ESRB/2019/3).

[73] **Recommendation of the European Systemic Risk Board of 11 December 2015 on recognising and setting countercyclical buffer rates for exposures to third countries** (ESRB/2015/1).

The compliance report on sub-recommendations B(1), B(2) and recommendation D was finalised in October 2017. The implementation of Recommendation A, sub-recommendations B(1) and B(3) and Recommendation C, which were due by 31 December 2020, is currently being assessed. The exercise is ongoing and is expected to be completed in 2021.

4.1.5 Assessment of compliance with Recommendation ESRB/2020/6

On 25 May 2020 the ESRB issued Recommendation ESRB/2020/6 on liquidity risks arising from margin calls.74 Recommendations A and D aim to ensure that sudden and significant (hence procyclical) changes and cliff effects relating to initial margins and collateral are limited. Furthermore, Recommendation B aims to ensure that CCPs capture comprehensively in their liquidity stress testing any events that could lead to them experiencing a liquidity shortfall, with a view to incentivising them to better manage their resilience on liquidity service providers. Finally, Recommendation C aims to ensure that CCPs, while maintaining their financial resilience, limit the asymmetry in the payment of variation margins collected intraday – and that they design their margin frameworks and schedules so as to be predictable and avoid excessive liquidity constraints for clearing members that could lead to default events.

Follow-up reports by the addressees of recommendations A, B(2), B(3), B(4) and C were due by 30 November 2020 and are currently being assessed by a dedicated Assessment Team. This exercise is expected to be completed in 2021.

4.1.6 Assessment of compliance with Recommendation ESRB/2020/7 and Recommendation ESRB/2020/15

On 27 May 2020 the ESRB issued Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic, asking the relevant authorities to request the financial institutions under their supervisory remit to refrain, at least until 1 January 2021, from undertaking any action which has the effect of reducing the quantity or quality of their own funds at the EU group level (or at the individual level where the financial institution is not part of an EU group), and, where appropriate, at the sub-consolidated or individual level.[75] Those actions include dividend distribution or irrevocable commitment to make a dividend distribution, buy-back of ordinary shares and creation of an obligation to pay variable remuneration to a material risk-taker. The Recommendation covers banks, certain investment firms, insurers, reinsurers and central counterparties.

The implementation of the Recommendation has been assessed by a dedicated Assessment Team which started its work in September 2020. The assessment of the first phase was based on the information provided by the addressees by 31 July 2020. This exercise was completed in the

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[74] **Recommendation of the European Systemic Risk Board of 25 May 2020 on liquidity risks arising from margin calls** (ESRB/2020/06).

[75] **Recommendation of the European Systemic Risk Board of 27 May 2020 on restriction of distributions during the COVID-19 pandemic** (ESRB/2020/7).

second quarter of 2021. The results of the assessment of compliance with the first phase of Recommendation ESRB/2020/7 will be published together with the results of the assessment of the second phase in the course of 2022.

In December 2020 Recommendation ESRB/2020/7 was amended by Recommendation ESRB /2020/15, including the date until which the restriction of distributions should apply.[76] The implementation of the amended Recommendation will be assessed in the fourth quarter of 2021 based on the information that will be provided by the addressees by 15 October 2021.

4.1.7 Assessment of compliance with Recommendation ESRB/2020/8

On 27 May 2020 the ESRB issued Recommendation ESRB/2020/8 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic.[77] Recommendation A aims to ensure that national macroprudential authorities monitor and assess the financial stability implications of COVID-19-related measures taken by their Member States to protect the real economy, such as debt moratoria, public guarantee schemes and other measures of a fiscal nature. Recommendation B establishes a framework for national macroprudential authorities to conduct regular reporting of the information necessary for the ESRB to monitor and assess the implications of the national measures referred to in Recommendation A for financial stability in the European Union.

In December 2020 the ESRB published a compliance report on the implementation of Recommendation A. The overall assessment revealed a high degree of compliance with recommendation A among the addressees.[78] Follow-up interim reports by the addressees of recommendation B were due by 31 December 2020 and are currently being assessed by a dedicated Assessment Team. This exercise is expected to be completed in the course of 2021.

4.1.8 Assessment of compliance with Recommendation ESRB/2019/18

On 26 September 2019 the ESRB issued Recommendation ESRB/2019/18 on exchange and collection of information for macroprudential purposes on branches of credit institutions having their head office in another Member State or in a third country.[79] Taking into account the increasing provision of cross-border financial services via branches within the Union, the Recommendation aims to enhance the exchange and collection of information on branches for

[76] **Recommendation of the European Systemic Risk Board of 15 December 2020 amending Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic** (ESRB/2020/15).

[77] **Recommendation of the European Systemic Risk Board of 27 May 2020 on monitoring the financial stability implications of debt moratoria, public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic** (ESRB/2020/8).

[78] 27 addressees were assessed as “Fully Compliant” (FC) and the remaining four as “Largely Compliant” (LC).

[79] **Recommendation of the European Systemic Risk Board of 26 September 2019 on exchange and collection of information for macroprudential purposes on branches of credit institutions having their head office in another Member State or in a third country** (ESRB/2019/18).

macroprudential and financial stability purposes. In particular Recommendation A recommends that the relevant authorities exchange the information deemed necessary for the discharge of their tasks related to the adoption and/or activation of macroprudential policy measures or for other financial stability tasks and establish memoranda of understanding or other forms of voluntary arrangements for cooperation and exchange of information among themselves.

Follow-up interim reports by the addressees of recommendation A were due by 31 December 2020 and are currently being assessed by a dedicated Assessment Team. This exercise is expected to be completed in the third quarter of 2021.

4.1.9 Assessment of compliance with Recommendations ESRB/2019/4, ESRB/2019/5, ESRB/2019/6, ESRB/2019/7, ESRB/2019/8 and ESRB/2019/9

On 27 June 2019 the ESRB decided to issue six country-specific recommendations on medium-term residential real estate (RRE) sector vulnerabilities, following a systematic and forward-looking assessment of the RRE sector covering the entire EEA. The recommendations were sent to the competent ministers of Belgium[80], Denmark[81], Finland[82] Luxembourg[83], the Netherlands[84], and Sweden[85]. Given that the identified vulnerabilities relating to the RRE sector as a source of systemic risk vary across countries, the recommendations consist of different policy actions. Accordingly, different deadlines for implementation apply.

The first deadline for addressees to submit follow-up reports on the level of implementation was 31 October 2020. The assessment of compliance with these recommendations based on the follow-up reports submitted by 31 October 2020 was concluded in the second quarter of 2021.

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80 **Recommendation of the European Systemic Risk Board of 27 June 2019 on medium-term vulnerabilities in the residential real estate sector in Belgium** (ESRB/2019/4).

81 **Recommendation of the European Systemic Risk Board of 27 June 2019 on medium-term vulnerabilities in the residential real estate sector in Denmark** (ESRB/2019/5).

82 **Recommendation of the European Systemic Risk Board of 27 June 2019 on medium-term vulnerabilities in the residential real estate sector in Finland** (ESRB/2019/8).

83 **Recommendation of the European Systemic Risk Board of 27 June 2019 on medium-term vulnerabilities in the residential real estate sector in Luxembourg** (ESRB/2019/6).

84 **Recommendation of the European Systemic Risk Board of 27 June 2019 on medium-term vulnerabilities in the residential real estate sector in the Netherlands** (ESRB/2019/7).

85 **Recommendation of the European Systemic Risk Board of 27 June 2019 on medium-term vulnerabilities in the residential real estate sector in Sweden** (ESRB/2019/9).

4.2 Reporting to the European Parliament and other institutional aspects

4.2.1 ESRB Chair's hearing before the Committee on Economic and Monetary Affairs of the European Parliament

In line with the ESRB's accountability and reporting obligations86, the Chair of the ESRB attends hearings before the Committee on Economic and Monetary Affairs of the European Parliament (ECON). These hearings are public and are transmitted via a webcast accessible on the ESRB's website. Both hearings in 2020 were held remotely owing to the COVID-19 pandemic.

The opening remarks of the ESRB Chair are published on the ESRB's website. These statements provide the Members of the European Parliament (MEPs) with an overview of the ESRB's stance on current systemic risks and on the macroprudential policy options recommended. The main points of the two most recent hearings are summarised below.

At the **hearing before ECON on 8 June 2020**, the ESRB Chair focused on the ESRB's response to the challenges posed by the COVID-19 pandemic. She highlighted the ESRB's assessment of the main vulnerabilities exposed by the pandemic and the five priority areas for action identified by the ESRB. MEPs were provided with first-hand information on the set of actions taken by the ESRB in those priority areas as well as on the underlying rationale. Regarding the ESRB's medium-term priorities, the Chair announced the publication of the ESRB report on financial stability risks related to climate change and discussed its main findings.

At the **hearing on 19 November 2020**, the ESRB Chair discussed two main areas. First, she explained the further actions taken in the non-banking sector in the context of the ESRB's response to the COVID-19 pandemic. Second, she provided MEPs with the ESRB's current assessment of the risks to financial stability, focusing particularly on banking issues and policy priorities going forward. Finally, the ESRB Chair marked the adoption of the ESRB Recommendation on the use of a legal entity identifier.

In addition to the public hearings, the ESRB Chair holds confidential discussions on the work of the ESRB with the Chair and Vice-Chairs of ECON, when appropriate.[87]

4.2.2 Other institutional relations

The ESRB held its annual meeting with the Committee of European Audit Oversight Bodies and statutory auditors of EU-based global systemically important financial institutions (G-SIFIs) on 3 and 4 November 2020. Owing to the restrictions in place as a result of the COVID-19 pandemic, the meeting took place remotely. The meeting is required by EU law[88] in order to inform

[86] Article 19 of the ESRB Regulation.

[87] Article 19(5) of the ESRB Regulation.

[88] Article 12(2) of Regulation (EU) No 537/2014 of the European Parliament and of the Council of 16 April 2014 on specific requirements regarding statutory audit of public-interest entities and repealing Commission Decision 2005/909/EC (OJ L 158, 27.5.2014, p. 77).

the ESRB of sectoral developments or any significant developments at G-SIFIs. The discussion focused on the immediate and long-term impact of the COVID-19 pandemic on banks and insurers, on how the audit work may be affected by the pandemic, and on the role of auditors in the prevention of fraud in accounting.

The ASC awards an annual prize (the Ieke van den Burg Prize) to recognise outstanding research conducted by young scholars on topics related to the ESRB's mandate. The annual prize was established in 2014 in memory of Ieke van den Burg, who was a member of the ASC (2011-14) and a Member of the European Parliament (1999-2009). In 2020 the prize was awarded to Marcus Mølbak Ingholt for his paper entitled "Multiple Credit Constraints and Time-Varying Macroeconomic Dynamics".[89]

4.2.3 The institutional framework

The organisational structure of the ESRB comprises a General Board, a Steering Committee, an Advisory Scientific Committee (ASC), an Advisory Technical Committee (ATC) and a Secretariat. During the review period, Claudia Buch, the Vice-President of the Deutsche Bundesbank, was appointed as the ATC Vice-Chair. In addition, Professor Javier Suarez succeeded Professor Richard Portes as Chair of the ASC, while Professor Stephen Cecchetti and Professor Loriana Pelizzon became Vice-Chairs of the ASC. Lastly, Emmanuelle Assouan, from the Banque de France, succeeded Thomas Schepens from the Nationale Bank van België/Banque Nationale de Belgique as the Co-Chair of the ATC Analysis Working Group (AWG).

From 1 April 2020 to the end of March 2021 there were 20 active working groups within the ESRB. Overall, 133 meetings of the General Board, Steering Committee, ASC and ATC substructures were organised.

The ECB supports the work of the ESRB in various ways. The day-to-day business of the ESRB is carried out by its Secretariat. The Head of the ESRB Secretariat is Francesco Mazzaferro and the Deputy Head is Tuomas Peltonen. In accordance with Council Regulation (EU) No 1096/2010, the ECB ensures the functioning of the Secretariat of the ESRB and thereby provides the ESRB with analytical, statistical, logistical and administrative support. In 2020 the ECB provided the ESRB with support in the form of 63.37 full-time equivalent (FTE) staff. Of these, 32.11 FTEs were employed within the Secretariat and 31.26 FTEs provided other forms of support. The direct costs incurred by the ECB amounted to €9.9 million. The indirect costs for other support services shared with the ECB (e.g. human resources, IT, general administration) are in addition to this amount. Over the same period, other member institutions of the ESRB provided approximately 55.3 FTEs for analytical support within the context of ESRB groups and ESRB group chair positions.

[89] See the ESRB's website for more information on the **Ieke van den Burg Prize.**

Annex 1: Publications on the ESRB's website from 1 April 2020 to 31 March 2021

ESRB reports and papers

Working papers

31/03/2021

The importance of technology in banking during a crisis

15/03/2021

Procyclical asset management and bond risk premia

15/03/2021

Cross-border credit derivatives linkages

01/02/2021

Financial crises, macroprudential policy and the reliability of credit-to-GDP gaps

16/11/2020

Retrenchment of euro area banks and international banking models

01/10/2020

Debt holder monitoring and implicit guarantees: did the BRRD improve market discipline?

01/09/2020

Gap-filling government debt maturity choice

15/04/2020

A dynamic network model to measure exposure diversification in the Austrian interbank market

Occasional papers

13/07/2020

Pension schemes in the European Union: challenges and implications from macroeconomic and financial stability perspectives

04/05/2020

The making of a cyber crash: a conceptual model for systemic risk in the financial sector

ESRB Reports

16/02/2021

Financial stability implications of support measures to protect the real economy from the COVID-19 pandemic

Infographics

21/01/2021

Preparing for the post-pandemic rise in corporate insolvencies

01/12/2020

Financial stability policies and bank lending: quasi-experimental evidence from Federal Reserve interventions in 1920-21

05/08/2020

Reforming bank stress testing in the EU: reflections in light of the EBA's discussion paper on the issue

23/07/2020

ESRB Annual Report 2019

08/06/2020

Liquidity risks arising from margin calls

08/06/2020

System-wide restraints on dividend payments, share buybacks and other pay-outs

08/06/2020

Positively green: measuring climate change risks to financial stability

14/05/2020

Issues note on liquidity in corporate bond and commercial paper markets

29/04/2020

A Review of Macroprudential Policy in the EU in 2019

Risk Dashboard

18/12/2020

ESRB Risk Dashboard, December 2020 (Issue 34)

ESRB Risk Dashboard - Annex I

ESRB Risk Dashboard - Annex II

01/10/2020

ESRB Risk Dashboard, September 2020 (Issue 33)

Overview note

ESRB Risk Dashboard - Annex I

ESRB Risk Dashboard - Annex II

02/07/2020

ESRB Risk Dashboard, July 2020 (Issue 32)

Overview note

ESRB Risk Dashboard - Annex I

ESRB Risk Dashboard - Annex II

09/04/2020

ESRB Risk Dashboard, April 2020 (Issue 31)

Imprint

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For specific terminology please refer to the **ESRB glossary** (available in English only).

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