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**Imprint**  59
I am very pleased to present the 13th Annual Report of the European Systemic Risk Board (ESRB), covering the period between 1 April 2023 and 31 March 2024. This report, addressed to co-legislators in the European Union and to the European public at large, explains how the ESRB delivered on its mandate. It forms an important part of the ESRB’s transparency and accountability framework.

The period under review was marked by a challenging macroeconomic environment, significant volatility in financial markets and high geopolitical uncertainty. A combination of slowing growth, high inflation and restrictive financial conditions saw the balance sheets of firms and households come under strain. In the second half of 2023, global bond market volatility underlined how financial markets remain vulnerable to disorderly asset price corrections. The ongoing war in Ukraine and the conflict in the Middle East reminded us that geopolitical tensions could escalate at any time. Together, these factors meant that risks to financial stability remained high.

The EU financial system proved resilient throughout this difficult time, including during the March 2023 banking turmoil in the United States and Switzerland and disruptions in global bond markets later that year. European banks began the period with much higher capital and liquidity ratios than before the global financial crisis. Prudent macroprudential policies contributed to this resilience. But the events documented in this report serve as a reminder of the importance of remaining vigilant, and of maintaining or even increasing resilience across the financial system. Consistent with this, several Member States tightened their macroprudential policies – particularly those related to capital buffers.

An important part of the ESRB’s work during this review period focused on systemic risks that cut across bank and non-bank financial institutions. The ESRB expanded the operational policy toolkit to address cyber risk by identifying key areas for action, including information management and coordination tools. It also continued to assess the systemic implications of crypto-assets and decentralised finance, concluding that authorities should strengthen their capacity to monitor developments in the crypto ecosystem and their potentially growing implications for financial stability. Furthermore, the ESRB – jointly with the ECB – put forward a gradual, targeted and scalable macroprudential approach to tackling climate risks.

The ESRB actively engaged with EU co-legislators to highlight the importance of including a macroprudential perspective in the ongoing regulatory reforms of the non-bank financial sector. The ESRB welcomes the finalisation of the legislative reviews concerning investment funds, insurers and central clearing. The revised rules will help address several of the vulnerabilities highlighted by the ESRB. At the same time, the reform of the regulation governing EU money market funds remains overdue. In May 2024 the European Commission launched a targeted consultation to assess the adequacy of macroprudential policies for non-bank financial intermediation. One of the ESRB’s priorities in 2024 will be to contribute to this important process.
During the review period, two dear and valued colleagues left their roles at the ESRB. I would like to thank Claudia Buch, whose role as Vice-Chair of the Advisory Technical Committee ended with her appointment as Chair of the ECB’s Supervisory Board. Claudia has greatly contributed to the ESRB’s work, and I am glad that the ESRB will continue to benefit from her insights in her new role. My thanks and appreciation also go to Ignazio Visco, whose term as member of the ESRB General Board ended in October 2023.

Christine Lagarde

ESRB Chair
The review period for this Annual Report runs from 1 April 2023 to 31 March 2024.

Financial stability risks remained high in 2023 and early 2024 owing to a challenging macroeconomic environment, significant volatility in financial markets and high geopolitical uncertainty. Subdued economic growth prospects, falling real estate prices and tight credit conditions led to concerns about borrowers’ debt servicing capacity and about cyclical risks more generally. Real GDP growth in the EU slowed in 2023 as the monetary policy response to the high price pressures worked its way through the real economy and the fiscal support provided during the coronavirus (COVID-19) pandemic was gradually phased out. High inflation, in combination with higher interest rates, had a dampening impact overall on firms’ investment and on households’ consumption decisions. Significant volatility in the global bond market in the second half of 2023 also challenged financial stability, particularly for non-bank sectors and investors with high interest rate risk exposures. Furthermore, the war in Ukraine, together with the flare-up of tensions in the Middle East in the latter part of 2023, added to geopolitical uncertainties. Looking ahead, further escalation of geopolitical tensions might reveal risks to financial stability.

Banks in the EU delivered strong profits in 2023 and remained resilient to global banking stress. EU banks’ profits increased significantly in 2023, driven by higher net interest income, while non-performing loan (NPL) ratios gradually fell to historical lows. The results of the 2023 EU-wide stress test by the European Banking Authority (EBA) confirmed that EU banks would remain resilient under an adverse scenario combining a severe EU and global recession, rising interest rates and higher credit spreads. Further confirmation of EU banks’ resilience came from the limited impact of the banking turmoil in March 2023, when three small-to-mid-sized banks in the United States collapsed and vulnerabilities arose in specific parts of the Swiss banking sector, leading to a takeover of Credit Suisse by UBS. Looking ahead, despite the strong profitability and resilience of the EU banking sector in 2023, the risks remain elevated. The full impact of high inflation and the sharp rise in interest rates will only be felt over time. Interest margins are expected to narrow, thereby dampening the profitability of EU banks. Furthermore, the subdued growth outlook, coupled with tight financing conditions, may lead to a deterioration in asset quality in the longer term. Moreover, if financial market tensions were to persist, funding risks for banks might increase. Given the high degree of uncertainty, it is crucial that banks ensure their resilience so they can withstand shocks to an already subdued macro-financial outlook.

Complementing its ongoing work on identifying systemic risks in the European Economic Area (EEA), the European Systemic Risk Board (ESRB) contributed to the stress-testing exercises of the European Supervisory Authorities (ESAs). Over the review period, the ESRB devised adverse scenarios for the money market fund and central counterparty stress tests conducted by the European Securities and Markets Authority (ESMA) in 2023. In addition, the ESRB devised adverse scenarios for the one-off “Fit for 55” climate risk scenario analysis, the results of which will be included in the final report submitted by the ESAs and the European Central Bank (ECB) to the European Commission.¹

¹ For more information, see “Fit for 55: Delivering on the proposals” on the European Commission’s website.
Over the period covered by this Annual Report, the ESRB reflected on several issues arising from the interplay between the prevailing economic environment and vulnerabilities across the financial system. This included considering potential lessons drawn from the March 2023 banking turmoil, such as the implications for banks of higher interest rate risks. The ESRB also worked on improving the monitoring and measurement of the systemic dimension of liquidity risks.

During the review period the ESRB worked on several important cross-sectoral and cross-border policy dossiers. As part of this work, the ESRB and the ECB published a joint report on a macroprudential framework for managing climate risk. The ESRB also put forward policy suggestions on financial stability risks related to cyber incidents, crypto assets and decentralised finance. The reflections and suggestions it made are designed to mitigate known risks and vulnerabilities that cut across the financial system. The ESRB, together with the ECB, also considered the implications for macroprudential policy of a higher inflation and higher interest rate environment, focusing particularly on the interactions between monetary policy and macroprudential policy at different stages of the cycle. This cross-sectoral and cross-cutting work included an update to its assessment of the residential real estate (RRE) sector and further work following the issuance of the ESRB’s Recommendation on commercial real estate (CRE) exposures. In updating its RRE assessment, the ESRB concluded that the levelling-off in the RRE markets has been too short-lived for it to materially alter its 2021 assessment of the risks.

The ESRB continued its work on banking sector-specific policies. This included contributing to the European Commission’s ongoing review of the macroprudential framework. The ESRB’s long-term vision for macroprudential policy was documented in its 2022 Concept Note, which continues to serve as the basis for the ESRB’s contributions to the review. In addition, further work is being undertaken to gain a better understanding of how the concept of a positive neutral rate for the countercyclical buffer is currently being applied by a number of ESRB members.

The ESRB has continued to develop the common macroprudential stance framework for banks on the basis of the methodologies it first proposed in 2019 and 2021. The macroprudential stance framework makes it possible to compare systematically and quantitatively financial stability risks against the macroprudential policy measures taken to address them so that each country’s macroprudential policy stance can be assessed as neutral, loose or tight. In January 2024 the ESRB published a report documenting further methodological advances within this framework. In addition, the ESRB used the framework to both support and challenge ESRB members’ national macroprudential policy decisions.

Macrop-prudential policies in several EU Member States were tightened over the review period in response to the increase in cyclical risks. A number of capital-based measures were taken, predominantly those relating to countercyclical capital buffers (CCyBs), which were primarily aimed at tightening existing macroprudential policy stances. A number of borrower-based measures (BBMs) were also taken, although with no particular overall direction in terms of tightening or loosening countries’ macroprudential policy stances. Looking at aggregate capital buffer requirements across the EEA, systemic risk buffers (SyRBs) have declined overall since the

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2 See also Box 1 entitled “March 2023 banking turmoil: causes and main lessons for financial stability”.
4 See the report by the Contact Group on Macroprudential Stance of the ESRB’s Instruments Working Group, “Improvements to the ESRB macroprudential stance framework”, European Systemic Risk Board, January 2024.
pandemic, but this has largely been offset by the building up of countercyclical buffers of a similar magnitude on aggregate.

Beyond the banking sector, despite the ESRB repeatedly calling for regulatory reforms in the non-bank financial sector, little progress has been made. During the review period the EU co-legislators concluded their review of the prudential rules governing investment funds, insurers and central clearing. In relation to central clearing, the ESRB engaged with the co-legislators on proposals to introduce an active account requirement to help address the concerns it had previously identified about exposures to certain clearing services provided by a number of UK central counterparties. The ESRB also set out options for addressing risks relating to corporate debt and real estate investment funds from a financial stability perspective. As part of its work in monitoring risks in certain parts of the non-bank financial sector, the ESRB also published its annual EU Non-bank Financial Intermediation (NBFI) Risk Monitor report. It also took note of the European Commission’s announcement, in January 2024, of the launch of a targeted consultation on macroprudential policies for non-bank financial intermediaries in the course of 2024. The ESRB’s response to that consultation will be covered in next year’s annual report.

The ESRB complied with its accountability and reporting obligations to the European Parliament and the public. To this end, the Chair of the ESRB attended a public hearing before the European Parliament’s Committee on Economic and Monetary Affairs (ECON) on 20 March 2023 and also held confidential meetings with the ECON Chair and Vice-Chairs to discuss financial stability risks. In terms of its accountability to the public, the ESRB issued its 2022 Annual Report in July 2023. The ESRB also organised several conferences and workshops to foster discussion on macroprudential policy. As part of its mandate, the ESRB held its annual meeting with the Committee of European Audit Oversight Bodies (CEAOB) and with the statutory auditors of EU-based global systemically important financial institutions (G-SIFIs) and insurers. The ESRB also held its seventh annual conference, which focused on the financial stability challenges ahead, including emerging risks and potential regulatory responses to address them.

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1 Systemic risks in the EU financial system

1.1 General outlook

Financial stability risks remained high in 2023 and early 2024 owing to a challenging macroeconomic environment, bouts of volatility in global bond markets and high geopolitical uncertainty. Subdued economic growth prospects, falling real estate prices and tight credit conditions led to concerns about borrowers’ debt servicing capacity, and about cyclical risks more generally. Real GDP growth in the EU slowed in 2023 as the monetary policy response to the high price pressures worked its way through the real economy and the fiscal support provided during the pandemic was gradually phased out. Elevated inflation combined with higher interest rates had a dampening overall impact on firms’ investment and on households’ consumption decisions. Significant volatility in global bond markets in the second half of 2023 also challenged financial stability, particularly for non-bank sectors and investors with interest rate risk exposures. Furthermore, the war in Ukraine and the flare-up of tensions in the Middle East in the latter part of 2023 added to the geopolitical uncertainties. Looking ahead, further escalation of geopolitical tensions might reveal risks to financial stability.

Banks in the EU delivered strong profits in 2023 and remained resilient to global banking stress. The profits of EU banks increased significantly in 2023, driven by higher net interest income, while NPL ratios gradually fell to historical lows. The results of the 2023 EU-wide stress test by the EBA confirmed that EU banks remained resilient under an adverse scenario combining a severe EU and global recession, rising interest rates and higher credit spreads. Further confirmation of EU banks’ resilience came from the limited impact of the banking turmoil seen in March 2023, when three small-to-mid-sized US banks collapsed and vulnerabilities arose in specific parts of the Swiss banking sector, leading to UBS taking over Credit Suisse. Looking ahead, despite the strong profitability and resilience of the EU banking sector in 2023, risks remain elevated. In particular, the full impact of higher interest rates will only be felt over time. Interest margins are expected to fall, thereby dampening the profitability of EU banks. Furthermore, the subdued growth outlook, coupled with tight financing conditions, are expected to lead to a deterioration in asset quality in the longer term. Moreover, if financial market tensions were to materialise, funding risks for banks would increase. Given the high degree of uncertainty, it is crucial that banks ensure their resilience so they can withstand shocks to an already subdued macro-financial outlook.

1.2 Key risks to financial stability

In March 2024, the ESRB highlighted seven key risks to financial stability, of which two were assessed as being “severe”. As part of its mandate, the ESRB regularly assesses systemic risks over a three-year horizon, and the risks it identifies form the basis for ESRB warnings and recommendations. The risk level reflects the probability of risks materialising and their potential systemic impact on the financial system. The ESRB ranks risk levels in three categories: (i) systemic risk; (ii) elevated systemic risk, and (iii) severe systemic risk. Some risks are assessed to be of a broad nature, with the potential to also trigger certain individual risks. Such risks are
categorised as “cross-cutting financial stability risks”. Figure 1 provides a summary of the ESRB risk assessment as at March 2024.

Figure 1
ESRB risk assessment

<table>
<thead>
<tr>
<th>Systemic risk originating from</th>
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<tbody>
<tr>
<td>1 A prolonged period of low economic growth and higher-than-expected inflation resulting in stress for non-financial corporations and households</td>
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<td>2 Disorderly market corrections possibly amplified by the non-banking sector</td>
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<td>4 Materialisation of accumulated risks in the residential and commercial real estate sectors</td>
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<td>5 Re-emergence of sovereign financing and debt sustainability concerns</td>
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<td>6 Disruptions of critical financial infrastructure, including central counterparties</td>
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Cross-cutting financial stability risks

- System-wide cyber incidents
- Climate-related financial stability risks
- Geopolitical tensions

Notes: Red denotes severe systemic risk, orange denotes elevated systemic risk and yellow denotes systemic risk.

1.2.1 Severe systemic risks

Risk 1. A prolonged period of low economic growth and higher-than-expected inflation resulting in stress for non-financial corporations and households

Households and firms in the EU were challenged by subdued economic growth prospects. Elevated gas and electricity prices across the EU Member States gave a rise to concerns that an energy crisis might unfold in the first half of 2023. However, the EU economy avoided energy shortages owing to a relatively mild winter, ample fiscal support and energy savings by households and firms. For 2023 as a whole, real GDP in the EU slowed significantly and recorded an annual growth rate of 0.4%, compared with 3.4% in 2022. The higher cost of living reduced private consumption over the review period. Low demand for capital and intermediate goods dampened
business investments, while tight financing conditions exerted a drag on housing investments. Looking ahead, available forecasts from international organisations project growth in the EU to improve over the medium term, but to remain subdued in the coming years, with significant cross-country heterogeneity. The European Commission’s Winter 2024 Economic Forecast projects that the EU economy will grow at an annual rate of 0.9% in 2024 and by 1.7% in 2025 (Chart 1).6

**Decisive action by global central banks supported financial stability.** Inflation in the EU recorded a downward trend in 2023. Most components contributed to the drop in headline inflation, with a particularly strong contribution coming from energy price inflation. Despite this, inflation was still above levels consistent with price stability in early 2024 (Chart 2). Elevated inflation continued to erode households’ purchasing power over the review period. This effect was more pronounced for households with low incomes, who tend to spend a larger share of their income on necessities. For firms, higher financing costs were recorded on loans granted by banks and also on debt tapped directly from financial markets. Greater stress was observed for energy-intensive firms and for several highly leveraged CRE firms in the EU. The ESRB has begun assessing the implications of higher inflation and interest rates on macroprudential policy (see Section 2.1.2.2 for further details).

**Looking ahead, financial stability risks stemming from the macroeconomic outlook are surrounded by high uncertainty.** Real GDP growth is expected to gradually recover in the EU, while it is anticipated that inflation will return closer to target over the medium term under the baseline scenario. This in turn should support confidence and lead to stronger balance sheets for households and firms in the EU. Such a benign baseline scenario is, however, surrounded by great uncertainty. Any escalation of geopolitical tensions could lead to trade disruption and sharp increases in commodity prices, with implications for growth, inflation and interest rates. This might then tighten financial and credit conditions in the EU and challenge the resilience of households and firms.

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Risk 2. Disorderly market corrections possibly amplified by the non-banking sector

Financial markets remained volatile in 2023, reflecting high macro-financial uncertainty. Elevated geopolitical tensions, uncertainty about the economic outlook coupled with shifting...
monetary policy expectations, resulted in high volatility in financial markets in both the US and Europe in the first three quarters of 2023. Risk sentiment improved, however, in the latter part of the review period, reflecting lower inflationary pressures and expectations that monetary policy would become somewhat more accommodative in 2024. EU stock markets rose overall in 2023 (see Chart 3). EU stock prices were influenced by a number of factors over the review period. They were bolstered, first, by the higher-than-expected resilience of the economy to the high energy prices seen during the winter of 2023 and, second, by the fall in bond yields as a consequence of markets’ repricing for inflation and for the monetary policy outlook in the latter part of 2023. Stock prices in the US outperformed those in the EU, mainly owing to a surge in the stock prices of a handful of large technology firms that investors believed would benefit from the artificial intelligence-driven productivity boom, boosting future earnings.

Chart 3
S&P 500 index, STOXX Europe 600 index and Bloomberg US Big Tech Top 7 Plus index

(1 January 2021 = 100)

Source: Bloomberg.

Looking ahead, financial markets remain vulnerable to disorderly asset price corrections. Several triggers may initiate significant falls in asset prices over the three-year risk horizon. First, an escalation of geopolitical tensions might lead to lower-than-expected economic growth though the trade and confidence channels. This in turn might result in lower earnings potential for firms and push risk premia higher. Second, higher-than-expected inflation might trigger a reassessment of future monetary policy rates, with possible implications for bond and stock markets. It might also accelerate ongoing downward price adjustments in the RRE and CRE markets. Low liquidity and leveraged investment funds might amplify market corrections. Events such as the March 2020 global turmoil and the September 2022 liability-driven investment (LDI) crisis in the United Kingdom raised concerns about the financial stability implications of low market liquidity. News of a sharp deterioration in liquidity would intensify financial asset price sensitivity, thereby amplifying market corrections. In addition, vulnerabilities in the non-bank financial sector might trigger adverse market dynamics through forced asset sales, low liquidity buffers and procyclical selling behaviour, thereby exacerbating the risk of disorderly conditions in financial markets.
risk is particularly large for investment funds operating with a high leverage, a large liquidity mismatch or a large market footprint.

1.2.2 Elevated systemic risks

Risk 3. Deteriorating asset quality and higher funding risks for the banking sector

Higher bank profitability was bolstered by strong net interest income. EU bank profitability benefited overall from the higher interest rate environment. Banks have generally been quick to pass higher policy rates on to lending rates, while the pass-through to deposit rates has been more sluggish. The increase in profitability has been more pronounced in countries with predominantly variable rates. The average return on equity (RoE) for EU banks stood at 10.3% in the fourth quarter of 2023, 2.2 percentage points higher than a year earlier.

The capital positions of EU banks strengthened further, primarily through retained earnings. The average fully-loaded common equity tier 1 (CET1) ratio for EU banks reached historically high levels in 2023, standing at 15.9% in the fourth quarter of 2023 (Chart 4). This was around 50 basis points higher than one year earlier, and the increase was driven primarily by higher retained earnings. Moreover, the results of the EBA 2023 EU-wide stress test showed that EU banks could remain resilient to sizeable shocks. The adverse scenario used for that test combined a severe EU and global recession, rising interest rates and higher credit spreads. Strong starting points, in the form of robust earnings and asset quality, contributed to the finding that banks would retain relatively solid capital ratios even after applying the adverse scenario.

Asset quality continued to be robust in 2023, despite the challenging macro-financial environment. Banks across the EU remained resilient in spite of the macro-financial challenges and the high uncertainty stemming from rising geopolitical tensions. The average NPL ratio for EU banks remained broadly stable over the past year, standing at a historical low of 1.9% in the fourth quarter of 2023.

EU banks remained resilient to the global banking turmoil. In March 2023, two mid-sized US banks collapsed and vulnerabilities in specific parts of the Swiss banking sector arose that resulted in the takeover of Credit Suisse by UBS. This then gave rise to heightened concerns about the stability of the EU banking sector. Confidence was restored after the relevant authorities quickly implemented appropriate measures. Apart from a degree of volatility in bank asset prices, there was no contagion to the EU. The chief reason for this resilience was that banks in Europe do not share some of the more risky features common to mid-sized US banks, including extreme exposure to interest rate risk and reliance on a concentrated uninsured deposit base (Box 1).7

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7 For more details of the results, see “EBA publishes the results of its 2023 EU-wide stress test”, Press release, European Banking Authority, 28 July 2023.

Chart 4
Return on equity and the CET1 ratio in the EU
(percentage points; December 2019-December 2023)

Source: EBA.
Note: CET1 stands for Common Equity Tier 1 and RoE for return on equity.

Box 1
March 2023 banking turmoil: causes and main lessons for financial stability

The banking turmoil of March 2023, which originated in the US and Switzerland, was the most significant banking stress seen since the 2008 global financial crisis. The turmoil was triggered by the failure of Silicon Valley Bank, a mid-sized US bank with high, unhedged exposure to interest rate risk and a concentrated depositor base with a large share of uninsured deposits.9 This was followed by deposit runs at US Signature Bank and First Republic Bank and their subsequent failures, the latter being sold to JP Morgan. Market concerns spread outside the US, leading to a confidence crisis and liquidity problems at Credit Suisse. The Swiss bank had already suffered from large deposit withdrawals and share price losses in 2022 due to a weak financial performance, together with concerns about the viability of its business model and its risk management practices. To alleviate systemic risk concerns, the Swiss authorities intervened and facilitated a takeover of Credit Suisse by UBS.

The banking turmoil in the US and Switzerland had significant, albeit short-lived, repercussions in European banking markets. The failure of some US regional banks and the confidence crisis at Credit Suisse triggered a broader market reaction in Europe, with bank share prices falling by more than 20% from the highs reached before the turmoil (Chart A). In addition, the regulatory treatment of Additional Tier 1 (AT1) instruments by the Swiss authorities, i.e. full write-down of AT1 capital instruments while not imposing full losses on equity holders, led to heightened investor uncertainty and significant spread widening.10 While forceful policy intervention by the US authorities helped contain contagion, US bank share prices have not yet fully recovered, with

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9 Before the failure of Silicon Valley Bank, Silvergate Bank, a smaller bank that was also providing services to cryptocurrency users, went into liquidation.

10 This triggered a reaction by the European supervisory authorities – ECB Banking Supervision, the European Banking Authority (EBA) and the Single Resolution Board (SRB) – who issued a joint statement confirming that creditor hierarchy would be respected in the event of resolution.
market concerns about US regional banks flaring up in February 2024, owing mainly to growing credit quality problems for some bank CRE loan portfolios. By contrast, European bank shares fully recovered from their fall and, by March 2024, had exceeded their pre-turmoil highs.

Chart A

Bank share prices in Europe and in the US

(index: 3 January 2023 = 100)

The origins of the banking turmoil in March 2023 have, in part, been idiosyncratic, but this episode exposed vulnerabilities in the banking sector in a rising interest rate environment, as well as the impact of structural changes on the propagation of stress. While bank earnings have, in general, benefited from higher interest rates, some banks with sizeable long-term fixed income assets experienced a sharp rise in unrealised losses on their available-for-sale and held-to-maturity portfolios. Business model and risk management deficiencies emerged as a common theme across banks experiencing distress. In the case of the failed US banks, high exposure to interest rate risk on the asset side was coupled with funding-side vulnerabilities, such as a high proportion of less stable deposits and a high sectoral concentration of deposits. This may also reflect the fact that these banks did not have adequate risk management governance and processes in place to control for risks stemming from their rapid balance sheet growth (Chart B).
Similarly, the confidence crisis at Credit Suisse was attributable, in part, to persistent risk management and governance issues. Ultimately, the March 2023 banking turmoil revealed a vulnerability to the speed of deposit outflows being greatly accelerated, as compared with earlier episodes of bank distress, in a digital world dominated by social media interactions (Chart C).

While EU banks have proven to be resilient to this type of shock, given their strong fundamentals, the March 2023 turmoil provides important lessons for banks and
Contagion risks for EU banks were mitigated by robust liquidity ratios (with a high share of cash and reserves in liquid assets), a more diversified deposit base and relatively contained unrealised losses compared with the US banks in distress. That said, the banking stress of 2023 has highlighted the need for sound corporate governance and effective risk control by banks. It has also served as a powerful reminder of the need to complete the banking union, in particular the crisis management framework and a common European deposit insurance scheme, and to ensure that banks remain well capitalised so they can withstand potential future losses.

The failures highlighted by the March 2023 episode triggered discussions in the ESRB Advisory Scientific Committee (ASC) aimed at gaining a better understanding of the root causes and of possible related flaws in the regulatory framework. It was apparent that part of the problem, in particular in the US, was weak implementation of financial regulation and supervision, especially in contrast with the EU. More generally, however, these failures were a stark reminder of the fragility associated with the funding structures adopted by banks, in particular when reliance is placed on a poorly diversified uninsured deposit base. Furthermore, the increased speed with which deposit withdrawals may now occur during a run implies, all other things being equal, greater bank vulnerability to such runs than in the past. The ASC also discussed, from an academic perspective, policies that could be used or adapted to address bank vulnerability to runs, or its underlying causes. Some of these policies would just entail a fine-tuning of existing regulations and institutions, while others would involve deeper structural transformations of the financial system. Among the latter group of policies, the ASC found some of them to be impractical or too costly, while others would require further analysis to determine whether they might be viable or desirable.

As part of its work on the identification of financial stability risks, the ESRB has also conducted an in-depth analysis of the macroprudential implications of increasing interest rates and of the role of credit default swap (CDS) markets in fostering information spillovers and magnifying shocks through interactions with other financial instruments, as seen during the March 2023 turmoil. The ESRB has also begun work on systemic liquidity.

Persistently low bank valuations are an indication of lingering market concerns about the ability of banks to generate sustainable profits in the long term. Despite the significant rise in the profitability of EU banks in recent quarters, bank valuations are still low. The average price-to-book ratio for listed banks in the euro area has increased, although remains notably below 1 and lower than that for US peers (Chart 5). Estimates of the cost of equity (CoE) continue to hover at levels above RoE. In other words, banks may still not be able to generate the returns demanded by investors. Apart from cyclical factors, such as subdued economic growth prospects, the negative RoE-CoE gap may also be related to structural factors. Measures of overcapacity suggest that the European banking sector is lagging behind those of other major economies, such as the UK and the US.11 EU banks have consistently maintained a higher cost base than banks in other major markets. The increasing profitability of euro area banks in recent years has, however, contributed to an improvement in cost efficiency ratios, with the cost-to-income ratio for the EU as a whole standing at 56% in the fourth quarter of 2023.

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Looking ahead, the risk outlook for EU banks is assessed as being at an elevated level. In particular, the full impact of higher interest rates on the EU economy is expected to be felt over time and a lag in the rise of credit risk is therefore to be expected. The subdued growth outlook for the EU economy is also expected to lead to a deterioration in asset quality. Furthermore, should policy rates fall, as anticipated by the financial markets, interest margins for EU banks may come under pressure, thereby gradually reducing their prospects of profitability. Their profitability may also be further adversely affected by the risk of a prolonged slowdown in credit volumes. Funding and liquidity risks are an additional vulnerability that requires close monitoring. The failure of Silicon Valley Bank in March 2023 provided a stark reminder that confidence in banks can quickly be eroded and result in sudden and large-scale bank runs, possibly amplified by social media. It is imperative that banks have adequate risk management practices and governance arrangements in place to ensure their resilience. Supervisory authorities can also support this resilience by actively identifying weaknesses and taking prompt action if needed.

Risk 4. Risks in the residential and commercial real estate sectors

The financial stability implications of the downturn in EU RRE markets have been limited so far. The prolonged period of rising house prices in the EU came to a halt in 2023. RRE prices and transactions declined in most EU countries owing to the rise in financing costs and the fall in households’ real disposable income. In nominal terms, EU RRE prices grew at a modest annual rate of 0.2% in the fourth quarter of 2023, but real RRE prices declined by -6.3% over the same period, albeit with strong cross-country heterogeneity (Chart 6). So far, the financial stability implications of the downturn in the RRE cycle have been limited and mitigated by the resilient labour market. Section 2.1.2.1 describes the work conducted by the ESRB over the review period to address country-specific vulnerabilities related to the RRE market.
The EU CRE sector continues to face cyclical and structural headwinds. The challenging macroeconomic environment with higher funding and construction costs in 2023, combined with certain structural factors, led to lower demand for CRE over the review period. As a result, nominal CRE prices in the EU dropped at an annual rate of 8.9% in the fourth quarter of 2023. Weak sentiment also pushed CRE transactions lower, and volumes declined by 53% over the same period. The strongest declines were recorded in the offices and apartments segments. Looking ahead, risks remain for further corrections in CRE prices and transactions. Quite apart from a still challenging cyclical outlook, the impact of climate-related economic policies, the shift towards e-commerce and more widespread use of teleworking pose longer-term challenges for CRE markets.

The fall in CRE prices in 2023, coupled with rising refinancing costs, has put pressure on several CRE investors. At the banking sector level, however, CRE risks remained contained, with CRE-related loans representing just 10% of EU bank lending. Some banks with significant concentrations of CRE exposures have been subjected to the scrutiny of investors, leading to sharp falls in their stock prices. Furthermore, the deterioration in asset quality would seem to be lagging behind the fall in prices, given that CRE NPLs and underperforming (Stage 2) loans increased only marginally.

While banks are the main lenders to the CRE sector, the direct holders of commercial properties are mostly investment funds and CRE firms. The marked decline in transactions since the beginning of 2022 has been driven mainly by these two types of investors. Vulnerabilities in the investment fund sector stem from investment funds with a large market share and elevated liquidity mismatches, and, occasionally, high leverage. Real estate funds exposed to such vulnerabilities – especially those that encompass several such vulnerabilities concurrently – should be monitored carefully to avoid fire-sale dynamics.
Risk 5. Re-emergence of sovereign financing and debt sustainability concerns

High public debt-to-GDP ratios remain a key macroeconomic vulnerability in several euro area countries. The public debt-to-GDP ratio in the euro area was estimated at 88.3% in 2023, with considerable cross-country heterogeneity. Public-sector indebtedness in the euro area has improved in recent years, driven by post-pandemic GDP growth and the gradual reduction in national budget deficits, which also reflects the ongoing roll-back of energy-related support measures. Looking ahead, however, this improving trend seems to have stalled, with the euro area public debt-to-GDP ratio expected to reach 88.6% in 2026, according to the March 2024 ECB staff macroeconomic projections for the euro area. This halt is linked to the ending of the fiscal stance tightening anticipated after 2024. The trajectory of public debt is highly sensitive to changes in the growth and interest rate outlooks. Consequently, the considerable uncertainty stemming from geopolitical tensions pose risks to sovereign debt sustainability over the medium term. To ensure future stability, it is imperative that the framework for economic and fiscal coordination is robust.

1.2.3 Systemic risks

Risk 6. Disruptions to critical financial infrastructure, including central counterparties

EU central counterparties (CCPs) reacted to elevated bond market volatility. Due to their central role in the financial system, any insolvency, resolution or operational problems involving a CCP could lead to severe disruptions in the financial markets. In a business-as-usual scenario, changes in the margin requirements and collateral practices of CCPs might be a source of procyclical feedback loops. CCPs responded to the gyrations in bond markets of the past year by raising their average haircuts on non-cash collateral. This signalled their awareness of market risks, but increased the liquidity needs of clearing members and clients. Half of the EU CCPs reported a decrease in cash ratios in the first three quarters of 2023. This was likely to have been caused by clearing members more commonly providing initial margins in the form of non-cash collateral, such as highly liquid government bonds, rather than in the form of cash to be deposited by CCPs at central banks and commercial banks. The main risk to financial stability associated with non-cash collateral is the market impact of simultaneous sell-offs by several CCPs should one, or more, large clearing member default at the same time. In addition, many CCPs established new prefunded default resources in 2023, in form of dedicated additional own capital, as required on entry into force of Article 9(14) of Regulation (EU) No 2021/23. More resources available in crisis situations make the clearing ecosystem more resilient. Concerning investment policies, the picture as regards risk is mixed given that several EU CCPs have significantly reduced their share of cash reinvestments into government bonds in relative terms, while others have increased their share of such reinvestments.

12 For more information, see ECB staff macroeconomic projections for the euro area, European Central Bank, March 2024.

Vulnerabilities remain in terms of the EU’s reliance on substantial systemically important third-country CCPs. Changes in the interest rate environment have increased the demand for protection through interest rate derivatives and for central clearing services for these products. Consequently, the EU financial system’s reliance on UK CCPs for clearing these products has increased over the review period. The main risks to financial stability associated with continued recognition of UK CCPs would arise from any procyclical measures taken by those CCPs during a period of market strain or if they were to enter into recovery or resolution.

### 1.2.4 Cross-cutting financial stability risks

#### Risk 7. System-wide cyber incidents

Risks to financial stability from cyber incidents have increased in the past year. Reports from banks under the Single Supervisory Mechanism (SSM) show that the number of cyber incidents affecting financial institutions increased by around 78% in 2023, compared with previous years. Looking ahead, risks for system-wide cyber incidents remain high. Large-scale cyber incidents have the potential to impair key economic functions, erode trust and exacerbate vulnerabilities. More sophisticated attackers could use artificial intelligence (AI) to lever cyberattacks. The risk of malicious attacks merits further attention, given that ongoing geopolitical tensions could have an adverse effect on the persistently heightened cyber-threat environment in Europe. The ESRB has been actively involved in the design of tools for mitigating cyber risk, having issued two reports on this matter over the review period (this policy work is described in Section 2.1.1.2).

#### Risk 8. Climate-related financial stability risks

Large, and potentially systemic, losses could arise for financial institutions from direct and indirect exposures to physical and transition risks related to global warming and other environmental risks, including abrupt asset price corrections of “stranded assets” and higher losses from natural disasters. The ESRB took timely steps, in conjunction with the ECB, by promoting a policy framework aimed at climate risk. A report published in 2023\(^\text{14}\) proposed three frameworks for reducing climate risks to financial stability that addressed risk surveillance, macroprudential policy and broader risks to nature (see also Section 2.1.1.1).

#### Risk 9. Geopolitical tensions

A surge in geopolitical tensions could trigger broad-based corrections in asset prices and lead to a rise in credit, interest rate and liquidity risks. In an adverse scenario, the global financial system could be significantly affected by falling asset prices, sharp increases in commodity prices and trade disruptions.

\(^\text{14\ ECB/ESRB Project Team on climate risk, “Towards macroprudential frameworks for managing climate risk”, European Systemic Risk Board, December 2023.}\)
Box 2  
Systemic liquidity risk

Recent developments, such as bond market volatility, geopolitical tensions and the shift towards quantitative tightening, have increased the probability of liquidity risks materialising. Furthermore, structural trends in the financial sector have broadened the range of potential vulnerabilities and require increased attention by policymakers. For example, the rising incidence of non-bank financial institutions and open-ended funds offering daily liquidity to investors has resulted in more liquidity transformation being performed outside the banking sector. The move towards central clearing and a greater reliance on secured funding has reduced counterparty risks, but has reinforced the link between market and funding risks by translating price volatility into margin calls and collateral requests. The increased digitalisation of the financial sector has led to the growth of proprietary trading through electronic markets and to fewer barriers for investors and depositors in redirecting their funds. The speed and severity of bank runs on US regional banks last year were likely to have been exacerbated by digitalisation and the rapid spread of information via social media.

Since early 2023, the ESRB has made progress in two areas relating to liquidity risk: developing a surveillance framework to analyse systemic illiquidity and laying the ground for a system-wide liquidity stress test. The surveillance framework consists of a set of indicators that can be used across EU jurisdictions to assess liquidity risk in systemically important entities and markets, while allowing for the structure of the financial system and interlinkages within it. The second project, the system-wide liquidity stress test, combines two perspectives: EU-wide and national. Both perspectives involve a top-down stress-testing model, differing in geographical and sectoral coverage. In 2023 the Task Force finalised liquidity scenarios for the stress test and finished the data collection exercise required before it runs stress-testing models using common adverse liquidity.

1.3 Regular risk monitoring and risk assessment activities

The ESRB continued its regular monitoring activities and provided adverse scenarios for the stress-testing exercises of the ESAs. This section describes the adverse scenarios that the ESRB provided to ESMA and to the European Insurance and Occupational Pensions Authority (EIOPA) and that were published during the review period for this Annual Report. The section also includes a box summarising the ESRB’s risk assessment of certain non-bank financial institutions, particularly investment funds (Box 2).

1.3.1 Stress test scenarios

Stress tests are an analytical and monitoring tool that helps assess the resilience of the financial system. They simulate the resilience of financial institutions under hypothetical adverse economic and financial conditions, aiding in risk management and crisis prevention. In accordance with their mandates, the ESAs are required to coordinate, in conjunction with the ESRB, the stress-testing exercises at the EU level falling within their remit. Not only do these exercises help
The ESRB provided three adverse scenarios over the review period, each tailored to the needs of the ESA coordinating the stress test. Each scenario is tailored to encompass the business models and risk profiles of the various types of financial institution covered by the specific stress-testing exercise. Reflecting this, each scenario was designed in close cooperation with the relevant ESA and extensively discussed with the ESRB member institutions.

In May 2023 the ESRB provided the adverse scenario for the 2023 EU-wide CCP stress-testing exercise coordinated by ESMA. This scenario reflects an aggravation of the geopolitical tensions and polarisation triggered by the Russian invasion of Ukraine. The main consequence is rising inflation, which triggers market expectations of higher market interest rates. This results in increased borrowing costs for both corporates and governments, which are still struggling with the elevated debt levels seen since the coronavirus pandemic. An important element of the scenario for CCPs is a spike in volatility and disorderly asset price corrections across asset types triggered by an overall tightening of financing conditions, weaker macroeconomic prospects and reduced market liquidity.

Later in the year, in December 2023, the ESRB also provided ESMA with the adverse scenario for the 2023 money market fund (MMF) stress-testing guidelines. The narrative of this scenario is similar to that of the scenarios described above and builds on a prolongation of geopolitical tensions. In this scenario, inflationary pressures lead to a broad re-appraisal of market expectations, resulting in an increase in interest rates across the whole maturity spectrum. Weak growth prospects, combined with the tightening of financing conditions and high inflation, affect the credit quality of both corporates and households and culminates in a deterioration in their profitability and real income. This environment forces markets to suddenly re-evaluate financial assets and real estate downwards, leading to the amplification of liquidity stress in the economy.

At the end of the review period, in March 2024, the ESRB provided the adverse scenario for the 2024 insurance sector stress test to EIOPA. The narrative of this scenario is similar to that of the scenarios described above, but emphasises those aspects of stress that are most relevant to the insurance sector. In this scenario, inflationary pressures lead to a re-appraisal of market expectations of interest rates across maturities and currencies. The expected persistence of the adverse shocks is reflected in an inversion of market interest rates across the yield curve. Despite expectations of decreasing inflationary pressures over time, growth will continue to be adversely affected. In this scenario, the increase in market interest rates fuels a disorderly repricing of CRE. At the same time, high borrowing costs, coupled with a sharp fall in RRE prices, trigger a sudden drop in the prices of covered bonds and other asset-backed securities. An increase in overall uncertainty under the adverse scenario also leads to a decline in equity valuations and consequent losses for hedge funds, real estate investment trusts and private equity funds.

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15 The ESRB publishes all the scenarios used for such regulatory stress tests – see the Stress testing page on the ESRB’s website.
1.3.2 Monitoring of certain non-bank financial institutions and securitisation markets

The ESRB monitors and assesses risks in certain non-bank financial institutions. These activities complement the broader risk monitoring outlined in Section 1.1. Box 3 describes these activities in more detail.

Box 3
The monitoring of risks relating to non-bank financial intermediation

The EU 2023 NBFI Risk Monitor report, published in June 2023, summarises the ESRB’s monitoring of systemic risks and vulnerabilities relating to non-bank financial intermediation in 2022. The 2023 report highlights three such risks and vulnerabilities. First, a broad-based economic slowdown, which, if combined with tightening financial conditions, could increase credit risk. Materialisation of credit risk could lead to losses, which, in the case of investment funds, could translate into large outflows and liquidity strains. Second, market liquidity risk, which could put further pressure on non-bank financial intermediaries engaged in liquidity transformation. Alongside cyclical liquidity risk, structural changes in liquidity provision and demand could amplify market price movements. Third, excessive use of leverage, which could amplify liquidity and market risks, potentially leading to contagion and magnifying shocks to financial stability. Risks associated with the use of leverage might also be amplified by low market liquidity, as observed in some bond market segments in 2022.

The 2023 report extended the monitoring universe to crypto assets and associated intermediaries, i.e. stablecoins, centralised finance platforms and decentralised finance protocols. Although the crypto ecosystem is exposed to certain risks that are unique to it, the business models of several crypto asset intermediaries resemble those of regulated financial institutions. Accordingly, they essentially engage in the same activities as traditional financial players, i.e. credit intermediation, liquidity and maturity transformation, as well as making use of leverage. Reflecting this, crypto assets and associated intermediaries provide financial intermediation and may be exposed to the same vulnerabilities and financial risks as the traditional financial sector. This is particularly important given that, prior to the new Markets in Crypto Assets (MiCA) Regulation, which entered into force in June 2023 and is due to enter into application in June 2024 (Titles III and IV) and December 2024 (other titles), crypto assets and associated intermediaries were largely unregulated in the EU, in contrast to investment funds.

To support risk identification, the NBFI Risk Monitor includes two special features. The 2023 report having extended the monitoring universe, one of the special features focuses on crypto ecosystem vulnerabilities that are similar to those present in traditional non-bank financial intermediaries. It looks at crypto assets and how associated intermediaries engage in credit intermediation, liquidity and maturity transformation, their use of leverage and their interconnectedness. The other special feature considers stress related to LDI strategies as at September 2022. It uses regulatory data to assess the resilience of EU-domiciled LDI funds to a sudden rise in yields and provides insights into how risks associated with liquidity and leverage materialise.
2 ESRB policies addressing systemic risk

Over the review period the ESRB continued to work on several important cross-sectoral and cross-border policy topics. An important part of the ESRB’s work is to assess financial stability across the financial system as a whole, so that interlinkages, common risks and exposures, and regulatory arbitrage risks are all evaluated in a holistic, top-down manner, in keeping with the ESRB’s mandate. This is reflected in the identification of the cross-cutting risks to financial stability described in Section 2.1 below: system-wide cyber incidents, climate-related financial stability risk and geopolitical tensions. That section deals with the first two of these cross-cutting risks and describes ESRB policy work to help address them. It also considers other topics (real estate, crypto assets and decentralised finances, higher inflation and interest rates) for which the ESRB has undertaken policy work to address the build-up of vulnerabilities and risk across the financial system.

In parallel, the ESRB developed its sector-specific policies further, given that these too support the overall stability of the system. For the banking sector, this included contributions to the European Commission’s five-yearly review of the macroprudential policy framework in the EU, as well as internal work by the ESRB to support its members in their national macroprudential policy decisions. Beyond the banking sector, the ESRB continued to propose changes to the prudential rules for the insurance sector, as well as to the rules for the investment fund sector and for central counterparties.

2.1 Addressing the build-up of vulnerabilities and risks across the financial system

2.1.1 ESRB policies to address cross-cutting systemic risks

The ESRB continued its work to address the build-up of vulnerabilities related to the cross-cutting systemic risks of climate change and cyber risk. Vulnerabilities in these areas cut across bank and non-bank financial institutions and could pose broader risks to financial stability. The remainder of this section describes the work of the ESRB in these areas in more detail.

2.1.1.1 Macroprudential policies to help tackle climate-related financial risks

In December 2023 the ESRB and the ECB published a joint report on macroprudential frameworks for managing climate risk. The report builds on the findings of the 2022 ECB-ESRB joint report on climate risk monitoring, which focused on the mapping of exposures and systemic amplifiers through scenario horizons, the modelling of uncertainty, and dynamic balance-
sheet modelling. The latest report builds on this groundwork and outlines three frameworks to cover climate risks to financial stability: risk surveillance, macroprudential policy and broader risks to nature.

The surveillance framework of the joint report compiles three categories of indicators for streamlining analysis of climate-related financial risks in regular financial stability assessments. First are the climatic indicators, which set the foundational layer for climate factors that could pose risks to economic and financial stability. These indicators encompass temperature developments and physical hazards. Second are the indicators related to the exposure of EU entities to climate shocks, highlighting the heterogeneity across sectors, countries and firms. These indicators encompass both the greenhouse gas emissions of households and firms, as well as the concentration of high-emitting sectors in bank loans portfolios. The third set of indicators introduces a number of forward-looking metrics that evaluate potential systemic risk implications in the financial system deriving from climate-related risks. Systemic threats could notably arise from sudden financial market repricing, as well as from shocks transmitted to European financial intermediaries through disruptions in global value chains.

The macroprudential policy section of the report proposes an operational framework for addressing the systemic impacts of climate change. The report suggests a strategy combining microprudential aspects with macroprudential tools focused on curbing the build-up of systemic vulnerabilities. It proposes a common EU strategy aimed at minimising fragmentation and risk spillovers. The report puts forward a gradual, targeted and scalable macroprudential approach, which could be adapted over time as information deficiencies are addressed. This strategy would involve a set of macroprudential tools that can be mobilised depending on the type of risk to be addressed and the objective pursued. On the lenders’ side in the banking sector, this could include threshold-sensitive buffers or concentration charges. Furthermore, the report highlights the potential of the SyRB for addressing systemic climate risks, noting that it is already available for use and is sufficiently flexible to fit a range of design options. Targeted adjustments, particularly to enable more granular specifications of risky exposures, could bolster the effectiveness of a potential sectoral systemic risk buffer (sSyRB). These could be complemented by BBMs addressing any solvency concerns induced by transition and by physical risks on the borrowers’ side. The report also stresses that enhancing transparency requirements would decrease the risk of sudden asset repricing for all non-bank financial intermediaries, and describes potential avenues to address the issue of rising insurance protection gaps.

The third and final framework of the report addresses the additional threats to financial stability that could be posed by nature degradation. Nature degradation could lead to both chronic and acute risks concentrating in specific sectors of the economy. The report makes a quantitative assessment of the reliance of EU banks on nature-reliant “ecosystem” services within those sectors, and the loss sensitivity of such services to various degrees of nature degradation. It finds that this sensitivity is likely to be sizeable, with approximately 75% of EEA bank loans to non-financial companies being highly dependent on nature-reliant services. The main channels for the transmission of losses include credit and market risk. Secondary channels include litigation and operational risk.

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Moving forward, these three frameworks will be incorporated into ongoing risk surveillance and macroprudential policy assessments.

Additionally, the ESRB provided advice to the EBA and EIOPA on the treatment of environmental and social risks. The EBA and EIOPA are required to assess whether dedicated prudential treatment of exposures to environmental or social risks would be justified, following consultation with the ESRB. The advice provided by the ESRB to the two ESAs recognised the systemic dimension of climate-related risks, particularly in view of potential amplifiers such as non-linearities and tipping points. It stressed the increasing severity of climate-related risks, making it impossible to manage prudential risks based on historical data. The prudential treatment of climate risks therefore needs to take a forward-looking approach informed by scenario analysis. Given that the effects of climate change are already materialising, it is urgent that the best possible use be made of the prudential tools that are currently available rather than delaying action until more evidence, and possibly more appropriate tools, become available.

In its advice to the EBA on the prudential treatment of environmental and social risks, the ESRB also considered how the current macroprudential framework can be used to address such risks. The SyRB, possibly targeted at specific sectors, could be used in a flexible way to increase the resilience of the European financial sector vis-à-vis the systemic impacts of climate risks. BBMs could complement such capital-based measures and help to prevent climate-related risks stemming from reduced borrower debt servicing capacity and from falling collateral valuations. The ESRB advice to the EBA also emphasised the need for close cooperation between microprudential and macroprudential authorities to ensure effective and coherent policymaking.

In March 2024 the ESRB provided advice to EIOPA on whether dedicated prudential treatment of environmental and social risks (“sustainability risks”) would be justified. Under Article 304a of the provisionally agreed Solvency II Directive, EIOPA is required to assess, following consultation with the ESRB, the potential effects of dedicated prudential treatment of sustainability risks. In its advice, the ESRB adopted a macroprudential perspective and considered all three pillars of the regulatory framework. The ESRB welcomed the analysis conducted by EIOPA, while noting the length of time that would be required to gather new evidence and develop dedicated prudential treatment or new macroprudential instruments for sustainability risk, such as an SyRB adapted to the insurance sector. Reflecting the rapidly evolving and systemic nature of sustainability risks, the ESRB stressed the urgency of taking action. The ESRB therefore emphasised, in its advice, the need to make full use of the new tools and provisions designed to address sustainability risks that have been made available in the provisionally agreed Solvency II Directive. In the light of this, the ESRB saw an important role for national supervisors and for EIOPA in ensuring that these tools and provisions are transposed and implemented consistently and swiftly. Moreover, reflecting the largely unprecedented nature of sustainability risks, the ESRB

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also highlighted the fact that scenario analysis could be particularly well suited to identifying and addressing sustainability risks more effectively.20

2.1.1.2 Fostering system-wide resilience to cyber risk

At the end of the review period, in March 2024, the ESRB General Board discussed and approved a report aimed at fostering system-wide operational cyber resilience.21 Work published by the ESRB in 2023 included a review of financial policy tools.22 Those tools are, however, to be applied late in the crisis mitigation process and cannot, therefore, be used to address the impairing effects of cyber incidents on the financial system’s operability. In contrast, operational policy tools can help to mitigate the impact before, during and after an incident, given their focus on preserving the underlying processes and systems on which the functioning of the financial system relies. The ESRB’s latest report on operational policy tools therefore complements the ESRB’s previous work on cyber resilience.

The report considers information management tools, coordination tools, and emergency and backup systems, and identifies areas where these can be enhanced. Each financial institution is responsible for the functioning of its own systems and must ensure its own resilience. There may, however, be large-scale incidents that require collective and coordinated action across jurisdictions. The report finds that system-level operational tools to respond to the materialisation of systemic cyber risk have only been introduced in a few Member States and are mostly without a cross-jurisdictional mandate.

Against this background, the ESRB has identified three areas for action. First, the ESRB encourages financial institutions and authorities to improve their information management and information sharing efforts. Second, the ESRB advocates national and EU-level crisis management and coordination practices that refer to European and international standards. Such practices should help to address the entire crisis management lifecycle of readiness, response and recovery. Third, the ESRB will consider the pros and cons of system-wide contingency options and backup arrangements. A European-level framework for coordinating national backup systems would require extensive discussion with national institutions and careful evaluation of the benefits and potential implications, such as resources, the interoperability of IT infrastructure and privacy and data protection regulation, at both the system-wide and national levels.

2.1.2 ESRB policies to address the build-up of vulnerabilities in other risk areas

The ESRB continued its work to address the build-up of vulnerabilities related to RRE, the effect of higher inflation and interest rates on macroprudential policy, and crypto assets and

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20 The ESRB provided its advice to EIOPA at the end of the review period in March 2024 and it was published subsequently. See “ESRB advice to EIOPA on the prudential treatment of environmental and social risks”, European Systemic Risk Board, 23 April 2024.
decentralised finance. The ESRB continued to follow a thematic approach in its work in these three areas, as set out in more detail below.

2.1.2.1 Residential real estate

In February 2024 the ESRB published a report on vulnerabilities in the RRE sectors of EEA countries. As part of its general policy response, the ESRB has been conducting regular analyses of the risks in the RRE sectors of each member country. These have often concluded with the issuance of warnings and recommendations addressed to Member States. The last such exercise was finalised in 2022. In the light of the recent turnaround in real estate cycles across the EEA, an update of the RRE vulnerabilities assessment became one of the ESRB’s priorities in 2023. The latest report analysed, in particular, changes since the last report, published in 2021.

The level of accumulated risks ("stock risks") remains significant in the majority of EEA countries, but the growth of cyclical risks has decelerated or stopped in many of these states. Compared with the 2021 report, the assessed risk level has remained unchanged for most EEA countries, given that RRE prices slowed, or began levelling off, in late 2022 and early 2023. However, there were still a number of countries in which the housing cycle continued to expand. Some countries experienced a slowdown in the granting of RRE loans, which may signal a possible levelling-off in prices in the future. Other countries in which both RRE prices and loan volumes continued to rise typically had lower levels of accumulated vulnerabilities.

Since 2021, several countries have been activating macroprudential policies to mitigate risks related to RRE markets and increase lender and borrower resilience (see Section 3). Updates of the ESRB’s last policy assessment were warranted in light of the macroprudential measures implemented since the 2021 report was published. A number of countries that received recommendations or warnings in the past have tightened their policy response and are now deemed to have policies that are fully appropriate and sufficient to mitigate RRE risks. There are still five countries (Bulgaria, Croatia, Denmark, Germany and Luxembourg) for which the policies in place are regarded as only partially appropriate and partially sufficient, while for two countries (the Netherlands and Sweden) the policies have been assessed to be appropriate but only partially sufficient.

The assessment concluded that RRE vulnerabilities should continue to be addressed with macroprudential policies, especially in those countries that received ESRB recommendations or warnings in the past. All ESRB member states should continue to monitor RRE vulnerabilities very closely and take the opportunity presented by the current slowdown in RRE markets to implement structural reforms, including some beyond the macroprudential remit. Such reforms should aim to mitigate upward pressure on house prices and to limit incentives for households to take on debt. In order to minimise the procyclical impact of any policy action, the activation of any such measures would continue to be dependent on each country’s position in the economic and financial cycles.

23 “Follow-up report on vulnerabilities in the residential real estate sectors of the EEA countries”, European Systemic Risk Board, February 2024.
2.1.2.2 Implications of higher inflation and interest rates on macroprudential policy

The ESRB, together with the ECB, also considered the implications of an environment of higher inflation and higher interest rates for macroprudential policy and drew up a report. The report was written against the backdrop of the recent rise in interest rates to combat high inflation and the experience of macroprudential authorities from 2022. The first part outlined a conceptual framework to map the effects of an inflationary shock and the associated increases in interest rates on risks to financial intermediaries. The second part considered the interplay between monetary policy and macroprudential policy at different phases of the financial cycle and given different inflationary dynamics.

The report reviews the channels through which an imported cost-push shock affects risks to financial intermediaries. The supply-driven inflationary shock and the monetary tightening response witnessed in 2022 led to macroeconomic effects in the form of lower disposable income, higher interest rates and real wealth transfers from lenders to borrowers. The impact on financial intermediaries stemming from these macroeconomic conditions relates to the changes to net interest income and credit, interest rate and liquidity risks. First, with higher rates, banks’ net interest income typically rises, thereby supporting overall profitability, albeit at varying strengths depending on the proportion of variable-rate loans. Second, the net effect on credit risk is, in principle, ambiguous owing to the two forces at play being partially counterbalanced: on the one hand, borrowers’ debt-repayment capacity is tested by a combination of lower real disposable income and higher debt servicing costs, given that the increases in nominal prices and rates may not be sufficiently matched by increases in borrowers’ nominal incomes; on the other hand, the reduction in the real value of debt may be marginally beneficial to borrowers, particularly for long-term fixed nominal-rate loans. Third, interest rate risks may materialise through valuation losses and higher funding costs. Certain mitigating factors have ensured resilience in the recent environment, namely record high net interest income, robust asset quality, and sound hedging and liquidity positions. However, they may gradually erode in the medium term, while the effects of higher inflation and interest rates are still feeding through to the economy.

The desynchronisation of business and financial cycles observed recently suggests that the classic notion of complementarity between monetary and macroprudential policies should be expanded. While mutually reinforcing in the long term, monetary and macroprudential policies each affect the other’s objectives given that they operate through common transmission mechanisms. With the financial cycle turning, macroprudential policy has been focused on further strengthening bank resilience. This could provide space for monetary policy to pursue its targets more effectively, with limited side effects for financial stability. The recent focus on preserving bank resilience may lead, as optimal policy outcomes, to a synchronous movement of monetary and macroprudential policies, despite a diversion in the cycles, or to a parallel tightening of both policies, despite a synchronous contraction of the cycles. Certain conditions need to be met, however, to avoid undesirable procyclicality: favourable bank capital levels (ample capital headroom and bank profitability), a CoE that is not highly elevated and the absence of capital-related supply constraints. Sufficient absorption capacity in the financial system may therefore be a key determinant in ensuring that the two policies are complementary. This conclusion also draws
on new results from recent research showing that the cost of implementing buffers where there is capital headroom and high profitability may be low and that the benefits of releasing buffers are greater if banks are well capitalised.

2.1.2.3 Crypto assets and decentralised finance

In May 2023 the ESRB published a report on the systemic implications of crypto assets and decentralised finance and the potential policy options. This report follows on from the analysis presented by the ESRB High-Level Group in June 2022 on the scope and priorities for analysis of crypto assets and decentralised finance (DeFi) from a financial stability perspective. While the report concludes that the systemic implications of crypto assets are limited and that there are few links with traditional finance so far, the ESRB continues to be of the opinion that the authorities should strengthen their capacity to monitor more effectively developments in the crypto ecosystem and their potential implications for financial stability.

The report first provides an assessment of recent market developments. Crypto asset markets continue to be characterised by high levels of volatility. After the November 2021 peak, the total market capitalisation of all crypto assets traded on exchanges contracted sharply before bouncing back strongly from late 2023, again reaching an all-time high in mid-March 2024. A number of crypto asset intermediaries failed over this downturn period, and there is an increasing perception that there are fundamental issues with corporate governance, conduct, market abuse and business models, as illustrated by the collapse of FTX cryptocurrency exchange, which largely resulted from high-risk activities coupled with the absence of proper governance and risk management arrangements and of appropriate conflict of interests controls. These elements point to a market that is not stabilising and which must be addressed from a prudential perspective.

Policy discussions on how to approach regulation of crypto asset markets have progressed in jurisdictions around the world, with a particular focus on consumer and investor protection issues. The EU MiCA Regulation, which entered into force in June 2023 and will enter into application in June 2024 (Titles III and IV) and December 2024 (other titles), marks a significant step towards uniform market rules in Europe for crypto assets that do not currently fall within the scope of existing financial legislation. While the Regulation includes prudential safeguards, in particular for issuers of asset-referenced tokens and electronic money tokens, financial stability is not a key theme. Consequently, the ESRB will continue to monitor the risks of any evolution of crypto asset markets in order to assess their systemic relevance and explore the related EU legislative and regulatory responses.

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The report emphasises the need to improve the capacity of public authorities, including those in the EU, to monitor potential contagion channels between the crypto asset sector and the traditional financial sector, as well as within the crypto asset market itself. Any applicable legal framework in place should provide authorities with access to data that makes it possible to identify and mitigate any potential risks to financial stability posed by the crypto asset sector. Moreover, the report suggests that it would be beneficial to carry out assessments of risks posed by (i) crypto asset conglomerates (i.e. entities and groups carrying out combinations of significant crypto asset-related activities, such as issuance and exchange), market developments following the application of the MiCA Regulation; and (ii) leverage using crypto assets. Potential additional actions could then be identified to mitigate the risks observed. Furthermore, the report endorses the continued exchange of knowledge between public authorities in the EU on market developments, focusing on several areas where potential crypto risks may emerge, notably regarding (i) operational resilience, (ii) decentralised finance, and (iii) crypto asset lending and staking (a process in which crypto asset holders take part in validating transactions on the blockchain). Taking all of this into account, the principle of proportionality should be given due consideration, as well as the need to ensure a harmonised EU reporting framework.

2.2 Strengthening the regulatory framework for banks

The ESRB’s activities in this area included following up the comprehensive review of the EU macroprudential framework for banks to create a more forward-looking, flexible and holistic macroprudential framework for the next decade. The ESRB also supported Member States in assessing the key elements to consider when taking macroprudential decisions through the stance framework for comparing systemic risks with the policy measures taken to address them.

2.2.1 Comprehensive review of the EU macroprudential framework for banks

The ESRB continued to contribute to the ongoing review by the European Commission of the macroprudential framework for the banking sector. The ESRB’s long-term vision for macroprudential policy was documented in its Concept Note published in March 2022. The document serves as a starting point for the ESRB’s contributions to the review. The review was reopened at the beginning of 2024 with the publication of the report from the European Commission on the macroprudential review for credit institutions, the systemic risks relating to non-bank financial intermediaries and their interconnectedness with credit institutions. The ESRB welcomed this report and the opportunity to participate in further discussions on the review with the European Commission and other relevant authorities.

During these discussions, the ESRB continued to emphasise that a sound and up-to-date macroprudential framework remains essential for EU and national authorities to address financial stability risks effectively. First, the ESRB is of the view that more releasable and usable capital needs to be ensured by building up buffers more proactively and earlier in the cycle. The amount in releasable buffers held by banks is still limited. Authorities need to build up these buffers in a more forward-looking manner so that they are available for release as needed. To support the timely build-up of releasable capital buffers, the ESRB proposed targeted changes to the CCyB legal framework to facilitate its use. These changes include 1) the possibility of taking into account
a broader range of cyclical indicators when setting the CCyB rate, 2) the option of reducing the 12-month implementation period to six months, and 3) the taking of policy action when there is the serious prospect of broad and increasing cyclical systemic risks, rather than solely when a material increase has already been observed. In addition to this, the ESRB suggested expanding the use of automatic reciprocation and implementing positive neutral rates for the CCyB and/or the SyRB.

Second, in the ESRB’s view, the existing EU macroprudential toolkit must be supplemented with a harmonised minimum standard for BBMs at the EU level that follows the principle of “guided discretion”. This would help to effectively mitigate systemic risks related to real estate markets, reduce inaction bias and facilitate further integration of the Single Market, while allowing sufficient flexibility. Third, the introduction of activity-based instruments should be considered to ensure that similar requirements apply to all entities carrying out the same type of financial activity. Fourth, tools that would allow macroprudential authorities to address cyber, crypto or climate-related financial risks should also be made available. The ESRB will continue to push for these reforms in order to create a more forward-looking, flexible and holistic macroprudential framework for the next decade.

In addition, further work is being undertaken to gain a better understanding of the current application by various ESRB members of the concept of a positive neutral rate for the CCyB. The use of a positive rate for the CCyB when cyclical systemic risks are neither subdued nor elevated (i.e. a “positive neutral” CCyB rate) has gained traction in the EEA, with an increasing number of countries implementing it since the pandemic. The main objective is to build up releasable buffers to ensure that capital is available for release when needed, either as a means of facilitating an early build-up of CCyBs in the cycle, or to allow for its release if a wider spectrum of shocks were to occur, independently of a country’s position in the financial or economic cycle. While the use of the CCyB to address cyclical systemic risk is well established and the conditions guiding its implementation are commonly understood, the recent, more flexible use of the buffer is subject to a higher degree of heterogeneity across countries. Consequently, the ESRB, in conjunction with the ECB, is engaging in a stocktaking exercise among its membership with the aim of fostering a shared understanding of the use of the positive neutral CCyB across the EEA, drawing on experience to date.

2.2.2 Macroprudential stance framework

The ESRB has developed a stance framework to support macroprudential decision-making across the ESRB membership. The ESRB’s macroprudential stance is a conceptual framework for comparing systemic risks with the policy measures taken to address them and for determining the resilience of the financial institutions considered. The outcome is an assessment of whether or not those components are in balance. ESRB members are assessed as having a loose, neutral, or tight stance – depending on the extent to which the risks are covered by the current resilience and policies. The stance framework is an important input for the ESRB Secretariat policy assessment and for countries’ macroprudential policy decisions, given that it evaluates all member

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28 The macroprudential stance framework has only been applied to banks, so far.
30 There are also grey zones between tight/loose and neutral to ensure a transition zone, thereby avoiding less abrupt jumps in the assessments (from say loose to neutral).
countries in the same way. The stance assessments are discussed with members and complemented with expert judgement. The stance framework is continuously improved based on experience gained from its application.

In early 2024, the ESRB published a report highlighting the latest improvements in the macroprudential stance assessment. This report, which builds on two earlier reports, follows two complementary approaches using country-level data, namely: a) a growth-at-risk (GaR) approach, in which a model is used to estimate the impact that the macroprudential policy has on future economic growth distribution forecasts; and b) an indicator-based approach, in which readily available indicators for risks, resilience and policy (for example, housing prices and bank capitalisation) are compared across countries for both capital-based measures and BBMs.

The most recent improvements to the macroprudential stance are intended to make countries’ individual assessments more stable over time and easier to interpret by policymakers. The technical improvements to the GaR approach include, inter alia, conducting robustness checks (for example, to assess whether results are stable when the COVID-19 pandemic period is included) and correcting for biases in the model estimation. The main improvements to the indicator-based approach include the use of a cumulative distribution function (instead of a bucketing approach), refining the thresholds for the final stance assessment and reducing the complexity of the BBM approach.

The ESRB will continue to use the macroprudential stance for its risk assessments and work to improve the framework further. The macroprudential stance can be an important communication tool for macroprudential policy decisions and contribute to an increase of accountability, given that it provides a clear link between risks and policies.

2.3 Strengthening the regulatory framework for non-bank financial institutions

The ESRB has proposed changes to the prudential rules to address vulnerabilities in non-bank financial institutions, such as investment funds and insurers, as well as in the central clearing ecosystem. The ESRB had repeatedly called for regulatory reforms in the non-bank financial sector, noting that little progress had been made. During the review period EU co-legislators reached political agreement on a review of three dossiers involving non-bank financial institutions: investment funds (the Alternative Investment Fund Managers Directive (AIFMD)) and

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31 See “Improvements to the ESRB macroprudential stance framework. Report by the Contact Group on Macroprudential Stance of the ESRB’s Instruments Working Group (IWG)”, European Systemic Risk Board, January 2024.


33 See, for example, the speech by Mario Draghi, then President of the ECB and Chair of the European Systemic Risk Board, entitled “Building on the achievements of post-crisis reforms”, at the second annual conference of the ESRB, Frankfurt am Main, 21 September 2017.

34 See the speech by the ESRB Chair, Christine Lagarde, at the Hearing before the Committee on Economic and Monetary Affairs of the European Parliament on 20 March 2023.

the Undertakings for the Collective Investment in Transferable Securities Directive (UCITSD)\textsuperscript{36}, insurance (the Solvency II Directive\textsuperscript{37}) and central counterparties (the European Market Infrastructure Regulation (EMIR)\textsuperscript{38}). Once it enters into force, the revised legislation will help to address some of the vulnerabilities that the ESRB had highlighted in various letters to the co-legislators during the previous review period.\textsuperscript{39} During the current review period, the ESRB cooperated with ESMA and EIOPA on several mandates arising from the revised legislation. The remainder of this section describes in more detail these new regulatory tasks and the related initiatives taken by the ESRB. The insurance-specific elements of the ESRB’s views on whether dedicated prudential treatment of environmental and social risks (“sustainability risks”) would be justified are set out in Section 2.1.1.1.

\subsection*{2.3.1 Central clearing}

The ESRB has engaged with the EU co-legislators and ESMA to enhance several aspects of the EU central clearing framework. These include, inter alia, the introduction of an active account requirement (AAR), emergency measures for CCP collateral requirements and measures for tackling the financial stability risks associated with the ongoing lack of data quality.

The ESRB contributed to the discussions on the review of the EMIR in October 2023 with a technical analysis of the impact of an AAR. In February 2024, European co-legislators reached political agreement on the review of the EMIR. The legislation requires market participants to hold an operationally active account at an EU CCP for clearing asset classes deemed to be of substantial systemic importance for the financial stability of the EU or of one or more of its Member States. Market participants will have to clear a representative amount of their trades through these accounts. In letters to EU co-legislators during the negotiations, the ESRB indicated its support for an AAR as a tool to help build domestic clearing capacity in the EU.\textsuperscript{40} The ESRB highlighted, however, the fact that the effectiveness of an AAR would depend on several design features, such as the types of trades falling within its scope and the threshold applied. For example, the ESRB pointed out that if the AAR were to be limited to new trades and to exempt market making and client clearing, it would have little impact in terms of transferring clearing volumes to EU CCPs and building clearing capacity in the EU. More fundamentally, the ESRB noted that if the AAR focuses on the number of trades or on notional amounts, it might not result in a reduction in the exposure of EU clearing members and clients to clearing services at UK CCPs.

In October 2023 the ESRB agreed with ESMA’s proposal to extend the emergency measures on collateral requirements to alleviate liquidity strains in the energy markets. In 2022 ESMA proposed emergency measures to alleviate liquidity strains at clearing participants, in particular at non-financial counterparties (NFCs). These measures were temporary and needed to be reviewed by ESMA in 2023. As part of this review, ESMA consulted the ESRB. The ESRB agreed to the six-


\textsuperscript{39} These vulnerabilities are described in the ESRB Annual Report 2022.

\textsuperscript{40} See the Letter to the Council of the European Union, Letter to the European Commission and Letter to the European Parliament providing background information on the proposal to introduce an active account requirement.
month extension proposed by ESMA, given the potential increase in volatility in energy markets over the winter months and the fact that the EMIR review was still ongoing at the time of its response.\footnote{See the ESRB response to ESMA’s final report on extending emergency measures on CCP collateral requirements.}

The ESRB continued to address the poor quality of the data that entities report, including that reported under EMIR and within the Public Quantitative Disclosure (PQD) framework.\footnote{See Public quantitative disclosure standards for central counterparties, Bank for International Settlements, February 2015.} The quality of EMIR data reported by CCPs and other reporting entities should further improve. The ESRB had repeatedly emphasised that high quality data should not be seen as a technicality but as a substantive matter.\footnote{See the Letter on the ESRB’s view regarding data quality issues and risks for financial stability, July 2022.} In particular, poor data quality hampers adequate monitoring of financial stability risks by authorities and therefore runs counter to the increased transparency of markets and market participants that was a key objective of the reforms introduced following the global financial crisis of 2007-09. Moreover, poor data quality might also be indicative of poor risk management practices by reporting entities.\footnote{See the Letter on the ESRB’s view regarding data quality issues and risks for financial stability, July 2022.} During the review period, the ESRB Secretariat had quarterly exchanges of views with ESMA staff to improve EMIR data quality, and the ESRB joined forces with ESMA and the national competent authorities to try to improve the quality of the data published by CCPs under the PQD framework. The PQD data are an important element in the transparency of CCPs vis-à-vis the public and serve as the basis for the CCP indicators in the quarterly ESRB Risk Dashboard.\footnote{See the Risk Dashboard page on the ESRB’s website.}

During the review period, the ESRB was consulted by ESMA and asked for an opinion on the systemic importance of a particular third-country CCP. Under Article 25(2a) of the EMIR, ESMA should consult the ESRB on the degree of systemic importance of any third-country CCP requesting recognition by ESMA to provide clearing services to EU participants. The ESRB took note of ESMA’s assessment that the CCP concerned remained below the relevant EMIR thresholds and was therefore not considered to be systemically important for the financial stability of the EU as a whole or of individual Member States.

### 2.3.2 Investment funds

In September 2023 the ESRB published an issues note describing the approach it will take to address risks in investment funds that invest in assets that are either inherently illiquid or might become illiquid in times of stress.\footnote{The Issues note on policy options to address risks in corporate debt and real estate investment funds from a financial stability perspective, European Systemic Risk Board, September 2023.} Among the areas meriting enhanced scrutiny from a financial stability perspective previously identified by the ESRB,\footnote{Recommendation of the European Systemic Risk Board of 6 May 2020 on liquidity risks in investment funds (ESRB/2020/4) (OJ C 200, 15.06.2020, p. 1).} the note focused on investment funds with large exposures to corporate debt and real estate. Investment fund resilience could be improved by adapting certain policy tools in the regulatory framework to better serve financial stability purposes and by developing new policy tools. As regards adapting existing policy tools, the note set out three approaches. First, structural liquidity mismatch in real estate funds, and in other funds that invest in inherently illiquid assets, could be reduced by ensuring closer alignment...
between a fund’s redemption terms and its investment strategy. Second, corporate bond funds, and other funds exposed to markets where liquidity conditions can deteriorate quickly, could use anti-dilution liquidity management tools as part of their day-to-day management. Third, leveraged funds could increase their preparedness for cash needs stemming from margin and/or collateral calls in derivative and repo transactions by holding liquidity buffers calibrated on the basis of stress testing. In terms of developing new policy tools, the note considered several options. Those options ranged from incremental amendments – such as building on the liquidity bucketing approach with a view to combining it with measures aimed at increasing investment fund resilience – to structural changes – such as developing an ex ante policy instrument aimed at mitigating the build-up of liquidity risk from a financial stability perspective. In addition, there is also a need to reflect on a more prominent role to be played by the authorities in addressing shocks triggered, transmitted and/or amplified by investment funds. Since the publication of the issues note, the ESRB has undertaken further work to develop certain policy options with a view to supporting national and EU authorities after the revised AIFMD and UCITSD come into force.48

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This section provides an overview of macroprudential policy measures taken by EEA countries and notified to the ESRB during the review period. In line with its broad mandate and EEA-wide perspective, the ESRB acts as an information hub for macroprudential measures adopted by its member countries. Several such measures were notified to the ESRB and published on its website. In this section, the actions notified to the ESRB are ordered by type of instrument.

Chart 7
Notifications received by the ESRB between April 2023 and March 2024 by type of measure and by country

(number of notifications)

Source: ESRB.
Notes: Only measures adopted or publicly announced during the review period and before the cut-off date of 31 March 2024 have been included. Reciprocation (recognition) measures are decisions made by countries on the reciprocity of other countries’ measures. CCyB stands for countercyclical capital buffer, SyRB for systemic risk buffer, O-SII for the buffer for other systemically important institutions, G-SII for the buffer for global systemically important institutions, LTV for the loan-to-value limit, DSTI for the debt service-to-income limit, DTI/LTI for the debt-to-income/loan-to-income limits and CRR for the Capital Requirements Regulation.

This refers to measures that were notified and announced during the review period, i.e. between 1 April 2023 and 31 March 2024. O-SII notifications are submitted by countries once a year and there is therefore just one entry per country each year.
3.1 Overview of national measures

Over the period under review macroprudential policies were tightened in a number of EEA countries, particularly policies related to capital buffers. Several EEA countries increased their CCyB rates, with one country activating the buffer for the first time. In some cases, these increases took place under a positive neutral approach whereby authorities aim for a positive CCyB rate when risks are judged to be neither subdued nor elevated. A few countries activated new sSyRBs to address vulnerabilities related to the real estate market or the NFC sector, while a few counties reduced the sSyRB rate in relation to RRE markets.

A number of BBMs were also taken, although with no clear overall direction as regards the impact of countries’ macroprudential policy stance. Some countries adopted new BBMs or tightened existing BBMs, while others loosened existing BBMs for a specific group of borrowers.

Finally, one country introduced a new risk weights measure on CRE exposures, while other countries extended the application period of existing risk weights measures for RRE or CRE exposures.\(^{50}\)

3.2 Countercyclical capital buffer

During the review period nine countries announced a change in their CCyB rates, in most cases tightening their stance. Six countries increased or reactivated their CCyB rates (Belgium, Croatia, Cyprus, Ireland, the Netherlands and Slovenia) to levels between 0.5% and 2%. In addition, Latvia activated its CCyB rate for the first time, initially setting it at 0.5% (from December 2024), with a further increase to 1% from June 2025. By contrast, the Czech Republic reduced its CCyB rate in two steps to 2.0%, due to a gradual reduction in cyclical systemic risks given falling economic activity. Finally, Hungary postponed activation of its CCyB rate of 0.5% by a further year (to July 2024). By the end of the review period (31 March 2024), a positive CCyB rate was either announced or in effect in a total of 21 countries.

In some countries, increases were related to the implementation of positive neutral CCyB rates or the raising of CCyB rates within a pre-established positive neutral approach. The aim of a positive neutral rate approach is to ensure that sufficient capital is available for release in the event of a wider spectrum of shocks. Latvia and Slovenia started to apply a positive neutral CCyB framework in the review period, both setting their positive neutral rate at 1%. Ireland and the Netherlands raised their CCyB rates to achieve positive neutral levels of 1.5% and 2.0% respectively. Cyprus increased its rate to 1%, also within a positive neutral framework. Overall, nine countries had a positive neutral rate in place on 31 March 2024, including three countries that had not notified the ESRB of a change in their CCyB rates during the review period (Estonia, Lithuania and Sweden) and the Czech Republic, which reduced its CCyB rate in two stages, as indicated above.

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Chart 8
CCyB rates in EEA countries

(Percentages)

Source: ESRB.

Notes: The chart shows the CCyB rates in effect at the end of the first quarter of 2023 and of the first quarter of 2024. CCyB stands for countercyclical capital buffer and PNR for positive neutral rate.

Across the euro area, non-releasable macroprudential buffers (the buffers for globally systemically important institutions (G-SIIs) and other systemically important institutions (O-SIIs) and the capital conservation buffer) still account for most of the total buffers. While the share of CCyB in aggregate capital buffer requirements has increased in recent quarters, this also reflects the (partial) substitution of SyRBs by countercyclical buffers (Chart 9). A further increase in the overall scale of releasable buffers might therefore be beneficial, by ensuring the resilience of the banking sector in a forward-looking manner.
**EU capital rules for banks also allow authorities to set higher CCyB rates on exposures to third countries.** Given the very large number of third countries to which this measure could apply, the ESRB, the ECB and EU Member States share the responsibility for this task and focus on identifying and monitoring only those countries to which the banking system of the EEA as a whole, or any individual EEA country, has material exposures. In order to implement a consistent EU-wide approach, the ESRB has provided details of its approach in a recommendation (ESRB/2015/151) and a decision (ESRB/2015/352). In particular, the ESRB establishes a list of third countries that are material for the EEA banking system as a whole and monitors developments in those countries. Since 2020 the identification sample – the banks whose exposures to third countries are taken into account – has been extended from the EU to the whole of the EEA.53

The ESRB reviewed the list of material third countries that it had established in 2021 for the EEA as a whole and left it unchanged. Thus, the list of material third countries published in 2022 comprises Brazil, China, Hong Kong, Mexico, Russia, Singapore, Switzerland, Turkey, the United Kingdom and the US. In line with Recommendation ESRB/2015/1, individual EEA countries identified third countries that were material from the perspective of their national banking systems and reviewed their lists in 2023 on the basis of their respective existing methodologies. The ESRB

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53 The definition of a third country in Decision ESRB/2015/3 (i.e. any country outside of the EEA), combined with the fact that the macroprudential tools of the Capital Requirements Directive (CRD) and the Capital Requirements Regulation (CRR) have been applicable to Iceland, Liechtenstein and Norway since 1 January 2020, means that all EEA countries should now be included in the identification sample. See 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).
made no recommendations over the review period for higher CCyB rates for EEA bank third-country exposures nor did any EEA country take any such action of its own initiative.

3.3 Systemic risk buffer

France and Portugal activated new sSyRBs to address vulnerabilities related to the real estate market and the NFC sector. France activated an sSyRB of 3% that was applied to the seven largest French banking groups with an exposure of over 5% of Tier 1 capital to highly indebted NFCs, i.e., those that have a total debt-to-EBITDA ratio that is negative or greater than 6. The assessment conducted by the French macroprudential authorities concluded that the significant size of some exposures to highly leveraged firms could have a substantial negative impact on credit institution credit risk: a shock to these systemic NFCs could affect bank credit risk and thus have negative consequences for the real economy, by prompting banks to decrease their credit supply to other firms. This is particularly relevant given the central role of the banking sector in the financing of the French economy. The new buffer rate replaced a previous large exposures limit and applied from 1 August 2023. Portugal activated a 4% sSyRB for internal ratings-based (IRB) retail exposures secured by residential immovable property for which the collateral is located in Portugal. The introduction of the buffer was justified on the grounds that (i) the risks to financial stability remain high amid rising interest rates, in particular owing to the high prevalence of floating rates in housing loans granted in Portugal; (ii) lower risk weights are applied by IRB banks to exposures to mortgage lending to Portuguese households as compared with banks applying a standardised approach; and (iii) downside risks remain for housing prices. The measure will be applied from 1 October 2024.

By contrast, Belgium and Slovenia reduced their sSyRB rates related to RRE markets. Belgium reduced from 9% to 6% the level of the existing sSyRB rate for banks using the IRB approach for retail exposures secured by residential immovable property. While the level of risk is assessed as having decreased since 2022, it remains significant. The risk assessment underlying this adjustment highlights: (i) the continued expansion and significant size of banks’ exposures to mortgage lending to Belgian households, this lending being secured by low capital buffers as a consequence of the low microprudential risk weights applied by IRB banks to such exposures; (ii) persistent, although decreasing, signs of overvaluation and downside risks in housing prices; (iii) persistently high household indebtedness; and (iv) improving credit quality. The new buffer rate came into force on 1 April 2024. Slovenia reduced its sSyRB rate from 1.0% to 0.5% for all retail exposures to natural persons secured by residential immovable property. This was based on an assessment that the risks stemming from RRE have partially subsided, reflected in a further slowdown in residential property price growth and a decline in the number of sales. In addition, the macroprudential authorities’ assessment was that the price correction in the market is taking place in a controlled manner and does not seem to be triggering risks to financial stability. The change will come into force on 1 January 2025.
3.4 Buffers for systemically important institutions (O-SIIIs and G-SIIIs)

As at 1 January 2024, 183 O-SIIIs had been identified in the EEA, one more than in the previous year. The highest country-level O-SII buffer rates among EEA countries ranged between 1% and 3% (Chart 10). The long-observed heterogeneity in buffer-setting for O-SIIIs persisted, i.e. authorities in different countries applied different buffer rates to banks with comparable scores for systemic importance. As the ESRB had previously noted, this heterogeneity is not fully explained by special economic or financial sector features, such as the size of the banking sector relative to GDP or Member States’ positions in the financial cycle.

Chart 10
Highest and lowest O-SII buffer rates by country as at January 2024

For 2024 seven G-SIIIs were identified across four EEA countries. Based on the globally systemic banks (G-SIB) list published in November 2023 by the Financial Stability Board (FSB), four G-SIIIs were identified in France, while Germany, the Netherlands and Spain each had one. This total is one fewer than in the previous year. Five of these seven banking groups were assigned a G-SII buffer rate of 1%, while the other two banks were assigned a buffer rate of 1.5%. No changes were made to the rates applied to G-SIIIs identified previously and still on the list of identified institutions.

3.5 Risk weights measures

A number of ESRB member countries implemented new risk weights measures or extended those that existed. Some of these risk weights measures were implemented pursuant to Article

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54 “Review of the EU Macroprudential Framework for the Banking Sector: Response to the call for advice”, European Systemic Risk Board, March 2022, p. 32.
For these measures, national authorities considered that the related systemic risk could not be addressed through other macroprudential tools. In a few other cases, risk weights were changed or existing risk weights measures were extended based on Article 124 of the CRR.

**Sweden implemented a national risk weights measure to address increasing risks in the CRE sector.** The proposed Article 458 CRR measure is a risk weights floor of 35% for certain corporate exposures secured by commercial properties and a risk weights floor of 25% for certain corporate exposures secured by residential properties. The requirement is applicable to credit institutions that use the IRB approach for calculating regulatory capital requirements and is directed at financial stability risks linked to the overheated real estate market in Sweden. The ESRB was of the view that the changes in the intensity of macroprudential or systemic risk are such that they pose a risk to financial stability at national level and that the alternative macroprudential measures would be less suitable and effective in addressing the identified risks to financial stability, in particular given the relative effectiveness of those measures.

**Sweden also extended the period of application of its current stricter national measure of a 25% risk weights floor for IRB retail exposures secured by immovable property in Sweden.** The extension, implemented under Article 458 of the CRR, is set to run for two years from 31 December 2023. The ESRB was of the view that the intensity of macroprudential or systemic risk stemming from exposures to the housing market remains at a high level, as was the case at the time of the last extension of the measure in 2021. It therefore continues to pose a risk to financial stability at national level and the measure should therefore be extended.

**Estonia extended a risk weights floor for RRE exposures for two additional years.** The measure establishes a credit institution-specific minimum level of 15% for the exposure-weighted risk weights average and is implemented under Article 458 of the CRR. It is applied to portfolios with a retail exposure to obligors residing in Estonia that is secured by mortgages on immovable property. The ESRB considered that the proposed extension of the measure may help to maintain resilience in IRB credit institutions in Estonia, and, in doing so, will mitigate against any materialisation of systemic risk in the RRE market.

**Poland extended the current risk weights measure on RRE exposures denominated in foreign currency.** The measure, taken under Article 124 of the CRR, reduces the risk weights applied to foreign currency mortgages secured by real estate properties from 150% to 100%, 75% or 50%, these reduced levels applying if loan loss provisions and write-offs or adjustments amount to at least 20%, 28%, or 35% of the gross exposure respectively. The ESRB assessed the risk weights measure as appropriate for addressing the risks of foreign currency mortgages for banks using the standardised approach to calculate risk weights. The ESRB added, however, that the measure also has a microprudential dimension and the effectiveness and appropriateness of the Pillar 2 measure for banks using the IRB approach should be examined further.

**Latvia reduced the risk weight applied to CRE exposures.** The risk weight for exposures secured by mortgages on commercial immovable property in Latvia will decrease to 80% (down from 100% previously) on 30 June 2024. The ESRB assessed the risk weights measure as appropriate for addressing the elevated, but decreasing, risks of CRE exposures for banks using

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the standardised approach. The ESRB noted that while the measure lowers the loss absorbency requirements for this particular subset of exposures, when viewed together with the gradual implementation of the positive CCyB rate, the overall capital requirements of Latvian banks should not decrease.

### 3.6 Borrower-based measures

Several countries have adjusted their BBMs, mainly to address increasing or elevated vulnerabilities in the real estate market. National authorities in nine EEA countries took a wide range of actions, including the activation of loan maturity and amortisation measures, as well as amendment of loan-to-value (LTV), debt-to-income (DTI), debt-service-to-income (DSTI), loan-to-income (LTI) and maturity limits. The majority of countries tightened existing BBMs, either generally or for a specific group of borrowers, while in other cases BBMs were loosened for certain borrower subgroups.

Three countries introduced new BBMs, complementing existing RRE measures. Against a background of high household indebtedness, Finland introduced a 30-year maturity limit for housing loans under its national Credit Institutions Act. Credit providers are allowed to deviate from the limit by up to 10% of their quarterly lending volume. To address risks from high household indebtedness, Liechtenstein opted to implement an amortisation requirement based on affordability, with affordability being defined as a loan service-to-income ratio below 33% for new RRE loans and 37% for existing RRE loans. Loans not meeting these criteria should apply a minimum annual amortisation of 1% of the initial loan volume until the point at which the loan can be reclassified as affordable. Greece activated a binding loan-to-value at origination cap of 90% for first-time buyers, and of 80% for non-first-time buyers. Each quarter, 10% of the total number of new loans approved may be exempted. Greece also activated a binding DSTI ratio of 50% for first-time buyers and of 40% for non-first-time buyers. Each quarter, 10% of the total number of new loans approved may be exempted. Both measures will be applied from 1 January 2025.

Some countries announced changes to their existing LTV limits, although for varying reasons. Finland restored the maximum loan-to-collateral ratio for residential mortgage loans for non-first-time home buyers to its statutory baseline level of 90%. Hungary increased its LTV limit from 80% to 90% for first-time buyer borrowers. The measure applies only to mortgage loans and financial leases denominated in forint. For other borrowers, the LTV limit remains at 80%. In Latvia, a 70% LTV requirement for buy-to-let housing loans has been included in its national BBMs. A 10% tolerance margin is applicable to this. At the same time, another measure was revoked, namely, a 70% LTV requirement for housing loans where the borrower’s income from real estate exceeds 20% of total income. This was replaced with a qualitative principle-based requirement to apply prudent LTV ratios for such borrowers.

Regarding BBMs related to borrowers’ income and maturity limits, there were also some changes to both limit levels and calculation methods. The Czech Republic abolished the upper limit on its DSTI and DTI ratios. Estonia changed the calculation principles of its DSTI requirement; calculation of loan payments must now use the interest rate set in the contract or 6%, whichever is the higher. The DSTI limit of 50% remains unchanged. France adjusted the total flexibility margin of 20% in its loan maturity measure; 70% of this total margin is allocated to owner-occupiers and 30% to first-time buyers. The DSTI limit remained unchanged at 35%. France also decided to allow...
credit institutions to exclude interest payments on bridge loans when assessing a borrower’s DSTI ratio, provided that the bridge loan’s loan-to-value ratio is deemed sufficiently conservative. Latvia introduced a differentiated (lower) 45% DSTI limit for mortgage loans for obtaining energy efficient housing, in addition to the 40% DSTI limit that already exists. Slovenia reduced the permitted deviation from DSTI caps from 10% to 3% and reduced the maximum DSTI limit allowed from 67% to 50%. Portugal reduced the interest rate shock considered in calculation of the stressed DSTI ratio to 1.5 percentage points for new loans with a maturity of over 10 years, to 1 percentage point for new loans with a maturity of 5 to 10 years and to 0.5 percentage points for new loans with a maturity of up to and including 5 years. Portugal also adjusted the maturity limits on mortgage loans. The measure concerns the average maturity of new mortgage loans, which is now limited to 30 years. This replaces a previous recommendation for a gradual convergence, over a period of four and a half years, to an average loan maturity of 30 years.

3.7 Other measures

Regarding measures targeting banks’ funding risks, Hungary amended its Mortgage Funding Adequacy Ratio (MFAR) Regulation, which is designed to reduce banks’ maturity mismatches. Under the previous amendment of the MFAR Regulation that came into force on 1 July 2022, foreign currency mortgage bonds and refinancing loans were accepted, but any new foreign currency funds could only be employed to finance energy efficient mortgages after 1 October 2023. However, Magyar Nemzeti Bank (MNB) has decided that more preparation time is warranted for fulfilling this requirement and has therefore postponed the green requirement by one year, to 1 October 2024.

Beyond the banking sector, in March 2024 the Luxembourg Commission de Surveillance du Secteur Financier (CSSF) and the Central Bank of Ireland (CBI) notified the ESRB of their intention to impose leverage limits under Article 25(3) of the AIFMD. The measures were designed by the two national competent authorities (NCAs) in cooperation. They apply to alternative investment fund managers of funds denominated in pounds sterling that pursue LDI strategies. Such managers are expected to maintain a ‘yield buffer’ of a size that would enable their funds to withstand an increase in UK government bond yields of 300 basis points before the funds’ net asset value (NAV) turned negative. By setting a yield buffer, the NCAs have limited the leverage that a fund can employ, contingent on its duration. This is because the amount and duration of a fund’s exposures determine the minimum NAV that a fund would need ex ante for its NAV to remain positive after a 300 basis points increase in yields.

3.8 Reciprocation

Reciprocation should ensure that the same macroprudential measure applies to all financial institutions within the EU that are exposed to the risk targeted by the measure concerned, regardless of where institutions are located. Macroprudential measures taken in one Member State often apply only to the exposures of financial institutions domiciled in that State. Such measures do not generally apply, therefore, to the exposures of financial institutions from other Member States. Reciprocity is the policy instrument that ensures that these measures also apply to the exposures of these other financial institutions that would not otherwise be covered. Reciprocation occurs when the relevant authority in the reciprocating Member State applies a
macroprudential measure that is the same as, or equivalent to, a measure taken in the activating Member State in order to address a risk related to a specific exposure. The reciprocation of macroprudential measures enhances the effectiveness and consistency of macroprudential policy in the EU and contributes to a level playing field in the Single Market. At the end of 2015 the ESRB put in place a framework of voluntary reciprocity for macroprudential policy measures. The reciprocity framework lays the foundations for a coordinated approach to the reciprocation of those macroprudential measures for which EU legislation does not foresee mandatory recognition. The reciprocation process is initiated by means of a formal request submitted to the ESRB by the authority that activated the initial measure. If it is deemed justified, the ESRB will issue a recommendation to reciprocate the measure.

In line with its reciprocity framework, the ESRB recommended the reciprocation of the new risk weights measure for CRE exposures in Sweden. Finansinspektionen notified the ESRB of its reciprocation request for a national risk weights measure on 12 May 2023. As described in Section 3.5, the goal of the measure is to prevent and mitigate macroprudential or systemic risks stemming from certain corporate IRB exposures secured by commercial and residential properties for which the collateral is located in Sweden. The measure sets a risk weights floor of 35% for certain corporate exposures secured by commercial properties and a risk weights floor of 25% for certain corporate exposures secured by residential properties. In order to prevent the materialisation of negative cross-border effects in the form of leakages and regulatory arbitrage that could result from the implementation of the macroprudential policy measure that will become applicable in Sweden, the ESRB recommended the reciprocation of the measure. An institution-specific materiality threshold of SEK 5 billion is nonetheless applied.

The ESRB also decided to continue recommending the reciprocation of the sSyRB measures set by Nationale Bank van België/Banque Nationale de Belgique (NBB/BNB). The measure concerns a sSyRB for IRB retail exposures secured by residential immovable property for which the collateral is located in Belgium. The NBB/BNB notified the ESRB on 18 July 2023 that it had reassessed its sSyRB rate and would recalibrate it from 9 % to 6 % from 1 April 2024. The ESRB decided to continue recommending the reciprocation of the measure and to adjust the recommended sSyRB rate in accordance with the NBB/BNB’s request. The aim is to prevent the materialisation of negative cross-border effects, in the form of leakages and regulatory arbitrage, that could result from the implementation of the macroprudential policy measure applied in Belgium, as well as to preserve a level playing field among EEA credit institutions.

Finally, the ESRB recommended the reciprocation of a new sSyRB measure activated by Portugal. Banco de Portugal notified the ESRB of its reciprocation request concerning an sSyRB measure on 4 October 2023. As indicated in Section 3.3, the goal of this measure is to prevent and mitigate macroprudential or systemic risks stemming from IRB retail exposures secured by residential property for which the collateral is located in Portugal. The ESRB recommended the reciprocation of the measure, with an institution-specific materiality threshold of EUR 1 billion.

[56] The reciprocity framework is outlined in the following documents: (i) Recommendation ESRB/2015/2 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 (OJ C 97, 12.3.2016, p. 9); (ii) Article 5 of the Decision of the European Systemic Risk Board of 16 December 2015 on a coordination framework for the notification of national macroprudential policy measures by relevant authorities, the issuing of opinions and recommendations by the ESRB, and repealing Decision ESRB/2014/2 (ESRB/2015/4) (OJ C 97, 12/03/2016, p. 28); and (iii) Chapter 11 (“Cross-border effects of macroprudential policy and reciprocity”) of the ESRB Handbook on operationalising macroprudential policy in the banking sector.
4 Institutional framework: implementation and accountability

This section provides an overview of the action taken to enhance the ESRB’s accountability. First, it explores the outcomes of the assessments of compliance with ESRB recommendations carried out in the review period. Second, it gives an account of the ESRB’s reporting to the European Parliament and describes some of the events that the ESRB organised over the review period.

4.1 Assessment of compliance with ESRB recommendations

Warnings and recommendations are the main tools at the disposal of the ESRB in its mission to prevent and mitigate systemic financial stability risks. ESRB recommendations specify remedial actions and establish deadlines for their implementation by addressees. Although these recommendations are not legally binding, they are subject to a “comply or explain” regime in accordance with Article 17 of the ESRB Regulation.\(^{57}\) This means that the addressees of recommendations – i.e. the EU as a whole, Member States, the ESAs, national authorities, designated authorities, resolution authorities, the ECB (in its capacity as banking supervisory authority), the Single Resolution Board (SRB) and the European Commission – must communicate to the European Parliament, the Council, the European Commission and the ESRB either the actions that they have taken to comply with a recommendation or provide adequate justification in the case of inaction.

In recent years, the ESRB has issued several recommendations on various sources of cross-sectoral and sector-specific systemic risk. Reflecting the diversity of the topics concerned, the ESRB assesses compliance with each recommendation through dedicated Assessment Teams. These teams are established under the auspices of the Advisory Technical Committee (ATC). Each team is composed of experts from ESRB member institutions. Assessing compliance with ESRB recommendations is key to the effective implementation of ESRB measures.

The Assessment Teams observed a high level of compliance with the ESRB recommendations that were assessed over the review period. Between April 2023 and March 2024, the Assessment Teams completed four assessments of compliance with ESRB

The compliance report for Recommendation ESRB/2020/12 on identifying legal entities involved in financial transactions through a unique legal entity identifier (LEI) shows that, in general, the degree of compliance is high and that the addressees recognise the importance of being able to identify individual entities and the connections between them from a financial stability perspective by using LEIs. A total of 85 national authorities from 30 EEA countries, the ESAs, and the ECB, as a competent authority within the SSM, were assessed. Of these, 60 authorities were graded as “fully compliant”, 28 as “largely compliant” and two as only “partially compliant”.

The compliance report for country-specific recommendations on medium-term vulnerabilities in the residential real estate sector in Belgium (ESRB/2019/4), Denmark (ESRB/2019/5), Luxembourg (ESRB/2019/6), the Netherlands (ESRB/2019/7), Finland (ESRB/2019/8) and Sweden (ESRB/2019/9) shows that most addressees have implemented further actions since the previous assessment to comply with the recommendations and to tackle risks to financial stability stemming from the RRE sector. To be more precise, three of the six EU Member States were assessed as “fully compliant”, two as “largely compliant” and one as “partially compliant”, the latter grading reflecting inaction in the face of clear vulnerabilities and overvaluation in the RRE market and a failure to provide sufficient explanations for this inaction.

The compliance report for Recommendation ESRB/2017/6 on liquidity and leverage risks in investment funds shows that there is a significant level of compliance with the Recommendation, which was addressed to the European Commission and ESMA. The European Commission proposed extensive amendments to two Directives (the AIFMD and the UCITSD) to incorporate into the EU legal framework the requirement for investment funds to have additional liquidity management tools and to introduce regular data reporting requirements for undertakings for collective investment in transferable securities (UCITS) and UCITS management companies. ESMA provided detailed and comprehensive guidelines on liquidity stress testing for UCITS and alternative investment funds based on Article 25 of the AIFMD, as well as guidance on the procedure for imposing leverage limits under that article.

58 Namely in respect of:

- Recommendation of the European Systemic Risk Board of 24 September 2020 on identifying legal entities (ESRB/2020/12) (OJ C 403, 26.11.2020, p. 1);
- 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) (OJ C 366, 30.10.2019, p. 7);
- Recommendation of the European Systemic Risk Board of 27 June 2019 on medium-term vulnerabilities in the residential real estate sector in Finland (ESRB/2019/9) (OJ C 366, 30.10.2019, p. 35);
- Recommendation of the European Systemic Risk Board of 7 December 2017 on liquidity and leverage risks in investment funds (ESRB/2017/6) (OJ C 151, 30.04.2018, p. 1);

The Recommendations and compliance reports are available on the ESRB’s website.
The compliance report for Recommendation ESRB/2015/2 on the assessment of cross-border effects of macroprudential policy measures and voluntary reciprocity of those measures shows that the Recommendation had been fully implemented by most of the addressees, i.e. the authorities entrusted with the adoption and/or activation of macroprudential policy measures. Indeed, the assessment resulted in 26 of the 30 countries assessed receiving an overall compliance grade of “fully compliant”, the remaining four receiving an overall compliance grade of “largely compliant”.

An assessment of compliance with Recommendation ESRB/2014/1 on guidance for setting countercyclical buffer rates was started during the review period and the results are expected to be published in the course of 2024.

4.2 Reporting to the European Parliament and other institutional aspects

The Chair of the ESRB attended hearings before the ECON in line with the ESRB’s accountability and reporting obligations. During the period under review the ESRB Chair attended one public hearing before ECON on 20 March 2023 and two confidential meetings with the ECON Chair and Vice-Chairs to discuss risks to financial stability.

During the public hearing the ESRB Chair provided Members of the European Parliament (MEPs) with an assessment of the risks to EU financial stability further to its general Warning of 22 September 2022 on vulnerabilities in the Union financial system. The Chair set out macroprudential policy considerations for banks and non-bank financial intermediaries and, more specifically, explained that persistent vulnerabilities in the non-bank sector required an acceleration of regulatory and policy responses for this part of the financial system. In this regard, the Chair welcomed the work of the European Parliament on investment funds as part of the review of the AIFMD and the UCITSD, but stressed the need for (i) legislative reform of money market funds in the EU; (ii) further enhancement of the EMIR and (iii) a strengthening of the Solvency II Directive as regards insurers and its extension beyond liquidity risks.

The Head and the Deputy Head of the ESRB Secretariat reported regularly to the Economic and Financial Committee on ESRB risk assessment. The Economic and Financial Committee is an EU committee set up to promote policy coordination among Member States. In addition, the Head and Deputy Head of the ESRB Secretariat regularly represented the ESRB in meetings of the Boards of Supervisors of the ESAs.

4.3 Organisational structure of the ESRB

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. Following Finland’s 2024 presidential elections, Governor Olli Rehn resumed his official duties at Suomen Pankki and, as such, of First Vice-Chair of the ESRB in January 2024. In March 2024 the national voting members of the General Board elected Madis Müller, Governor of Eesti Pank, for a second term as a national member of the Steering Committee. In addition, the General Board extended the term of Professor Bo Becker (Stockholm School of Economics) for
another four years and appointed Professor Hans Degryse (Katholieke Universiteit Leuven) as members of the ASC. Over the review period Claudia Buch, the Vice-Chair of the ATC and Vice-President of Deutsche Bundesbank, was appointed Chair of the ECB’s Supervisory Board.

The ESRB Secretariat organised a total of 89 meetings of the General Board, Steering Committee, ASC and ATC and their main substructures. 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, Tuomas Peltonen. During the period under review, there were 23 active working groups within the ESRB.

The ECB supports the work of the ESRB in various ways. In accordance with Council Regulation (EU) No 1096/2010,59 the ECB ensures the functioning of the Secretariat of the ESRB, providing the ESRB with analytical, statistical, logistical and administrative support. In 2023 that support took the form of 62.1 full-time equivalent employees (FTEs). Of these, 30.8 FTEs were employed within the Secretariat and 31.3 FTEs provided other forms of support. The direct costs incurred by the ECB amounted to €10.1 million. The indirect costs for other support services shared with the ECB (e.g. human resources, IT and general administration) are in addition to this amount. Over the same period other member institutions of the ESRB provided approximately 54 FTEs for analytical support to ESRB groups and in terms of ESRB group chair positions.

4.4 ESRB public events

On 11 May 2023 Pablo Hernández de Cos, Governor of the Banco de España and Chair of the ATC, delivered a keynote speech at the IE University-Banco de España-Federal Reserve Bank of Saint Louis Conference, which focused on the current situation and challenges of the financial system.

Each year the ASC awards the leke van den Burg Prize in recognition of outstanding research by young scholars on topics related to the ESRB’s mandate. The prize was established in 2014 in memory of leke van den Burg, who was a member of the ASC (2011–14) and a member of the European Parliament (1999–2009). In 2023 the prize was awarded to Tristan Jourde and Quentin Moreau for their paper entitled “Systemic climate risk”.

In October 2023, the ESRB hosted an in-house workshop on the topic of systemic liquidity. The workshop included representatives from academia, the ECB, the ESRB and other international institutions, including the Bank for International Settlements (BIS) and the International Monetary Fund (IMF). The workshop was structured into three main sessions: the first focused on monitoring and measuring liquidity risk, the second delved into transmission channels and amplification effects, and the third explored contagion and spillover effects. The main findings and insights from the workshop were shared with senior policymakers across the ESRB membership.

The seventh ESRB Annual Conference took place on 16 November 2023 as a virtual event and was dedicated to financial stability challenges ahead: emerging risks and regulation. The conference opening speech was delivered by the ESRB Chair, Christine Lagarde. It included

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three panels. The first was chaired by Pablo Hernández de Cos (Governor of the Banco de España, Chair of the ESRB ATC and Chair of the Basel Committee on Banking Supervision) and focused on banking sector turbulences: lessons learnt for supervision and regulation. The second concerned the closing of macroprudential framework gaps and was chaired by Alexandra Jour-Schroeder (Deputy Director-General, Directorate-General for Financial Stability, Financial Services and Capital Markets Union, European Commission). The third panel covered the evolution of liquidity risk in an environment of higher interest rates and was chaired by Fabio Natalucci (Deputy Director, IMF). Two keynote speeches were also given. The first, by Klaas Knot (President of De Nederlandsche Bank and Chair of the FSB), was entitled “Lessons learnt from recent financial sector turmoil - Global regulatory priorities”. The second, “Artificial intelligence and systemic risk”, was delivered by Jón Danielsson (Director of the Systemic Risk Centre and Professor of Finance at the London School of Economics). Finally, Francesco Mazzaferro, in his capacity as Head of the ESRB Secretariat, concluded the conference with closing remarks. The recording of the conference is available on the ESRB’s website.

On 11 and 12 December 2023 the ESRB held its annual meeting with the CEAOB and statutory auditors of EU-based G-SIFIs. This meeting is mandatory under EU law\textsuperscript{60} in order to inform the ESRB of sectoral developments or of any significant developments regarding G-SIFIs. The meeting took place in a hybrid format. After the parties summarised the activities that they had conducted in the past year, the discussions started with an ASC report on corporate credit and leverage that analysed changes in the financing of NFCs in Europe. The next topic of discussion revolved around the rules and expectations for the classification and modelling of bank deposits, which was then followed by an analysis of accounting and climate-related risks from a financial stability perspective. The last item of discussion touched on the preliminary findings as regards initial implementation by the insurance sector of the international financial reporting standard on insurance contracts (IFRS 17). Finally, in terms of other risks, the key subject raised was the reporting of environmental, social, and governance (ESG) risks.

The ESRB organised a CRE Workshop, which took place in February 2024 in hybrid format, with on-site participants gathering in Lisbon. The workshop’s agenda covered the latest developments with regard to CRE data collection, risk assessment and policy undertakings, and contained presentations from various Member States and European institutions.

Annex: Publications on the ESRB’s website from 1 April 2023 to 31 March 2024

Working papers

The market liquidity of interest rate swaps
01/03/2024

Public money as a store of value, heterogeneous beliefs and banks: implications of CBDC
15/02/2024

The transmission of macroprudential policy in the tails: evidence from a narrative approach
15/11/2023

Quantitative easing, accounting and prudential frameworks, and bank lending
01/08/2023

Fear the Walking Dead? Zombie Firms in the Euro Area and Their Effect on Healthy Firms’ Credit Conditions
01/07/2023

The demand for long-term mortgage contracts and the role of collateral
01/07/2023

Occasional papers

Joining up prudential and resolution regulation for systemically important banks
25/03/2024

15/11/2023

The European significant risk transfer securitisation market
02/10/2023

Insurers’ investment behaviour and the coronavirus (COVID-19) pandemic
15/09/2023
ESRB reports

Follow-up report on vulnerabilities in the residential real estate sectors of the EEA countries
01/02/2024

Improvements to the ESRB macroprudential stance framework
15/01/2024

Towards macroprudential frameworks for managing climate risk
18/12/2023

Issues note on policy options to address risks in corporate debt and real estate investment funds from a financial stability perspective
04/09/2023

EU Non-bank Financial Intermediation Risk Monitor 2023
06/06/2023

Crypto assets and decentralised finance
25/05/2023

Risk dashboards

ESRB risk dashboard, March 2024 (Issue 47)
Annex I
Annex II
28/03/2024

ESRB risk dashboard, November 2023 (Issue 46)
Annex I
Annex II
07/12/2023

ESRB risk dashboard, September 2023 (Issue 45)
Annex I
Annex II
05/10/2023

ESRB risk dashboard, June 2023 (Issue 44)
Annex I
Annex II
29/06/2023

ESRB risk dashboard, March 2023 (Issue 43)
Annex I
Annex II
11/04/2023

Stress testing

Adverse scenario for the 2023 European Securities and Markets Authority’s money market fund stress testing guidelines
19/12/2023

Adverse scenario for the European Securities and Markets Authority’s 2023 central counterparty stress test
31/05/2023

Opinions

Opinion of the European Systemic Risk Board of 25 August regarding the Belgian notifications of the setting or resetting of O-SII buffer rates pursuant to Article 131 and the setting or resetting of a systemic risk buffer pursuant to Article 133 of Directive 2013/36/EU of the European Parliament and of the Council on access to the activity of credit institutions and the prudential supervision of credit institutions (ESRB/2023/7)
Report
17/01/2024

Opinion of the European Systemic Risk Board of 14 December 2023 regarding the Latvian notification of an adjustment of the risk weight set for commercial immovable property pursuant to Articles 124(2) and 126(1) of Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012 (ESRB/2023/14)
Report
16/01/2024

Opinion of the European Systemic Risk Board of 10 October 2023 on the Swedish notification of the extended 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 (ESRB/2023/10)
Report
19/12/2023

Opinion of the European Systemic Risk Board of 3 August 2023 regarding the existing systemic risk buffer pursuant to Article 133 and the Norwegian notification of the setting or resetting of an O-SII buffer pursuant to Article 131 of Directive 2013/36/EU of the European Parliament and of the Council on access to the activity of credit institutions and the prudential supervision of credit institutions (ESRB/2023/6)
Report
02/10/2023

Opinion of the European Systemic Risk Board of 1 September 2023 regarding the Polish notification of higher risk weights set for immovable property pursuant to Articles 124(2) and 125(1) of Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012 (ESRB/2023/8)

Report
29/09/2023


Report
14/09/2023

Opinion of the European Systemic Risk Board of 31 May 2023 regarding the Estonian 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 the Council on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012 (ESRB/2023/2)

ASC reports

Corporate credit and leverage in the EU: recent evolution, main drivers and financial stability implications
29/06/2023

Compliance reports

Summary compliance report on Recommendation B of the Recommendation of the European Systemic Risk Board of 24 September 2020 on identifying legal entities (ESRB/2020/12)
05/03/2024

Compliance report on Country-specific Recommendations 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), Denmark (ESRB/2019/5), Luxembourg (ESRB/2019/6), the Netherlands (ESRB/2019/7), Finland (ESRB/2019/8) and Sweden (ESRB/2019/9), respectively
- part III September 2023

19/10/2023

Summary compliance report on the 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)

27/09/2023

Compliance report on the Recommendation of the European Systemic Risk Board of 7 December 2017 on liquidity and leverage risks in investment funds (ESRB/2017/6)

04/07/2023

Recommendations

Sweden - Recommendation of the European Systemic Risk Board of 06 July 2023 amending Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures (ESRB/2023/4)

14/09/2023

Recommendation of the European Systemic Risk Board of 13 November 2023 regarding the Portuguese notification of its intention to set a sectoral systemic risk buffer rate in accordance with Article 133 of Directive 2013/36/EU (ESRB/2023/11)

16/12/2023

Assessment report

17/01/2024

Responses and letters

ESRB Secretariat’s response to the consultation on draft ITS specifying certain tasks of collection bodies and certain functionalities of the European single access point (ESAP)

06/03/2024

ESRB Letter to the European Parliament - background information on the proposal to introduce an active account requirement

05/10/2023

ESRB Letter to the European Commission - background information on the proposal to introduce an active account requirement

05/10/2023
ESRB Letter to the Council of the European Union - background information on the proposal to introduce an active account requirement
05/10/2023

ESRB response to ESMA’s final report on extending emergency measures on CCP collateral requirements
02/10/2023

ESRB response to the request for information for post-implementation Review of IFRS 9 Financial Instruments – Impairment
28/09/2023

ESRB advice on the prudential treatment of environmental and social risks
27/09/2023

17/05/2023