Promoting Global Financial Stability

2023 FSB Annual Report

11 October 2023
The Financial Stability Board (FSB) coordinates at the international level the work of national financial authorities and international standard-setting bodies in order to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies. Its mandate is set out in the FSB Charter, which governs the policymaking and related activities of the FSB. These activities, including any decisions reached in their context, shall not be binding or give rise to any legal rights or obligations.
Table of Contents

Executive summary .................................................................................................................................................. 1

1. March 2023 banking turmoil .......................................................................................................................... 3
   1.1. Overview of the events ............................................................................................................................. 3
   1.2. Preliminary lessons ................................................................................................................................. 4

2. Financial stability outlook .................................................................................................................................. 8
   2.1. Vulnerabilities in the global financial system remain elevated ............................................................. 8
   2.2. Vulnerabilities from structural changes continue to emerge ............................................................... 12

3. Priority areas of work and new initiatives in 2023 ....................................................................................... 13
   3.1. Enhancing the resilience of non-bank financial intermediation ......................................................... 13
   3.2. Improving cross-border payments ........................................................................................................ 15
   3.3. Responding to the challenges of technological innovation ................................................................. 16
   3.4. Addressing financial risks from climate change .................................................................................. 18
   3.5. Enhancing the resolution of central counterparties ............................................................................. 19

4. Implementation and effects of reforms ......................................................................................................... 20
   4.1. Building resilient financial institutions ............................................................................................... 20
   4.2. Ending too-big-to-fail ........................................................................................................................... 21
   4.3. Making derivatives markets safer ......................................................................................................... 23
   4.4. Enhancing resilience of non-bank financial intermediation ............................................................... 25
   4.5. Progress in other reform areas ............................................................................................................ 27

5. Looking ahead .................................................................................................................................................. 28

Annex 1: FSB reports published over the past year .......................................................................................... 30
Annex 2: Implementation of reforms in priority areas by FSB member jurisdictions ..................................... 32
Abbreviations ....................................................................................................................................................... 35
Executive summary

The banking turmoil in March 2023 highlighted issues for financial stability.

- Swift and decisive actions by the US and Swiss authorities were taken to deal with the failures of US regional banks and of Credit Suisse respectively earlier this year.

- The already implemented Basel III reforms helped shield the global banking sector and real economy from a more severe banking crisis. The events underscored the importance of completing the implementation of the outstanding Basel III standards.

- A striking feature of the bank failures was the unprecedented speed and scale of deposit runs. The FSB is assessing vulnerabilities from asset-liability and liquidity mismatches and exploring whether technology and social media have changed deposit stickiness.

- Banks’ risk management and governance arrangements remain the first and most important source of resilience. The Basel Committee on Banking Supervision (BCBS) is prioritising work to strengthen supervisory effectiveness and is pursuing follow-up work to assess the performance of specific features of the Basel Framework, such as liquidity risk and interest rate risk in the banking book.

- The FSB’s review of the lessons to be learnt for the operation of the international resolution framework concludes that recent events demonstrate the soundness of the framework. While the review identifies several areas for further analysis and improvements in the operationalisation and implementation of the framework (see Box 1), the review upholds the appropriateness and feasibility of the framework, rather than presenting issues that would question the substance of the Key Attributes themselves.

Vulnerabilities in the global financial system continue to be elevated...

- The effects of the post-pandemic rise in interest rates are increasingly being felt. The cost of financing has risen substantially, at a time when debt is at very high levels across the government, corporate and household sectors. This is likely to lead to credit quality challenges that may affect both banks and non-bank investors.

- High interest rates and an uncertain growth outlook also create the potential for higher volatility in asset prices. This could generate significant spikes in collateral and margin calls, inducing fire sales of assets. Liquidity mismatches in non-bank financial entities could also amplify shocks if they lead to simultaneous asset sales across markets.

… while vulnerabilities from structural change continue to emerge.

- Exposure to climate-related vulnerabilities is becoming more evident. A manifestation of physical risks, as well as a disorderly transition to a low carbon economy, could have destabilising effects from increases in risk premia and falling asset prices.

- Cyber incidents continue to grow in frequency and sophistication. A successful cyber-attack on parts of the financial system, including third-party service providers, could interrupt the supply of financial services and damage confidence.
Crypto-asset markets are rapidly evolving and, while financial stability risks appear contained at present, recent incidents underscore the need for vigilance and oversight. If these markets were to grow and become more interconnected with the traditional financial system, they could reach a point where they represent a threat to global financial stability.

**The FSB is working to address current and emerging vulnerabilities.**

- A key FSB priority this year has been the finalisation of a global regulatory framework for crypto-assets, including stablecoins, based on the principle of ‘same activity, same risk, same regulation’. The focus now is on the global implementation of the recommendations.

- Work to address systemic risk in non-bank financial intermediation (NBFI) is underway. The FSB proposed revisions to its policy recommendations to address structural liquidity mismatch in open-ended funds; is working with standard-setting bodies (SSBs) to enhance margining practices; and has launched policy work on non-bank leverage.

- The FSB is consulting on a global standard for financial resources and tools to support resolution of central counterparties (CCPs), given their systemic importance.

- The FSB Climate Roadmap has made further progress across all four pillars. The publication of the ISSB’s inaugural sustainability disclosure standards is a milestone achievement. The FSB will work with the ISSB, IOSCO and other bodies to promote their timely and wide use as well as their interoperability with jurisdictional frameworks.

- The FSB has issued recommendations to achieve greater convergence in cyber incident reporting and is consulting on a proposed policy toolkit for authorities, financial institutions and service providers for their third-party risk management and oversight.

- The G20 roadmap to enhance cross-border payments has transitioned from analyses to practical projects, including strengthened partnership with the private sector. The FSB has published, for the first time, key performance indicators to monitor progress toward the speed, cost, access and transparency targets.

**Progress in implementing G20 reforms continues but is uneven.**

- A BCBS evaluation found that the overall resilience of the banking sector has increased since the implementation of the Basel reforms. Member jurisdictions continue to make progress in implementing the finalised Basel III reforms and reiterated their expectation of implementing all aspects of the Basel framework in full, consistently, and as soon as possible, though implementation in many cases is being pushed to 2024 or later.

- Work is still ongoing to close gaps in the operationalisation of resolution plans for banks and to implement effective resolution regimes for insurers and CCPs. The implementation of NBFI reforms continues but is at an earlier stage than other reforms; the FSB is working with urgency to finalise and support the implementation of international reforms to enhance NBFI resilience.

**Developments over the past year reinforce the importance of global regulatory cooperation, including the completion of the post-crisis reform agenda with G20 support.**

- The FSB and SSBs will continue to promote approaches to deepen international cooperation, coordination and information sharing.
1. March 2023 banking turmoil

1.1. Overview of the events

The banking turmoil was the most significant system-wide banking stress since the 2008 global financial crisis (GFC) in terms of scale and scope.

- The stress experienced by individual banks, while having largely distinct causes, triggered an assessment of the resilience of the broader banking sector. Contagion from individual bank failures was limited, thanks to the swift, decisive, and concerted actions of authorities and amid confidence in the resilience of the broader financial system.

- Credit Suisse, a G-SIB, reached the point of non-viability on liquidity grounds in March 2023. It had been suffering from a series of problems in recent years, including losses on its prime brokerage business with Archegos and its relationship with Greensill, and heavy outflows of deposits starting in the last quarter of 2022. The strains on Credit Suisse led to its takeover by UBS with support by the Swiss authorities.¹

- March also saw a deposit run and the failure of Silicon Valley Bank (SVB), a non-G-SIB in the US. This was followed by deposit runs at two other US regional banks and the failures of Signature Bank and First Republic Bank (both non-G-SIBs).² Deposit outflows were mostly concentrated in smaller US banks, though other banks faced outflows as well (Graph 1, left panel), with a sizeable portion of the deposits withdrawn from smaller banks going to government money market funds and to larger banks. Policy action by the US authorities helped stabilise deposits and contain additional market spillovers.³

---

¹ This included liquidity backstop facilities, a second-loss guarantee from the Swiss government, and a write-down of Credit Suisse’s additional Tier 1 (AT1) bonds. See Swiss National Bank, Financial Stability Report 2023, June.


³ This included the resolution of these banks using existing powers and tools, including (for SVB and Signature Bank) the systemic risk exception, as well as the set-up of a new, temporary bank term funding program by the Federal Reserve. See the Joint Statement by the US Department of the Treasury, Federal Reserve, and FDIC, 12 March 2023.

---

Bank resilience has been tested

<table>
<thead>
<tr>
<th>1. US bank deposit flows, 2023¹</th>
<th>2. Bank equity market valuations, 2023²</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-week change (USD bn)</td>
<td>Price-to-book ratio</td>
</tr>
<tr>
<td>Jan</td>
<td>Feb</td>
</tr>
<tr>
<td>Large banks</td>
<td>Small banks</td>
</tr>
</tbody>
</table>

---

¹ This included liquidity backstop facilities, a second-loss guarantee from the Swiss government, and a write-down of Credit Suisse’s additional Tier 1 (AT1) bonds. See Swiss National Bank, Financial Stability Report 2023, June.


³ This included the resolution of these banks using existing powers and tools, including (for SVB and Signature Bank) the systemic risk exception, as well as the set-up of a new, temporary bank term funding program by the Federal Reserve. See the Joint Statement by the US Department of the Treasury, Federal Reserve, and FDIC, 12 March 2023.
These failures led to some contagion in bank equity prices. In general, bank valuations globally fell during the turmoil period and have not yet fully recovered (Graph 1, right panel), suggesting lingering investor concerns about bank resilience and profitability.

1.2. Preliminary lessons

These events highlight a number of issues for financial stability…

- The FSB, SSBs and national authorities are working to draw out lessons from these events from both a policy and implementation perspective.

- The events involving Credit Suisse and the US banks showed that some banks still need to address shortcomings in managing risks and instilling robust risk culture and governance arrangements. Such weaknesses mean that these banks could be vulnerable to a loss of confidence that can result in a deposit run, even though the banks at the centre of the episode had capital and liquidity ratios at end-2022 that were above regulatory minima and funding ratios that were not particularly low relative to their peers (Graph 2).

- The US bank failures underscore the problems that the combination of vulnerabilities from liquidity and maturity mismatches can pose for the financial system during a time of significant monetary tightening. The previous long period of low rates likely contributed to longer duration and higher leverage across financial institutions. Given the magnitude and speed of the increase in interest rates, some of these institutions could be impacted if their business models and investment strategies were predicated on low rates and volatility as well as ample funding and market liquidity.

- A striking feature about these failures was the unprecedented speed and scale of deposit runs compared to past cases. This raises questions notably about the role of deposit insurance in stemming such runs and whether greater use of technology in banking may have made deposits less sticky. The rapid increase in interest rates that provided incentives to move deposits to higher yielding alternatives such as MMFs, may also have changed ‘deposit betas’ (i.e. the sensitivity of bank deposit rates to changes in policy rates or market interest rates) over time.

- A related question is whether social media has changed the nature and increased the speed of deposit runs by facilitating the rapid communication of information, rumours and opinions to many people simultaneously.

---

1 The US Federal Reserve defines large banks as the top 25 US banks by domestic assets and small banks as all other domestically chartered banks. Based on this definition, SVB and First Republic were large banks. 2 Panel 2 shows simple averages of individual bank price-to-book ratios. The chart shows data for publicly listed banks from FSB member jurisdictions. The averages for G-SIBs and non-G-SIBs exclude banks that failed between March and May 2023 (Credit Suisse, First Republic Bank, Signature Bank and SVB).

Sources: Bloomberg; US Federal Reserve; FSB calculations.
The banks that failed were not outliers in terms of capital or liquidity ratios
In per cent as of 2022:Q4

Graph 2

1. Common Equity Tier 1 capital ratios

2. Liquidity and funding ratios

Sources: S&P Capital IQ; FSB calculations.

... and provide initial lessons for the design and implementation of G20 financial reforms.

- Two reform areas that are particularly relevant in this context are Basel III and the international resolution framework. An important aspect of drawing lessons on these reforms is to distinguish issues relating to the appropriate design, calibration and application of the international policy or standard, as compared to its actual operationalisation in particular jurisdictions or contexts.

- The Basel Committee on Banking Supervision (BCBS) completed a stocktake of the regulatory and supervisory implications of the banking turmoil with a view to learning lessons and will conduct a series of follow-up initiatives including: (i) prioritising work to strengthen supervisory effectiveness and identifying issues that could merit additional guidance at a global level; and (ii) pursuing additional follow-up analytical work based on empirical evidence, to assess whether specific features of the Basel Framework performed as intended during the turmoil, such as liquidity risk and interest rate risk in the banking

---

4 Other identified issues that may relate to implementation of G20 reforms include deposit insurance systems and their role in promoting financial stability, and incentive compensation practices that may inappropriately encourage risk taking.
book. Domestic analyses of these episodes by the US and Swiss authorities may also provide lessons on aspects of the Basel III framework.

- The FSB conducted a review on lessons learnt for the FSB’s international resolution standard – the Key Attributes of Effective Resolution Regimes for Financial Institutions. The review seeks to set out a clear understanding of the Swiss authorities’ actions with a view to drawing lessons for the international resolution framework. It highlights that the actions by the Swiss authorities to facilitate a commercial transaction outside of resolution supported financial stability and the global operations of Credit Suisse. At the same time, it raises the question why resolution was not the chosen path despite it being an executable alternative at that time in light of preparations made. The review reaches the conclusion that recent events demonstrate the soundness of the international resolution framework in that it provided the Swiss authorities with an executable alternative to the solution that they deemed preferable in this particular case. While the review identifies several areas for further analysis and improvements in the operationalisation and implementation of the G-SIB resolution framework, the review upholds the appropriateness and feasibility of the framework, rather than presenting issues that would question the substance of the Key Attributes themselves.

- The review notes that the failures of the US regional banks showed that banks not identified as G-SIBs can still be systemically significant or critical upon failure. The banks were effectively resolved without bailing out shareholders and unsecured creditors. Nevertheless, there was relatively limited resolution planning information available and very limited time to develop and implement firm-specific plans to resolve these banks. The events demonstrated that resolution capabilities – such as the ability to quickly produce information needed to market an institution or to operationalise key staff retention plans – are of critical importance, and that when such capabilities lack maturity it can be a hindrance to an efficient resolution process. In addition, the failed banks would have benefited from having in place loss absorbing capacity in the form of long-term debt. These cases raise a number of issues that deserve attention as part of future work of the FSB (see Box 1).

- Another reform area that may be relevant in this context – also highlighted in the FSB report – is the design of deposit insurance systems and its role in promoting financial stability. Aspects to explore include the interaction of deposit insurance and resolution (including the respective role of deposit insurance and loss-absorbing capacity in

---

maintaining depositor confidence in resolution) and the impact of high levels of uninsured deposits on resolvability and resolution strategies.

The lessons presented above are still preliminary. The FSB, in collaboration with relevant SSBs, continues to analyse lessons from these events for the design and implementation of internationally agreed reforms, and will report on its findings in 2024.

Box 1: Preliminary lessons for implementation of G20 reforms from the recent bank failures

This box focuses on the implementation issues, rather than on issues relating to the appropriate design and calibration, of Basel III and the international resolution framework. The G20, FSB and BCBS have reiterated the importance of ongoing work by national authorities to complete the implementation of the agreed G20 reforms in light of these events.

The BCBS stocktake of the regulatory and supervisory lessons of the banking turmoil underlines: (i) the importance of banks’ risk management practice and governance arrangements as the first and most important source of financial and operational resilience; (ii) the role of strong and effective supervision in overseeing the safety and soundness of banks, and the critical importance of supervisors acting early and effectively to identify and promptly correct weaknesses in bank practices; and (iii) the critical importance of a prudent and robust regulatory framework in safeguarding financial stability. Regarding (iii), the implementation of all aspects of the Basel III framework in full, consistently, and as soon as possible, remains a key priority. The already implemented Basel III reforms have helped shield the global banking system and real economy from a more severe banking crisis. The implementation of the outstanding Basel III standards is essential to further enhance the resilience of the global banking system and provide a regulatory level playing field for internationally active banks.

Domestic analyses of these episodes have also identified weaknesses in bank risk management practices and governance arrangements as well as supervisory and regulatory issues. For example, the review of the supervision and regulation of SVB in the US9 indicated the need to improve the speed, force and agility of supervision and for a stronger regulatory framework applied to a broader set of banks. Drawing on this analysis, the US authorities have proposed a set of reforms (including implementation of the final Basel III rules) to enhance banking sector resilience.

The review by the FSB of the lessons learned for the operation of the international resolution framework concludes that recent events demonstrate the soundness of the framework. While the review identifies several areas for further analysis and improvements in the operationalisation and implementation of the framework, the review upholds the appropriateness and feasibility of the framework, rather than presenting issues that would question the substance of the Key Attributes themselves. The areas highlighted by the Credit Suisse case include the need for an effective public sector liquidity backstop and operational readiness of banks to access it as a last resort; to address the legal issues identified in the execution of bail-in across borders in the course of resolution planning; to better operationalise a range of resolution options such as transfer and sale of business tools alone or in combination with bail-in; and to understand the impact of bail-in on financial markets. Additionally, the Credit Suisse case shows that authorities should continue to prioritise testing and simulating effective decision making and execution at domestic and international levels; and extend their communication and coordination efforts outside of the core crisis management group (CMG).

The failures of the mid-sized banks in the US raise issues such as the need to explore whether the scope of resolution planning requirements and loss-absorbing capacity requirements needs to be expanded; how resolution authorities can be better prepared for the increased speed of bank runs; and the implications of recent events for the role of deposit insurance in resolution arrangements.

---

9 See Federal Reserve (2023), Review of the Federal Reserve’s Supervision and Regulation of Silicon Valley Bank, April.
A number of these issues, such as the operationalisation of bail-in and funding in resolution, were previously identified in the FSB’s implementation monitoring work. The FSB is considering how to enhance its monitoring and reporting going forward in light of the lessons from these episodes.

2. Financial stability outlook

2.1. Vulnerabilities in the global financial system remain elevated

The effects of the post-pandemic rise in interest rates are increasingly being felt.

- The cost of financing has risen substantially since end-2021 in a number of jurisdictions (Graph 3, left panel). Importantly, this is taking place at a time when debt is at a very high level across the government, corporate and household sectors simultaneously (Graph 3, right panel). While debt servicing costs have been helped by the previously low level of interest rates, the rise in financing costs is leading to a sharp increase in interest payments for both new and existing borrowers, including fixed-rate borrowers that need to refinance their debt.

- Some other factors that have helped support debt servicing may be coming to an end. The extraordinary government support provided to the non-financial private sector during the pandemic has ended; corporate profits may weaken if economic growth slows; the low unemployment rate could also be threatened by the economic slowdown; and household savings are declining in several jurisdictions.

Credit quality challenges are looming.

- Bank asset quality may be affected by this increase in credit risk. Previous monetary and fiscal support for economies may have masked the extent of problem loans that
could impact banks. This past support might have also made it more difficult for banks to assess credit risk using models calibrated on recent borrower performance.

- Declines in residential and commercial real estate (CRE) prices already seen in some jurisdictions could add to concerns about bank asset quality (Graph 4, left panel). Property price declines could increase the probability of some borrowers defaulting and affect the quality of the collateral and of property investments held by banks. In several jurisdictions, smaller banks are more exposed to CRE than larger banks.

- Non-bank investors may be exposed to losses on commercial property. These investors – including real estate investment trusts (REITS), real estate funds, insurance companies, pension funds, and private funds – are also directly exposed to CRE. Any potential fire sales by leveraged funds could exacerbate CRE price falls.

High debt levels are also a concern in emerging market and developing economies (EMDEs).

- Market prices exhibit a large divergence in bond spreads across EMDE sovereigns (Graph 4, right panel). While spreads for large EMDE borrowers – such as the majority of those that are FSB members – continue to be relatively narrow, some smaller or less developed EMDE borrowers are already facing debt sustainability concerns and have lost access to market financing, while others have already defaulted.¹⁰

Credit vulnerabilities are building

<table>
<thead>
<tr>
<th>1. Residential property prices</th>
<th>2. EMDE sovereign spreads¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="chart.png" alt="Graph 4" /></td>
<td><img src="chart.png" alt="Graph 4" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Months relative to peak</th>
<th>Peak=100</th>
</tr>
</thead>
<tbody>
<tr>
<td>-20</td>
<td>10</td>
</tr>
<tr>
<td>-18</td>
<td>9</td>
</tr>
<tr>
<td>-16</td>
<td>8</td>
</tr>
<tr>
<td>-14</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basis points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,200</td>
</tr>
<tr>
<td>1,000</td>
</tr>
<tr>
<td>800</td>
</tr>
<tr>
<td>600</td>
</tr>
<tr>
<td>400</td>
</tr>
<tr>
<td>200</td>
</tr>
</tbody>
</table>

¹ Panel 2 shows the simple average spread for the sovereigns in each group. Currently defaulted sovereigns are excluded from the chart. In the chart, FSB member jurisdictions exclude Argentina. Frontier market jurisdictions are countries that are included in the JPMorgan NEXGEM index.

Sources: BIS; Bloomberg; JPMorgan Chase; FSB calculations.

- Some EMDEs may also be vulnerable to a sovereign-bank nexus, to the extent they are faced with a combination of debt sustainability concerns and large bank holdings of

domestic government bonds. A spike in government financing costs would then lead to a decline in the value of bond holdings and ultimately defaults, impacting bank capital.

**Markets could face another bout of volatility.**

- In an environment of rising interest rates and greater economic uncertainty, there is the potential for sudden movements and higher volatility in asset prices. This is particularly the case if interest rates stay at higher levels than currently expected by investors in the context of a slowing growth outlook, persistently higher inflation, and tighter liquidity in core bond markets than in previous years. Continued geopolitical tensions also raise the risk of further volatility in some commodities markets.\(^{11}\)

- Leverage taken by non-bank investors could be exposed by market volatility. Pockets of high borrowing among non-banks, combined with the synthetic leverage embedded in derivatives, could propagate strains through the financial system (Box 2). Sharp changes in asset prices could generate significant spikes in collateral and margin calls, and these could induce fire sales of assets, worsening the market volatility.

- Liquidity mismatches in non-bank financial entities could also amplify market shocks. While these mismatches are not new, widespread redemptions at some money market funds (MMFs) and some open-ended funds (OEFs) could lead to sales of assets across a number of markets at the same time. Aspects of these dynamics were illustrated during the March 2020 ‘dash for cash’ episode.\(^{12}\)

---

\(^{11}\) See FSB (2023), *The financial stability aspects of commodities markets*, February; and BCBS-CPMI-IOSCO (2023), *Margin dynamics in centrally cleared commodities markets in 2022*, May.

Leverage is a financial technique used to increase exposure, boost returns or take positions that can offset potential losses from other exposures (hedging). It can take the form of financial leverage (borrowing through loans, bonds, repurchase agreement (repo) and other securities financing transactions) or synthetic leverage (using derivatives that create exposures whose value depends on the value of an underlying asset). Leverage can be taken on-balance sheet or off-balance sheet. If not properly managed, the build-up of leverage creates a vulnerability that, when acted upon by a shock, can propagate strains through the financial system, amplify stress and lead to systemic disruption.

A recent FSB report has shown that more than 90% of on-balance sheet financial leverage in FSB member jurisdictions is concentrated in so-called ‘other financial intermediaries’, such as broker-dealers, hedge funds, finance companies, holding companies and securitization vehicles. The report also finds pockets of highly leveraged investors in NBFI (Graph A, left panel). Financial leverage of non-bank investors has not changed significantly since the time of the 2008 global financial crisis (other than for REITs), which suggests that there has been limited deleveraging by non-bank entities.

Non-bank investors also appear to be taking on increasing amounts of synthetic leverage. While it is difficult to obtain data on synthetic leverage in NBFI, one proxy is the ratio of the gross notional amount of their derivatives to the market value. This proxy is high in 2022 with notional outstanding some 31 times gross market value, though the proxy has peaked at higher levels (Graph A, right panel). Among non-bank investors, some hedge funds pursuing macro and relative value strategies have very high levels of synthetic leverage. Moreover, a few prime brokers dominate the provision of lending to hedge funds, and this concentration could amplify shocks and propagate them through the financial system.

---

**Box 2: Leverage in NBFI**

Leverage is a financial technique used to increase exposure, boost returns or take positions that can offset potential losses from other exposures (hedging). It can take the form of financial leverage (borrowing through loans, bonds, repurchase agreement (repo) and other securities financing transactions) or synthetic leverage (using derivatives that create exposures whose value depends on the value of an underlying asset). Leverage can be taken on-balance sheet or off-balance sheet. If not properly managed, the build-up of leverage creates a vulnerability that, when acted upon by a shock, can propagate strains through the financial system, amplify stress and lead to systemic disruption.

A recent FSB report has shown that more than 90% of on-balance sheet financial leverage in FSB member jurisdictions is concentrated in so-called ‘other financial intermediaries’, such as broker-dealers, hedge funds, finance companies, holding companies and securitization vehicles. The report also finds pockets of highly leveraged investors in NBFI (Graph A, left panel). Financial leverage of non-bank investors has not changed significantly since the time of the 2008 global financial crisis (other than for REITs), which suggests that there has been limited deleveraging by non-bank entities.

Non-bank investors also appear to be taking on increasing amounts of synthetic leverage. While it is difficult to obtain data on synthetic leverage in NBFI, one proxy is the ratio of the gross notional amount of their derivatives to the market value. This proxy is high in 2022 with notional outstanding some 31 times gross market value, though the proxy has peaked at higher levels (Graph A, right panel). Among non-bank investors, some hedge funds pursuing macro and relative value strategies have very high levels of synthetic leverage. Moreover, a few prime brokers dominate the provision of lending to hedge funds, and this concentration could amplify shocks and propagate them through the financial system.
2.2. Vulnerabilities from structural changes continue to emerge

Crypto-asset markets continue to evolve and, while financial stability risks appear contained at present, recent incidents underscore the need for vigilance and oversight. If they were to grow and become more interconnected with the traditional financial system, they could reach a point where they represent a threat to global financial stability.

- Crypto-asset market capitalisation remains well below its peak and is a small portion of global financial system assets (Graph 5). While interconnectedness within the crypto-asset ecosystem remains high, linkages with core financial markets and institutions are still limited. Crypto-assets are not widely used in critical financial services (including payments), and so-called decentralised finance remains a niche market segment.\(^{15}\) However, if the crypto-asset ecosystem were to grow in size, or its linkages with financial system and the real economy to increase, financial stability risks could arise.

### Crypto-asset market capitalisation remains well below its peak

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q2 21</strong></td>
<td><strong>Q4 21</strong></td>
</tr>
<tr>
<td><strong>USD bn</strong></td>
<td><strong>USD bn</strong></td>
</tr>
<tr>
<td>Bitcoin</td>
<td>Ethereum</td>
</tr>
</tbody>
</table>

Sources: CoinGecko; CCData; FSB calculations.

- Recent developments warrant close monitoring because of their potential impact on vulnerabilities in the crypto-asset sector. Some market makers have backed away, reducing market liquidity; the banking turmoil has put pressure on crypto-asset service providers to find new means to process real-time USD transfers and hold USD depo; and new firms have entered the stablecoin market. In addition, a few multi-function crypto-asset intermediaries dominate key crypto-asset market segments, increasing the risk of market disruption in the event of a shock affecting these intermediaries.

The adoption of new technologies is creating vulnerabilities in the financial system.

---

\(^{14}\) Synthetic leverage comes from the fact that derivatives positions have exposure to changes in the notional amount of the underlying asset, as written in contracts, while market participants only need to put-up a fraction of that notional value in initial and variation margin. The intuition behind this measure is that the denominator represents the value at which the derivative is recorded in accounts and is related to the cumulative sum of variation margin over the life of a derivative contract.

\(^{15}\) See FSB (2023), *The financial stability risks of decentralised finance*, February.
While novel technologies – such as artificial intelligence, decentralised platforms offering credit, or the speed and automation of decision making in financial markets – could increase efficiency and access, they can also create new risks, including disruptions for incumbent financial institutions that are not adapting quickly enough and that face competition from new service providers such as BigTech and fintech firms.

Cyber incidents are rapidly growing in frequency and sophistication. A successful cyber-attack on key financial infrastructures, systemically important financial institutions, or a group of smaller institutions, could interrupt the supply of financial services and damage confidence. There could also be attacks on third-party providers of services to the financial system, and if these are successful, they could impact the operations of many different institutions, highlighting how interconnectedness increases this vulnerability.

Exposure to climate-related vulnerabilities is becoming more evident.

Extreme weather events are becoming more common, and this is leading to a growing focus on the risks that climate change could pose to financial stability. A manifestation of physical risks as well as a disorderly transition to a low-carbon economy could have destabilising effects on the financial system, such as a rise in risk premia and falling asset prices. Climate-related risks may also be amplified by the financial system across borders and sectors. The increased frequency and intensity of extreme weather and climate-related events, and the intense debate about current and future energy policies in many jurisdictions, highlight that this is not just a long-term issue or tail event.

Any potential under-pricing of climate risks relating to assets could, if they subsequently materialise, adversely impact banks and non-bank investors that hold those assets. These direct effects could be further amplified by domestic and cross-border financial linkages and by feedback loops where losses suffered by the financial system or heightened risk aversion reduce the financing of the real economy. Many least developed countries would be likely to be amongst the most severely affected.

3. Priority areas of work and new initiatives in 2023

The FSB is carrying out policy work to foster global financial stability in response to new and emerging risks, and to enhance the functioning of the G20 reforms introduced after the 2008 global financial crisis. Key priorities include enhancing the resilience of NBFI; improving cross-border payments; responding to technological innovation; addressing financial risks from climate change; and enhancing central counterparty resolution.

The banking sector stress events in March 2023 were an important test of the post-crisis reforms and brought up a number of issues for financial institutions and authorities. The FSB and SSBs are working to draw out lessons from these events from both a policy and implementation perspective (see section 1.2).

3.1. Enhancing the resilience of non-bank financial intermediation

The FSB is coordinating work to assess and address systemic risk in NBFI.
NBFI has grown – to almost half of global financial assets, compared to 42% in 2008 – and become more diverse and interconnected.\textsuperscript{16} The March 2020 market turmoil and subsequent developments, including the failure of Archegos and strains in commodities and bond markets, underscore the need to enhance the resilience of that sector.

Enhancing NBFI resilience is intended to ensure a more stable provision of financing to the economy and reduce the need for extraordinary central bank interventions. Efforts to strengthen NBFI resilience should not compromise the resilience in other parts of the system or the important role that NBFI plays in financing the real economy.

The focus of the FSB work is on key amplifiers of liquidity stress.\textsuperscript{17}

Key amplifiers refers to those activities and types of entities that may exacerbate liquidity imbalances and transmission and amplification of shocks due to their size, structural characteristics, and behaviour in stress.

On the liquidity demand side, this includes activities that could give rise to liquidity mismatches, which are particularly prevalent in some types of non-bank entities, such as certain MMFs and OEFs. Other factors that can contribute to liquidity demand in stress include unexpectedly large margin calls for derivatives and securities trades combined with insufficient preparedness by market participants to meet those calls; external funding and currency mismatches (e.g. considering global use of the US dollar as a borrowing and investment currency); and excessive build-up of leverage.

On the liquidity supply side, key amplifiers include factors that reduce the ability of bank and non-bank liquidity providers to absorb large spikes in liquidity demand; and core wholesale funding markets that are characterised by limited standardisation, low levels of automated trading and turnover, and heavy reliance on dealer intermediation.

FSB policies aim to reduce excessive spikes in the demand for liquidity by addressing the vulnerabilities that drive those spikes or by mitigating their financial stability impact.

These policies involve largely repurposing existing policy tools rather than creating new ones, given the extensive micro-prudential and investor protection toolkit already available. They cover MMFs, OEFs and margining practices.

- The FSB issued policy proposals in 2021 to address MMF vulnerabilities.\textsuperscript{18}

- Following an assessment of the effectiveness of its 2017 Recommendations to address structural liquidity mismatch in OEFs,\textsuperscript{19} the FSB issued a consultation report in July 2023 to provide greater clarity on the redemption terms that OEFs could offer to investors based on the liquidity of their asset holdings and to promote greater inclusion and use (and consistency of use) of liquidity management tools


\textsuperscript{17} See FSB (2023), \textit{Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report}, September.

\textsuperscript{18} See FSB (2021), \textit{Policy proposals to enhance money market fund resilience: Final report}, October.

\textsuperscript{19} See FSB (2022), \textit{Assessment of the Effectiveness of the FSB’s 2017 Recommendations on Liquidity Mismatch in Open-Ended Funds}, December.
(LMTs). The goal of the revised Recommendations, combined with the new IOSCO
guidance on anti-dilution LMTs, is a significant strengthening of liquidity
management by OEF managers compared to current practices.20

- The FSB, BCBS, CPMI and IOSCO are working on policies to enhance margining
practices. This includes developing consultation reports with guidance and effective
practices to increase transparency and initial margin responsiveness as well as to
streamline variation margin processes in centrally cleared markets; high-level,
cross-sectoral policy recommendations on liquidity risk management and
governance to enhance the liquidity preparedness of market participants for margin
and collateral calls; and other actions to streamline variation margin processes and
initial margin responsiveness in non-centrally cleared markets.

- The FSB and SSBs are also working to enhance the resilience of liquidity provision in
stress and the risk monitoring and preparedness of authorities and market participants.

The FSB will continue to work with SSBs to address systemic risk in NBFI.

- A key area of policy focus in 2024 is addressing financial stability risks from NBFI
leverage. Other areas include work to enhance the availability of OEF-related data for
financial stability monitoring, examine vulnerabilities in short-term funding markets, and
monitor market participants' liquidity preparedness for margin and collateral calls.

- Experience with the use of tools for systemic risk mitigation in NBFI is limited to date.
The FSB will discuss experiences and lessons by members on the design and use of
tools to address systemic risk in NBFI. The FSB will also work with the SSBs to assess,
in due course, whether implemented reforms have sufficiently addressed systemic risk
in NBFI, including whether to develop additional tools for use by authorities.

3.2. Improving cross-border payments

In 2020 the G20 made enhancing cross-border payments a priority.

- One factor behind the market attention paid to crypto-assets has been user
dissatisfaction with existing cross-border payments services. Faster, cheaper, more
transparent and more inclusive cross-border payment services, including remittances,
while maintaining their safety and security, would have widespread global benefits.

- Enhancing cross-border payments requires addressing frictions in existing processes.
These frictions include: fragmented data standards or lack of interoperability;
complexities in meeting compliance requirements, including for anti-money laundering
and countering the financing of terrorism and data protection purposes; different
operating hours across different time zones; and outdated legacy technology platforms.

20 See FSB (2023), Addressing Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds – Revisions to the FSB’s
2017 Policy Recommendations: Consultation report, July; and IOSCO (2023), Anti-dilution Liquidity Management Tools –
Guidance for Effective Implementation of the Recommendations for Liquidity Risk Management for Collective Investment
Schemes, July.
The Roadmap, developed in coordination with the CPMI and other relevant international organisations and SSBs, sets out actions and indicative timelines across five areas.\footnote{These are: committing to a joint public and private sector vision to enhance cross-border payments; coordinating on regulatory, supervisory and oversight frameworks; improving existing payment infrastructures and arrangements to support the requirements of the cross-border payments market; increasing data quality and straight-through processing by enhancing data and market practices; and exploring the potential role of new payment infrastructures and arrangements. See FSB (2020), Enhancing Cross-border Payments: Stage 3 roadmap, October.} The initial set of actions outlined in the 2020 Roadmap has been largely completed.

Implementation of the Roadmap has now transitioned from analyses to practical projects.

- In February 2023, the FSB published a Prioritised Roadmap.\footnote{See FSB (2023), G20 Roadmap for Enhancing Cross-border Payments: Priority actions for achieving the G20 targets, February.} To meet the G20’s end-2027 goal for achieving the quantitative targets for cross-border payments, the Prioritised Roadmap focuses on 15 priority actions across three themes: payment system interoperability and extension; legal, regulatory and supervisory frameworks; and cross-border data exchange and message standards.

- Developing further engagement with the private sector and jurisdictions beyond the G20 to motivate and facilitate project implementation is a centrepiece of the Prioritised Roadmap. To this end, the FSB established a private-sector taskforce on legal, regulatory and supervisory matters related to the provision of cross-border payments and relevant data-related frameworks (LRS taskforce).\footnote{See the FSB Taskforce on Legal, Regulatory, and Supervisory matters.}

The FSB published its first estimates of key performance indicators (KPIs) to monitor progress toward the G20 quantitative targets for cross-border payments.

- The G20 quantitative targets play an important role in defining the ambition of the Roadmap programme and creating accountability.\footnote{See FSB (2021), Targets for Addressing the Four Challenges of Cross-Border Payments: Final Report, October.} To operationalise the targets, the FSB published an implementation methodology for monitoring progress.\footnote{See FSB (2022), Developing the Implementation Approach for the Cross-Border Payments Targets: Final report, November.} The FSB also published the first KPI estimates in conjunction with its annual progress report.\footnote{See FSB (2023), G20 Roadmap for Enhancing Cross-border Payments: Consolidated progress report for 2023, October, and FSB (2023), Annual Progress Report on Meeting the Targets for Cross-Border Payments: 2023 Report on Key Performance Indicators, October.}

3.3. Responding to the challenges of technological innovation

The cyber threat landscape continues to expand amid digital transformation, increased dependencies on third-party service providers and geopolitical tensions.

- Addressing cyber risk requires timely and accurate information for effective incident response and recovery, and for promoting financial stability. To support this goal, the FSB issued recommendations to achieve greater convergence in cyber incident reporting.\footnote{See FSB (2023), Recommendations to Achieve Greater Convergence in Cyber Incident Reporting: Final Report, April.} The FSB is also undertaking work to determine the feasibility and pre-
requisites for developing a format to standardise common information requirements for incident reporting exchange (FIRE), building on a concept paper.\(^{28}\)

- In recent years, financial institutions have become increasingly reliant on third-party service providers. Whilst these dependencies can enhance flexibility, innovation and operational resilience, if not properly managed, disruption to critical services or service providers could pose risks to both financial institutions and financial stability.

- The FSB published a proposed policy toolkit for authorities, institutions and service providers for their third-party risk management and oversight.\(^{29}\) The toolkit aims to reduce fragmentation in regulatory and supervisory approaches across jurisdictions and different financial services segments, thereby helping mitigate compliance costs for both financial institutions and third-party service providers and facilitate coordination among relevant stakeholders. The finalised toolkit will be published before end-2023.

**A key priority for the FSB this year has been the finalisation of a global regulatory framework for crypto-asset activities.**

- The FSB has been monitoring trends and assessing financial stability risks in crypto-asset markets in recent years. It issued policy recommendations in July to promote comprehensive and internationally consistent regulatory and supervisory approaches for crypto-asset activities, commensurate to the risks they pose.\(^{30}\)

- The FSB framework is based on the principle of ‘same activity, same risk, same regulation’ and consists of distinct sets of recommendations for the regulation, supervision and oversight of crypto-asset activities and markets and of so-called “global stablecoin” (GSC) arrangements. The recommendations, which take into account lessons from the turmoil in these markets, focus on addressing risks to financial stability and do not comprehensively cover all risks related to crypto-asset activities.

- A number of SSBs have also issued standards or guidance in their respective areas.\(^{31}\) The FSB and SSBs have developed a shared workplan for 2023 and beyond, through which they will continue to coordinate work on crypto-asset activities.

- In September, the FSB and IMF delivered a Synthesis Paper to the G20 bringing together policy findings on macroeconomic and monetary as well as supervisory and regulatory issues for crypto-assets. The paper includes a roadmap for future work on implementing policy frameworks; building institutional capacity beyond G20

---


The focus now is to promote implementation of the FSB’s crypto-asset regulatory framework globally and to develop additional guidance in particular areas as needed.

- The FSB will work with SSBs and international organisations (IOs) to promote the implementation of its high-level recommendations globally. In addition, the FSB will conduct follow-up policy work, as appropriate, on decentralised finance and on multi-function crypto-asset intermediaries. The FSB will also explore ways to address the cross-border risks that GSCs pose to EMDEs and consider ways to strengthen supervisory and regulatory coordination.

3.4. Addressing financial risks from climate change

In July 2021 the FSB published a comprehensive Roadmap for Addressing Climate-related Financial Risks, which was endorsed by the G20.

- The Roadmap addressed the need for coordinated work by outlining actions to be taken by the FSB, SSBs and IOs over a multi-year period in four areas: firm-level disclosures, data, vulnerabilities analysis, and regulatory and supervisory practices and tools.

A key milestone this year has been the publication of global sustainability disclosure standards by the International Sustainability Standards Board (ISSB).34

- The standards, which have been endorsed by IOSCO, will serve as a global framework for sustainability-related disclosures that, when implemented, will enable disclosures by different companies around the world to be made on a common basis. The FSB will work with the ISSB, IOSCO and other bodies to promote the timely and wide use of the standards, and their interoperability with jurisdictional frameworks to achieve global comparability of climate-related disclosures. IOSCO will seek to assist jurisdictions through a broad capacity building programme.

- These standards can be seen as a culmination of the work of the FSB’s Task Force on Climate-related Financial Disclosures (TCFD). Going forward, the ISSB will take over from the TCFD the monitoring of the adoption of climate-related disclosures by firms.

Progress has also been made by the FSB on other areas of the Roadmap.

- Work has continued to focus on improving the availability, quality, and cross-border comparability of climate data. An important goal is to develop global repositories that provide open access to data and would facilitate the use of metrics that reflect climate-

---

33 See FSB (2023), FSB roadmap for addressing financial risks from climate change - 2023 progress report, July.
34 See IFRS (2023), IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures, June.
35 See FSB (2023), Progress Report on Climate-Related Disclosures, October.
related risks consistently and reliably across sectors and jurisdictions. There is a continuing need for improving the accuracy, consistency and quality of climate data, which will support use of risk assessments and climate scenario analysis exercises.\(^{36}\)

- The FSB is continuing work to assess climate-related vulnerabilities, including by setting out a conceptual framework for the impact of climate shocks on financial stability and by developing metrics and using the outputs from scenario analysis to monitor these vulnerabilities at the cross-sector and cross-jurisdiction level. Further work is needed to develop robust metrics to measure climate vulnerabilities in a forward-looking manner.

- Initiatives on embedding climate-related risks into risk management and prudential frameworks are ongoing. There is a growing interest in the role of transition plans of financial institutions and non-financial corporates in enabling an orderly transition and as a source of information for financial authorities to assess micro- and macroprudential risks. The FSB has set up a group that will develop a conceptual understanding on the relevance of transition plans and planning by these firms for financial stability.

**The FSB has also examined climate financial risk factors in compensation frameworks.**

- An FSB report reviewed how climate-related objectives are incorporated into financial institutions’ compensation frameworks, to identify common challenges and share practices to ensure effective alignment of compensation with prudent risk taking.\(^{37}\)

### 3.5. Enhancing the resolution of central counterparties

**The FSB has proposed a global standard for financial resources and tools to support resolution of systemically important CCPs.**

- The G20 regulatory reforms agreed after the 2008 global financial crisis, particularly the central clearing mandate, have increased the systemic importance of CCPs. While efforts are ongoing to enhance CCP resolvability (see section 4.2), further work is needed on the availability of adequate resources and tools for CCP resolution.

- The FSB is consulting on a toolbox approach that includes resolution-specific resources and tools\(^{38}\) and, where available, financial resources from access to non-exhausted recovery tools. The resolution-specific resources and tools were assessed against the objectives for CCP resolution described in the Key Attributes and accompanying CCP resolution guidance.

---

36 See FSB and NGFS (2022), *Climate Scenario Analysis by Jurisdictions: Initial findings and lessons*, November.


38 These include: (i) bail-in bonds; (ii) resolution funds; (iii) resolution-specific insurance; (iv) resolution-specific third-party contractual support; (v) resolution cash calls; (vi) statutory or contractual variation margin gains haircutting for resolution; and (vii) equity in a first-loss position. See FSB (2023), *Financial Resources and Tools for Central Counterparty Resolution – Consultation Report*, September.
The FSB would monitor implementation for CCPs that are systemically important in more than one jurisdiction through its annual CCP Resolvability Assessment Process and CMG monitoring, with the findings published in the FSB’s annual resolution report.

4. Implementation and effects of reforms

4.1. Building resilient financial institutions

A BCBS evaluation of the impact and efficacy of the Basel III reforms finds that the overall resilience of the banking sector has increased since the reforms’ implementation.39

The analysis shows that the gains in resilience were greater for banks more heavily impacted by the reforms. Greater resilience did not come at the expense of banks’ cost of capital, as banks more heavily impacted by the reforms also saw a greater decrease in their cost of capital. Market-based measures of banking-sector systemic risk have also improved following the implementation of the reforms.

The report finds no robust evidence and only some indication that banks with lower initial capital and liquidity ratios had lower loan growth than their peers.

These reforms helped shield the global banking sector and real economy from a more severe banking crisis during the March banking turmoil.

The March events also underlined the importance of implementing all aspects of the Basel III Framework in full, consistently, and as soon as possible. BCBS members have reiterated their expectation of implementing the outstanding Basel III standards,40 though implementation in many cases is being pushed to 2024 or later.

Member jurisdictions have continued to make progress in implementing the outstanding Basel III standards, which were finalised in 2017 and due to take effect in January 2023.

- Around a third of BCBS member jurisdictions have implemented all, or the majority of these standards, while two-thirds plan to implement them by the end of 2024 and the remaining jurisdictions in 2025.

- Most progress has been made on implementing the leverage ratio requirements. The revised leverage ratio is now in effect in 14 FSB jurisdictions, while the G-SIB leverage ratio buffer is implemented in all (11) applicable FSB jurisdictions.

- Final rules are adopted for the following elements: revised standardised approach for credit risk (nine FSB jurisdictions); revised internal ratings-based approach (eight FSB jurisdictions); the output floor (seven FSB jurisdictions); revised credit valuation

39 See BCBS (2022), Evaluation of the impact and efficacy of the Basel III reforms, December.
40 See the press release of the 11 September 2023 meeting of the Governors and Heads of Supervision and BCBS (2023), Basel III implementation dashboard, October.
adjustment (six FSB jurisdictions); market risk framework (six FSB jurisdictions); and operational risk framework (10 FSB jurisdictions).

- The Net Stable Funding Ratio (NSFR), which took effect in 2018, and the supervisory framework for measuring and controlling large exposures, which took effect in 2019, are in force in most jurisdictions (Graph 6). BCBS jurisdicational assessments of the consistency of implementation of the NSFR and the large exposures framework have found the 18 jurisdictions assessed so far to be compliant or largely compliant with both standards, including most recently South Africa and the US.

Further progress has been made in implementing Basel III standards

Graph 6

<table>
<thead>
<tr>
<th></th>
<th>As percent of number of FSB jurisdictions</th>
<th>As percent of market size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large exposures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage ratio (2017 defn)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquidity (NSFR)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1 The five EU members of the FSB are presented as separate jurisdictions. 2 Market size based on assets of banks domiciled in each FSB jurisdiction at end-2021.

- Adoption of the other Basel III standards whose implementation deadline passed before 2023 is still not complete. These include interest rate risk in the banking book (adopted in 15 FSB jurisdictions, two more since last year), the standardised approach for counterparty credit risk exposures (one jurisdiction still to adopt), and equity investments in funds (three jurisdictions still to adopt).

Progress continues towards a global Insurance Capital Standard (ICS).

- The IAIS is in the fourth year of its five-year monitoring period. In June 2023, the IAIS released the Candidate ICS for final public consultation, ahead of its adoption at end-2024 as a prescribed capital requirement.41

4.2. Ending too-big-to-fail

Implementation of the policy framework for G-SIBs continues to advance, but work is still ongoing to close gaps in operationalising and testing resolution plans.

41 See IAIS (2023), Public Consultation on Insurance Capital Standard as a Prescribed Capital Requirement, June.
■ Implementation of higher loss absorbency as well as of the related reporting and disclosure requirements for G-SIBs is proceeding on a timely basis.

■ All relevant G-SIBs appear to meet the final 2022 minimum external Total Loss-Absorbing Capacity (TLAC) requirements. External TLAC issuance by these firms has continued. Work is continuing to build up external TLAC by four emerging market economy G-SIBs that are due to comply with the TLAC standard by January 2025.

■ Almost all G-SIB home and key host jurisdictions have in place comprehensive bank resolution regimes that align with the Key Attributes (Graph 7). However, implementation of the Key Attributes is still incomplete in some FSB jurisdictions, and no new bank resolution powers were fully implemented since last year. The powers most often lacking are bail-in and to impose a temporary stay on the exercise of early termination rights.42

The 2022–2023 Resolvability Assessment Process (RAP) identified that further work to enhance G-SIB resolvability is necessary in most CMGs, focusing on liquidity and funding in resolution, unallocated TLAC, capabilities to support a bail-in execution, trading book wind-down and valuation, as well as testing and assurance of capabilities.

**Work remains to implement comprehensive bank resolution regimes**

![Graph 7](image)

Notes: 1 The five EU members of the FSB are presented as separate jurisdictions. 2 Market size based on assets of banks domiciled in each FSB jurisdiction at end-2021. 3 Composite indicator on extent to which jurisdictions have transfer, bail-in and temporary stay powers in their regime.

More work is needed to implement effective resolution regimes for insurers and CCPs.

■ Operationalising resolution plans for insurers requires a broad range of powers and tools, some of which are still lacking in several jurisdictions. These include powers to perform portfolio transfer and bail-in, and powers to establish a bridge institution.

■ Authorities in some jurisdictions have identified systemically important insurers subject to resolution planning. These authorities have reported different levels of progress in

42 See FSB (2022), *2022 Resolution Report – Completing the agenda and sustaining progress*, December.
resolution planning and resolvability assessments. FSB work highlights the importance of the identification of critical functions for these institutions as well as the need to better understand the different frameworks and methodologies used by authorities for the identification of insurers that could be systemically significant or critical in failure.

- Statutory resolution regimes are in place in all jurisdictions that are home to CCPs that are systemically important in more than one jurisdiction (SI>1 CCP)\(^{43}\) and most of the SI>1 CCP resolution authorities have most of the powers set out in the Key Attributes.

- Authorities have established CMGs for all 13 SI>1 CCPs and resolution planning has commenced for all of them, while work on resolvability assessments has been initiated for 10 SI>1 CCPs. Cooperation agreements (CoAgs) have been signed for 11 SI>1 CCPs. Further progress is expected in 2024 as the pending CoAgs are being discussed in the CMGs (Graph 8).

- Almost all CMGs for SI>1 CCPs have considered hypothetical default loss and non-default loss scenarios and, to a slightly lesser extent, a combination of them. A qualitative and quantitative evaluation of existing resources and tools available in resolution has also been discussed in almost all CMGs. However, CMGs have not yet completed full resolvability assessments in line with the FSB guidance.\(^{44}\)

<table>
<thead>
<tr>
<th>Resolution planning status for SI&gt;1 CCPs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Graph 8</strong></td>
</tr>
<tr>
<td><strong>Per cent</strong></td>
</tr>
<tr>
<td>Per cent of CCPs systemically important in more than one jurisdiction</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

Source: Relevant authorities for SI>1 CCPs.

## 4.3. Making derivatives markets safer

Overall implementation of the G20 OTC derivatives reforms is well-advanced but further progress has slowed in recent years.

---

\(^{43}\) These CCPs were reported as systemically important in more than one jurisdiction by agreement between home and host authorities on the basis of a set of criteria set out in the FSB \textit{Guidance on CCP Resolution and Resolution Planning} (July 2017).

There has been no increase over the past four years in the number of FSB member jurisdictions with comprehensive\textsuperscript{45} trade reporting requirements, and only one increase over the same period (and this year) for central clearing frameworks or platform trading frameworks. Final capital requirements for non-centrally cleared derivatives are in place in 18 FSB jurisdictions, unchanged from last year.

Those jurisdictions that have not yet implemented these reforms account for a very low proportion of global OTC derivatives market activity (Graph 9). The low trading volume in certain jurisdictions has been noted as a challenge in implementing the reforms.

\textbf{Implementation is most advanced in the largest OTC derivatives markets} \hspace{1cm} \textbf{Graph 9}

<table>
<thead>
<tr>
<th>Reporting to trade repositories</th>
<th>Central clearing</th>
<th>Exchange / Platform trading</th>
<th>Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully implemented/in place</td>
<td>Fully implemented/in place</td>
<td>Fully implemented/in place</td>
<td>Fully implemented/in place</td>
</tr>
<tr>
<td>Partially implemented/in place</td>
<td>Partially implemented/in place</td>
<td>Partially implemented/in place</td>
<td>Partially implemented/in place</td>
</tr>
<tr>
<td>Not implemented</td>
<td>Not implemented</td>
<td>Not implemented</td>
<td>Not implemented</td>
</tr>
</tbody>
</table>

As percent of number of FSB jurisdictions\textsuperscript{1} \hspace{1cm} As percent of market size\textsuperscript{2}

Notes: \textsuperscript{1} The five EU members of the FSB are presented as separate jurisdictions. \textsuperscript{2} Market size is proxied by single currency interest rate derivatives’ gross turnover in April 2022 (Bank for International Settlements (BIS) 2022 Triennial Survey, Annex Table 9.1).

Work continues at the international level to strengthen the resilience of FMIs and address challenges to the effectiveness of implemented OTC derivative market reforms.

CPMI-IOSCO published a report on current CCP practices to address non-default losses (NDLs) arising, for example, from investment risk or cyber-attacks.\textsuperscript{46} Given the range of CCP practices to address NDLs and industry requests for further clarifications, CPMI and IOSCO will work to identify areas where further guidance or recommendations may be useful. Further engagement with industry stakeholders will also be undertaken to inform a public consultation in the near term on further guidance or recommendations with respect to NDLs.

---

45 For the purposes of this sub-section, “comprehensive” means that the standards, criteria or requirements apply to over 90% of OTC derivatives transactions as estimated by that jurisdiction. In the case of margin requirements, “comprehensive” means that the standards, criteria or requirements in force in a jurisdiction would have to apply to over 90% of transactions covered, consistent with the BCBS-IOSCO Working Group on Margin Requirements phase in periods.

46 See CPMI-IOSCO (2023), \textit{Report on current central counterparty practices to address non-default losses}, August.
CPMI-IOSCO published a statement on the stocktake of industry progress on auctions,\(^{47}\) noting that the industry has made good progress on the issues to be addressed from a 2020 report on central counterparty default management auctions.

CPMI-IOSCO also reviewed the state of cyber resilience for FMIs.\(^{48}\) The report finds reasonably high adoption of the guidance on cyber resilience for FMIs but also a serious issue of concern relating to a small number of FMIs not fully meeting expectations regarding the development of cyber response and recovery plans to meet the two-hour recovery time objective. The report also finds four other issues of concern.\(^{49}\)

### 4.4. Enhancing resilience of non-bank financial intermediation

Implementation of NBFI reforms continues at a slow pace and is at an earlier stage than other reforms.

- Implementation of Basel III reforms to mitigate spillovers between banks and non-bank financial entities is still ongoing. Three jurisdictions have yet to implement applicable risk-based capital requirements for banks’ investments in the equity of funds and three jurisdictions (one fewer than last year) have yet to fully implement the supervisory framework for measuring and controlling banks’ large exposures.

- Adoption of IOSCO recommendations to reduce the run risk of MMFs is most advanced in 19 FSB jurisdictions (Graph 10), unchanged since 2021. The fair value approach for valuation of MMF portfolios is adopted in all FSB jurisdictions, though one jurisdiction does not have in place requirements for use of the amortised cost method only in limited circumstances. Progress in liquidity management is less advanced, with 19 jurisdictions having reforms in effect. 12 FSB jurisdictions do not permit MMFs offering a stable NAV. An IOSCO review found that the policy measures in nine jurisdictions representing about 95% of global net MMF assets are generally in line with the IOSCO recommendations.

- The FSB, in collaboration with IOSCO, published policy proposals to enhance MMF resilience in 2021.\(^{50}\) A number of FSB member authorities have already published proposals or adopted policy reforms on MMFs. The FSB is taking stock of the measures adopted in response to these proposals and will publish its findings later this year.\(^{51}\)

---

\(^{47}\) See CPMI-IOSCO stocktake of industry progress on auctions (February 2023) and CPMI-IOSCO (2020), *Central counterparty default management auctions – Issues for consideration*, June.


\(^{49}\) These relate to: (i) shortcomings in established response and recovery plans to meet the two-hour recovery time objective under extreme cyber-attack scenarios; (ii) a lack of cyber resilience testing after a significant system change; (iii) a lack of comprehensive scenario-based testing; and (iv) inadequate involvement of relevant stakeholders in testing of their responses.

\(^{50}\) See FSB (2021), *Policy proposals to enhance money market fund resilience: Final report*, October.

Adoption of the IOSCO recommendations on incentive alignment approaches for securitisation has been completed by 17 FSB jurisdictions, unchanged from last year (Graph 11). Three FSB jurisdictions have yet to implement the revised BCBS securitisation framework, compared to four jurisdictions the year before.

- The FSB has recently launched an evaluation on the effects of securitisation reforms agreed by the G20 in the aftermath of the 2008 global financial crisis.\textsuperscript{52} The evaluation, to be completed around mid-2024, aims to assess the extent to which these reforms have achieved their financial stability objectives, and examine broader effects (positive or negative) of the reforms on the functioning and structure of the securitisation markets and the implications for financing to the real economy.

- Progress continues at a slow pace on global securities financing data collection and aggregation. Only seven FSB jurisdictions are submitting data, and in most cases the coverage is limited to only a subset of market segments and granularity is limited.

- Implementation of the FSB recommendations for dampening procyclicality and other financial stability risks associated with securities financing transactions is incomplete and continues to face significant delays in most jurisdictions, with generally little progress over the past year.

\textsuperscript{52} See FSB (2023), \textit{Evaluation on Effects of G20 Reforms on Securitisation: Summary Terms of Reference}, August.
4.5. Progress in other reform areas

After a decade of preparation, the LIBOR transition has entered its final stage.

- The end of June 2023 marked the final major milestone in the LIBOR transition with the end of the remaining USD LIBOR panel. Only three of the US dollar LIBOR settings continue in a synthetic form after June 2023 and are intended to cease at end-September 2024. In addition, reform of other interest rate benchmarks and related transition efforts have either been completed or near their planned, final conclusion.

- This major undertaking has seen an unprecedented shift in wholesale markets and required sustained coordination and dedication of regulators, industry bodies and market participants. To maintain financial stability, it is important that markets remain anchored in robust benchmarks (e.g. risk-free or nearly risk-free rates) going forward.

Adoption of the Legal Entity Identifier (LEI) continues to make good progress.

- The number of active LEIs has increased from 1.4 million in 2019 to 2.3 million at present. This increase, up from 2.1 million in 2022, has been supported by a broad range of efforts to encourage LEI adoption, including expanding uses beyond financial markets and securities. The FSB will review progress in implementing its 2022 recommendations to promote the use of the LEI in cross-border payment transactions and those of the 2019 LEI peer review, and publish a progress report by end-2024.

---


54 See the Global LEI Foundation dashboard.

55 See FSB (2022), Options to Improve Adoption of The LEI, in Particular for Use in Cross-border Payments, July.

The third phase of the G20 Data Gaps Initiative (DGI) is underway.

- The new phase focuses on data gaps in some areas relating to financial stability, such as climate change and financial innovation. The FSB is working with the IMF, the Inter-Agency Group on Economic and Financial Statistics as well as with the G20 and participating economies to fill the identified data gaps.

5. Looking ahead

Authorities need to stay vigilant as a further deterioration in economic conditions may test again the resilience of the global financial system.

- The combination of higher inflation, lower growth and tighter financial conditions may crystallise existing financial vulnerabilities (see section 1) or give rise to new ones.
- The March banking turmoil was a stark reminder of the speed with which vulnerabilities can be exposed in the current environment. At the same time, it is encouraging – and a testament to the post-crisis financial reforms introduced by the G20 – that the strains faced by individual banks did not cascade into a full-blown crisis.
- Policy space is limited in many jurisdictions and the financial buffers of firms and households have been reduced. This makes it more difficult for authorities to intervene should a shock materialise, which further underscores the need to take policy measures to maintain the resilience of the financial system.

The FSB’s work over the coming year will continue to reflect its global and cross-sectoral approach to financial stability policy.

- Key priorities include further work on lessons from the banking turmoil for vulnerabilities assessments, policy and implementation aspects of financial reforms; continued support for global cooperation on financial stability; further progress on the key policy areas in section 3 (NBFI resilience, cross-border payments, technological innovation, climate financial risks, CCP resolution); and new deliverables for the G20 Presidency.
- The FSB will also continue its policy and implementation work in other areas, such as completing resolution reforms; evaluating the impact of securitisation reforms; and regular monitoring and progress reporting on various financial stability issues.

The FSB’s cooperative approach has proven instrumental for the timely identification of financial vulnerabilities and the development of effective policy responses globally.

---

57 See the IMF website on the G20 Data Gaps Initiative.
58 These include, for example, continuing the: annual review and publication of the list of designated G-SIBs; joint FSB-IMF Early Warning Exercise; publication of the annual Global Monitoring Report on NBFI; monitoring, together with SSBs, of the implementation of G20 reforms in a streamlined manner, through regular progress reports and peer reviews; and encouraging consistent application of accounting standards, auditing of financial statements and enhanced audit quality.
Authorities worked together in developing the G20 reforms, recognising the benefits of international standards in promoting confidence in the financial system and the resumption of cross-border financial activity in the aftermath of the 2008 financial crisis.

Maintaining this level of cooperation is critical, given the challenging combination of rapidly evolving financial conditions and structural change in the financial system brought about by the growth of NBFI, accelerating digitalisation, and climate change.

The FSB and SSBs will continue to promote approaches to deepen international cooperation, coordination and information sharing on these issues.
### Annex 1: FSB reports published over the past year

<table>
<thead>
<tr>
<th>Month</th>
<th>Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2022</td>
<td>2022 Resolution Report – Completing the agenda and sustaining progress</td>
</tr>
<tr>
<td></td>
<td>Assessment of the Effectiveness of the FSB’s 2017 Recommendations on Liquidity Mismatch in Open-Ended Funds</td>
</tr>
<tr>
<td></td>
<td>Progress Report on LIBOR and Other Benchmarks Transition Issues: Reaching the finishing line of LIBOR transition and securing robust reference rates for the future</td>
</tr>
<tr>
<td></td>
<td>Global Monitoring Report on Non-Bank Financial Intermediation 2022</td>
</tr>
<tr>
<td>January 2023</td>
<td>Implementation of G20 Non-Bank Financial Intermediation Reforms: Progress report</td>
</tr>
<tr>
<td>February</td>
<td>The Financial Stability Risks of Decentralised Finance</td>
</tr>
<tr>
<td></td>
<td>The Financial Stability Aspects of Commodities Markets</td>
</tr>
<tr>
<td></td>
<td>G20 Roadmap for Enhancing Cross-border Payments: Priority actions for achieving the G20 targets</td>
</tr>
<tr>
<td>April</td>
<td>Cyber Lexicon: Updated in 2023</td>
</tr>
<tr>
<td></td>
<td>Format for Incident Reporting Exchange (FIRE): A possible way forward</td>
</tr>
<tr>
<td></td>
<td>Recommendations to Achieve Greater Convergence in Cyber Incident Reporting: Final Report</td>
</tr>
<tr>
<td></td>
<td>Climate-related Financial Risk Factors in Compensation Frameworks</td>
</tr>
<tr>
<td>June</td>
<td>Enhancing Third-Party Risk Management and Oversight: A toolkit for financial institutions and financial authorities - Consultative document</td>
</tr>
<tr>
<td>July</td>
<td>Addressing Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds – Revisions to the FSB’s 2017 Policy Recommendations: Consultation report</td>
</tr>
<tr>
<td></td>
<td>FSB Roadmap for Addressing Financial Risks from Climate Change: 2023 Progress Report</td>
</tr>
<tr>
<td></td>
<td>High-level Recommendations for the Regulation, Supervision and Oversight of Global Stablecoin Arrangements: Final report</td>
</tr>
<tr>
<td></td>
<td>High-level Recommendations for the Regulation, Supervision and Oversight of Crypto-asset Activities and Markets: Final report</td>
</tr>
<tr>
<td></td>
<td>FSB Global Regulatory Framework for Crypto-asset Activities</td>
</tr>
<tr>
<td></td>
<td>Deployment of Unallocated Total Loss-Absorbing Capacity (uTLAC): Considerations for Crisis Management Groups (CMGs)</td>
</tr>
<tr>
<td>September</td>
<td>The Financial Stability Implications of Leverage in Non-Bank Financial Intermediation</td>
</tr>
<tr>
<td></td>
<td>Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report</td>
</tr>
<tr>
<td></td>
<td>IMF-FSB Synthesis Paper: Policies for Crypto-Assets</td>
</tr>
<tr>
<td></td>
<td>Financial Resources and Tools for Central Counterparty Resolution: Consultation report</td>
</tr>
<tr>
<td></td>
<td>Stocktake of international data standards relevant to cross-border payments</td>
</tr>
<tr>
<td>October</td>
<td>2023 bank failures: Preliminary lessons learnt for resolution</td>
</tr>
<tr>
<td></td>
<td>Progress Report on Climate-Related Disclosures: 2023 Report</td>
</tr>
</tbody>
</table>
• G20 Roadmap for Enhancing Cross-border Payments: Consolidated progress report for 2023
• Annual Progress Report on Meeting the Targets for Cross-Border Payments: 2023 Report on Key Performance Indicators
### Annex 2: Implementation of reforms in priority areas by FSB member jurisdictions

The table provides a snapshot of the status of implementation progress by FSB jurisdiction across priority reform areas, as of September 2023. The colours and symbols in the table indicate the timeliness of implementation. For Basel III, the letters indicate the extent to which implementation is consistent with the international standard. For trade reporting, the letters indicate to what extent effectiveness is hampered by identified obstacles. For compensation, letters indicate the sectoral application of the FSB Principles and Standards (where not applied to all sectors).

<table>
<thead>
<tr>
<th>Reform Area</th>
<th>BASEL III*</th>
<th>OVER-THE-COUNTER (OTC) DERIVATIVES</th>
<th>RESOLUTION</th>
<th>NON-BANK FINANCIAL INTERMEDIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Risk-based capital</td>
<td>Requirements for SIBs</td>
<td>Large exposures framework</td>
<td>Leverage</td>
</tr>
<tr>
<td>Argentina</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>&amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Türkiye</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>⚫</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>C, &amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Reform Area abbreviations:
- BASEL III: Risk-based capital requirements for SIBs
- OVER-THE-COUNTER (OTC) DERIVATIVES: Trade reporting, Central clearing, Platform trading
- RESOLUTION: Margin, Minimum external TLAC for G-SIBs, Transfer / bail-in / temporary stay powers for banks, Recovery and resolution planning for systemic banks, Transfer / bridge / run-off powers for insurers, Resolution planning for systemic CCPs in more than one jurisdiction
- NON-BANK FINANCIAL INTERMEDIATION: Money market funds (MMFs), Securitisation, Securities financing transactions (SFT)

*Notes:
- ⚫: Fully implemented
- C: In progress
- LC: Late completion
- B: Bank
- I: Insurance
- R: Recovery
- F: Resolution
- #: Non-applicable
Legend

**Basel III:** Final rule published and implemented. Risk-based capital: revised standardised approach for credit risk and output floor in force. Leverage: revised leverage ratio and G-SIB leverage buffer (as applicable) in force. Requirements for SIBs: covering both D-SIBs and higher loss-absorbency for G-SIBs (for G-SIB home jurisdictions) – published and in force.

**OTC derivatives:** Legislative framework in force and standards/criteria/requirements (as applicable) in force for over 90% of relevant transactions.

**Resolution:** Final rule for external Total Loss-Absorbing Capacity (TLAC) requirement for G-SIBs published and implemented. For the powers columns, all three of the resolution powers for banks (transfer, bail-in of unsecured and uninsured credit claims, and temporary stay) and insurers (transfer, bridge and run-off) are available. Recovery and resolution planning processes are in place for systemic banks. For CCPs that are systemically important in more than one jurisdiction (SiP>1) resolution planning, crisis management group (CMG) established, cross-border cooperation agreement (CoAg) signed, resolution planning commenced and resolvability assessment commenced.

**Compensation:** All or almost all (all but 3 or less) FSB Principles and their Implementation Standards for Sound Compensation Practices (Principles and Standards) implemented for significant banks, insurers and asset managers (as applicable in the jurisdiction – see below).

**Non-bank financial intermediation (NBFI):** MMFs – Final implementation measures in force for valuation, liquidity management and (where applicable) stable net asset value (NAV). Securitisation – Final adoption measures taken (and where relevant in force) for an incentive alignment regime and disclosing requirements. SFT: Implementation complete for at least one of the four areas described above.

**Resolution:** Final rule published but not implemented, or draft rule published. For risk-based capital column, draft regulation published for at least one of revised standardised approach for credit risk and output floor. For leverage, draft regulation published for at least one of leverage ratio and G-SIB leverage buffer (as applicable).

**Compensation:** FSB Principles and Standards implemented for some but not all of the applicable banking, insurance and asset management sectors.

**NBFI:** MMFs – Draft/final implementation measures published or partly in force for valuation, liquidity management and (where applicable) stable NAV. Securitisation – Draft/final adoption measures published or partly in force for implementing an incentive alignment regime and disclosing requirements. SFT: Implementation complete for at least 1 of the 4 areas described above.

**Resolution:** Minimum TLAC requirements not applicable for jurisdictions that are not home to G-SIBs or to a subsidiary of a G-SIB that is a resolution entity under a multiple point of entry resolution strategy.

### Basel III

**Basel III:** Final rule published and implemented. Risk-based capital: revised standardised approach for credit risk and output floor in force. Leverage: revised leverage ratio and G-SIB leverage buffer (as applicable) in force. Requirements for SIBs: covering both D-SIBs and higher loss-absorbency for G-SIBs (for G-SIB home jurisdictions) – published and in force.

**Resolution:** Final rule for external TLAC requirement for G-SIBs published but not yet implemented, or draft rule published. For the powers columns, one or two of the resolution powers for banks (transfer, bail-in of unsecured and uninsured credit claims, and temporary stay) and insurers (transfer, bridge and run-off) are available. Recovery planning is in place for systemic banks, but resolution planning processes are not. For SiP>1 CCP resolution planning, CMG established and resolution planning commenced but CoAg not signed or resolvability assessment not commenced.

**Compensation:** FSB Principles and Standards implemented for some but not all of the applicable banking, insurance and asset management sectors.

**NBFI:** MMFs – Draft/final implementation measures published or partly in force for valuation, liquidity management and (where applicable) stable NAV. Securitisation – Draft/final adoption measures published or partly in force for implementing an incentive alignment regime and disclosing requirements. SFT: Implementation complete for at least 1 of the 4 areas described above.

**Resolution:** Final rule published but not implemented, or draft regulation published. For risk-based capital column, draft regulation published for at least one of revised standardised approach for credit risk and output floor. For leverage, draft regulation published for at least one of leverage ratio and G-SIB leverage buffer (as applicable).

**Resolution:** Final rule for external TLAC requirement for G-SIBs published but not yet implemented, or draft rule published. For the powers columns, one or two of the resolution powers for banks (transfer, bail-in of unsecured and uninsured credit claims, and temporary stay) and insurers (transfer, bridge and run-off) are available. Neither recovery nor resolution planning processes are in place for systemic banks.

**Resolution:** Final rule published but not implemented, or draft rule published. For risk-based capital column, draft regulation published for at least one of revised standardised approach for credit risk and output floor. For leverage, draft regulation published for at least one of leverage ratio and G-SIB leverage buffer (as applicable).

**Resolution:** Final rule published but not implemented, or draft regulation published. For risk-based capital column, draft regulation published for at least one of revised standardised approach for credit risk and output floor. For leverage, draft regulation published for at least one of leverage ratio and G-SIB leverage buffer (as applicable).

**C / LC / MNC / NC**

**Basel III:** Regulatory Consistency Assessment Program (RCAP) – assessed “compliant” (C), “largely compliant” (LC), “materially non-compliant” (MNC) and “non-compliant” (NC) with Basel III rules. See the RCAP scale. The grade for SI(b) requirements relates only to the SIBs.

**Basel III:** All FSB jurisdictions have implemented the liquidity coverage ratio and were assessed compliant or largely compliant. All FSB jurisdictions have implemented the initial (2013) risk-based capital framework; 18 jurisdictions have been assessed C or LC, while six jurisdictions were assessed MNC. Leverage ratio column based on the 2017 definition. All FSB jurisdictions but one have implemented the leverage ratio based on the 2014 exposure definition.

**Basel III:** In Japan, banks are allowed to apply the final rule from 31 March 2023 but internationally active banks are required to apply it by 31 March 2024. Mexico’s large exposures framework came into force 1 October 2023 for SIBs and comes into force January 2024 for other banks. Turkey’s NSFR comes into force 1 January 2024. The US does not identify any additional D-SIBs beyond those designated as G-SIBs; its framework was found to be broadly aligned with the D-SIB principles; see the US RCAP assessment (June 2016).

**Basel III:** A few provisions relating to the credit conversion factor will be implemented by the UK in 2025 along with other finalised Basel III reforms.

**Resolution:** Saudi Arabia issued a resolution law, which came into force in 2021 and will be followed by detailed rules and regulations to complete implementation.

**NBFI:** Implementation is more advanced than the overall rating in one or more / all elements of at least one reform area (MMFs), or in one or more / all sectors of the market (securitisation). Switzerland reports that it lacks an active domestic securitisation market. The 2019 update was undertaken by IOSCO using the assessment methodology in its 2015 peer reviews in these areas.

**Russia:** The status of implementation in Russia has not been updated and reflects progress only as of end-September 2021.
Changes in implementation status over the past year

The table shows the changes in implementation status by FSB member jurisdiction across priority areas from September 2022 (left-hand cell) to September 2023 (right-hand cell).

<table>
<thead>
<tr>
<th>Reform area / Jurisdiction</th>
<th>Basel III</th>
<th>OTC derivatives</th>
<th>Resolution</th>
<th>Non-bank financial intermediation+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Leverage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>Risk-based capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
<td>Central clearing, Platform trading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td>Leverage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Large exposures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td></td>
<td>Recovery and resolution planning for systemic banks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
<td>Margin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Risk-based capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>Risk-based capital</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+ The 2023 update on MMFs and securitisation was undertaken by IOSCO using the assessment methodology in its 2015 peer review reports in these areas.
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCBS</td>
<td>Basel Committee on Banking Supervision</td>
</tr>
<tr>
<td>CCPs</td>
<td>Central counterparties</td>
</tr>
<tr>
<td>CMG</td>
<td>Crisis management group</td>
</tr>
<tr>
<td>CPMI</td>
<td>Committee on Payments and Market Infrastructures</td>
</tr>
<tr>
<td>CRE</td>
<td>Commercial real estate</td>
</tr>
<tr>
<td>D-SIB</td>
<td>Domestic systemically important bank</td>
</tr>
<tr>
<td>DGI</td>
<td>Data Gaps Initiative (G20)</td>
</tr>
<tr>
<td>EMDEs</td>
<td>Emerging market and developing economies</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>Fintech</td>
<td>Financial Technology</td>
</tr>
<tr>
<td>FIRE</td>
<td>Format for incident reporting exchange</td>
</tr>
<tr>
<td>FMI</td>
<td>Financial market infrastructure</td>
</tr>
<tr>
<td>FSB</td>
<td>Financial Stability Board</td>
</tr>
<tr>
<td>G-SIB</td>
<td>Global systemically important bank</td>
</tr>
<tr>
<td>GFC</td>
<td>Global financial crisis (2008)</td>
</tr>
<tr>
<td>GSC</td>
<td>“Global stablecoin”</td>
</tr>
<tr>
<td>IAIS</td>
<td>International Association of Insurance Supervisors</td>
</tr>
<tr>
<td>ICS</td>
<td>Insurance Capital Standard (IAIS)</td>
</tr>
<tr>
<td>IFRS</td>
<td>International Financial Reporting Standards</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IOs</td>
<td>International organisations</td>
</tr>
<tr>
<td>IOSCO</td>
<td>International Organization of Securities Commissions</td>
</tr>
<tr>
<td>ISSB</td>
<td>International Sustainability Standards Board</td>
</tr>
<tr>
<td>KPIs</td>
<td>Key performance indicators</td>
</tr>
<tr>
<td>LEI</td>
<td>Legal Entity Identifier</td>
</tr>
<tr>
<td>LMTs</td>
<td>Liquidity management tools</td>
</tr>
<tr>
<td>MMF</td>
<td>Money market fund</td>
</tr>
<tr>
<td>NAV</td>
<td>Net asset value</td>
</tr>
<tr>
<td>NBFIs</td>
<td>Non-bank financial intermediation</td>
</tr>
<tr>
<td>NDL</td>
<td>Non-default loss</td>
</tr>
<tr>
<td>NSFR</td>
<td>Net Stable Funding Ratio (Basel III)</td>
</tr>
<tr>
<td>OEF</td>
<td>Open ended fund</td>
</tr>
<tr>
<td>OTC</td>
<td>Over-the-counter (derivatives)</td>
</tr>
<tr>
<td>PFMI</td>
<td>Principles for Financial Market Infrastructures (CPMI-IOSCO)</td>
</tr>
<tr>
<td>RCAP</td>
<td>Regulatory Consistency Assessment Programme (BCBS)</td>
</tr>
<tr>
<td>REITs</td>
<td>Real estate investment trusts</td>
</tr>
<tr>
<td>SFTs</td>
<td>Securities financing transactions</td>
</tr>
<tr>
<td>SI&gt;1</td>
<td>CCP that is systemically important in more than one jurisdiction</td>
</tr>
<tr>
<td>SIBs</td>
<td>Systemically important banks</td>
</tr>
<tr>
<td>SSBs</td>
<td>Standard-setting bodies</td>
</tr>
<tr>
<td>SVB</td>
<td>Silicon Valley Bank</td>
</tr>
<tr>
<td>TCFD</td>
<td>Task Force on Climate-related Financial Disclosures</td>
</tr>
<tr>
<td>TLAC</td>
<td>Total Loss-Absorbing Capacity (FSB)</td>
</tr>
<tr>
<td>TRs</td>
<td>Trade repositories</td>
</tr>
<tr>
<td>USD</td>
<td>United States dollar</td>
</tr>
</tbody>
</table>