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# Promoting Global Financial Stability

2022 FSB Annual Report



16 November 2022

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## Executive summary

### **The current economic environment is particularly challenging for financial stability.**

- The combination of high inflation, lower growth, and much tighter global financial conditions may crystallise pre-existing financial vulnerabilities or give rise to new ones.
- So far, global financial markets have largely coped with evolving economic conditions and high volatility in an orderly manner, with limited and temporary support when necessary, and systemic financial institutions have shown resilience to market strains – in large part due to the post-crisis financial reforms introduced by the G20.
- However, policy space is limited in many jurisdictions. This makes it more difficult for authorities to intervene should a shock materialise and underscores the need to remain vigilant and take policy measures to maintain the resilience of the financial system.

### **New shocks may expose a number of current vulnerabilities...**

- Market turbulence could be amplified by still elevated valuations of some assets, forced sales from sudden unwinding of leveraged positions of non-bank financial institutions, and liquidity mismatches in some types of funds. Further stress in commodities, bond and repo markets could spill over to the financial system and requires close monitoring.
- Debt servicing pressures may surface due to high debt levels across the sovereign, non-financial corporate and household sectors. Emerging market economies also face the prospect of capital outflows due to high external debt mostly in US dollars. All of these strains could also adversely impact banking sector resilience.

### **... while a number of vulnerabilities associated with structural changes are emerging.**

- Accelerated digitalisation has improved efficiencies but also raised operational resilience issues, including cyber risks; dependence on BigTech and FinTech providers in some markets; and threats to the business models of traditional financial institutions.
- The recent turmoil in crypto-asset markets has highlighted a number of vulnerabilities in the sector that are similar to those in traditional financial markets. Growing linkages between crypto-asset markets and the traditional financial system increase the risk of spillovers, though the few linkages to date have limited the degree of contagion.
- Exposure to climate risks is becoming more evident and recent climate events have shown the potential for non-linear effects. Russia's war in Ukraine is threatening global energy security and adding complexity for jurisdictions seeking to transition to net zero.

### **The FSB is working to tackle current and emerging vulnerabilities.**

- Intensified monitoring of vulnerabilities and continued support of international cooperation and coordination in the aftermath of COVID-19 and the war in Ukraine.
- Work to enhance the resilience of the non-bank financial intermediation (NBFII) sector, which is a key priority. The FSB is delivering a set of policy proposals to reduce spikes

in liquidity demand that can give rise to system-wide imbalances; enhance the resilience of liquidity supply in stress; and enhance risk monitoring and preparedness.

- Work to enhance the resolvability of central counterparties (CCPs), given that the increased shift to central clearing has further increased their systemic importance.
- Work to enhance regulation and supervision of risks from financial institutions' reliance on critical third-party providers, as well as those institutions' cyber incident reporting.
- Issuance of a set of proposed recommendations to achieve internationally consistent and comprehensive regulation of crypto-assets and markets, including stablecoins, based on the principle of 'same activity, same risk, same regulation'.
- Work to assess and address climate-related financial risks, including to analyse related vulnerabilities, promote globally consistent and comparable disclosures by firms of those risks, and develop approaches to monitor, manage and mitigate climate risks.
- Progress in the G20 roadmap to enhance cross-border payments, including the development of a strategy to prioritise future work in collaboration with stakeholders.

#### **Progress in implementing G20 reforms continues but remains uneven.**

- Jurisdictions' adoption of Basel III continues, though there is uneven progress in implementing the final reforms to the capital framework. Implementation of OTC derivatives reforms is well advanced but further progress continues to be incremental.
- 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 NBFIs reforms continues but is at an earlier stage than other reforms.

#### **Recent analysis supports the positive impact of the G20 reforms during the COVID-19 pandemic, but also the need for further policy work to enhance resilience.**

- Increased quality and higher levels of capital and liquidity due to implemented Basel III standards helped banks to absorb the impact of the pandemic and, along with temporary reductions in capital requirements, to support lending during that period.
- While the international recommendations to address liquidity risk management in open-ended funds remain broadly appropriate, they need to be made clearer and more specific on the desired policy outcomes to be more effective. The FSB and IOSCO will carry out follow-up policy work based on this assessment.

#### **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 financial stability benefits of the timely and consistent implementation of G20 reforms remain as relevant as when they were initially agreed.
- The FSB and standard-setting bodies will continue to promote approaches to deepen international cooperation, coordination and information-sharing.

# 1. Financial stability outlook

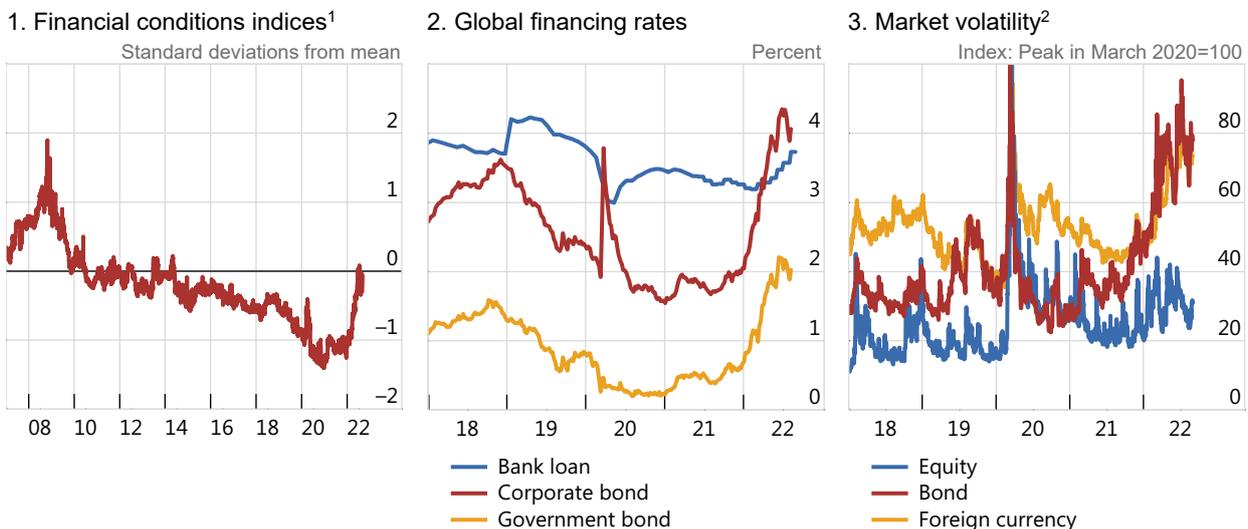
## 1.1. A challenging outlook for global financial stability

**The current economic environment is particularly challenging for financial stability.**

- Against the backdrop of the highest inflation rates for decades and concerns that inflation could be more persistent than expected, central banks have continued to raise policy rates over the past six months.
- Financial conditions have tightened at a rate not seen since the period immediately following the 2008 global financial crisis (GFC) (Graph 1). Government and corporate bond yields have increased, and market volatility remains elevated. Corporate bond issuance has weakened and there are signs of banks tightening lending standards.
- At the same time, the global growth outlook is slowing, commodities markets remain volatile, geopolitical tensions persist and stagflation risks have risen further. The prices of risky assets have declined since the beginning of the year, but asset valuations still appear to be stretched in a number of cases.
- Such a combination of shocks could test many of the long-standing and growing vulnerabilities in the global financial system.

### Financial conditions have tightened and markets remain volatile

Graph 1



<sup>1</sup> Panel 1 shows the median of standardised Goldman Sachs financial conditions indices across the FSB member jurisdictions with data.

<sup>2</sup> Panel 3 uses the VIX index for equity market volatility, the MOVE index for bond market volatility and the JPMorgan FX volatility index for foreign currency volatility.

Sources: ICE BofAML; BIS; Bloomberg; Datastream; Goldman Sachs; JP Morgan; FSB calculations.

**Further bouts of market turbulence could be amplified by existing vulnerabilities.**

- The use of leverage – for example, through margin loans or synthetic leverage via derivatives – could exacerbate volatility through forced asset sales. Sudden and large margin calls from derivatives and securities positions remain a potential source of

volatility and liquidity squeezes, as evidenced in commodities markets and in the UK government bond market this year. Short-term funding in the financial system could be cut back in a period of stress, which could lead to fire sales of assets.

- Liquidity mismatches in some types of money market and investment funds could also be exposed if investor redemptions lead to significant sales of assets. While work at the international level to address vulnerabilities in open-ended funds and other parts of non-bank financial intermediation is ongoing, the amplification mechanisms behind the 2020 dash for cash episode remain. Fund asset sales would add to sales by other types of investors motivated by asset price falls, and if this selling pressure exceeds the capacity of dealers to intermediate trades, markets could become illiquid and disorderly.
- Finally, interconnectedness in financial markets means that strains in specific segments could spill over into different markets and jurisdictions.

#### **Further stress in commodities markets could spill over to the broader financial system.**

- Another round of commodity market turbulence may lead central counterparties and clearing members to make further margin calls on commodities positions, banks to limit their credit exposures to the commodities sector, and market participants to cut back on their trading in both cleared and non-cleared commodities markets.
- While these actions could be part of a prudent risk management, they could exacerbate liquidity mismatches on market participants' balance sheets, thereby propagating shocks in commodities markets more broadly.
- These channels are likely to be exacerbated by the juxtaposition of concentration in the commodities sector (e.g. among commodities traders and clearing banks), leveraged and largely unregulated commodities traders, and opacity in some parts of the market (e.g. lack of information to assess the funding needs of commodities traders, or concentration and cross-border exposures in OTC commodities derivatives markets).

#### **Non-financial sector debt levels remain very high.**

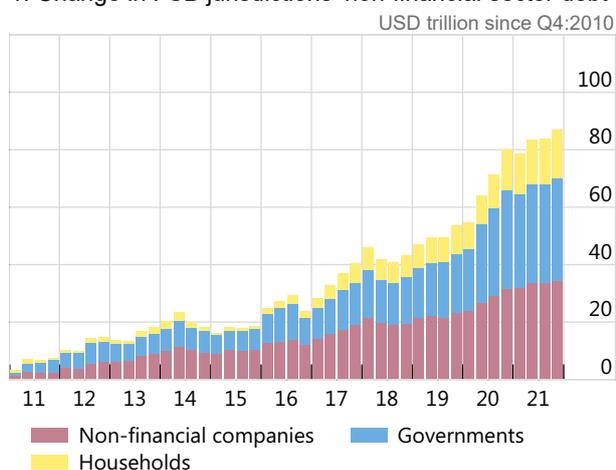
- Nominal debt levels have continued to rise in the non-financial sector (sovereigns, non-financial corporates and households), increasing by a total of almost \$90 trillion for FSB member jurisdictions in the post-GFC period (Graph 2, left panel).
- The aggregate debt-to-GDP ratio for FSB jurisdictions remains close to historically high levels in the government, non-financial corporate and household sectors (Graph 2, right panel). The combination of high debt levels in all three of these sectors simultaneously makes the current conjuncture a particular concern globally.
- For households in some jurisdictions, high debt is associated with high residential real estate valuations. The residential real estate sector could come under pressure as financial conditions continue to tighten, potentially crystallising vulnerabilities in house price valuations at the same time as for household debt.

- While available data suggests that cash holdings of households and non-financial companies are now higher relative to debt levels in some jurisdictions than prior to the GFC, these aggregate figures do not account for the distribution of cash and debt.

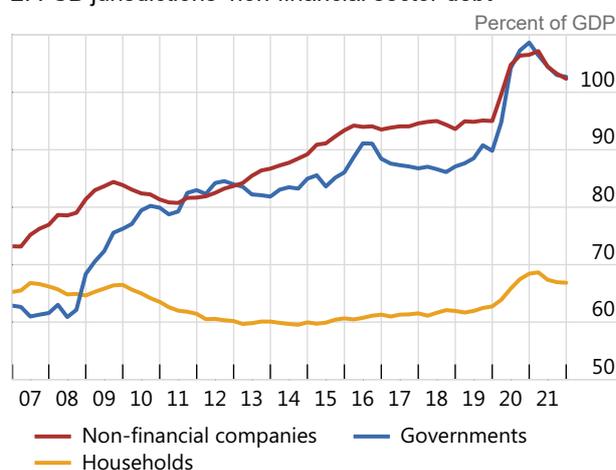
## Non-financial sector debt is high in all three sectors

Graph 2

1. Change in FSB jurisdictions' non-financial sector debt



2. FSB jurisdictions' non-financial sector debt



Sources: BIS; FSB calculations.

## Non-financial sector strains could adversely impact banking sector resilience.

- The interaction of high debt levels, tightening financial conditions and falling real incomes in the weakening growth environment is likely to lead to a rise in private non-financial sector debt service ratios, limiting companies' and households' ability to service their debts.
- Households are likely to be also affected by the large increases in energy and food costs in some jurisdictions. This would squeeze disposable incomes further, particularly for low-income households that spend a large proportion of their budget on these items.
- While government debt has increased, debt servicing pressure has been contained so far. However, the combination of the tightening in financial conditions and a likely slowdown in economic activity and tax revenues suggests that debt servicing pressures are also likely to rise for governments.
- These potential strains in non-financial sector debt servicing could adversely impact bank asset quality and lead to significant credit losses. While banks have more capital now than at the time of the GFC and stress tests suggest that banking sectors would be able to withstand significant shocks, a large decline in bank capital ratios could make them less willing to lend and provide financing for economic activity.

## EMEs face a confluence of vulnerabilities, including high external borrowing.

- The overall rise in non-financial sector debt has been reflected in an increase in EME external debt. Recent FSB work has found that most external debt is denominated in

foreign currency, with a large share in US dollars.<sup>1</sup> This borrowing could, therefore, be exposed during tighter financial conditions and an appreciating US dollar.

- The greater role of non-bank financial institutions in financing EMEs could make portfolio flows more susceptible to global financial conditions than before, accentuating the procyclicality in capital flows. Some EMEs have already experienced portfolio debt outflows and, while these have been manageable so far, they could accelerate if investor risk appetite was to deteriorate.
- The increase in sovereign indebtedness in EMEs has reduced the space available for governments to use fiscal policy to combat macroeconomic downturns. The greater amount of debt has – in some economies – also led to an increase in the banking sector’s holdings of local government bonds. This has strengthened the links between these sectors and raised the potential for spillovers via the sovereign-bank nexus.

### **Vulnerabilities to cyber-attacks remain and these incidents continue to occur frequently.**

- A successful cyber-attack on key financial infrastructures, systemically important financial institutions, or a group of smaller financial institutions, or a third-party provider to multiple financial institutions could interrupt the supply of financial services and damage confidence. The most high-profile cyber incidents that have come to light over the last few years (e.g. SolarWinds, Microsoft Exchange Network, Apache Log4Shell) highlight how interconnectedness could exacerbate this vulnerability.
- Available information suggests that recent cyber-attacks on banks and key financial market infrastructures have been manageable, though the frequency and sophistication of such incidents has increased in recent years.

## 1.2. Vulnerabilities from structural changes continue to emerge

### **Exposure to climate-related risks is becoming more evident.**

- Extreme weather caused \$65 billion in losses during the first half of 2022, compared to \$105 billion for the whole year of 2021, with roughly half of these losses affecting uninsured assets. Recent events have shown the potential for non-linear effects from climate change (e.g. droughts, wildfires, and an impact on production in parts of Europe via lower hydro energy and reduced transport of fuel due to low river water levels).
- The higher number of climate-related disasters affects financial institutions via the physical risk channel (through their exposures to affected sectors), but also increases the likelihood of a disorderly and sudden transition to a low-carbon economy. Portfolio reallocation might happen at a large scale, affecting those economies that are most vulnerable to climate change. Russia’s war in Ukraine is threatening global energy security and adding complexity for jurisdictions seeking to transition to net zero.

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<sup>1</sup> See FSB (2022), *US dollar funding and emerging market economy vulnerabilities*, April.

## **Growing linkages between crypto-asset markets and the traditional financial system increase the risk of potential spillovers.**

- The recent sell-off in crypto-asset markets has highlighted a number of vulnerabilities in the sector that are similar to those in traditional financial markets (see Box 1). The crypto-asset ecosystem appears highly interconnected and contagion within the sector was sizeable and immediate. However, the few linkages of that sector with the traditional financial system to date appear to have limited the degree of contagion.

### **Box 1: Lessons from the recent turmoil in crypto-asset markets**

In May and June 2022, crypto-asset markets lost roughly half of their value due to a deteriorating macroeconomic landscape, broader risk-off sentiment, and a number of prominent project failures in the sector. To date, the crypto-asset market turmoil has not had an impact on broader financial stability, because interconnectedness with the traditional financial system and the real economy has been limited. But a number of vulnerabilities that manifested within the crypto-asset and decentralised finance (DeFi) ecosystems are similar to those observed in the past in traditional financial markets, namely: inappropriate and unsustainable business models that depend on expectations of ever-increasing crypto-asset prices or rely on new investors to serve the returns they promise to existing investors; liquidity/maturity mismatches that expose platforms and protocols to run risk; highly leveraged positions, which led to margin calls or automatic liquidations; and interconnectedness within the crypto-asset sector. These vulnerabilities were amplified by the lack of transparency and disclosure in the crypto-asset sector, flawed governance, inadequate investor protection, and weaknesses in risk management.

There has been some stabilisation in crypto-asset markets since the turmoil, largely reflecting broader economic and financial market developments. Nonetheless, risk sentiment remains fragile. Known bankruptcies are still being worked through, and the collapse of another crypto-asset firm or a major operational event could trigger further strains. These include potential contagion through stablecoins; the impact on non-financial companies with a crypto-asset focused business or significant crypto-asset exposures; and any additional failures of DeFi protocols or centralised crypto-asset platforms.

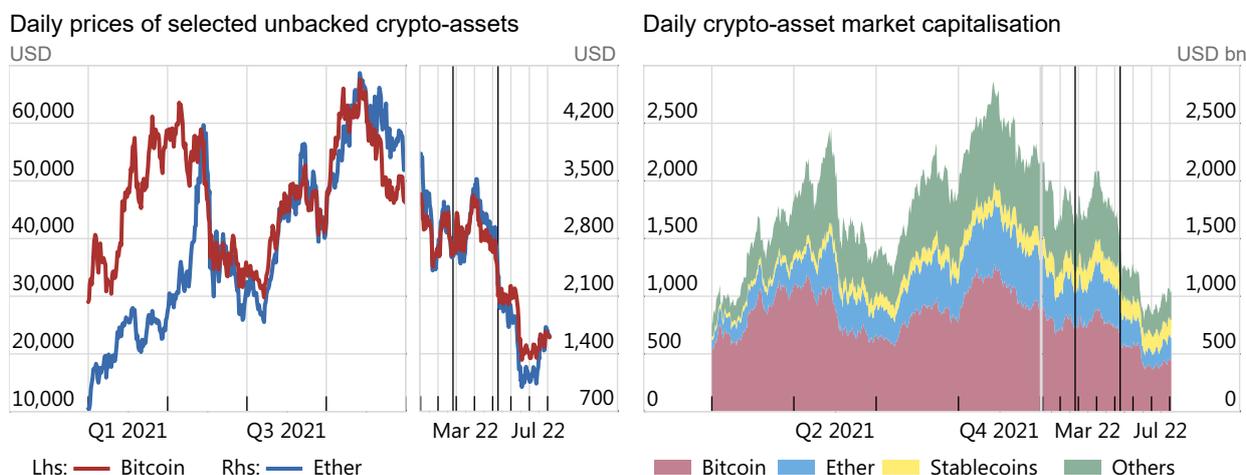
There are a number of lessons to draw from the recent turmoil. First, financial stability risks to date are limited, but growing linkages of crypto-asset firms with core financial markets and institutions increase the risk of spillovers. Second, data gaps make crypto-asset monitoring challenging, especially since available data are incomplete, inconsistent and potentially unreliable, in part due to the non-compliance of certain crypto-asset market participants with existing laws and regulations. Third, stablecoins play an important role in the crypto-asset sector as a substitute for fiat currency or as collateral in various types of transactions, and they are a key connection between crypto-asset markets, traditional financial institutions and retail market participants, including potentially through payments activities. Uses of stablecoins continue to evolve. Fourth, centralised trading and lending platforms are at the heart of crypto-asset markets due to their combination of economic activities that are often separate in traditional finance (e.g. trading, settlement, custody, credit provision, proprietary trading) and interconnections with firms across the entire crypto-asset ecosystem. And finally, where identified vulnerabilities in crypto-asset markets are similar to those in traditional finance, the regulatory approach could seek to ensure the same regulatory outcome while taking account of the distinct features of crypto-assets and harnessing their potential benefits.

- Since the May/June 2022 turmoil, prices and market capitalisation of crypto-assets have rebounded somewhat but remain at low levels compared to early 2022 (Graph 3). Notwithstanding this, the concern is that growing linkages of crypto-asset issuers and service providers with core financial markets and institutions will increase the risk of

potential spillovers.<sup>2</sup> Stablecoins, in particular, play a key role in the crypto-asset sector and can be an important transmission channel if large-scale runs force stablecoin issuers to sell traditional debt securities to meet redemptions in stress.

### Prices, correlations and market capitalisation of crypto-assets<sup>1</sup>

Graph 3



<sup>1</sup> The vertical lines indicate 23 February 2022, the day before the start of the Russia-Ukraine war and 9 May 2022, the day TerraUSD started to significantly decouple from its peg.

Sources: CryptoCompare; CoinGecko; Bloomberg; CoinDance; FSB calculations.

### The digitalisation of financial services and emergence of new types of financial service providers could also pose vulnerabilities.

- The COVID-19 pandemic has accelerated the trend toward digitalisation of retail financial services and further expanded the footprint of BigTechs and large FinTechs. Technological innovation in financial activities can reduce costs and friction, increase efficiency and competition, and broaden access to financial services. The widespread use of technology in financial services may, however, introduce new vulnerabilities.
- FinTechs and BigTechs might be out of the regulatory scope, or regulation might not yet capture risks related to the way they conduct their businesses – such as their ability to leverage wide-ranging customer data. In addition, there could be negative financial stability implications from dependence on a limited number of BigTech and FinTech providers in some markets and the complexity and opacity of their partnership activities.
- Competition from these firms might reduce the resilience of financial institutions by affecting their profitability or reducing the stability of their funding. Traditional financial institutions face a need to adapt their business models, and this creates potential incentives for excessive risk taking by those institutions to preserve profitability.
- New business models by both incumbents and new entrants rely on third-party cloud storage, computing power and other information technologies. Operational vulnerabilities to IT risks and cyber threats could therefore become larger.

<sup>2</sup> See FSB (2022), *Assessment of Risks to Financial Stability from Crypto-assets*, February.

## 2. Priority areas of work and new initiatives in 2022

- The FSB is carrying out analytical and policy work to foster global financial stability in response to the pandemic as well as new and emerging risks, and to enhance the functioning of the regulatory reforms established after the 2008 global financial crisis.
- Key priorities include financial policy issues that have arisen in the context of COVID-19; strengthening resilience of non-bank financial intermediation; enhancing central counterparty (CCP) resilience, recovery and resolvability; responding to the challenges of technological innovation (e.g. on crypto-assets and cyber resilience); enhancing cross-border payments; and addressing financial risks from climate change.

### 2.1. Coordinating financial policy responses in the current environment

**The FSB has continued to support international cooperation and coordination in the aftermath of COVID-19 and Russia's invasion of Ukraine.**

- The FSB has intensified monitoring and assessment of vulnerabilities in the global financial system, including the turmoil in commodity markets in the immediate aftermath of the invasion and its implications for financial stability.
- Work on policy responses since COVID-19 has involved sharing information on policy responses; assessing impact of measures taken; and monitoring, with the SSBs, the use of flexibility and consistency of responses with international financial standards.
- The FSB Principles underpin the importance of global financial resilience as a condition for equitable recovery, while recognising the need to use the flexibility embedded in international standards.<sup>3</sup>

**The FSB has analysed strategies to support equitable recovery and address the effects from COVID-19 scarring in the financial sector.**<sup>4</sup>

- Recovery from the economic impacts of the pandemic has been divergent across jurisdictions, partly due to different cyclical and structural factors and partly due to different duration of health policy related restrictions. Russia's invasion of Ukraine has added significantly to pre-existing challenges, by causing a setback to global growth, triggering higher inflation, and adding to economic uncertainty.
- Scarring effects from the pandemic on capital, labour and productivity are therefore likely to have a greater potential to damage future growth. The risks of scarring may be particularly significant in EMDEs that experience large swings in external financing conditions while having limited policy space to support the provision of financing to the

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<sup>3</sup> For the Principles, see FSB (2020), *COVID-19 pandemic: Financial stability implications and policy measures taken*, April.

<sup>4</sup> See FSB (2022), *Financial policies in the wake of COVID-19: supporting equitable recovery and addressing effects from scarring in the financial sector: Final report*, November.

economy. Moreover, a more uneven global recovery increases the risk of negative spillovers and a sustained retrenchment of global investors into core markets.

- Recent developments have reinforced three additional challenges to policymakers: the need for sustained policy stimulus amidst rising inflation and removal of monetary accommodation; the risk of negative cross-border spillovers from a deteriorating global recovery and diverging monetary and fiscal policy stances; and that vulnerabilities that COVID-19 support measures prevented from materialising may now come to the fore.

## 2.2. Strengthening resilience of non-bank financial intermediation

**Conjunctural factors and structural changes in the financial system over the past decade have increased reliance on non-bank financial intermediation.**

- NBFi has grown considerably – to almost half of global financial assets, compared to 42% in 2008 – and become more diverse.<sup>5</sup> NBFi's increasing importance means that funding and market liquidity has become more central to financial resilience.
- Underlying drivers for this growth include long-term demographic trends leading to asset accumulation; macro-financial factors such as accommodative monetary policies; and post-crisis reforms, which may have increased the relative cost of bank-based finance.

**The FSB is coordinating work to enhance the resilience of the NBFi sector while preserving its benefits.**

- The FSB's NBFi work programme builds on the lessons from the March 2020 market turmoil. It aims to examine and, where appropriate, address specific issues that contributed to amplification of the shock; enhance understanding and strengthen the monitoring of systemic risk in NBFi; and assess policies to address systemic risk in NBFi.<sup>6</sup> Enhancing NBFi resilience will help ensure a more stable provision of financing to the economy and reduce the need for extraordinary central bank interventions.
- The NBFi work programme includes analytical and policy work to enhance money market fund (MMF) resilience; assess and address risks from liquidity mismatch in open-ended funds; analyse margining practices' transparency, predictability and volatility, as well as market participants' preparedness to meet margin calls; examine the drivers of resilience and liquidity in bond markets; and assess the interaction between USD funding, external vulnerabilities, and NBFi financing in EMEs.
- The focus of the FSB's work in 2021 was to assess and address vulnerabilities in specific NBFi areas that may have contributed to the build-up of liquidity imbalances and their amplification.<sup>7</sup> This year's report brings together these findings to identify certain non-bank activities and types of entities (key amplifiers) that may contribute to large liquidity imbalances in stress, and which may therefore give rise to financial

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<sup>5</sup> See the FSB (2021), *Global Monitoring Report on Non-Bank Financial Intermediation 2021*, December.

<sup>6</sup> See FSB (2020), *Holistic Review of the March Market Turmoil*, November.

<sup>7</sup> See FSB (2021), *Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report*, November.

instability. It also assesses the existing NBFi policy toolkit to ensure that it is adequate and effective from a system-wide perspective and includes high-level policy proposals to enhance it.<sup>8</sup>

**Policies to address systemic risks in NBFi aim to reduce liquidity demand spikes; enhance the resilience of liquidity supply in stress; and enhance risk monitoring and the preparedness of authorities and market participants.**

- The policy proposals in the FSB report involve largely repurposing existing NBFi policy tools rather than creating new ones, given the extensive policy toolkit already available. The main focus of the proposals is to reduce excessive spikes in the demand for liquidity, either by addressing the underlying vulnerabilities that drive those spikes (e.g. by reducing liquidity mismatch or the build-up of leverage) or by mitigating their financial stability impact (e.g. by ensuring that redeeming investors pay the cost of liquidity and by enhancing the liquidity preparedness of market participants). A key element of the proposals focuses on addressing liquidity mismatch risks in OEFs (see section 3.2).
- These policies include revising or adding to existing international standards by the FSB and SSBs or providing further guidance as needed; identifying other useful policy options that individual authorities may wish to consider based on their particular market structure and context; and carrying out additional analytical and policy work as needed.
- Experience with the use of existing NBFi policy tools for systemic risk mitigation is limited to date. The FSB will assess in due course whether the repurposing of these tools is sufficient to address systemic risks in NBFi, including whether there is a need to develop additional tools for use by authorities.

### 2.3. Enhancing CCP resilience, recovery and resolvability

**Effective resolution regimes and the availability of adequate resources for CCP resolution remain critical for financial stability.**

- The G20 reforms have promoted the use of CCPs but have also increased their systemic importance. While various efforts have been made to enhance the resilience and resolvability of CCPs (see section 3.1), further work is still needed on CCP resolution and resolvability, including the adequacy of resources for CCP resolution.

**The FSB has been considering the costs and benefits of potential alternative financial resources and tools for CCP resolution, alongside a comparison to existing resources.**

- Several potential alternative financial resources and tools have been identified for further analysis, with a plan to consult on policy options in 2023. The analysis includes resources such as bail-in bonds, resolution funds, resolution-specific insurance and third-party contractual support, and compares them to existing resources such as resolution cash calls.

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<sup>8</sup> See FSB (2022), *Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report*, November.

- This FSB work builds on the analysis undertaken jointly by the FSB, the CPMI and IOSCO of the impact of default and non-default loss (NDL) stress scenarios on existing financial resources and tools in recovery and resolution, which highlighted the need to continue work on CCP financial resources.<sup>9</sup> In addition, CPMI and IOSCO have published a discussion paper focusing on CCP practices to address NDLs.<sup>10</sup>

## 2.4. Responding to the challenges of technological innovation

### **Digital transformation, increased dependencies on third-party service providers and geopolitical tensions have increased the cyber threat landscape.**

- As noted in section 1.1, the frequency and sophistication of cyber incidents are rapidly growing. Interconnectedness of the financial system makes it possible that a cyber incident at one financial institution (or an incident at one of its third-party service providers) could have spill-over effects across borders and sectors.
- Recognising that timely and accurate information on cyber incidents is crucial for effective incident response and recovery and promoting financial stability, the G20 asked the FSB to deliver a report on achieving greater convergence in cyber incident reporting. This work builds on the 2021 stocktake of regulatory reporting of cyber incidents by financial institutions to their financial authorities.<sup>11</sup>
- In October 2022, the FSB published a consultative document that takes a comprehensive approach to achieving greater convergence in cyber incident reporting.<sup>12</sup> The reports sets out recommendations to address impediments to achieving greater convergence in cyber incident reporting, advances work on establishing common terminologies related to cyber incidents and proposes the development of a common format for incident reporting exchange (FIRE). The FIRE concept aims to promote convergence in incident reporting, address operational challenges arising from reporting to multiple authorities, and foster better communication across sectors and borders.

### **Crypto-assets and markets must be subject to effective regulation and oversight commensurate to the risks they pose.<sup>13</sup>**

- The recent turmoil in crypto-asset markets highlights their intrinsic volatility, structural vulnerabilities and potential interconnectedness with the traditional financial system.
- An effective regulatory framework must ensure that crypto-asset activities are subject to comprehensive regulation commensurate to the risks such activities pose to financial stability while harnessing potential benefits of the technology behind them.

<sup>9</sup> See the FSB, CPMI and IOSCO report on existing financial resources and tools for CCP recovery and resolution, *Central Counterparty Financial Resources for Recovery and Resolution* (March 2022).

<sup>10</sup> See CPMI and IOSCO (2022), *A discussion paper on central counterparty practices to address non-default losses*, August.

<sup>11</sup> See FSB (2021), *Cyber Incident Reporting: Existing Approaches and Next Steps for Broader Convergence*, October.

<sup>12</sup> See FSB (2022), *Achieving Greater Convergence in Cyber Incident Reporting: Consultative document*, October.

<sup>13</sup> See FSB (2022), *FSB Statement on International Regulation and Supervision of Crypto-asset Activities*, July.

**The FSB has submitted to the G20 a set of proposals to achieve internationally consistent and comprehensive regulation of crypto-assets and markets, including stablecoins.<sup>14</sup>**

- The FSB proposed a set of high-level recommendations for the regulation, supervision and oversight of crypto-asset activities and markets. These recommendations aim to cover any type of crypto-asset activity, as well as the associated issuers and service providers – including crypto-asset trading platforms – that may pose risks to financial stability. The recommendations seek to promote the comprehensiveness and international consistency of regulatory and supervisory approaches.
- The FSB, in consultation with SSBs and international organisations, has also reviewed and proposed revisions to its high-level recommendations on the regulation, supervision, and oversight of so-called “global stablecoin” (GSC) arrangements. The revised recommendations emphasise the need for authorities to be ready to apply regulations to any stablecoins that could become GSCs, and include guidance to strengthen governance frameworks, clarify redemption rights of single fiat-referenced GSCs and maintain effective stabilisation mechanisms, among other revisions. As the report describes, many existing stablecoins would not meet the FSB recommendations.

## 2.5. Addressing financial risks from climate change

**The FSB continues to promote globally consistent and comparable disclosures by firms of their climate-related financial risks.<sup>15</sup>**

- Such disclosures are increasingly important as a means to give investors and other market participants the information they need to make informed decisions on assessing and comparing investments, managing risks and seizing opportunities stemming from climate change.
- A milestone has been the publication by the International Sustainability Standards Board (ISSB) under the IFRS Foundation of two Exposure Draft standards on general sustainability-related and climate-related disclosures, for public consultation with the aim to issue the final standards by early 2023.<sup>16</sup> The ISSB standards aim to establish a common global baseline that would be interoperable with jurisdictions’ frameworks through a building block approach that will drive more comparability and consistency on common climate disclosures across jurisdictions. This will help avoid harmful fragmentation of approaches to climate disclosures and unnecessary costs for preparers of disclosures.

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<sup>14</sup> See FSB (2022), *Review of the FSB High-level Recommendations of the Regulation, Supervision and Oversight of “Global Stablecoin” Arrangements: Consultative Report; Regulation, Supervision and Oversight of Crypto-Asset Activities and Markets: Consultative report; and International Regulation of Crypto-asset Activities: A proposed framework – questions for consultation*, October.

<sup>15</sup> See FSB (2022), *Progress Report on Climate-Related Disclosures*, October.

<sup>16</sup> See IFRS (2022), *ISSB delivers proposals that create comprehensive global baseline of sustainability disclosures*, March.

- Looking ahead to the finalisation of ISSB standards, more than half of FSB jurisdictions state that they already have, or are putting in place, structures and processes to bring the ISSB standards into local requirements, once finalised.
- Following this year's report on progress in disclosures across jurisdictions around the world, the FSB will produce another update for G20 next year.

**The FSB is also assisting authorities in developing approaches to monitor, manage and mitigate risks from climate change.**

- A more consistent global approach to addressing climate-related risks will help to better monitor, assess and mitigate financial vulnerabilities and to reduce the risk of harmful market fragmentation.
- The FSB's report on supervisory and regulatory approaches to climate-related risks provides a snapshot of jurisdictions' approaches as well as high-level recommendations to promote consistency as authorities continue to develop their approaches further.<sup>17</sup>

**The FSB, SSBs and other international bodies, have made progress on other areas of the G20 roadmap for addressing climate-related financial risks.<sup>18</sup>**

- Work has continued on improving the availability and cross-border comparability of climate related data more broadly. A priority is to further coordinate the establishment of common metrics for financial risks (e.g. for financial stability analysis, supervisory reporting), including forward-looking metrics anchored in real-world climate targets.
- Work on vulnerabilities analysis has continued to progress along three strands – ongoing monitoring using the data and tools currently available, development of conceptual frameworks, and further development and use of scenario analysis. Further experience with building and using climate scenarios can help the monitoring of financial risks.<sup>19</sup>
- Firms' development of transition plans is an area of growing importance and the potential oversight role of supervisors is starting to be explored (e.g. through the NGFS). The FSB will carry out further work on transition planning next year, in close coordination with the NGFS and other international organisations.

## 2.6. Enhancing 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 public dissatisfaction with existing cross-border payments services. Faster, cheaper, more

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<sup>17</sup> See FSB (2022), *Supervisory and Regulatory Approaches to Climate-related Risks: Final report*, October.

<sup>18</sup> See FSB (2022), *FSB roadmap for addressing financial risks from climate change - 2022 progress report*, July.

<sup>19</sup> See joint FSB-NGFS report, *Climate Scenario Analysis by Jurisdictions: Initial findings and lessons* (November 2022).

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.

**Much has been accomplished in the two years since the FSB developed a roadmap, in coordination with the CPMI and other relevant international organisations and SSBs, to enhance cross-border payments...**

- The roadmap sets out actions and indicative timelines in 19 building blocks across five focus areas.<sup>20</sup> The work in 2021 and 2022 has focused on establishing the foundational elements of the Roadmap and beginning to pivot from stocktaking, analysis and guidance to practical projects to improve existing systems and develop new ones.<sup>21</sup>
- The international bodies leading the 19 building blocks of the Roadmap have published consultative or final reports offering specific proposals, best practices, or guidance, examining a wide range of issues, technologies and arrangements (current and future).

**... and the work on the Roadmap has now reached an inflection point.**

- A foundational element in the Roadmap has been the publication of quantitative targets (to be achieved by 2027 in most cases) that define the Roadmap's ambition for achieving cheaper, faster, more transparent, and more accessible cross-border payments and create accountability.<sup>22</sup> The Roadmap now needs to move to practical projects to enhance payment arrangements.
- The latest FSB report on the Roadmap sets out priorities for this new phase of the work, and proposes an intensified public-private sector collaboration to take this forward.<sup>23</sup> To take the Roadmap forward, the FSB, the CPMI and partner bodies have begun to focus and prioritise the future work around three interconnected themes: payment system interoperability and extension; legal, regulatory and supervisory frameworks; and cross-border data exchange and message standards. In addition, more strategic engagement with the private sector at the senior executive and management levels has begun to develop a greater sense of shared ownership, commitment, and partnership.

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<sup>20</sup> 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 the FSB's report on *Enhancing Cross-border Payments: Stage 3 roadmap* (October 2020).

<sup>21</sup> See FSB (2022), *G20 Roadmap for Enhancing Cross-border Payments: Consolidated progress report for 2022*, October.

<sup>22</sup> See FSB (2022), *Developing the Implementation Approach for the Cross-Border Payments Targets*, July.

<sup>23</sup> See FSB (2022), *G20 Roadmap for Enhancing Cross-border Payments: Priorities for the next phase of work*, October.

## 3. Implementation and effects of reforms

### 3.1. Implementation status

#### *Building resilient financial institutions*

#### **Jurisdictions' adoption of Basel III standards continues, though there is uneven progress in implementing the final reforms to the capital framework.<sup>24</sup>**

- 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, some of whom finalised implementation in the past year (see Graph 4). Adoption of other Basel III standards whose implementation deadline has passed is progressing but is not complete.<sup>25</sup>
- Implementation of the finalised reforms to the capital framework, which were agreed in 2017 and will take effect from January 2023, has progressed unevenly in the past year. Most progress has been made in implementing the leverage ratio requirements. The revised leverage ratio is in effect in eight FSB jurisdictions and nine more have published draft or final rules. The global systemically important bank (G-SIB) leverage ratio buffer is implemented in four FSB jurisdictions, with eight more having published final rules. For other elements of the finalised reforms, some jurisdictions have adopted final rules while others have published draft rules.<sup>26</sup>
- More than two thirds of BCBS jurisdictions plan to implement all, or the majority of, the finalised reforms in 2023 or 2024, with the remaining jurisdictions planning to implement them in 2025. The Group of Central Bank Governors and Heads of Supervision, the oversight body of the BCBS, reaffirmed its expectations of implementing all aspects of the Basel III framework in a full and consistent manner, and as soon as possible.<sup>27</sup>
- The BCBS resumed in late 2021 its jurisdictional assessments of the consistency of implementation of the NSFR and the large exposures framework. The 16 jurisdictions assessed so far were found to be compliant or largely compliant with both standards.

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<sup>24</sup> See the BCBS (2022), [Basel III implementation dashboard](#), October.

<sup>25</sup> These include interest rate risk in the banking book, the standardised approach for counterparty credit risk exposures, and equity investments in funds.

<sup>26</sup> Final rules are adopted for other elements as follows: the revised standardised approach for credit risk (eight FSB jurisdictions), the revised internal ratings-based approach (six FSB jurisdictions); the output floor (six FSB jurisdictions); the revised credit valuation adjustment (three FSB jurisdictions); and the market and operational risk frameworks (three FSB jurisdictions).

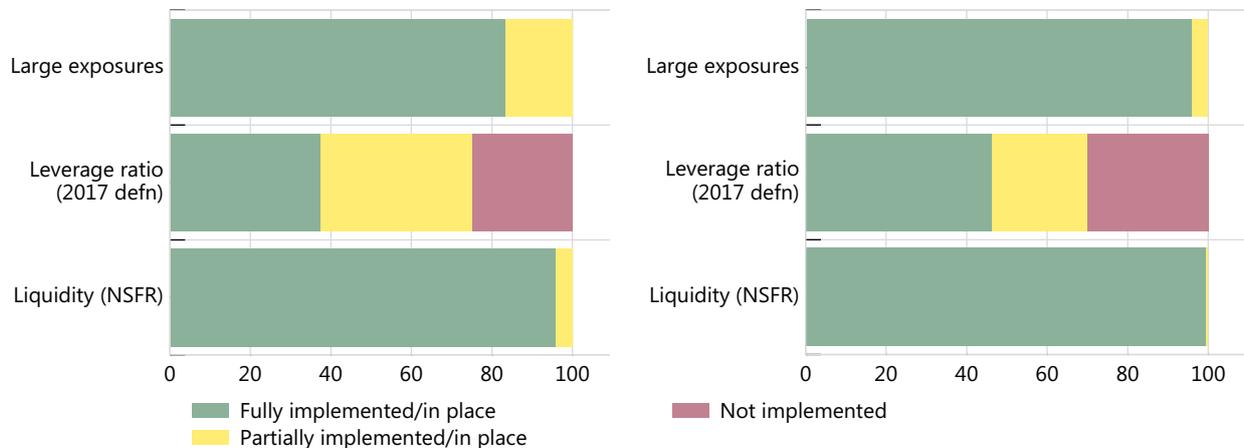
<sup>27</sup> See the [press release of the 12 September meeting of the Governors and Heads of Supervision](#) (September 2022).

## Implementation is advancing on core Basel III standards

Graph 4

As percent of number of FSB jurisdictions<sup>1</sup>

As percent of market size<sup>2</sup>



Notes: <sup>1</sup> The five EU members of the FSB are presented as separate jurisdictions. <sup>2</sup> Market size based on assets of banks domiciled in each FSB jurisdiction at end-2020.

### Most of the regulatory and supervisory measures to alleviate the economic impact of COVID-19 on the banking sector have been withdrawn or expired.

- Very few of the original COVID-19 measures were still in effect by September 2022, and most remaining are scheduled to expire in the near term. Among the measures still in effect but with an end date in sight are the transition period on expected credit loss (ECL), buffer replenishment, and some exemptions on exposures, including the exemption of central bank reserves from the leverage ratio exposure.
- The large majority of the measures taken make use of the flexibility embedded in the Basel III framework (e.g. supervisory discretion in neutralising volatility in the Value-at-Risk multiplication factor and in the expected time for temporary dip below the 100% liquidity coverage ratio (LCR)). Beyond the built-in flexibilities in the framework, only a couple of jurisdictions have extended (with no end date) measures aimed at recognising certain liquid assets in the LCR and mitigating FX volatility impact on credit exposures.

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

- The IAIS continues its monitoring of the ICS for internationally active insurance groups, ahead of its adoption as a prescribed capital requirement at end-2024.

### Implementation of the FSB Principles and Standards for Sound Compensation Practices is more advanced for banks than for the insurance and asset management sectors.

- Firms are increasingly using non-financial measures to enhance the effectiveness of performance assessments and determine variable compensation. While deferral and

in-year adjustments are still commonly used, clawback continues to face obstacles to its effectiveness due to legal and practical barriers and its use is still not widespread.<sup>28</sup>

- To ensure that banks preserve the capital needed to support lending in response to COVID-19, authorities in some jurisdictions had taken compensation-related measures. No new actions are reported in the past year, and most jurisdictions have withdrawn or not extended their measures relating to compensation and dividends.

### *Ending too-big-to-fail*

#### **Implementation of the policy framework for global systemically important financial institutions has advanced the most for G-SIBs.**

- 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 meet the final 2022 minimum external Total Loss-Absorbing Capacity (TLAC) requirements. External TLAC issuance by these firms has continued.

#### **Work is still ongoing to close gaps in the operationalisation of resolution plans for SIBs.**

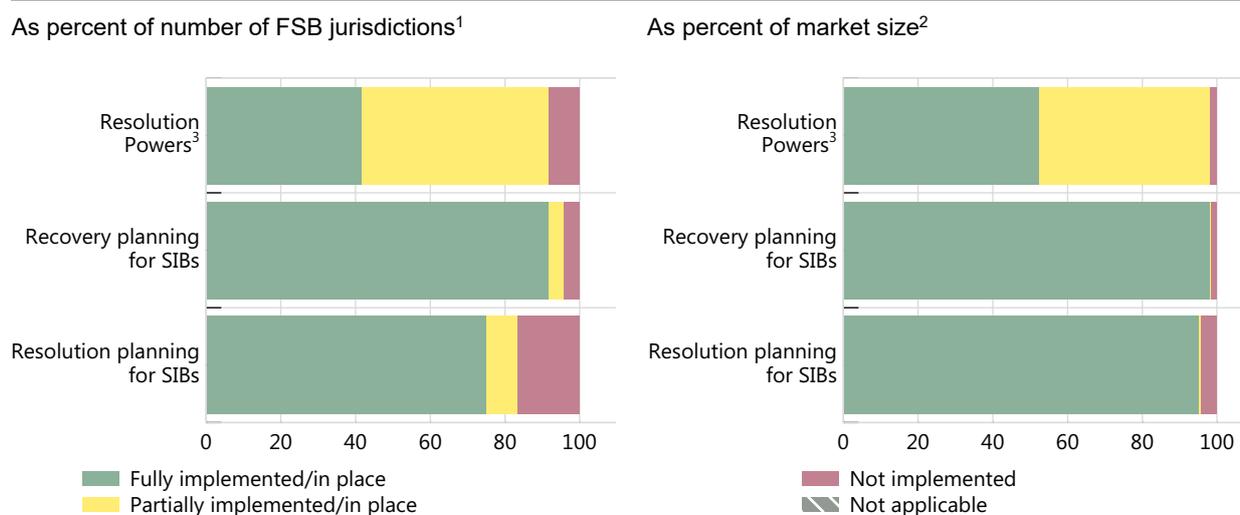
- Almost all G-SIB home and key host jurisdictions have in place comprehensive bank resolution regimes that align with the FSB's *Key Attributes of Effective Resolution Regimes for Financial Institutions*<sup>29</sup> (see Graph 5). However, implementation of the Key Attributes is still incomplete in some FSB jurisdictions. The powers most often lacking are bail-in and to impose a temporary stay on the exercise of early termination rights.<sup>30</sup>
- G-SIB resolution planning is maturing and the focus is shifting increasingly to fine-tuning and testing resolution preparedness. In most cases, G-SIBs' progress towards resolvability has been incremental since last year, reflecting the level of advancement of resolution policy implementation in many jurisdictions.
- Funding in resolution remains an area of focus for firms and authorities. More progress is needed to address issues on the cross-border mobilisations of collateral and liquidity.
- A 2022 review of disclosures of resolution-related information by G-SIBs and their resolution authorities showed substantial progress by both firms and authorities. G-SIBs have implemented the BCBS Pillar 3 Disclosure Standards and disclose information on their external TLAC ratios on a risk-weighted assets and leverage ratio exposure basis, and on their TLAC-eligible instruments. Authorities in several G-SIB home jurisdictions have also published substantial information about their resolution planning frameworks.

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<sup>28</sup> See FSB (2021), *Effective Implementation of FSB Principles for Sound Compensation Practices and Implementation Standards: 2021 progress report*, November.

<sup>29</sup> See FSB (2014), *Key Attributes of Effective Resolution Regimes for Financial Institutions*, October.

<sup>30</sup> See FSB (2022), *2022 Resolution Report: Completing the agenda and sustaining progress*, December.



Notes: <sup>1</sup> The five EU members of the FSB are presented as separate jurisdictions. <sup>2</sup> Market size based on assets of banks domiciled in each FSB jurisdiction at end-2020. <sup>3</sup> 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 insurance companies 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 progress in resolution planning and resolvability assessments for these institutions. FSB work highlights the importance of mapping intra-group interconnectedness and assessing its implications for resolution planning and of effective resolution funding arrangements.<sup>31</sup>
- 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),<sup>32</sup> 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 and resolvability assessments for them are progressing but are still in an early stage (see Graph 6). Institution-specific arrangements for information sharing and cross-border cooperation have been introduced for the majority (11) of these CCPs. Resolution planning for SI>1 CCPs has commenced, although no full resolution plan is yet in place. Resolvability assessments for SI>1 CCPs are also still at an early stage. Most CMGs have considered hypothetical default loss and non-default loss scenarios and evaluated

<sup>31</sup> See FSB (2022), *Internal Interconnectedness in Resolution Planning for Insurers: Practices Paper*, January; and FSB (2022), *Resolution Funding for Insurers: Practices Paper*, January.

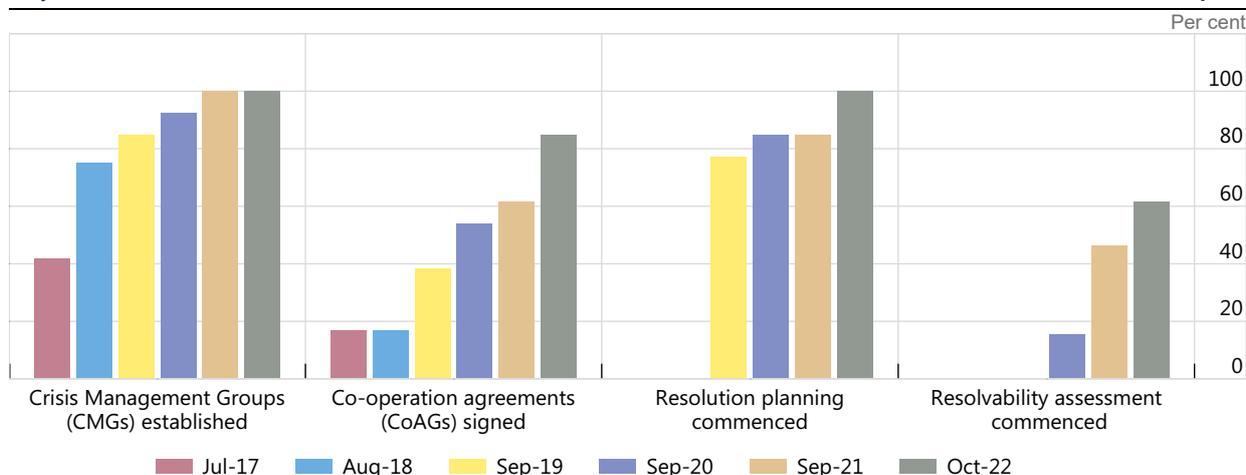
<sup>32</sup> These CCPs were reported as systemically important in more than one jurisdiction by agreement between home and host authorities on the basis of a set of criteria set out in the FSB *Guidance on CCP Resolution and Resolution Planning* (July 2017).

the hypothetical costs compared to existing resources and tools. However, CMGs have not yet completed full resolvability assessments in line with FSB guidance.<sup>33</sup>

## Resolution planning status for SI>1 CCPs<sup>1</sup>

July 2017 – October 2022

Graph 6



Notes: <sup>1</sup> Percentage of CCPs systemically important in more than one jurisdiction.

Source: Relevant authorities for SI>1 CCPs.

- The FSB has published a framework that seeks to help FMIs and FMI service providers better understand which information client banks and their resolution authorities may need from them to support their resolution planning and ensure that banks can continue performing their critical functions or critical services, including in cases where banks need to be resolved.<sup>34</sup> The first experience with the framework is being evaluated.

### Resolution authorities have continued recovery and resolution planning during the pandemic consistent with the Key Attributes.

- Most actions that jurisdictions took in 2020 to alleviate the burden on firms, such as extending information submission deadlines for resolution planning and for meeting certain requirements regarding resolution capabilities, were not extended in 2021.
- The powers and capabilities established over time to implement the Key Attributes have served authorities well during these times of stress. For example, CMG coordination and information capabilities have supported the monitoring of liquidity position and more frequent and granular sharing of information in the current environment.

### Making derivatives markets safer

Overall implementation of the G20's OTC derivatives reform agenda is well advanced (see Graph 7), but progress continues to be incremental.

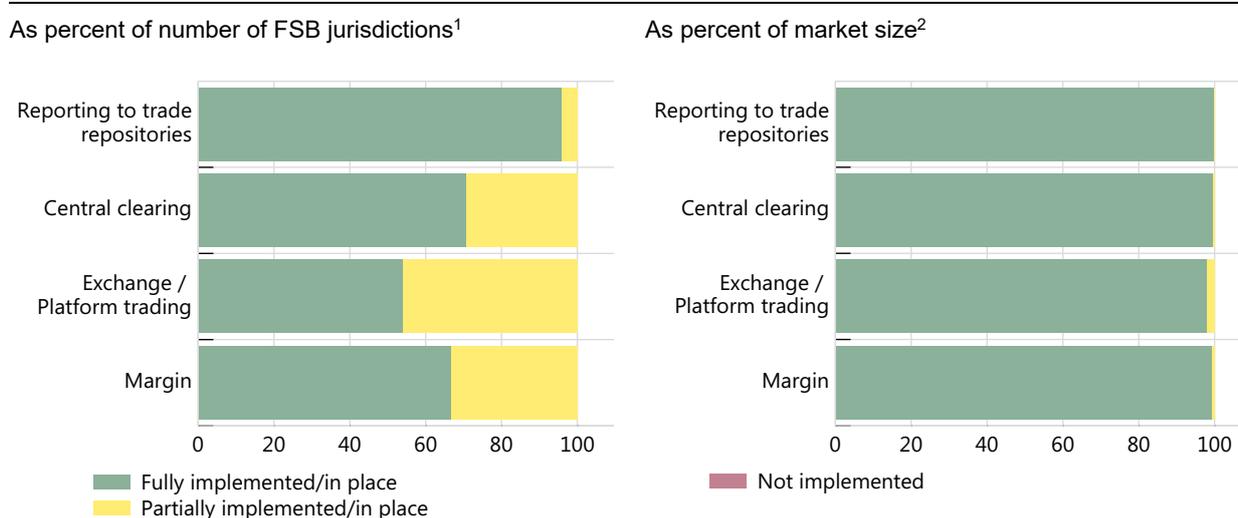
<sup>33</sup> See FSB (2010), *Guidance on Financial Resources to Support CCP Resolution and on the Treatment of CCP Equity in Resolution*, November.

<sup>34</sup> See FSB (2021), *Continuity of access to FMI services (FMI intermediaries) for firms in resolution: Framework for information from FMI intermediaries to support resolution planning*, August.

- There has been no increase over the past three years in the number of FSB member jurisdictions with comprehensive<sup>35</sup> trade reporting requirements, central clearing frameworks, margin requirements for non-centrally cleared derivatives (NCCDs), or platform trading frameworks.
- Three more jurisdictions expect to implement margin requirements for NCCDs (whose final implementation phase took effect in September 2022) in 2023.<sup>36</sup>
- Interim capital requirements for NCCDs are now in force in all FSB jurisdictions, and final higher capital requirements for NCCDs are now in place in 18 FSB jurisdictions (three more since last year).
- Most jurisdictions have withdrawn or not extended measures previously introduced to alleviate the operational burden for OTC derivatives market participants, or have made changes to mitigate excessive procyclicality into permanent supervisory frameworks.

### Implementation is most advanced in the largest OTC derivatives markets

Graph 7



Notes: <sup>1</sup> The five EU members of the FSB are presented as separate jurisdictions. <sup>2</sup> 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).

### Enhancing resilience of non-bank financial intermediation

#### Implementation of NBFIs reforms continues but is at an earlier stage than other reforms.

- Progress in implementing Basel III reforms to mitigate spillovers between banks and non-bank financial entities is still ongoing. Four jurisdictions have yet to implement applicable risk-based capital requirements for banks' investments in the equity of funds or the supervisory framework for measuring and controlling banks' large exposures.

<sup>35</sup> 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.

<sup>36</sup> See FSB, *OTC Derivatives Markets Reforms: Implementation Progress in 2022* (November 2022).

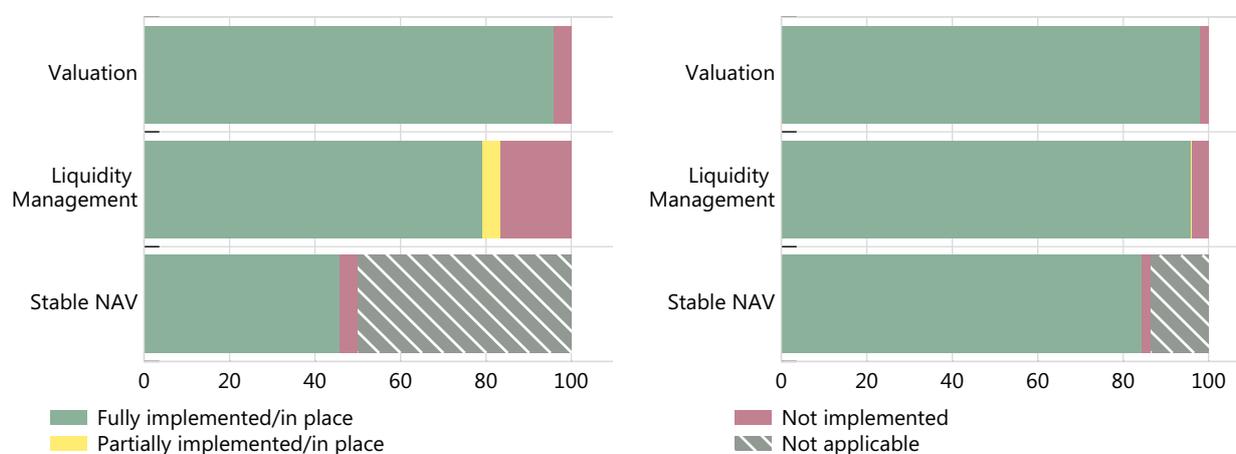
- Adoption of IOSCO recommendations to reduce the run risk of MMFs is most advanced in 19 FSB jurisdictions (see Graph 8), unchanged since 2021. The fair value approach for valuation of MMF portfolios is adopted in all FSB jurisdictions, though one jurisdiction does not have in place requirements for 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.<sup>37</sup> The FSB will, working with IOSCO, take stock in 2023 of measures adopted by member jurisdictions in response to the 2021 FSB policy proposals to enhance MMF resilience.<sup>38</sup>

### Implementation progress is most advanced in the largest MMF markets

Graph 8

As percent of number of FSB member jurisdictions<sup>1</sup>

As percent of market size<sup>2</sup>



<sup>1</sup> The five EU members of the FSB are presented as separate jurisdictions. <sup>2</sup> Market size based on assets under management (AUM) in FSB jurisdictions at end-2020.

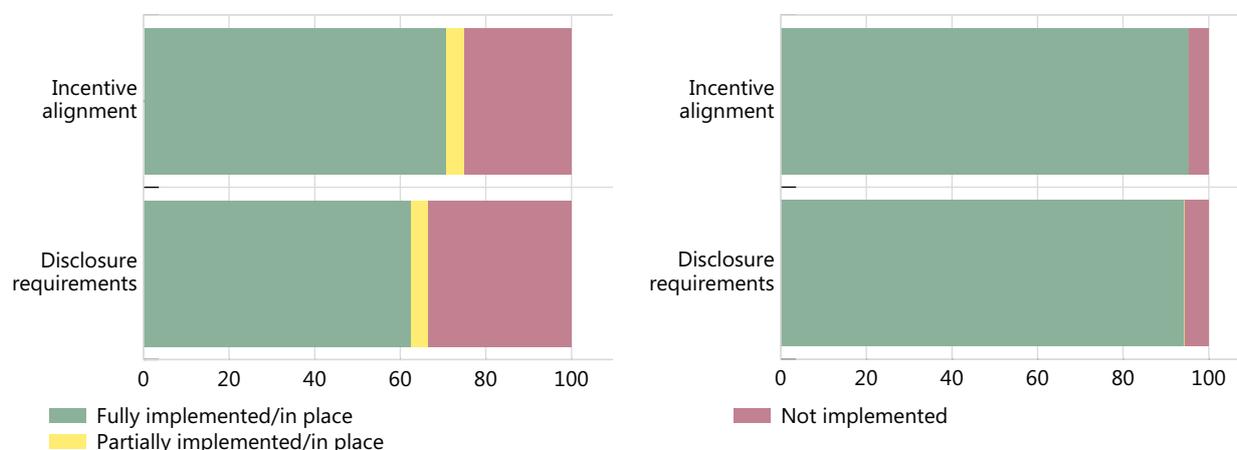
- Adoption of the IOSCO recommendations on incentive alignment approaches for securitisation has been completed by 17 FSB jurisdictions (see Graph 9). One-fifth of FSB jurisdictions have yet to implement the revised BCBS securitisation framework.
- Implementation of the FSB recommendations for dampening procyclicality and other financial stability risks associated with securities financing transactions (SFTs) is incomplete and continues to face significant delays in most jurisdictions.
- Work is underway on global securities financing data collection and aggregation. Only a few FSB jurisdictions are submitting data, and in most of these cases the coverage is limited to only a subset of three market segments and granularity is limited. To help jurisdictions facing practical challenges, a sequencing approach by market segment and data granularity was adopted.

<sup>37</sup> See the IOSCO *Level 2 Peer Review of Regulation of Money Market Funds* (November 2020).

<sup>38</sup> See FSB, *Policy proposals to enhance money market fund resilience: Final report* (October 2021).

As percent of number of FSB member jurisdictions<sup>1</sup>

As percent of market size<sup>2</sup>



<sup>1</sup> The five EU members of the FSB are presented as separate jurisdictions. <sup>2</sup> Market size based on value of securitisation issuance (collateralised debt obligations, mortgage-backed securities and asset-backed securities) in FSB jurisdictions during 2014.

- Implementation of the FSB and IOSCO recommendations to address structural vulnerabilities in asset management activities is ongoing (see also section 3.2). Authorities have made meaningful progress in implementing the 2017 FSB policy recommendations to mitigate vulnerabilities in open-ended funds from liquidity mismatch (FSB Recommendations).<sup>39</sup> IOSCO’s review<sup>40</sup> of its 2018 recommendations on liquidity risk management for such funds shows that there was a high degree of implementation of regulatory requirements, consistent with the objectives of the 2018 recommendations, for most FSB jurisdictions (see section 3.2).

*Progress in other reform areas*

- Significant progress has been achieved in implementing the second phase of the **G20 Data Gaps Initiative (DGI-2)**, which aims to address data gaps identified in the 2008 crisis by enhancing the collection and dissemination of accurate and timely data for policy use. Areas of progress include financial soundness indicators; NBFIs data; derivatives data; sectoral accounts and international banking statistics. However, challenges remain for some participating economies in fully closing data gaps related to some DGI-2 recommendations, which will continue to be addressed going forward. Participating economies and international organisations will carry out further work to address data gaps for emerging policy needs, e.g. climate change and fintech credit.<sup>41</sup>
- Following years of preparation, the end of 2021 marked a major milestone in the **transition away from LIBOR**. The FSB has welcomed the smooth transition to robust alternative rates across global markets, primarily overnight risk-free or nearly risk-free rates. Given the significant use of USD LIBOR globally, the FSB has emphasised that

<sup>39</sup> See FSB (2017), *Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities*, January.

<sup>40</sup> See IOSCO (2018), *Recommendations for Liquidity Risk Management for Collective Investment Schemes*, February.

<sup>41</sup> See FSB (2022), *G20 Data Gaps Initiative (DGI-2): Progress Achieved, Lessons Learned, and the Way Forward*, June.

firms must have plans in place to ensure their preparedness for the cessation of the USD LIBOR panel.<sup>42</sup> The FSB has encouraged authorities to set globally consistent expectations and milestones that firms will rapidly cease new use of LIBOR, regardless of where those trades are booked or their denomination currency. It has also shared solutions to benchmark transition issues common to many jurisdictions and provided a guide for authorities in determining appropriate alternative benchmark rates.<sup>43</sup> Moreover, the FSB has encouraged authorities and market participants to keep momentum for the last stage of transition, which is important due to the extensive use of US dollar LIBOR across jurisdictions in legacy contracts.

- Since 2019, the number of active **Legal Entity Identifiers** (LEIs) has increased from 1.4 to 2.1 million.<sup>44</sup> This has been supported by a broad range of actions to encourage LEI adoption, including expanding uses beyond financial markets and securities. The FSB recently outlined the benefits that could accrue from the use of the LEI in cross-border payment transactions and set out recommendations and options to promote the use of the LEI.<sup>45</sup> The FSB will review progress in implementing these recommendations and those of the 2019 LEI peer review<sup>46</sup> and publish a progress report by end-2024.

## 3.2. Effects of reforms

### *Financial system resilience during the COVID-19 shock*

**Thus far the global financial system withstood the stress from the pandemic thanks to greater resilience, supported by G20 reforms and the swift and bold policy responses.**

- Effective implementation of those reforms meant that core parts of the system entered the pandemic in a more resilient state than during the 2008 financial crisis.<sup>47</sup>
- The policy measures adopted in response to the COVID-19 shock were intended to bridge temporary economic disruption. Authorities typically deployed a mix of liquidity and financial measures (e.g. interest rate cuts, liquidity injections, extension of repo facilities, bond purchases, payment moratoria, loan guarantees). To support the flow of credit to the real economy and to free up bank capital, authorities also used prudential measures (e.g. release of capital and liquidity buffers, restriction of dividend distributions, temporary relaxation of risk-weights and asset classification guidance). These measures mostly used built-in flexibilities and did not result in divergence from global standards as these have expired or are set to end soon with very few exceptions.

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<sup>42</sup> More generally, to ensure financial stability, it is important that market participants transition from LIBOR and other IBORs that are set to be discontinued. See FSB (2022), *FSB statement welcoming smooth transition away from LIBOR*, April.

<sup>43</sup> See FSB (2021), *Progress report to the G20 on LIBOR transition issues: Recent developments, supervisory issues and next steps*, July.

<sup>44</sup> See the [Global LEI Foundation dashboard](#).

<sup>45</sup> See FSB (2022), *Options to Improve Adoption of The LEI, in Particular for Use in Cross-border Payments*, July.

<sup>46</sup> See FSB (2019), *Thematic Review on Implementation of the Legal Entity Identifier*, May.

<sup>47</sup> See FSB (2021), *Promoting Global Financial Stability: 2021 FSB Annual Report*, October.

- Some jurisdictions are now increasing their countercyclical capital buffer (CCyB) rates in view of increasing vulnerabilities in the financial system and considering positive cycle-neutral levels to address unpredictable shocks such as the pandemic. Authorities have also gradually unwound the temporary flexibility on capital and liquidity ratios.

### **Recent analytical work supports the positive impact of Basel III during the pandemic.**

- The BCBS interim evaluation on the impact of Basel reforms<sup>48</sup> found that the increased quality and higher levels of capital and liquidity held by banks have helped them absorb the sizeable impact of the COVID-19 pandemic thus far, suggesting that the Basel reforms have achieved their broad objective of strengthening the resiliency of the banking system. Banks and the banking system would have faced greater stress had the Basel reforms not been adopted. While the report finds that some features of the Basel reforms, including the functioning of capital and liquidity buffers, the degree of countercyclicality in the framework, and the treatment of central bank reserves in the leverage ratio may warrant further consideration, it does not seek to draw firm conclusions regarding the need for potential revisions to the reforms.
- The BCBS evaluation on the impact of implemented Basel III reforms regarding buffer usability and cyclical<sup>49</sup> finds some indications of a positive relationship between lending and banks' capital headroom, which is consistent with previous analysis. Empirical evidence indicates that temporary reductions in capital requirements supported lending during the pandemic, although there is weaker evidence for CCyB releases specifically, which may reflect more limited use of the CCyB during the evaluation period. The evaluation findings of an apparent reluctance of banks to cross regulatory capital thresholds and a positive impact of capital releases on lending demonstrate the value of an effective countercyclical regulatory capital regime. The report finds little evidence to suggest that reluctance by banks to use liquid asset buffers has affected their lending and market activity, given the short-lived nature of the liquidity pressures during the pandemic. Similarly, the analysis finds little sign of procyclical effects on lending during the pandemic related to the introduction of the ECL framework.

### **Work is underway to assess and, as necessary, enhance resilience in the NBFi sector.**

- As noted in section 2.2, the March 2020 turmoil has underscored the need to strengthen resilience in the NBFi sector, as key funding markets experienced acute stress and public authorities needed to take a wide range of measures to support the supply of credit to the real economy. To this end, the FSB developed a comprehensive NBFi work programme to examine and, where appropriate, address specific issues that contributed to amplification of the shock; enhance understanding and strengthen the monitoring of systemic risk in NBFi; and assess policies to address systemic risk in NBFi. Enhancing NBFi resilience is intended to ensure a more stable provision of

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<sup>48</sup> See BCBS (2021), *Early lessons from the Covid-19 pandemic on the Basel reforms*, July.

<sup>49</sup> See BCBS (2022), *Buffer usability and cyclical in the Basel framework*, October. A third BCBS evaluation report focusing on the broader impact of the introduction of implemented Basel III reforms on bank resilience is planned for publication at end-2022.

financing to the economy and reduce the need for extraordinary central bank interventions.

### *Assessing policies on liquidity mismatch in open-ended funds*

**The FSB assessed its recommendations to address liquidity risk management in OEFs and concluded that they need to be made clearer and more specific on policy outcomes.<sup>50</sup>**

- In 2022, the FSB assessed the effectiveness of its 2017 policy recommendations to mitigate vulnerabilities in OEFs from liquidity mismatch (FSB Recommendations).<sup>51</sup> This took place in coordination with IOSCO's review of its 2018 recommendations on liquidity risk management for such funds (IOSCO Recommendations).<sup>52</sup>
- The assessment finds that authorities have made meaningful progress in implementing the 2017 FSB Recommendations (see Box 2). Nevertheless, lessons learnt since then, including during the March 2020 market turmoil, have produced new insights into liquidity management challenges in segments of the OEF sector. While the assessment suggests that the FSB Recommendations remain broadly appropriate, enhancing clarity and specificity on the policy outcomes the FSB Recommendations seek to achieve would make them more effective from a financial stability perspective.
- IOSCO's review of its 2018 IOSCO Recommendations shows that for the 14 FSB jurisdictions comprising over 92% of global AUM, there was a high degree of implementation of regulatory requirements consistent with the objectives of the recommendations. Seven jurisdictions were assessed as fully consistent with all 10 recommendations, and 12 are fully consistent with at least six recommendations. For some IOSCO Recommendations, the review identified areas that may warrant further attention.
- Based on this assessment, the FSB and IOSCO will carry out follow-up work to: revise the FSB and IOSCO Recommendations to address structural liquidity mismatch and promote greater inclusion and use of LMTs, as well as to clarify the appropriate roles of fund managers and authorities in implementing the recommendations; develop detailed guidance on the design and use of LMTs; enhance the availability of OEF-related data for financial stability monitoring; and promote the use of stress testing.

#### **Box 2: Main findings of the FSB assessment on the effectiveness of its 2017 policy recommendations to mitigate vulnerabilities in OEFs from liquidity mismatch**

Many jurisdictions have high-level regulatory expectations on consistency between fund assets and investment strategies, and redemption terms and conditions, but there appear to be differences in the levels of specificity in these expectations across jurisdictions. Overall, the analysis of available data suggests that there has been no measurable reduction in the degree of structural liquidity mismatch since the FSB Recommendations were issued. As the OEF sector has grown in absolute terms,

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<sup>50</sup> See FSB (2022), *Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report*, November.

<sup>51</sup> See FSB (2017), *Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities*, January.

<sup>52</sup> See IOSCO (2018), *Recommendations for Liquidity Risk Management for Collective Investment Schemes*, February.

reflecting the increased importance of market-based finance, the potential impact of vulnerabilities that can arise from OEFs' structural liquidity mismatch has also grown.

Most jurisdictions permit OEF managers to implement a broad range of liquidity management tools (LMTs) and available information suggests there has been a gradual increase in the inclusion of LMTs in OEF constitutional documents since the publication of the FSB Recommendations. The use of anti-dilution LMTs increased during the height of the COVID-19 shock in response to increased redemption requests, especially for corporate bond funds, but available evidence points to material variation in swing factors across corporate bond funds using swing pricing. There remains room for greater uptake of LMTs, particularly anti-dilution tools intended to pass on the cost of liquidity to redeeming shareholders in both normal and stressed market conditions. When LMTs are available, cost, competitive or reputational concerns, as well as operational hurdles, may have prevented OEF managers from including LMTs in OEF constitutional documents or using LMTs.

Many jurisdictions enhanced their regulatory reporting requirements following publication of the FSB Recommendations, but there is variance in the scope, frequency and content of periodic reporting. In addition, many jurisdictions can collect more frequent ad hoc supervisory information from fund managers where necessary. These data are useful during market stress, but they are less suited to ex ante vulnerabilities monitoring. The FSB encountered challenges obtaining and analysing data to support its assessment of the effectiveness of the FSB Recommendations. This suggests that measuring and monitoring liquidity mismatch, as well as evaluating the availability, use and effectiveness of LMTs for assessing vulnerabilities in OEFs, continue to be challenging for authorities.

While all surveyed jurisdictions require disclosure of fund liquidity risk to investors, more could be done to enhance these disclosures. Market participants agree that it is important to ensure adequate disclosure on the availability and use of LMTs by OEFs to protect investors and to allow them to factor these into their decision making.

Most surveyed jurisdictions require responsible entities to conduct ongoing liquidity assessments at fund level in different scenarios. Additionally, most jurisdictions have conducted some form of system-wide stress testing to capture the effects of collective selling by funds and other investors on the resilience of financial markets and the financial system more generally.

## 4. Looking ahead

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

- The combination of higher inflation, lower growth and much tighter global financial conditions may crystallise pre-existing financial vulnerabilities or give rise to new ones. So far, global financial markets have largely coped with evolving economic conditions and high volatility in an orderly manner, with limited and temporary support when necessary, and systemic financial institutions have shown resilience to market strains – in large part due to the post-crisis financial reforms introduced by the G20.
- However, 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.
- A resilient global financial system is essential for strong and sustainable global growth. The economic impact of the pandemic was contained through a timely and effective

global policy response. This response involved the utilisation of financial buffers and an increase in non-financial sector debt. With the exit from COVID-19 now well underway, it is important to rebuild macroprudential policy space whenever national conditions allow.

**Policies to contain economic scarring from the pandemic will be an important contributor to financial resilience and sustainable economic growth going forward.**

- Targeted approaches and the phasing-out of COVID-19 measures may help to mitigate adverse effects of high debt and prevent scarring. To this end, jurisdictions should pay attention to coordination in the narrowing down and phasing out of support measures and in designing effective mechanisms to deal with the debt overhang resulting from such measures. At the same time, it may be necessary to amend the support measures in light of recent developments. Close cooperation and information exchange is critical for authorities in ensuring appropriately tailored policy responses and exit strategies.
- The prospect of an uneven global economic recovery may increase the risk of negative spillovers and the importance of policies to contain them. Exit strategies need to reflect specific domestic economic conditions and avoid excessive financial market reactions, which may limit the scope to engineer a fully synchronised exit across jurisdictions.

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

- 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 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 NBFIs, accelerated adoption of technology, and climate change.
- Monitoring and coordination, guided by the FSB COVID-19 Principles, has discouraged unilateral actions during the pandemic that could distort the level playing field and lead to harmful market fragmentation. The monitoring findings confirm the importance of full, timely and consistent implementation of international standards and underline the financial stability lessons summarised in the FSB's 2021 report to the G20.<sup>53</sup>
- The FSB and SSBs will continue to promote approaches to deepen international cooperation, coordination and information sharing on these issues.

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<sup>53</sup> See FSB (2021), *Lessons learnt from the COVID-19 pandemic from a financial stability perspective: Final report*, October.

## Annex 1: FSB reports published over the past year

Month	Report
November 2021	<ul style="list-style-type: none"> <li>• <a href="#"><u>Enhancing the Resilience of Non-Bank Financial Intermediation: Progress Report</u></a></li> <li>• <a href="#"><u>Effective Implementation of FSB Principles for Sound Compensation Practices and Implementation Standards: 2021 progress report</u></a></li> <li>• <a href="#"><u>FSB Statement to Support Preparations for LIBOR Cessation</u></a></li> <li>• <a href="#"><u>Good Practices for Crisis Management Groups (CMGs)</u></a></li> </ul>
December	<ul style="list-style-type: none"> <li>• <a href="#"><u>OTC Derivatives Market Reforms: Implementation progress in 2021</u></a></li> <li>• <a href="#"><u>RCG for the Americas: Non-Bank Financial Intermediation Monitoring - Sixth Report</u></a></li> <li>• <a href="#"><u>2021 Resolution Report: "Glass half-full or still half-empty?"</u></a></li> <li>• <a href="#"><u>Bail-in Execution Practices Paper</u></a></li> <li>• <a href="#"><u>Global Monitoring Report on Non-Bank Financial Intermediation 2021</u></a></li> </ul>
January 2022	<ul style="list-style-type: none"> <li>• <a href="#"><u>Resolution Funding for Insurers: Practices Paper</u></a></li> <li>• <a href="#"><u>Internal Interconnectedness in Resolution Planning for Insurers: Practices Paper</u></a></li> </ul>
February	<ul style="list-style-type: none"> <li>• <a href="#"><u>Assessment of Risks to Financial Stability from Crypto-assets</u></a></li> <li>• <a href="#"><u>Approaches to Debt Overhang Issues of Non-financial Corporates: Discussion paper</u></a></li> </ul>
March	<ul style="list-style-type: none"> <li>• <a href="#"><u>Central Counterparty Financial Resources for Recovery and Resolution</u></a></li> <li>• <a href="#"><u>FinTech and Market Structure in the COVID-19 Pandemic: Implications for financial stability</u></a></li> <li>• <a href="#"><u>FSB Work Programme for 2022</u></a></li> </ul>
April	<ul style="list-style-type: none"> <li>• <a href="#"><u>FSB Statement Welcoming Smooth Transition Away from LIBOR</u></a></li> <li>• <a href="#"><u>US Dollar Funding and Emerging Market Economy Vulnerabilities</u></a></li> <li>• <a href="#"><u>Supervisory and Regulatory Approaches to Climate-related Risks: Interim Report</u></a></li> </ul>
May	<ul style="list-style-type: none"> <li>• <a href="#"><u>Thematic Review on Out-of-Court Corporate Debt Workouts</u></a></li> </ul>
June	<ul style="list-style-type: none"> <li>• <a href="#"><u>G20 Data Gaps Initiative (DGI-2): Progress Achieved, Lessons Learned, and the Way Forward</u></a></li> </ul>
July	<ul style="list-style-type: none"> <li>• <a href="#"><u>Developing the Implementation Approach for the Cross-Border Payments Targets</u></a></li> <li>• <a href="#"><u>Options to Improve Adoption of The LEI, in Particular for Use in Cross-border Payments</u></a></li> <li>• <a href="#"><u>FSB Statement on International Regulation and Supervision of Crypto-asset Activities</u></a></li> <li>• <a href="#"><u>Exit Strategies to Support Equitable Recovery and Address Effects from COVID-19 Scarring in the Financial Sector</u></a></li> <li>• <a href="#"><u>FSB Roadmap for Addressing Financial Risks from Climate Change: 2022 progress report</u></a></li> </ul>

Month	Report
October	<ul style="list-style-type: none"> <li>• <u><i>G20 Roadmap for Enhancing Cross-border Payments: Priorities for the next phase of work</i></u></li> <li>• <u><i>G20 Roadmap for Enhancing Cross-border Payments: Consolidated progress report for 2022</i></u></li> <li>• <u><i>Review of the FSB High-level Recommendations of the Regulation, Supervision and Oversight of “Global Stablecoin” Arrangements: Consultative report</i></u></li> <li>• <u><i>Regulation, Supervision and Oversight of Crypto-Asset Activities and Markets: Consultative report</i></u></li> <li>• <u><i>International Regulation of Crypto-asset Activities: A proposed framework – questions for consultation</i></u></li> <li>• <u><i>Supervisory and Regulatory Approaches to Climate-related Risks: Final report</i></u></li> <li>• <u><i>Progress Report on Climate-Related Disclosures</i></u></li> <li>• <u><i>Achieving Greater Convergence in Cyber Incident Reporting: Consultative document</i></u></li> <li>• <u><i>Liquidity in Core Government Bond Markets</i></u></li> </ul>
November	<ul style="list-style-type: none"> <li>• <u><i>OTC Derivatives Market Reforms: Implementation progress in 2022</i></u></li> <li>• <u><i>Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report</i></u></li> <li>• <u><i>Financial Policies in the Wake of COVID-19: Supporting Equitable Recovery and Addressing Effects from Scarring in the Financial Sector: Final report</i></u></li> <li>• <u><i>Climate Scenario Analysis by Jurisdictions: Initial findings and lessons (Joint report with NGFS)</i></u></li> <li>• <u><i>Developing the Implementation Approach for the Cross-Border Payments Targets: Final Report</i></u></li> </ul>

## 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 2022. 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).

Reform Area	BASEL III <sup>A</sup>					COMPENSATION	OVER-THE-COUNTER (OTC) DERIVATIVES				RESOLUTION					NON-BANK FINANCIAL INTERMEDIATION		
	Risk-based capital	Requirements for SIBs	Large exposures framework	Leverage	Net Stable Funding Ratio (NSFR)		Trade reporting	Central clearing	Platform trading	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	Money market funds (MMFs)	Securitisation	Securities financing transactions (SFT)
Phase-in (completed) date	2023	2016 (2019)	2019	2023	2018		end-2012	end-2012	end-2012	2016 (2022)	2019/2025 (2022/2028)						2017/2023	
Argentina			C		C	B, I										**		
Australia	&		C	&	C										*			
Brazil			C		C											**		
Canada	&		C		C													
China		C	C		C		R, F											
France		C	LC	&	LC													
Germany		C	LC	&	LC													
Hong Kong			C		C	B, I												
India			C		C													
Indonesia	&		C		C										**			
Italy		C	LC	&	LC													
Japan	&	C	LC	&	C	B, I												
Korea	&																	
Mexico															**	*		
Netherlands		C	LC	&	LC													
Russia <sup>1</sup>															**			
Saudi Arabia	&		C	&	C	B	R					#	#	#				
Singapore			C		C													
South Africa																		
Spain		C	LC	&	LC													
Switzerland		C														***		
Türkiye															**			
United Kingdom		C		#														
United States		C, &				B, I												

## Legend

	<p><b>Basel III:</b> 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.</p> <p><b>OTC derivatives:</b> Legislative framework in force and standards/criteria/requirements (as applicable) in force for over 90% of relevant transactions.</p> <p><b>Resolution:</b> 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. Both recovery and resolution planning processes are in place for systemic banks. For CCPs that are systemically important in more than one jurisdiction (SI&gt;1) resolution planning, crisis management group (CMG) established, cross-border cooperation agreement (CoAG) signed, resolution planning commenced and resolvability assessment commenced.</p> <p><b>Compensation:</b> All or almost all (all but 3 or less) FSB Principles and their <u>Implementation Standards for Sound Compensation Practices</u> (Principles and Standards) implemented for significant banks, insurers and asset managers (as applicable in the jurisdiction – see below).</p> <p><b>Non-bank financial intermediation (NBFI):</b> 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 minimum standards for cash collateral re-investment, regulations on re-hypothecation of client assets, minimum regulatory standards for collateral valuation and management (all due January 2017) and numerical haircut floors on bank-to-non-bank transactions (due January 2023).</p>
	<p><b>Basel III:</b> 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).</p> <p><b>OTC derivatives:</b> Regulatory framework being implemented.</p> <p><b>Resolution:</b> 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 SI&gt;1 CCP resolution planning, CMG established and resolution planning commenced but CoAG not signed or resolvability assessment not commenced.</p> <p><b>Compensation:</b> FSB Principles and Standards implemented for some but not all of the applicable banking, insurance and asset management sectors.</p> <p><b>NBFI:</b> 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.</p>
	<p><b>Basel III:</b> Draft regulation not published.</p> <p><b>Resolution:</b> Draft rule for external TLAC requirement for G-SIBs not published. For the powers columns, none of the three 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.</p> <p><b>NBFI:</b> MMFs – Draft implementation measures not published for valuation, liquidity management and (where applicable) stable NAV. Securitisation – Draft adoption measures not published for implementing an incentive alignment regime and disclosing requirements. SFT: Implementation not complete for any of the four areas described above.</p>
	<p><b>Resolution:</b> 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.</p>
<b>C / LC / MNC / NC</b>	<p><b>Basel III:</b> 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 SIB requirements relates only to the G-SIB requirements.</p>
<b>^</b>	<p><b>Basel III:</b> 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.</p>
<b>&amp;</b>	<p><b>Basel III:</b> For risk-based capital and leverage columns, final rules adopted and will come into effect 1 January 2023 or (for Japan) 31 March 2023. 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 <u>US RCAP assessment</u> (June 2016).</p>
<b>B / I / A</b>	<p><b>Compensation:</b> FSB Principles and Standards deemed applicable by the jurisdiction for certain sectors only: banks (B), insurers (I), and/or asset managers (A).</p>
<b>R / F</b>	<p><b>OTC derivatives:</b> Further action required to remove barriers to full trade reporting (R) or to access trade repository data by foreign authority (F). See the FSB report on <u>Trade reporting legal barriers: Follow-up of 2015 peer review recommendations</u> (November 2018). Mexico issued a regulation in 2020 to allow the direct sharing of Mexican TR data with foreign TRs.</p>
<b>#</b>	<p><b>Basel III:</b> A few provisions relating to the credit conversion factor will be implemented by the UK in 2025 along with other finalised Basel III reforms.</p> <p><b>Resolution:</b> Saudi Arabia issued a resolution law, which came into force in 2021 and will be followed by detailed rules and regulations to complete implementation.</p>
<b>* / ** / ***</b>	<p><b>NBFI:</b> 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 <u>2019 update</u> was undertaken by IOSCO using the assessment methodology in its 2015 peer reviews in these areas.</p>
<b>1</b>	<p><b>Russia:</b> The status of implementation in Russia has not been updated and reflects progress only as of end-September 2021.</p>

## 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 2021 (left-hand cell) to September 2022 (right-hand cell). This table excludes those reforms that were not included in Annex 2 from the 2021 FSB Annual Report.

Reform area / Jurisdiction	Basel III	OTC derivatives	Resolution	Non-bank financial intermediation+
Australia	Risk-based capital			
Canada	Risk-based capital, Leverage			
China	Leverage			
	SIB requirements			
France	Risk-based capital			
Germany	Risk-based capital			
Hong Kong	Risk-based capital			
India	NSFR			
Indonesia	Risk-based capital		Recovery and resolution planning for SIBs	
Italy	Risk-based capital			
Japan	NSFR, Risk-based capital			
	Leverage			
Korea			Transfer/bridge/run-off power for insurers	
Mexico	NSFR			
Netherlands	Risk-based capital			
Saudi Arabia	Risk-based capital			
	Leverage			
South Africa	Large exposures			
	Risk-based capital, Leverage			
Spain	Risk-based capital			
Switzerland	Risk-based capital			
United Kingdom	Large exposures, Leverage, NSFR			
United States	Leverage			

+ The 2022 update on MMFs and securitisation was undertaken by IOSCO using the assessment methodology in its 2015 peer review reports in these areas.

## Abbreviations

AUM	Assets under management
BB	Building block (cross-border payments roadmap)
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
CCPs	Central counterparties
CCyB	Countercyclical capital buffer (BCBS)
CMGs	Crisis management groups
CPMI	Committee on Payments and Market Infrastructures
DGI	Data Gaps Initiative
D-SIBs	Domestic systemically important banks
ECL	Expected credit loss
EMEs	Emerging market economies
ETFs	Exchange-traded funds
EU	European Union
FinTech	Financial Technology
FIRE	Format for incident reporting exchange
FMI	Financial market infrastructure
FSB	Financial Stability Board
G-SIBs	Global systemically important banks
GFC	Global financial crisis
GSC	“Global stablecoin”
IAIS	International Association of Insurance Supervisors
ICS	Insurance Capital Standard (IAIS)
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
ISSB	International Sustainability Standards Board
LCR	Liquidity Coverage Ratio (Basel III)
MMFs	Money market funds
NAV	Net asset value
NBFI	Non-bank financial intermediation
NCCDs	Non-centrally cleared derivatives
NDL	Non-default loss
NGFS	Network for Greening the Financial System
NSFR	Net Stable Funding Ratio (Basel III)
OEF	Open ended fund
OTC	Over-the-counter (derivatives)
PFMI	Principles for Financial Market Infrastructures (CPMI-IOSCO)
RCAP	Regulatory Consistency Assessment Programme (BCBS)
SFTs	Securities financing transactions
SIBs	Systemically important banks
SSBs	Standard-setting bodies
TLAC	Total Loss-Absorbing Capacity (FSB)
TRs	Trade repositories
USD	United States dollar