

# Enhancing the Resilience of Non-Bank Financial Intermediation

Progress report

22 July 2024



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# Table of Contents

Executive summary .....	1
1. Introduction .....	3
2. Policies to address systemic risk in NBFIs .....	5
2.1. Policy deliverables to date .....	5
2.2. Resilience of money market funds and short-term funding markets.....	9
2.3. Liquidity risk and its management in open-ended funds.....	13
2.4. Margining practices.....	14
2.5. Non-bank leverage .....	17
2.6. Other NBFIs vulnerabilities.....	18
3. Way forward.....	19



## Executive summary

Conjunctural and structural developments in the global financial system over the past decade have increased the reliance on market-based intermediation. Non-bank financial intermediation (NBFi) has grown to almost half of global financial assets and become more diverse. As a result, the importance of NBFi for the financing of the real economy has increased. However, the experience of the 2008 global financial crisis, the March 2020 market turmoil and more recent episodes of market stress demonstrated that NBFi can also create or amplify systemic risk.

Drawing on the lessons from these events, the FSB developed a work programme to enhance the resilience of the NBFi sector. This is intended to ensure a more stable provision of financing to the economy and reduce the need for extraordinary central bank interventions. In particular, the aim of policies by the FSB and standard-setting bodies (SSBs) has been to reduce excessive spikes in the demand for liquidity; enhance the resilience of liquidity supply in stress; and enhance risk monitoring and the preparedness of authorities and market participants. To date, these policies have involved largely repurposing existing policy tools rather than creating new ones, given the extensive micro-prudential and investor protection toolkit already available.

A number of policy deliverables have already been agreed under the FSB's work programme, including to enhance money market fund resilience (2021) and to address liquidity mismatch in open-ended funds (2023). Policies have also been proposed by the FSB and SSBs in early 2024 to enhance margining practices and the liquidity preparedness of non-bank market participants for margin and collateral calls. A key area of current policy focus is to enhance the monitoring of, and address financial stability risks from, leverage in NBFi. To this end, the FSB expects to publish by the end of 2024 a consultation report with proposed policy approaches for authorities.

The design and implementation of NBFi policies continues to advance, albeit at an uneven pace across jurisdictions. Progress is hampered by a number of challenges, including the heterogeneity of the sector; the diversity of institutional frameworks and market practices across jurisdictions; and common data challenges that impede a full assessment of NBFi vulnerabilities and the formulation of effective policy responses. The global financial system remains vulnerable to further liquidity strains, as many of the underlying vulnerabilities and key amplifiers of stress in the NBFi sector during recent market incidents are still largely in place. It is therefore critical to finalise and implement international reforms to enhance NBFi resilience, so that market participants internalise fully their own liquidity risk – rather than rely on extraordinary central bank and other official sector interventions – and authorities are better prepared for stress events.

The report concludes by outlining further work to assess and address systemic risk in NBFi that the FSB, in collaboration with the SSBs, will carry out. The work is structured in three main areas: in-depth assessment and ongoing monitoring of vulnerabilities in NBFi; the development of policies to enhance NBFi resilience; and the monitoring of the implementation and assessment of the effects of NBFi reforms. This work will help the FSB determine whether collectively the reforms have sufficiently addressed systemic risk in NBFi, including whether to develop additional tools for use by authorities.

Table 1 below provides an overview of the FSB's medium-term NBFi work programme. As key elements of that programme are nearing completion, the FSB and SSBs will initiate discussions later this year about potential future work in this area.

**Table 1: Planned deliverables under the FSB’s medium-term NBFi Work Programme**

<b>Topic</b>	<b>Deliverable</b>	<b>Timing</b>
Resilience of money market funds (MMFs) and short-term funding markets	FSB, working with IOSCO, to assess the effectiveness of MMF reforms in addressing risks to financial stability	End-2026
	IOSCO to revisit its <i>Policy Recommendations for MMFs</i> in light of the framework and policy toolkit in FSB report	TBD
	FSB to analyse the functioning and resilience of repo markets, including interlinkages with core bond markets	2025
Liquidity risk and its management in open-ended funds (OEFs)	IOSCO to operationalise revised FSB Recommendations through amendments to the 2018 IOSCO Recommendations and supporting good practices	TBD
	FSB, in consultation with IOSCO, to complete work on seeking to close identified data gaps for monitoring financial stability risks relating to OEF liquidity mismatch and the use of LMTs	End-2024
	FSB and IOSCO to take stock of the OEF policy measures adopted by FSB member jurisdictions and assess the effectiveness of their respective revised Recommendations in addressing risk to financial stability	End-2026 and 2028 respectively
Margining practices	FSB to issue policy recommendations on liquidity preparedness of market participants for margin and collateral calls, and to work on data gaps in regulatory reporting	End-2024
	BCBS-CPMI-IOSCO to complete policy work on transparency in centrally cleared markets; variation margin processes; and the responsiveness of initial margin models to market stresses in centrally and non-centrally cleared markets (followed by further standard-setting work as appropriate)	End-2024
Non-bank leverage	FSB and SSBs to work on policies to enhance the monitoring of, and address financial stability risks from, leverage in NBFi	2024-25
Bond market liquidity	FSB and IOSCO to consider follow-up work in due course to enhance the functioning and resilience of core bond markets	TBD
Advancing the understanding and monitoring of systemic risk in NBFi	FSB to continue to assess vulnerabilities in specific NBFi segments and report on implementation of G20 NBFi reforms	2024 and beyond
	FSB to continue to enhance its Global Monitoring Report on NBFi reflecting the findings from NBFi work	2024 and beyond
Developing policies to address systemic risk in NBFi	FSB to publish report with main findings of NBFi initiatives and any further policy proposals to address systemic risk in NBFi	2025
	FSB to discuss experiences and lessons of member work on the design and use of tools to address systemic risk in NBFi	Ongoing
	FSB to work with SSBs to assess, in due course, whether agreed and implemented reforms have sufficiently addressed systemic risk in NBFi, including whether additional policy tools are required	TBD

# 1. Introduction

The experience of the 2008 global financial crisis (GFC), the March 2020 market turmoil and more recent episodes of market stress demonstrated that NBFIs can create or amplify systemic risk and underscored the need to take policy measures to enhance the sector's resilience. The FSB is working with SSBs across a broad range of areas to assess and address vulnerabilities in NBFIs that can give rise to systemic risk.

The FSB first developed a framework and policy toolkit in 2013 for strengthening the oversight and regulation of non-bank entities. The framework, which was endorsed by the G20, identifies areas in which policies are needed to mitigate the potential systemic risks associated with NBFIs.<sup>1</sup> Implementation of these reforms is advancing, but is at an earlier stage than other reforms.<sup>2</sup>

Many of the activities and structures considered to have made the financial system more vulnerable and that contributed to the GFC have declined significantly.<sup>3</sup> However, NBFIs developments since then mean that new types of activities and risks have emerged. In particular, changes in the global financial system have increased reliance on market-based intermediation. NBFIs have grown to almost half of global financial assets and have become more diverse (Graph 1). As a result, the importance of NBFIs for the financing of the real economy has increased.<sup>4</sup> Underlying drivers for this growth include long-term demographic trends leading to asset accumulation; macro-financial factors, such as fiscal and monetary policies; rising valuations; and post-GFC reforms, which have increased the relative cost of bank-based finance.

The FSB's Holistic Review of the March 2020 market turmoil provided the starting point for the current, second set of NBFIs reforms at the international level. The breadth and dynamics of the economic shock and related liquidity stress during that event were unprecedented. Key funding markets experienced acute stress and public authorities needed to take a wide range of measures to restore market functioning and to support the supply of credit to the real economy.<sup>5</sup> The exceptional measures taken to restore market confidence and functioning have meant that public authorities had to take on material financial risk, and prompted concerns that they could lead to moral hazard issues in the future. The changed macroeconomic environment since then and additional market events – such as the failure of Archegos Capital Management in March 2021, the 2022 turmoil in certain commodities markets, and the September 2022 stress in the UK government bond market driven by liability-driven investment (LDI) funds – have further highlighted issues associated with market activities and mechanisms that can cause systemic liquidity imbalances and propagate stress.

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<sup>1</sup> See FSB (2013), *Overview of Policy recommendations for Shadow Banking*, August. These policies seek to: mitigate spillovers between banks and the NBFIs sector; reduce the susceptibility of MMFs to runs; align incentives associated with securitisation; dampen financial stability risks and pro-cyclical incentives associated with securities financing transactions (SFTs); and mitigate systemic risks posed by other non-bank entities and activities. The policy framework for other non-bank entities and activities was expanded in 2017 with the FSB recommendations to address structural vulnerabilities in asset management, followed in 2018 by the IOSCO recommendations on liquidity risk management for OEFs.

<sup>2</sup> See FSB (2023), *Implementation of G20 Non-Bank Financial Intermediation Reforms: Progress report*, January.

<sup>3</sup> These include, for example, ABCP conduits, SIVs, subprime RMBS, CDOs. See FSB (2017), *Assessment of shadow banking activities: risks and the adequacy of post-crisis policy tools to address financial stability concerns*, July.

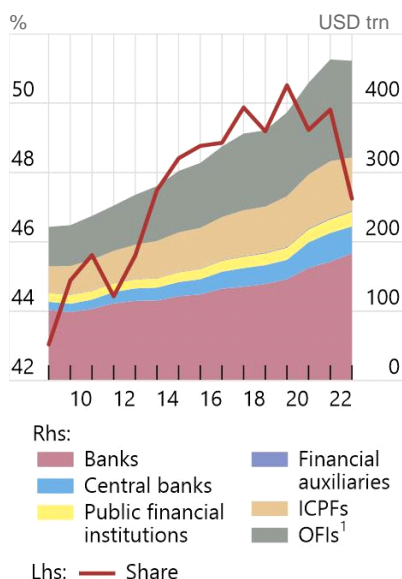
<sup>4</sup> See FSB (2023), *Global monitoring report on non-bank financial intermediation 2023*, December.

<sup>5</sup> See FSB (2020), *Holistic Review of the March Market Turmoil*, November.

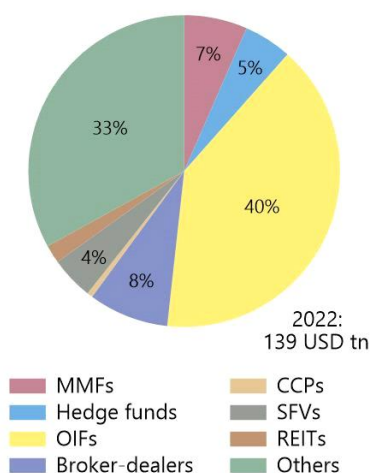
## The NBFi sector has grown and evolved considerably in recent years

Graph 1

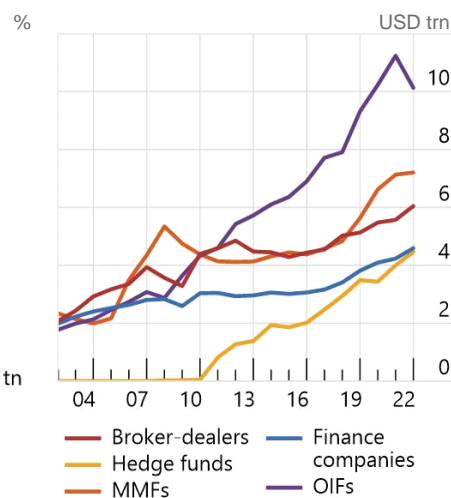
NBFi asset's rising share in total financial assets



Share of OFI's major subsectors to total OFI assets



Credit assets held by selected OFI sub-sectors<sup>2</sup>



CCPs = central counterparties; ICPFs = insurance corporations and pension funds; MMFs = money market funds; OFIs = other financial intermediaries; OIFs = investment funds other than MMFs and hedge funds; REITs = real estate investment trusts and real estate funds; SFVs = structured finance vehicles. Data used in the charts above covers 21 jurisdictions and euro area.

<sup>1</sup> OFIs (other financial intermediaries) is a subset of the NBFi sector, comprising all financial institutions that are not central banks, banks, public financial institutions, insurance corporations, pension funds, or financial auxiliaries. OFIs include, for example, investment funds, captive financial institutions, and money lenders (CFIMLs), central counterparties (CCPs), broker-dealers, finance companies, trust companies and structured finance vehicles. <sup>2</sup> Increases of aggregated data may also reflect improvements in the availability of data over time at a jurisdictional level.

Sources: FSB (2023), *Global Monitoring Report on Non-Bank Financial Intermediation 2023*; FSB calculations.

With the overall growth of debt markets and NBFi, funding and market liquidity have become more central to financial resilience. Drawing on the experience of recent market stress events, the FSB developed a framework for assessing NBFi vulnerabilities that identifies certain activities and types of entities (so-called 'key amplifiers') as key for resilience (see Box 1).<sup>6</sup>

### Box 1: Framework for enhancing NBFi resilience

The functioning and resilience of the NBFi ecosystem depends on the availability of liquidity and its effective intermediation in stress. If liquidity imbalances become sufficiently large and pervasive, they may give rise to financial instability. These imbalances can be the result of the interaction of large and unexpected shifts in liquidity demand (going well beyond the normal fluctuations that are part of price formation and portfolio management), insufficient supply of liquidity in stress and various amplification mechanisms. These interactions can give rise to asset fire sales and transmission of stress to other parts of the financial system and the economy.

Certain activities and types of entities (key amplifiers) may particularly contribute to aggregate liquidity imbalances and transmission and amplification of shocks due to their size, structural characteristics and behaviour in stress. On the liquidity demand side, this includes activities that could give rise to liquidity mismatches, which are particularly prevalent in some types of non-bank entities, such as certain MMFs and OEFs. Other factors that can contribute to liquidity demand in stress include unexpectedly large

<sup>6</sup> See FSB (2021), *Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report*, November; FSB (2022), *Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report*, November; and FSB (2023), *Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report*, September.



margin calls for derivatives and securities trades; external funding and currency mismatches (e.g. considering global use of the US dollar as a borrowing and investment currency); and excessive build-up of leverage. Leverage, in particular, is an important amplifier of stress as it can lead to systemic disruption through the position liquidation channel (e.g. sudden unwinding of positions in response to margin calls) and the counterparty risk channel (e.g. counterparty default due to its leveraged positions). On the liquidity supply side, key amplifiers include factors that reduce the ability of bank and non-bank liquidity providers to absorb large spikes in liquidity demand; and the structure of core wholesale funding markets, which is characterised by limited standardisation, low levels of automated trading and turnover, and heavy reliance on dealer intermediation.

Recent market incidents have confirmed that many of the key amplifiers work in tandem – both on the liquidity demand and supply sides – to transmit and amplify the shock across the financial system. For example, the significant spike in demand for liquidity during the March 2020 market turmoil – especially by non-banks to raise cash to meet investor redemptions (such as certain OEFs and MMFs) and unwind leveraged positions (such as hedge funds) – exceeded the ability of dealers to intermediate and created dislocation across various markets. The sharp increase and extreme volatility in key commodities prices in 2022 led to higher margin calls in centrally cleared derivatives markets in Europe, which contributed to a migration of activity to largely non-centrally cleared OTC markets as well as to reduced hedging of commodities prices. Deleveraging by LDI funds (in part due to poor preparedness to meet margin/collateral calls) and the insufficient supply of market liquidity added further pressure on UK gilt prices in September 2022 and led to additional margin/collateral calls as well as to large outflows by some MMFs used by those funds. Given the interconnectedness between and potential spillovers across market segments and participants, including between NBFIs and the banking sector, it is critical to ensure that the various policies fit together from a system-wide perspective.

Using this framework and building on the lessons from the March 2020 market turmoil, the FSB developed an NBFI work programme to examine and, where appropriate, address specific issues that contributed to the amplification of the shock; to enhance understanding and strengthen the monitoring of systemic risk in NBFIs; and to assess policies to address systemic risk in NBFIs. Enhancing NBFI resilience is intended to ensure a more stable provision of financing to the economy and reduce the need for extraordinary central bank interventions. Efforts to strengthen NBFI resilience should not compromise the resilience in other parts of the system or the important role that NBFIs play in financing the real economy.

This year's report describes recent and ongoing work by the FSB, in collaboration with the SSBs, to address systemic risk in NBFIs. Section 2 presents the main findings of the work over the past year to assess and address vulnerabilities in particular NBFI entities and activities that may give rise to systemic risk, while section 3 describes the way forward.

## 2. Policies to address systemic risk in NBFIs

### 2.1. Policy deliverables to date

The aim of policies by the FSB and SSBs to address systemic risk in NBFIs is 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 (see Box 2). These policies include revising or adding to existing international standards by the FSB and SSBs or providing further guidance as needed; identifying other potentially useful policy options that individual authorities may wish to consider based on their particular market structure and context; and carrying out

additional analytical work to assess and, as appropriate, address issues identified in the NBF work to date. Any changes to international standards or guidance will involve close coordination with relevant SSBs and outreach with stakeholders, including through public consultation.

### Box 2: Policy objectives and approach of NBF work programme

The main focus of the FSB policy work to enhance NBF resilience is to reduce excessive spikes in the demand for liquidity. To date, the policy proposals to address systemic risk in NBF have involved largely repurposing existing policy tools (e.g. on liquidity management and margining) rather than creating new ones, given the extensive micro-prudential and investor protection toolkit already available.

Policies to enhance resilience of liquidity provision in stress are also very important, though they are more difficult to implement as they require longer-term structural changes and tend to be country-specific. In addition, some of the policies aiming to reduce excessive spikes in the demand for liquidity may support the provision of liquidity during stress periods, for example, by reducing procyclical behaviour of certain NBF liquidity providers.

Measures to enhance the risk monitoring and preparedness of authorities and market participants include addressing identified key data gaps, enhancing transparency and information sharing, and developing additional risk metrics and analytical tools for monitoring.

Experience with the use of policy tools to address systemic risk in NBF is limited to date. To this end, the FSB will discuss experiences and lessons of work by its member authorities on the design and use of tools – micro-prudential, investor protection and macroprudential – for this purpose. The FSB will also, working with the SSBs, assess in due course whether the implemented reforms have sufficiently addressed systemic risk in NBF, including whether to develop additional tools for use by authorities.

Key policy deliverables of the NBF work programme to date include (see Table 2 and below):

- **Liquidity demand** – FSB policy proposals in 2021 to enhance the resilience of MMFs; revised FSB policy recommendations in 2023 to address liquidity mismatch in OEFs (complemented by IOSCO guidance on anti-dilution liquidity management tools); and proposed policies in 2024 by the BCBS-CPMI-IOSCO to enhance margining practices and by the FSB to enhance the liquidity preparedness of non-bank market participants for margin and collateral calls. A key area of current focus is to enhance the monitoring of, and address financial stability risks from, leverage in NBF.
- **Liquidity supply** – FSB reports have identified certain reforms that individual authorities may wish to explore for their domestic government bond markets (2022), complemented by similar work by IOSCO on corporate bond markets; to address vulnerabilities in emerging market economies stemming from reliance on USD funding (2022); and to enhance the functioning and potentially the resilience of CP and CD markets (2024).
- **Risk monitoring and preparedness** – The FSB, in collaboration with SSBs, is developing additional metrics and new analytical tools to monitor NBF vulnerabilities on an ongoing basis. The FSB has also assessed vulnerabilities in specific NBF segments through targeted deep dives, e.g. on liquidity mismatch in OEFs (2021), commodities markets (2022), government bond markets (2022), and CP and CD markets (2024).

The NBF work programme deliverables interact with and seek to reinforce each other, reflecting the need for a system-wide approach. Better monitoring of NBF vulnerabilities should enhance

the authorities' ability to identify and address potential financial stability concerns at an early stage, including any spillovers to other parts of the financial system. Policies to reduce excessive spikes in the demand for liquidity aim to address the vulnerabilities that drive those spikes (e.g. by reducing liquidity mismatch or the build-up of leverage) or mitigate their financial stability impact (e.g. by enhancing the liquidity preparedness of market participants to meet margin calls). These are complemented by policies to enhance resilience of liquidity provision in stress that, while typically jurisdiction-specific and longer-term in nature, can enhance the ability of bank and non-bank liquidity providers to absorb spikes in liquidity demand during times of stress.

The remainder of this section presents the main findings of recent (i.e. since the September 2023 NBF1 progress report) and ongoing work to assess and address vulnerabilities in particular entities and activities that may contribute to systemic risk in NBF1.

**Table 2: Deliverables completed by mid-2024 under the FSB's NBFi Work Programme**

<b>Topic</b>	<b>Brief description</b>	<b>Timing</b>
Resilience of money market funds (MMFs) and short-term funding markets	To make policy proposals, in light of the March 2020 experience, to enhance MMF resilience	FSB MMFs report (Oct 2021)
	To take stock of the MMF policy measures adopted by FSB member jurisdictions	FSB peer review report (Feb 2024)
	To assess functioning and resilience of commercial paper and negotiable certificates of deposit markets	FSB report (May 2024)
Liquidity risk and its management in open-ended funds (OEFs)	FSB, in consultation with IOSCO, to revise the 2017 FSB Recommendations on liquidity mismatch in OEFs	FSB report (Dec 2023)
	IOSCO, in consultation with the FSB, to develop guidance on liquidity management tools to complement the revised FSB Recommendations	IOSCO report (Dec 2023)
	FSB and IOSCO to organise workshop on experiences by authorities on stress tests for OEFs	July 2024
Margining practices	To examine frameworks and dynamics of margin calls in centrally and non-centrally cleared derivatives markets and the liquidity management preparedness of market participants to meet margin calls	BCBS-CPMI-IOSCO analytical reports (Sep 2022 and May 2023) and consultation report (Jan 2024), BCBS-IOSCO consultation report (Jan 24), CPMI-IOSCO discussion paper (Feb 2024), FSB consultation report (Apr 2024)
Liquidity, structure and resilience of core bond markets	To examine the structure and liquidity provision in core funding markets during stress, including the role of leveraged investors and factors that limit dealer capacity to intermediate	IOSCO corporate bond markets report (Apr 2022), BIS Markets Committee paper (May 2022), FSB government bond markets report (Oct 2022)
Non-bank leverage	To assess the financial stability implications of NBFi leverage	FSB analytical report (Sep 2023)
Advancing the understanding and monitoring of systemic risk in NBFi	To assess NBFi risks in light of COVID-19 developments and lessons from the March turmoil	Annual FSB Global Monitoring Reports
	To deepen the analysis of structural and interconnectedness issues in NBFi, including the interaction of USD funding pressures and fund outflows in emerging market economies, as input into enhanced risk monitoring and discussions on policies to address systemic risks in NBFi	FSB USD funding report (Apr 2022) FSB NBFi progress reports (Nov 2021 and 2022, Sep 2023, Jul 2024)
Developing policies to address systemic risk in NBFi	To examine policies to address systemic risks in NBFi, including the adequacy of current policy tools and the concept and desired level of resilience in NBFi	FSB NBFi progress reports (Nov 2022 and Sep 2023, Jul 2024)

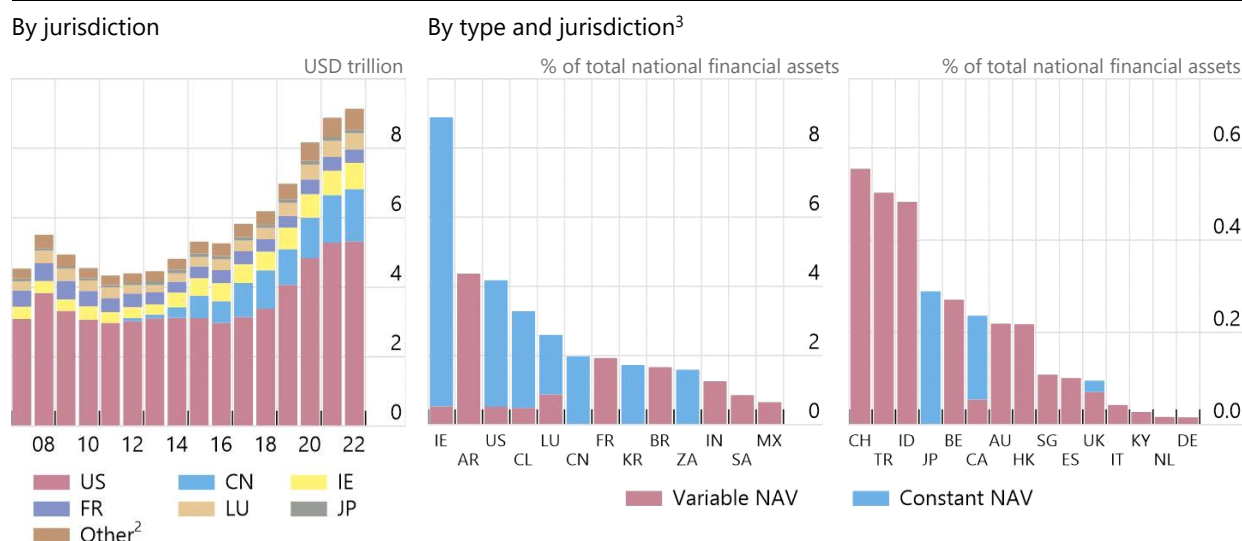
## 2.2. Resilience of money market funds and short-term funding markets

MMFs are important providers of short-term financing and are used by investors to invest excess cash and manage their liquidity (see Graph 2). The FSB published in 2021 a report on policy proposals to enhance MMF resilience (2021 FSB Report), with policy options to address MMF vulnerabilities by imposing on redeeming investors the cost of their redemptions; enhancing the ability to absorb credit losses; addressing regulatory thresholds that may give rise to cliff effects; and reducing liquidity transformation.<sup>7</sup>

### MMF assets are concentrated globally in a few jurisdictions

29-Group, end-2022<sup>1</sup>

Graph 2



NAV = Net Asset Value. <sup>1</sup> AR, AU, BE, BR, CA, CH, CL, CN, DE, ES, FR, HK, ID, IE, IN, IT, JP, KR, KY, LU, MX, NL, RU (up until 2020), SA, SG, TR, UK, US and ZA. <sup>2</sup> Other jurisdictions in 29-Group not displayed separately. <sup>3</sup> The bar for Ireland's constant net asset value (8.4%) is not shown entirely because it is particularly high compared to the rest of the jurisdictions. Does not include data for Russia.

Source: FSB Global monitoring report on non-bank financial intermediation 2023.

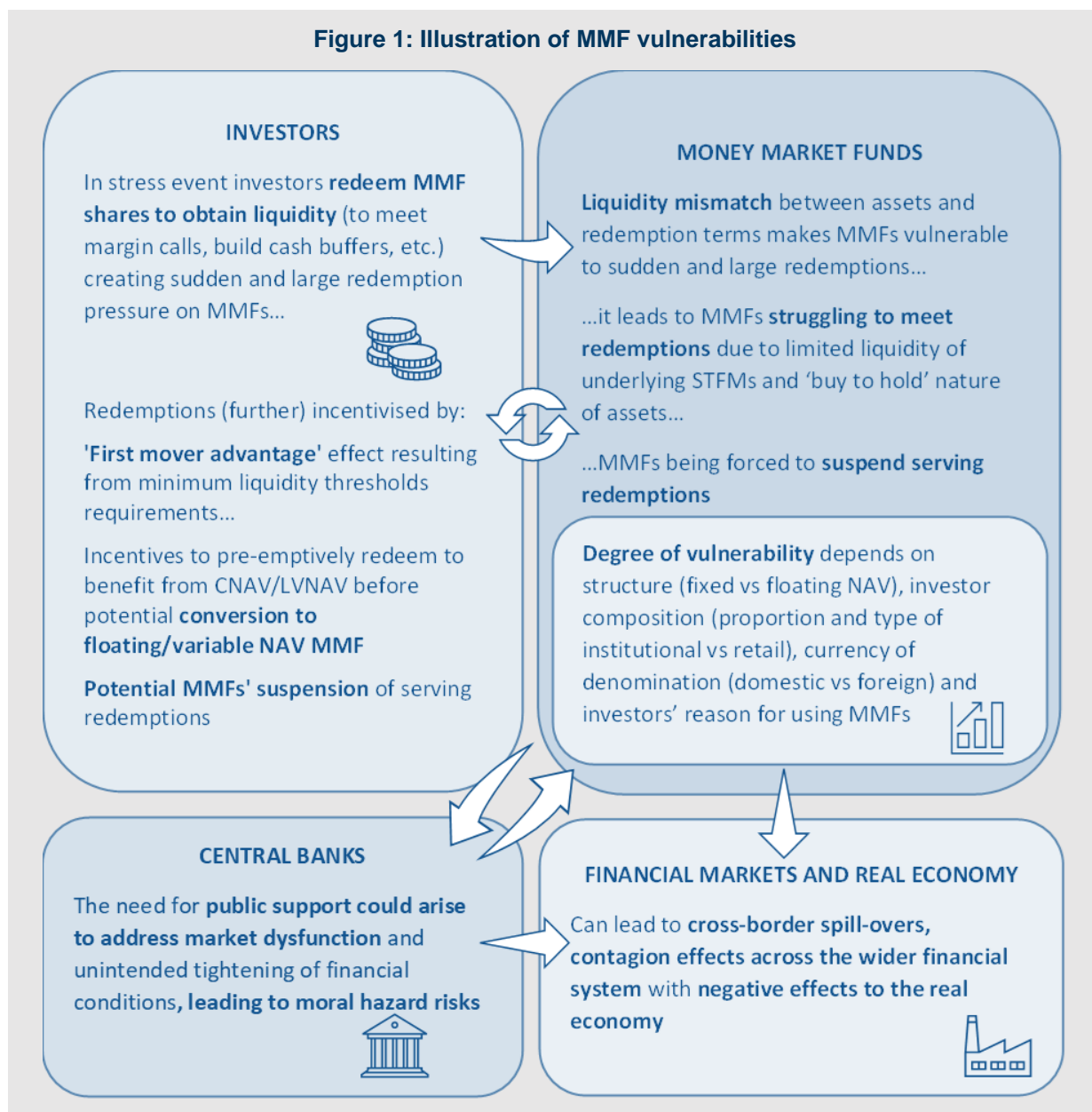
A recent FSB peer review took stock of the measures adopted or planned by FSB member jurisdictions in response to the 2021 FSB Report.<sup>8</sup> The main vulnerability identified in the review continues to be the mismatch between the liquidity of MMF asset holdings and the redemption terms offered to investors, which makes MMFs susceptible to runs from sudden and disruptive redemptions (see Figure 1).<sup>9</sup> This vulnerability can be amplified by the presence of a high share of institutional investors and a stable or low-volatility net asset value, and by rules that may give rise to threshold effects that provide incentives for investors to pre-emptively redeem their MMF holdings in times of stress. While MMFs in most jurisdictions exhibit a strong home bias in both their asset portfolios and investor bases, there are some cases of significant cross-border funding and investing flows – particularly in Europe – that can transmit vulnerabilities across borders and markets. These vulnerabilities are often difficult to assess given data gaps on MMF investors and on the issuers of the instruments in which the MMFs invest. The existence of these cross-border flows, as well as differences in availability or calibration of policy tools, creates the potential for regulatory arbitrage and cross-border spillovers, raising the need in such cases for

<sup>7</sup> See FSB (2021), *Policy Proposals to Enhance Money Market Fund Resilience*, October.

<sup>8</sup> See FSB (2024), *Thematic Review on Money Market Fund Reforms: Peer review report*, February.

<sup>9</sup> This is particularly the case for non-government bond MMFs that invest in riskier assets, such as corporate debt.

international cooperation in closing data gaps and implementing policy reforms to ensure resilience.



The report finds that progress in implementing the 2021 FSB policy proposals has been uneven across jurisdictions. Authorities in all jurisdictions report that they had implemented policies aimed at addressing MMF vulnerabilities prior to the 2021 FSB Report. Since then, some jurisdictions have introduced new policy tools or recalibrated existing ones (China, India, Indonesia, Japan, Korea, Switzerland, US), while others are still in the process of developing or finalising their reforms (EU, South Africa, UK). Given the vulnerabilities reported in individual jurisdictions, further progress on implementing the FSB policy toolkit would be needed to enhance MMF resilience and thereby limit the need for extraordinary central bank interventions during times of stress. In particular, the extent to which minimum liquidity requirements are

calibrated appropriately to address MMF vulnerabilities has not been examined but there is a significant variation between jurisdictions and MMF types.<sup>10</sup>

Based on these findings, the peer review report made three recommendations. First, FSB jurisdictions that have not yet done so should review their policy frameworks and adopt tools to address identified MMF vulnerabilities, taking into consideration the 2021 FSB policy proposals. Where relevant tools (such as minimum liquidity requirements) are already available, FSB jurisdictions should consider whether these need to be re-calibrated to ensure their effective use and to maintain a sufficient level of MMF resilience, including by taking account of experience with previous stress events, potential cross-border spillovers and regulatory arbitrage. Second, the FSB will take the findings of this peer review into account in its monitoring of the vulnerabilities and policy tools for MMFs. Finally, IOSCO should consider the review's findings when it revisits its 2012 Policy Recommendations for MMFs in light of the 2021 FSB Report.

The 2021 FSB Report had noted that policies aimed at enhancing the resilience of MMFs could be accompanied by measures that aim at improving the functioning of the underlying short-term funding markets, though it cautioned that such measures, while useful, might not change the limited incentives of market participants to trade or of dealers to intermedate, particularly during stress periods. The FSB, in consultation with IOSCO, followed up on those findings by analysing commercial paper (CP) and negotiable certificates of deposit (CD) markets in core funding jurisdictions (EU, Japan, UK, US), including by exploring potential market reforms to improve the functioning and potentially the resilience of these markets.<sup>11</sup>

The size, microstructure and legal framework of CP and CD markets vary significantly across jurisdictions (see Graph 3). The US market is the largest globally, while Europe has different market segments across issuer domicile and currency as well as two international markets – the London-based Euro Commercial Paper (ECP) and Paris-based Negotiable European Commercial Paper (NEU CP). The overall size of US and EU markets remains much smaller than its all-time high in 2007, while the Japanese market (where all issuance is JPY-denominated) has grown since 2007.

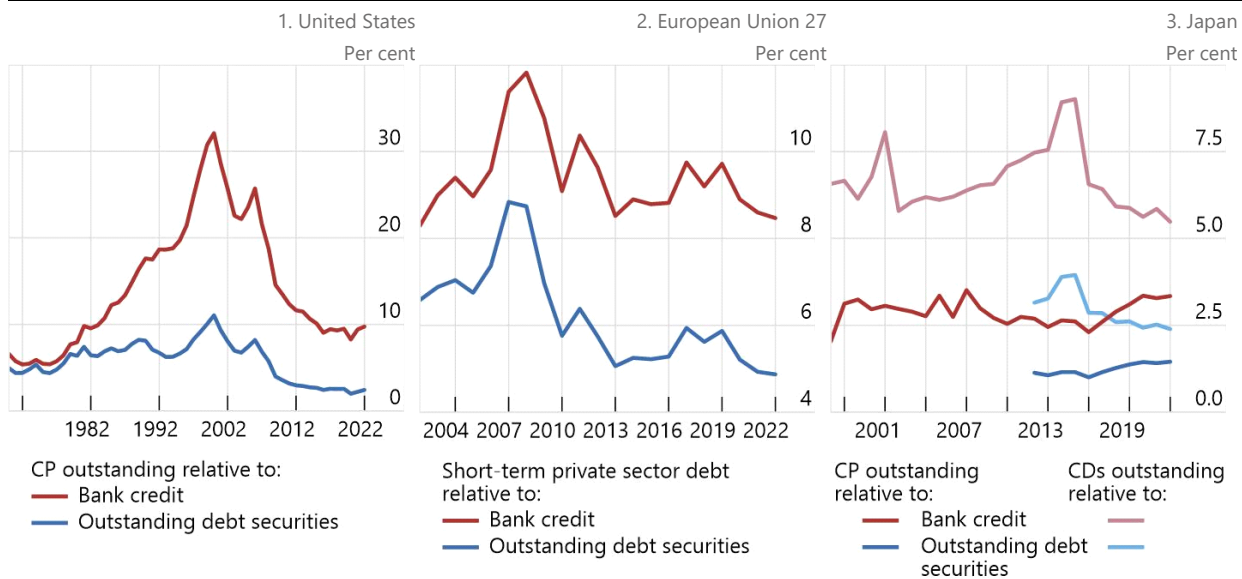
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<sup>10</sup> The review did not assess the effectiveness of policy measures in addressing risks to financial stability, as this will be the focus of separate follow-up work by the FSB in 2026.

<sup>11</sup> See FSB (2024), *Enhancing the Functioning and Resilience of Commercial Paper and Negotiable Certificates of Deposit Markets*, May.

## CP and CD as a proportion of bank credit and outstanding debt securities

Graph 3



Source: Bank of Japan, Federal Reserve's Financial Accounts of the United States; European Central Bank; Bloomberg; BIS

With regard to vulnerabilities, the analysis largely confirmed the findings of previous FSB work – namely, that these markets, although subject to inefficiencies, tend to generally function well in normal times but are susceptible to illiquidity in times of stress. The vulnerabilities in these markets pertain to the short-term nature of CP and CDs that results in a buy-and-hold market; concentration of investors and dealers; susceptibility of some key investors, such as MMFs, to large and sudden redemption requests in times of stress, thereby exacerbating liquidity demands; the opacity of these markets, which may exacerbate illiquidity due to information asymmetry and contribute to reliance on dealers; limited adoption of electronification and digitisation in these markets; and high interconnectedness of these markets with other funding markets, meaning that stress can be transmitted within the financial system and across borders.

Potential market reforms that can be considered by industry and public authorities are grouped into three areas, which may be interlinked:

- Improving market microstructure, e.g. through digitalisation, shorter settlement conventions and streamlined generation processes for transaction identification.
- Enhancing regulatory reporting and public disclosures, e.g. through increased regulatory reporting in areas such as amount outstanding per issuer, investor profiles on an aggregated basis, and post-trade information such as pricing.
- Expanding private repo markets for CP and CD collateral, to provide a channel for investors and intermediaries to generate liquidity.

The report notes that while such reforms may have a positive impact on CP and CD market functioning in normal times – particularly if used in combination and appropriately tailored to each jurisdiction – they would likely not, on their own, significantly enhance the resilience of these markets. The idiosyncratic nature of these markets means that not all potential reforms in the report may be appropriate or relevant for all jurisdictions. Jurisdictions should therefore consider the relative merits of these reforms for their own CP and CD markets, including how



they could complement other policies such as to address vulnerabilities in MMFs, while market participants need to manage their liquidity risk accordingly. Authorities should also consider whether and how they may be able to help catalyse or support industry initiatives to improve market functioning, particularly for primary CP and CD markets.

### 2.3. Liquidity risk and its management in open-ended funds

In December 2023, the FSB published revised policy recommendations to address liquidity mismatch in open-ended funds (OEFs),<sup>12</sup> complemented by new IOSCO guidance on anti-dilution liquidity management tools (LMTs) ('Guidance').<sup>13</sup> The Revised FSB Recommendations are addressed to financial regulatory and supervisory authorities and set out the key objectives that an effective regulatory and supervisory framework should achieve to address the vulnerabilities arising from liquidity mismatch in OEFs. The goal of these recommendations, combined with the new IOSCO guidance, is a significant strengthening of liquidity management by OEF managers compared to current practices.

Among the most substantive changes introduced by the Revised FSB Recommendations are:

- The Revised FSB Recommendation 3 provides greater clarity on the redemption terms that OEFs could offer to investors, based on the liquidity of their asset holdings. This would be achieved through a 'categorisation approach', where OEFs would be grouped depending on the liquidity of their assets. Authorities should set expectations for OEF managers to use a mixture of quantitative and qualitative factors when determining the liquidity of OEF assets in normal and stressed market conditions within the context of the domestic liquidity framework set out by authorities. OEFs in each category would then be subject to specific expectations in terms of their redemption terms and conditions. For funds that invest mainly in 'liquid' assets, daily dealing would remain appropriate. For funds that invest mainly in 'less liquid' assets, offering daily dealing to fund investors may remain appropriate provided that anti-dilution LMTs are implemented as specified in the Revised FSB Recommendation 5, as for these funds there is a greater likelihood of dilution. If anti-dilution LMTs are not implemented for such funds, OEF managers should consider and use measures to reduce the liquidity offered to fund investors (e.g. by reducing redemption frequency or by implementing long notice or settlement periods), as considered appropriate by authorities. Funds that allocate a significant proportion of their assets under management to 'illiquid' assets should create and redeem shares at lower frequency than daily and/or require long notice or settlement periods.
- Revised FSB Recommendation 5 seeks to achieve greater inclusion of anti-dilution LMTs in OEF constitutional documents and greater use of, and greater consistency in the use of, anti-dilution LMTs in both normal and stressed market conditions. The expectation is that anti-dilution LMTs would be increasingly used by funds that invest

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<sup>12</sup> See FSB (2023), *Revised Policy Recommendations to Address Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds*, December. These recommendations supersede the relevant part of the FSB's 2017 *Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities*.

<sup>13</sup> See IOSCO (2023), *Anti-dilution Liquidity Management Tools – Guidance for Effective Implementation of the Recommendations for Liquidity Risk Management for Collective Investment Schemes: Final Report*, December.

mainly in less liquid assets as part of their day-to-day liquidity management. An exception from the use of LMTs could be made if clearly justified, subject to the oversight of authorities in line with their supervisory approaches and the implementation of other effective liquidity risk management measures that meet the broader policy intent of reducing material structural liquidity mismatches.

In its Guidance, IOSCO specified that OEFs should consider and use appropriate anti-dilution LMTs to mitigate material investor dilution and potential first-mover advantage from structural liquidity mismatch. Anti-dilution LMTs should impose on subscribing and redeeming investors the estimated cost of liquidity, i.e. explicit and implicit transaction costs, including any significant market impact of asset purchases or sales. Independently of the anti-dilution LMT used, OEFs should be able to demonstrate to authorities (in line with the authorities' supervisory approaches) that the calibration of the tool is appropriate and prudent for both normal and stressed market conditions. In addition, OEFs should publish clear disclosures of the objectives and operation (including design and use) of anti-dilution LMTs to enable investors to better incorporate the cost of liquidity into their investment decisions and mitigate potential adverse trigger effects.

IOSCO also plans to operationalise the revised FSB Recommendations, as appropriate, through amendments to the 2018 IOSCO Liquidity Risk Management Recommendations and supporting good practices. The FSB and IOSCO will both review progress by member jurisdictions in implementing their respective revised Recommendations and guidance, starting with a stocktake of the measures and practices adopted and planned by FSB member jurisdictions in 2026. IOSCO will aim to coordinate its stocktake with the FSB's stocktake. The stocktake will be followed up by 2028 with an assessment of the effectiveness of these measures in addressing risks to financial stability.

The Revised FSB Recommendations build on the findings of the assessment of the effectiveness of the FSB's previous recommendations.<sup>14</sup> One of the findings suggested in the assessment was that data challenges limit some authorities' ability to monitor liquidity mismatch and its management from a financial stability perspective. In 2023, the FSB established a data pilot programme to identify and diagnose these data challenges to improve both central banks and securities regulators' ability to monitor key OEF vulnerabilities related to liquidity mismatch. The FSB is building a toolkit that authorities can use within their domestic frameworks to monitor these vulnerabilities. The toolkit may include metrics that authorities could use within their domestic frameworks to monitor OEF vulnerabilities.

## 2.4. Margining practices

Central counterparties (CCPs) functioned as intended during the March 2020 market turmoil, but increases in margin requirements were sometimes significant in scale and frequency. In some cases, the increases stretched market participants' ability to manage the associated liquidity risk and forced them to sell assets at short notice, with knock-on effects across financial markets. In light of this, the BCBS, CPMI and IOSCO conducted a joint review on margining practices in centrally and non-centrally cleared markets. The review concluded that further policy work was

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<sup>14</sup> See FSB (2022), *Assessment of the Effectiveness of the FSB's 2017 Recommendations on Liquidity Mismatch in Open-Ended Funds*, December.

needed in several areas: increasing transparency in centrally cleared markets; enhancing the liquidity preparedness of market participants; identifying data gaps in regulatory reporting; streamlining variation margin (VM) processes in centrally and non-centrally cleared markets; and evaluating the responsiveness of centrally cleared and non-centrally cleared initial margin (IM) models to market stresses.<sup>15</sup>

Responsibility for carrying out this work was allocated across the BCBS-CPMI-IOSCO and the FSB. The joint work took a holistic approach by covering a wide range of market participants (CCPs, clearing members, end users) and different aspects of margin (transparency, processes, responsiveness). Building upon the findings and follow-up plan in the BCBS-CPMI-IOSCO report, the joint work has sought to achieve complementarity across policy proposals.

A key area of focus for the FSB over the past year has been the liquidity preparedness of non-bank market participants for margin and collateral calls. This is because analysis of recent incidents of liquidity stress and feedback from stakeholder outreach suggest that whilst margin and collateral calls are a necessary protection against counterparty risk, they can also amplify the demand for liquidity in times of stress if they are unexpected and affect a large enough part of the market. Weaknesses in liquidity risk management and governance by some market participants, in particular, were found to be key causes behind inadequate liquidity preparedness for such calls. These include issues such as robust liquidity stress-testing, planning for extreme but plausible scenarios, monitoring and managing concentrated and leveraged positions, putting in place effective collateral management practices, ensuring adequate levels of liquidity as well as diversified and reliable funding sources, and having efficient decision-making processes.

The FSB published in April 2024 a consultation report with cross-sectoral, high-level policy recommendations on liquidity preparedness for margin and collateral calls<sup>16</sup> across three areas:

- Non-bank market participants' liquidity risk management practices and governance with respect to managing and mitigating exposures to spikes in margin and collateral calls.
- Liquidity stress testing and scenario design for margin and collateral calls during normal market conditions, as well as in extreme but plausible stressed market conditions.
- Ensuring sufficient collateral is available, as and when required.

The aim of the proposed policy recommendations is to reduce the excessive procyclical behaviour of some non-bank market participants in response to margin and collateral calls during times of market-wide stress. The recommendations cover both centrally and non-centrally cleared derivatives and securities markets and apply to a broad range of non-bank market participants that may face margin and collateral calls, including both financial institutions and non-financial entities. While these recommendations are intended to build on and complement rules and regulations for liquidity risk management and governance that already exist in many sectors and jurisdictions, the SSBs and national authorities may further specify proportionality

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<sup>15</sup> See BCBS, CPMI and IOSCO (2022), *Review of margining practices*, September.

<sup>16</sup> See FSB (2024), *Liquidity Preparedness for Margin and Collateral Calls: Consultation report*, April.

and materiality requirements for their respective sectors. The recommendations should be applied proportionately to the underlying risks of different non-bank market participants.

The FSB is continuing to work on the identification of data and monitoring tools or metrics that authorities would find useful to enhance their assessment of market participants' liquidity preparedness and their management of liquidity strains arising from margin and collateral calls.

Complementing this work, the BCBS, CPMI and IOSCO launched two consultation reports and issued a discussion paper in early 2024:

- The BCBS-CPMI-IOSCO published in January a consultation report on transparency and responsiveness of IM in centrally cleared markets.<sup>17</sup> The report sets out ten policy proposals to increase the resilience of the centrally cleared market ecosystem in times of market stress. The proposals are primarily drafted to aid market participants and regulators' understanding of IM calculations and potential future requirements through increased transparency. The proposals cover aspects of central counterparty (CCP) transparency, governance, and review of IM models, as well as clearing member transparency for clients and CCPs.
- The BCBS-IOSCO also launched a consultation report in January on streamlining VM processes and the responsiveness of IM models in non-centrally cleared markets.<sup>18</sup> The report sets out eight recommendations to participants in these markets to encourage the widespread implementation of good practices in this area. Four of the recommendations aim to address challenges that could inhibit a seamless exchange of VM during a period of stress. The remaining ones highlight good practices for market participants to ensure the calculation of IM is consistently adequate for contemporaneous market conditions and propose that supervisors should monitor whether these developments are sufficient to make the IM model responsive enough to extreme market shocks.
- In February, CPMI-IOSCO issued a discussion paper on VM in centrally cleared markets.<sup>19</sup> The paper describes eight examples of effective practices identified by CPMI-IOSCO for CCPs and their clearing members (CMs) regarding VM processes and transparency. The practices cover several aspects of centrally cleared VM practices, including scheduled and ad hoc intraday VM calls, the use of excess collateral held at CCPs to meet VM requirements, the pass-through of VM by CCPs, and CCP-CM and CM-client transparency regarding VM processes. These examples are intended to inform CCPs as they design their VM call and collection processes and provide examples of how standards set out in the CPMI-IOSCO *Principles for Financial Market Infrastructures* and CCP resilience guidance can be met.<sup>20</sup>

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<sup>17</sup> See BCBS, CPMI and IOSCO (2024), *Transparency and responsiveness of initial margin in centrally cleared markets: review and policy proposals*, January.

<sup>18</sup> See BCBS and IOSCO (2024), *Streamlining VM processes and IM responsiveness of margin models in non-centrally cleared markets*, January.

<sup>19</sup> See CPMI and IOSCO (2024), *Streamlining variation margin in centrally cleared markets – examples of effective practices*, February.

<sup>20</sup> See CPMI-IOSCO, *Principles for Financial Market Infrastructures (PFMI)* and CPMI-ISCO (2017), *Resilience of central counterparties (CCPs): Further guidance on the PFMI - Final report*, July.

The BCBS, CPMI and IOSCO, as well as the FSB, intend to finalise policy work on their respective areas by the end of 2024, which will then be followed by further standard-setting work by the respective SSBs as appropriate.

## 2.5. Non-bank leverage

Leverage is widely used but is unevenly distributed within the NBFIs sector. While insurance companies, pension funds and investment funds represent two-thirds of NBFIs assets, most on-balance sheet financial leverage is in so-called other financial intermediaries (OFIs), such as broker-dealers, hedge funds, finance companies, holding companies, and securitisation vehicles. Non-bank entities have been taking on additional leverage through off-balance sheet exposures, including foreign exchange swaps and forwards. These positions have grown significantly over the past decade. As a number of recent market incidents demonstrate (see section 1), if poorly managed, the build-up of leverage creates a vulnerability that, when acted upon by a shock, can propagate strains through the financial system, amplify stress and lead to systemic disruption. Moreover, data gaps make it difficult to fully assess the vulnerabilities associated with NBFIs leverage.<sup>21</sup>

In 2024, the FSB launched work on data and metrics and on policy tools to enhance the monitoring of, and address financial stability risks from, leverage in NBFIs. The work covers a broad range of nonbank entities and market activities and takes a holistic perspective, given the interconnectedness with other parts of the financial system. The objective of this work is to: (i) enhance authorities' and market participants' ability to monitor vulnerabilities from NBFIs leverage; (ii) contain NBFIs leverage where it is likely to create risks to financial stability; and (iii) mitigate, in coordination with the SSBs, the financial stability consequences of NBFIs leverage. To this end, the FSB will publish by the end of 2024 a consultation report with proposed policy approaches for authorities to address systemic risk from NBFIs leverage.

On data and metrics, the FSB is working on a harmonised assessment of vulnerabilities across nonbank entities and jurisdictions and building a toolkit that authorities could consider using within their domestic frameworks to monitor NBFIs leverage. To this end, the FSB aims to agree on a set of metrics, tools and processes that jurisdictions could use for regular NBFIs leverage monitoring. The work will also involve identifying data challenges that authorities may face in the calculation and use of these metrics and propose possible ways to address these challenges, where appropriate. In addition, the FSB is working to identify, collect and share authorities' experiences and best practices on data use, public disclosure, monitoring tools, stress testing, and event-driven reporting.

Authorities have available a diverse array of tools that aim to mitigate vulnerabilities from NBFIs leverage, depending on the institutional frameworks and market practices in different jurisdictions. The tools range from policies encouraging market discipline, such as public disclosure; supervisory guidance setting out expectations for firm behaviour; constraints on the provision and use of leverage at the activity or entity level; and measures providing the power for authorities to intervene when imbalances are building up or after financial stability risks from

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<sup>21</sup> See FSB (2023), *The Financial Stability Implications of Leverage in Non-Bank Financial Intermediation*, September.

leverage have materialised. The FSB is assessing the pros and cons of these tools as well as potential unintended consequences and complementarities among different sets of policy tools.

The FSB's work is focussing on policy tools that seek to address the transmission channels to financial stability identified in previous work, i.e. to mitigate counterparty risk (where a stress or default of a leveraged entity could propagate losses to its counterparties) and position liquidation risk (where liquidity demands to meet collateral or margin calls could lead to fire sales). The tools also aim to address amplification factors related to interconnectedness (through direct links between an entity and its financial counterparties, and indirect links through similar investments or assets); concentration (accumulation of positions in a single asset, or entities having similar strategies, in aggregate representing a large part of a market); and liquidity imbalances (when entities finance leveraged positions with short term funding sources).

In parallel to the FSB's work, the BCBS is working to address issues related to the provision of leverage by banks to nonbank financial entities. In particular, the BCBS issued in April 2024 a consultative document with guidelines for counterparty credit risk (CCR) management, which will replace the sound practices for banks' interactions with highly leveraged institutions published in January 1999.<sup>22</sup> The revised guidelines include key practices critical to resolving long-standing industry weaknesses in CCR management, including the need to: (i) conduct comprehensive due diligence of counterparties both at initial onboarding and on an ongoing basis; (ii) develop a comprehensive credit risk mitigation strategy to effectively manage counterparty exposures; (iii) measure, control and limit CCR using a wide variety of complementary metrics; and (iv) build a strong CCR governance framework. The guidelines provide a supervisory response to the significant shortcomings that have been identified in banks' management of CCR, including the lessons learned from recent episodes of NBFIs distress. The greatest potential benefits from the guidelines are expected to be in cases where banks have high-risk exposures to counterparties, including NBFIs.

## 2.6. Other NBFIs vulnerabilities

The FSB continues to monitor and analyse NBFIs vulnerabilities on an ongoing basis through the development of additional metrics and analytical tools, as well as through targeted deep dives in specific areas. Examples of such work over the past year include:

- The FSB undertook a horizon scan to assess vulnerabilities in the global financial system stemming from the intersection of solvency and liquidity risks in an environment of rising interest rates, following the banking sector turmoil in March 2023. Rising rates expose financial institutions to both solvency and liquidity risks through various channels that may interact with each other – for example, margin calls or redemptions can force financial institutions to sell assets and thereby realise losses, which can lead to a negative feedback loop. The analysis identified nonbank real estate investors – including real estate investment trusts, real estate funds, and other non-bank mortgage lenders – as being among the sectors particularly vulnerable to the confluence of high interest rate and liquidity risks. The FSB is currently assessing the vulnerabilities of those investors, with a particular focus on commercial real estate. The findings from the horizon scan will

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<sup>22</sup> See BCBS (2024), *Guidelines for counterparty credit risk management*, April.

be included in the FSB's October report to the G20 summarising the work carried out, as a follow-up to the March 2023 turmoil, on interest rate and liquidity risks in the financial system and on deposit behaviour and the role of technology and social media.

- The FSB is carrying out an evaluation of the effects of the IOSCO minimum retention recommendations and the BCBS securitisation framework on the collateralised debt/loan obligation and the non-government-guaranteed part of the residential mortgage-backed securities (RMBS) markets. The reforms have sought to enhance the resilience of these markets after the GFC by reducing misaligned incentives and moral hazard and thereby limiting systemic risk. The analysis thus far suggests that the BCBS and IOSCO reforms have contributed to the resilience of the securitisation market (especially for RMBS) without strong evidence of material negative side-effects on financing to the economy, though the findings are preliminary and need to be confirmed by additional work.<sup>23</sup> The FSB will continue its analysis of the reforms, including through empirical work where possible, and expects to publish the final report at the end of 2024.
- The FSB is monitoring vulnerabilities in private credit, a market that has grown rapidly in recent years predominantly in the US and Europe. Private credit is generally understood as lending by nonbanks (typically funds) to small and mid-size unrated firms that may not be able to secure funding from banks or public markets. The focus of the monitoring is on issues identified in FSB member authorities' own work in this area, including high borrower indebtedness; the use of leverage at the private credit fund and portfolio company levels, and any associated liquidity risks; opacity and the absence of observable market prices potentially leading to lagged and abrupt valuation adjustments; and interconnectedness with banks. The FSB will present initial findings from this work in its Annual Report to the G20 in November.

### 3. Way forward

The design and implementation of NBFIs policies continues to advance, albeit at an uneven pace across jurisdictions. Progress is hampered by a number of challenges, including the heterogeneity of the sector; the diversity of institutional frameworks and market practices across jurisdictions; and common data challenges (see below). The global financial system remains vulnerable to further liquidity strains, as many of the underlying vulnerabilities and key amplifiers of stress in the NBFIs sector during recent market incidents are still largely in place. It is therefore critical to finalise and implement international reforms to enhance NBFIs resilience, so that market participants internalise fully their own liquidity risk – rather than rely on extraordinary central bank and other official sector interventions – and authorities are better prepared for stress events.

To advance further on the design and implementation of policies to address systemic risk in NBFIs, the FSB will continue its work in 2025 and beyond. This work will be carried out within the FSB as well as by its member SSBs and international organisations, to ensure that relevant experiences and perspectives are brought to bear. The deliverables include stand-alone reports in specific areas of the programme and an overall progress report to the G20 in 2025 with the main findings across different areas and any further policy proposals to address systemic risk in

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<sup>23</sup> See FSB (2024), [Evaluation of the Effects of the G20 Financial Regulatory Reforms on Securitisation](#), July.

NBFI. The work is structured (and described below) in three main areas: vulnerabilities assessments; policy development; and implementation monitoring and evaluations.

The first broad area of work concerns the in-depth **assessment and ongoing monitoring of vulnerabilities in NBFI**. Examples of planned work include:

- Analysing the functioning and resilience of repo markets. Issues for consideration include mapping key market participants and their interlinkages; assessing vulnerabilities, drawing on experience during episodes of stress; taking account of the potential impact of new regulatory developments on repo markets in some FSB jurisdictions; and identifying key data gaps for financial stability monitoring, including from a cross-border perspective.
- Continuing to enhance NBFI vulnerabilities indicators in FSB surveillance, including in the context of the FSB's annual monitoring and information-sharing exercise to assess global trends and risks in NBFI, drawing on the findings of various work initiatives.
- Sharing experiences and lessons among authorities on approaches and tools used in FSB jurisdictions to assess vulnerabilities in NBFI. These include, for example, the organisation of a workshop by the FSB and IOSCO on the design and use of fund- and system-level stress tests; the design of a toolkit for authorities to monitor OEF liquidity mismatch vulnerabilities (see section 2.3); and the sharing of information to enhance authorities' assessment of market participants' liquidity preparedness for margin and collateral calls (see section 2.4) and of financial stability risks from non-bank leverage (see section 2.5).

The second area involves the **development of policies to enhance NBFI resilience**, including:

- Sharing experiences and lessons on the design and use of policy tools in FSB jurisdictions to address systemic risk in NBFI. Such discussions are embedded in the relevant FSB working groups that develop policy approaches to address specific NBFI vulnerabilities, such as on leverage (see below); and more general discussions within the FSB about evolving NBFI policy frameworks among its member jurisdictions.<sup>24</sup>
- Developing policy approaches to address financial stability risks from NBFI leverage (see section 2.5). The work on policy tools is considering a wide array of tools available in FSB jurisdictions and the adequacy and complementarity of these tools, i.e. how they interact with each other and for which situations and circumstances they work best.
- Understanding better and considering how to address common NBFI data challenges. Such challenges may relate to data availability; data use (e.g. due to lack of human or technological resources); data quality (e.g. with respect to certain data in trade repositories); and data sharing (i.e. the data that is not available to an authority but is reported and available to another (domestic or foreign) authority due to, for example, data confidentiality, legal restrictions on sharing entity-level data, and lack of data sharing agreements and arrangements). These challenges impede a full assessment of

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<sup>24</sup> See, for example, the European Commission's [consultation assessing the adequacy of macroprudential policies for NBFI](#).



NBFI vulnerabilities and the formulation of effective policy responses, so finding ways to address the most salient challenges is likely to form a key part of future FSB work.

The third area of work involves the **monitoring of the implementation and assessment of the effects of NBFI reforms**. Planned actions in this area include:

- Continuing to monitor and report publicly (e.g. through peer reviews and the Annual Report) on the implementation progress and challenges of agreed NBFI reforms. This includes a stocktake in 2026 of the measures and practices adopted and planned by FSB jurisdictions in implementing the revised FSB and IOSCO Recommendations and guidance to address liquidity mismatch in OEFs (see section 2.3).
- Assessing the effectiveness of these reforms in addressing risks to financial stability, including for MMFs in 2026 (see section 2.2) and OEFs in 2028 (see section 2.3). The findings from such exercises will help the FSB determine whether collectively the reforms have sufficiently addressed systemic risk in NBFI, including whether to develop additional tools for use by authorities.

Table 1 in the Executive Summary provides an overview of the planned deliverables under the FSB's work programme on NBFI. As key elements of that programme are nearing completion, the FSB and SSBs will initiate discussions later this year about potential future work in this area.