Implementation of G20 Non-Bank Financial Intermediation Reforms

Progress report

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

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

Introduction.................................................................................................................................................. 2

1. Policy measures to mitigate risks in banks’ interactions with non-bank financial entities ...... 3
2. Reducing the susceptibility of MMFs to runs ......................................................................... 3
3. Improving transparency and aligning incentives for securitisation .................................. 5
4. Dampening procyclicality and other financial stability risks associated with securities financing transactions such as repos and securities lending ................................. 7
5. Assessing and mitigating systemic risks posed by other non-bank financial entities and activities .................................................................................................................................. 9
   5.1. Asset management .................................................................................................................. 10
   5.2. Hedge funds .......................................................................................................................... 11
Executive summary

This report describes progress in implementing reforms that had been agreed by the G20 following the 2008 global financial crisis to strengthen the oversight and regulation of non-bank financial intermediation (NBFI). The implementation status in various NBFI areas is as follows:

- Jurisdictions have made progress in implementing Basel III reforms to mitigate spillovers between banks and non-bank financial entities, but implementation is not yet complete. 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.

- Adoption of the 2012 IOSCO recommendations to reduce the run risk of money market funds (MMFs) is most advanced in the largest MMF markets. All FSB members adopted the fair value approach for valuation of MMF portfolios, 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. 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.

- Adoption of the IOSCO recommendations on incentive alignment approaches for securitisation and of the BCBS standard on revised securitisation framework is ongoing. About one-third of FSB jurisdictions (for the IOSCO recommendations) and one-sixth of FSB jurisdictions (for the BCBS standard) have yet to implement them.

- Implementation of 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. On global SFT data collection and aggregation, a few FSB jurisdictions are submitting data to the BIS.

- Implementation of most FSB recommendations to assess and mitigate systemic risks posed by other non-bank financial entities and activities is ongoing.

   - The FSB and IOSCO assessed the implementation and effectiveness of their respective recommendations to address liquidity mismatch in open-ended funds (OEFs). The FSB found that authorities have made meaningful progress in implementing the 2017 FSB Recommendations, but that lessons learnt since then 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 Recommendations shows a high degree of implementation of regulatory requirements consistent with the Recommendations’ objectives, but some areas may warrant further attention.

In addition to these reforms, the FSB is carrying out further analytical and policy work to enhance the resilience of the NBFI sector, building on the lessons from the March 2020 market turmoil.
Introduction

The FSB, working with standard-setting bodies (SSBs), developed a framework and policy toolkit in 2013 for strengthening the oversight and regulation of non-bank entities. The policy framework, which was endorsed by the G20, identifies five specific areas in which policies are needed to mitigate the potential systemic risks associated with non-bank financial intermediation (NBFI). These involve policies to:

- mitigate spillovers between banks and the NBFI sector;
- reduce the susceptibility of money market funds (MMFs) to runs (the policy framework for MMFs was further expanded in 2021);
- 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 was further expanded in 2017 with the FSB recommendations to address structural vulnerabilities in asset management activities, followed in 2018 by the International Organization of Securities Commissions (IOSCO) recommendations on liquidity risk management for open-ended funds (OEFs).

Monitoring and reporting on implementation of NBFI reforms is carried out by the FSB and by SSBs for their respective areas, with the main findings presented in the FSB Annual Report. The implementation status in various NBFI areas is described below.

In addition to these reforms, the FSB is carrying out further policy work to enhance the resilience of the NBFI sector, building on the lessons from the March 2020 market turmoil (see section 5). Progress in the implementation of any new agreed NBFI policies will be reported in future versions of this report.

---

1 See FSB (2013) Overview of Policy recommendations for Shadow Banking, August.
6 Unless otherwise stated, information about implementation progress in this note reflects the status as of end-September 2022. The report does not include updated information on implementation of NBFI reforms in Russia, so the status of Russia in this report is based on the information in 2021.
1. Policy measures to mitigate risks in banks’ interactions with non-bank financial entities

The Basel Committee on Banking Supervision (BCBS) policies in this area include higher capital requirement for banks’ exposures to non-bank financial entities; the standard for measuring and controlling large exposures; and enhancements to the prudential treatment of banks’ off-balance sheet exposures and guidance on the identification and management of step-in-risk. 

As part of its Regulatory Consistency Assessment Programme (RCAP), the BCBS regularly monitors the implementation of the above policies, with the exception of the guidance on the identification and management of step-in risk (implementation was due in 2020). The latest information shows that:

- The capital requirements for banks’ equity investments in funds are in force in 19 of the 22 FSB jurisdictions for which it is applicable, three more than last year (Australia, Hong Kong, UK). These requirements, due in January 2017, are not yet in place in China, Mexico and the US, and are not applicable for India (where equity investments in funds are not held in the banking book) and Indonesia (where banks are prohibited from making equity investments in funds).

- The supervisory framework for measuring and controlling banks’ large exposures is in place in 20 FSB jurisdictions, two more than last year (South Africa, UK). This framework, to be implemented by January 2019, is not yet in place in Korea, Mexico, Russia, and Türkiye.

2. Reducing the susceptibility of MMFs to runs

IOSCO issued policy recommendations in October 2012 that provided the basis for common standards of regulation and management of MMFs across jurisdictions. These recommendations cover eight reform areas: (i) scope of the regulatory reform (e.g. definition of MMFs in regulation); (ii) limitations to the types of assets of, and risks taken by, MMFs; (iii) valuation; (iv) liquidity management; (v) MMFs that offer a stable net asset value (NAV); (vi) use of ratings; (vii) disclosure to investors; and (viii) repos.

---

7 See BCBS higher risk-weights for banks’ exposures to unregulated financial institutions and risk-based capital requirements for banks’ investments in funds.
8 See the BCBS Large exposures standard.
10 See the BCBS (2022) Basel III implementation dashboard, October.
11 Mexico’s current regulation is a partial adoption of the standard, and a revised regulation to reflect that standard is under development.
12 Jurisdictional assessments review the extent to which domestic regulations in each member jurisdiction are aligned with the minimum regulatory standards agreed by the BCBS. Assessments covering the large exposures framework have been published for 10 FSB jurisdictions, all assessed as “compliant.”
13 The status of implementation in Russia has not been updated and reflects progress only as of end-September 2021.
IOSCO regularly monitors implementation of some of these reforms, and the FSB publishes the findings in its Annual Report. IOSCO’s annual monitoring covers the recommendations relating to: valuation practices of MMFs; liquidity management for MMFs; and a stable NAV. IOSCO has also published peer reviews on implementation of the reforms in 2015 (covering all eight areas), 2017 and 2019 (covering FSB jurisdictions and the three reforms areas above), and 2020 (a consistency review covering the nine largest MMF domiciles and the recommendations in the three areas above). The latest information shows no change compared to 2021 – namely:

- The fair value approach for valuation of MMF portfolios is adopted in all FSB jurisdictions. However, one jurisdiction (Australia) 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 all FSB jurisdictions having reforms in effect except Australia, Indonesia, Mexico, Russia and Türkiye.

- Of the 12 FSB jurisdictions that permit MMFs offering a stable NAV, all but one (Australia) have implemented the IOSCO reforms to address the risks and issues which may affect the stability of such MMFs. Twelve FSB jurisdictions do not permit MMFs offering a stable NAV – these are Argentina, Brazil, Canada, India, Indonesia, Italy, Mexico, Russia, Saudi Arabia, Singapore, Switzerland and Türkiye (see Graph 1).

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

<table>
<thead>
<tr>
<th></th>
<th>As percent of number of FSB member jurisdictions</th>
<th>As percent of market size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuation</td>
<td><img src="image" alt="Graph 1" /></td>
<td><img src="image" alt="Graph 1" /></td>
</tr>
<tr>
<td>Liquidity Management</td>
<td><img src="image" alt="Graph 1" /></td>
<td><img src="image" alt="Graph 1" /></td>
</tr>
<tr>
<td>Stable NAV</td>
<td><img src="image" alt="Graph 1" /></td>
<td><img src="image" alt="Graph 1" /></td>
</tr>
</tbody>
</table>

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

The 2020 IOSCO review found that the policy measures in nine jurisdictions representing about 95% of global net MMF assets are generally in line with the IOSCO recommendations.

---

The FSB set out in October 2021 policy proposals to enhance MMF resilience, including with respect to the appropriate structure of the sector and of underlying short-term funding markets. The FSB will, working with IOSCO, take stock of progress made by member jurisdictions in adopting reforms to enhance MMF resilience, including their evidence-based explanation of relevant MMF vulnerabilities and policy choices made. This stocktake, to be completed by the end of 2023, will be followed up with an assessment of the effectiveness of these measures in addressing risks to financial stability by 2026. In addition, IOSCO plans to revisit its 2012 policy recommendations in light of the framework and policy toolkit in the October 2021 report; and the FSB and IOSCO intend to carry out follow-up work in 2023, complementing MMF policy reforms, to enhance the functioning and resilience of short-term funding markets.

3. Improving transparency and aligning incentives for securitisation

IOSCO issued policy recommendations related to transparency, standardisation and incentive alignment in 2012, and regularly monitors implementation of some of these reforms. The BCBS updated its securitisation framework in 2014. In addition, the BCBS and IOSCO published criteria for identifying simple, transparent and comparable (STC) securitisations in July 2015. Following this, the BCBS updated its securitisation framework in 2016 to include the regulatory capital treatment for STC securitisations and in 2018 to include the capital treatment for STC short-term securitisations.

IOSCO conducts annual updates on implementation status of its 2012 policy recommendations (which are included in the FSB Annual Report) and has published peer reviews on the topic. The BCBS regularly monitors the implementation of its revised securitisation framework, which came into effect in January 2018. The latest information shows that:

- Adoption of the IOSCO recommendations on incentive alignment approaches for securitisation has been completed by all FSB jurisdictions except Australia, Canada, Mexico, Saudi Arabia, Singapore, South Africa and Switzerland (see Graph 2).
- Adoption of disclosure requirements has been completed by 15 FSB jurisdictions. Argentina, Brazil, and the same seven jurisdictions above, have yet to adopt these.

---

17 See Table 1 of FSB (2022) Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report, November.
19 See BCBS (2014) Revisions to the securitisation framework, December.
21 See BCBS (2016) Revisions to the securitisation framework, July.
22 See BCBS (2018) Capital treatment for simple, transparent and comparable short-term securitisations, May. In November 2020, the BCBS published a technical amendment setting out capital requirements for non-performing loan securitisations to address a gap in the framework. The amendment is to be implemented by no later than 1 January 2023.
The revised BCBS securitisation framework is in place in 20 FSB jurisdictions, one more than last year (Mexico). It has yet to be implemented in China, South Africa, Türkiye and the United States.

**Implementation of incentive alignment reforms for securitisation is uneven**

<table>
<thead>
<tr>
<th>As percent of number of FSB member jurisdictions</th>
<th>As percent of market size</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Incentive alignment" /></td>
<td><img src="image2" alt="Incentive alignment" /></td>
</tr>
<tr>
<td><img src="image3" alt="Disclosure requirements" /></td>
<td><img src="image4" alt="Disclosure requirements" /></td>
</tr>
</tbody>
</table>

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

Other G20 recommendations relating to securitisation include: strengthening the regulatory and capital framework for monoline insurers in relation to structured credit; strengthening of supervisory requirements or best practices for investment in structured products; and enhancing disclosure of securitised products and their underlying assets.24

- All FSB jurisdictions where monoline insurers are active and involved in structured credit business reported in 2016 that they have implemented this recommendation. In addition, four jurisdictions with no active monoline firms implemented rules on monolines.

- All FSB jurisdictions except the US report that implementation of the recommendations for firms’ processes for investment in structured products is complete (Switzerland reports the recommendation is not applicable, given its market).

- All FSB jurisdictions except Russia report that implementation of the recommendation on enhanced disclosures is complete (Türkiye and Switzerland report the recommendation is not applicable, given their markets).

---

24 See the FSB webpage on Monitoring of Other Areas.
4. Dampening procyclicality and other financial stability risks associated with securities financing transactions such as repos and securities lending

To address financial stability risks from SFTs, the FSB developed 18 policy recommendations published in August 2013 and updated in October 2015. The recommendations cover:

- global SFT data collection and aggregation;
- disclosures of financial institutions’ SFT activities;
- review of reporting requirements for fund managers to end-investors, due January 2017;
- minimum standards for cash collateral reinvestment, due January 2017;
- regulations governing re-hypothecation of client assets, due January 2017;
- minimum regulatory standards for collateral valuation and management, due January 2017;
- evaluation of the possible introduction of central clearing for inter-dealer repos, due by January 2016; and
- minimum haircut standards, consisting of qualitative standards for the methodologies that firms use to calculate collateral margins/haircuts (due for implementation and review against the FSB guidance by end-2017), and numerical haircut floors for non-centrally cleared SFTs.

FSB member jurisdictions report making some progress in implementing these recommendations, but implementation is still incomplete and continues to face significant delays in most jurisdictions.

The FSB has been facilitating the implementation of the SFT data standards, including monitoring and assessing national progress and incorporating the results into reports of the G20 Data Gaps Initiative. 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.

---


27 For numerical haircut floors, recommendations to authorities were to implement bank to non-bank requirements in their jurisdictions by January 2023; to introduce the framework for non-bank to non-bank transactions by January 2025; and to conduct by January 2022 an initial assessment of the need and approach for introducing non-bank to non-bank haircut floors.

and granularity is limited. To help jurisdictions facing practical challenges, a sequencing approach by market segment and data granularity was adopted.

■ Thirteen jurisdictions report that they conducted a review of their reporting requirements and assessed them to be fully or partially compliant with the FSB’s proposed requirements for reporting by fund managers to end-investors. Some of the remaining jurisdictions believe that a review is not necessary because they judge their reporting requirements for mutual funds to satisfy the FSB recommendation.

■ Seven jurisdictions report that they have implemented a regulatory regime that meets the FSB minimum standards for cash collateral reinvestment, and six others report to be in the process of implementing such a regime.

■ Seventeen jurisdictions assess their existing regulations to be fully or partially compliant with the FSB principles for regulations governing re-hypothecation of client assets.

■ Eighteen jurisdictions indicate they had implemented minimum regulatory standards for collateral valuation and management, though some seem to have applied such standards only for certain market participants.

■ Thirteen jurisdictions report that they have central counterparties (CCPs) in their inter-dealer repo market. Of these jurisdictions, eight had considered broadening participation of their CCP to other funding providers in the repo market. Of the ten jurisdictions without a CCP in their inter-dealer report markets, three evaluated the costs and benefits of introducing one.

■ Sixteen jurisdictions have qualitative standards for the calculation of collateral margin/haircuts, and seven have no plans to introduce such standards. Of those with standards in place, five jurisdictions have reviewed their existing standards against the FSB recommendation on qualitative standards for firms’ haircut methodologies.

■ Four jurisdictions have implemented the framework of numerical haircut floors, which has been incorporated in the finalised Basel III framework due by January 2023, and implementation is in progress in four more jurisdictions. Implementation challenges noted by some jurisdictions relate to level playing-field concerns (because some jurisdictions have deferred implementation of the haircut floors for several years) and the complexity or appropriateness in introducing the framework.

■ Ten jurisdictions have completed their initial assessment of the need and implementation approach for introducing the framework of numerical haircut floors on non-bank-to-non-bank transactions. Thirteen have yet to begin a review.
5. Assessing and mitigating systemic risks posed by other non-bank financial entities and activities

The FSB published a high-level policy framework to address risks posed by non-bank financial entities other than MMFs (Policy Framework) that was endorsed by the G20 in 2013.²⁹ By focusing on the underlying economic functions (EFs) rather than legal forms, this framework allows authorities to assess bank-like financial stability risks from non-bank financial entities in a consistent manner and be forward-looking in capturing new structures and innovations. The Policy Framework comprises three elements: (i) an assessment based on five EFs of non-bank financial entities’ involvement in non-bank credit intermediation that may pose systemic risks or in regulatory arbitrage; (ii) the framework of policy toolkits, which includes a toolkit for each EF (which includes open-ended funds (OEFs) but not MMFs) to address vulnerabilities; and (iii) information-sharing among member authorities through the FSB.

The FSB is monitoring developments annually in NBFI, including any changes to the policy toolkit for the five EFs.

An FSB peer review in 2016 of members’ progress in implementing the Policy Framework found that while NBFI monitoring had improved, continued data gaps and lack of granularity impede a more forward-looking identification of potential financial stability risks.³⁰ It recommended that jurisdictions establish systematic processes for assessing NBFI risks; address identified data gaps; remove impediments to cooperation and information-sharing between authorities; and review the adequacy of disclosures by non-bank financial entities and enhance them as necessary. It also recommended FSB actions to facilitate effective implementation of the Policy Framework.

In the 2017 FSB report to the G20 assessing the evolution of NBFI activities and related financial stability risks since the global financial crisis, FSB member authorities agreed to: enhance system-wide oversight of NBFI and policy responses to address the identified risks identified through implementing the recommendations of the 2016 peer review; strengthen the monitoring of NBFI activity and the data collection framework; and complete the remaining policy development at the international level and implement the agreed policy recommendations to reduce risks and arbitrage opportunities across jurisdictions and sectors.³¹

The FSB has developed a comprehensive work programme to enhance the resilience of the NBFI sector. The programme builds on the lessons from the March 2020 market turmoil and includes analytical and policy work to examine and, where appropriate, address specific issues that contributed to amplification of the shock; enhancing understanding and strengthening the monitoring of systemic risks in NBFI; and assessing policies to address systemic risks in NBFI.

---

Progress in delivery of this work programme, including findings from work in different areas and policy proposals to enhance resilience, is described in the latest FSB NBFI report to the G20.  

5.1. Asset management

In 2017 the FSB published policy recommendations to address structural vulnerabilities from asset management activities that could potentially present financial stability risks:  

- liquidity mismatch between fund investments and redemption terms and conditions for open-ended fund units;
- leverage within investment funds;
- operational risk and challenges at asset managers in stressed conditions; and
- securities lending activities of asset managers and funds.

Several of the recommendations were to be operationalised by IOSCO, in particular most of those relating to liquidity mismatch and leverage within investment funds.

- IOSCO published in February 2018 its recommendations for liquidity risk management for investment funds.  
- IOSCO published in December 2019 a two-step framework to facilitate more meaningful monitoring of leverage in funds for financial stability purposes in a consistent manner across jurisdictions.

Implementation of the FSB and IOSCO recommendations to address structural vulnerabilities from liquidity and leverage in asset management activities is ongoing. In 2022 the FSB assessed the effectiveness of its 2017 policy recommendations to mitigate vulnerabilities in OEFs from liquidity mismatch (FSB Recommendations). This took place in coordination with IOSCO’s review of its 2018 recommendations for liquidity risk management for investment funds (IOSCO Recommendations).

The FSB assessment finds that authorities have made meaningful progress in implementing the 2017 FSB Recommendations. Nevertheless, lessons learnt since then, including during the March 2020 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 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.

  • For Design Process Recommendations common themes that may warrant further attention include challenges with respect to dealing frequency, dealing arrangements and disclosure practices.

  • For Day-to-day Liquidity Management Recommendations, several areas may warrant further attention, including where further implementation or potential enhancements could be helpful. In particular, jurisdictions may wish to consider further attention to the identification of an emerging liquidity shortage before it occurs and further guidance to keep the investment strategy, liquidity profile and redemption policy aligned. Other areas that may warrant further attention include data availability and third party providers of liquidity metrics.

  • For Contingency Planning Recommendations, relevant jurisdictions may wish to consider supplementing their regulations with requirements that are more specific or guidance regarding contingency plans for the use of liquidity management tools (LMTs); and jurisdictions may wish to further address the availability of LMTs.

- 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.

5.2. Hedge funds

The G20 also endorsed additional recommendations specifically for hedge funds. These relate to: their registration, appropriate disclosures and oversight; the establishment of international information sharing frameworks for them; and enhancing counterparty risk management. All FSB jurisdictions that permit and have an active hedge funds market reported this recommendation to be implemented in 2016.

38 See the FSB webpage on Monitoring of Other Areas.
■ All FSB jurisdictions except China report implementation of the information sharing networks recommendation to be fully implemented (or in the case of Argentina and Indonesia, not applicable).

■ All FSB jurisdictions reported implementation of the recommendation on counterparty risk management to be fully implemented in 2018.