FSB FINANCIAL STABILITY BOARD

9 July 2025

Leverage in Non-bank Financial Intermediation

Overview of consultation responses and changes to the report to address them

1. Introduction

This note presents a summary of the responses received to the consultation report on Leverage in Non-bank Financial Intermediation (NBFI).

The consultation report was published on 18 December 2024 and the comment period closed on 28 February 2025.[1] The objective of the consultation was to get stakeholder feedback on the proposed recommendations. This note provides a summary of the comments received and presents the changes to the report to address them.

36 responses were received, the majority of which came from asset managers and capital market and other financial market associations mainly from the United States and Europe. All responses not marked as confidential have been published on the FSB website.[2]

The note includes an annex with the list of the consultation questions.

2. Summary of feedback received

2.1. General comments and cross-cutting themes

Comments received

Comment 1: Scope of the recommendations. Some respondents emphasised that the report should more clearly define the scope of the entities, activities and markets covered by the recommendations, stressing the highly complex and diverse nature of the NBFI ecosystem. They argued that such diversity requires proportionality in the policy approach by authorities, which should properly consider the specificities of different entities and activities in the NBFI ecosystem. Some respondents also suggested that the focus should be on less regulated or non-regulated nonbanks, where regulators have less transparency over the risks being

[1] See FSB (2024), *Leverage in Non-bank Financial Intermediation: Consultation report*, December.

[2] See *Public responses to consultation on Leverage in Non-Bank Financial Intermediation*.

undertaken. Certain respondents suggested more clearly specifying the notion of 'core financial markets' used in the report.

Comment 2: Acknowledgement of recent policy developments. Several respondents highlighted that numerous policy steps have recently been taken by authorities and standard-setting bodies (SSBs). Inter alia, responses mentioned the Basel Committee on Banking Supervision (BCBS) guidelines for counterparty credit risk management, the reports on margining practices published by the BCBS, the Committee on Payments and Market Infrastructures (CPMI), the International Organization of Securities Commissions (IOSCO) and the FSB, and the central clearing mandate for U.S. Treasuries adopted by the SEC. Some respondents emphasised the relevance of these developments for the purpose of the report and suggested that the FSB may consider giving some time for these policies to be implemented and for their effectiveness to be assessed, before introducing new ones.

Comment 3: Data sharing and increased harmonisation in reporting and risk metrics. Several respondents highlighted the merits of data sharing between authorities. Some of them supported the call for authorities to remove obstacles to data sharing within their jurisdictions and to explore avenues for information sharing across jurisdictions. Some respondents noted that a better use of the data already available to authorities would enable a more precise assessment by authorities of system-wide risks to financial stability. Benefits of more harmonisation in risk metrics across jurisdictions were flagged, while some respondents mentioned that better data sharing would also reduce the burden on firms that are often subject to multiple, duplicative information requests from authorities, which may have different reporting thresholds and formats.

Changes to address comments

Scope of the recommendations

- The final report clarifies that the recommendations are addressed to FSB member authorities and focus on markets, entities, and activities where NBFI leverage can create financial stability risks. It also notes that such risks can vary across jurisdictions. The report then acknowledges (i) the high degree of heterogeneity of nonbanks, (ii) that leverage in some NBFI segments is relatively limited and is not likely to pose financial stability risks, (iii) the differences between banks and various types of nonbanks, which have motivated different regulatory approaches, (iv) as well as the complex and varying nature of NBFI leverage in different jurisdictions. It also recognises that certain leveraged activities by nonbanks can facilitate hedging, enhance efficiency and support liquidity in financial markets. For these reasons, the recommendations provide authorities with flexibility to tailor their policy response to their jurisdictional circumstances by selecting, designing and calibrating policy measures, or combinations of measures, that are most appropriate to the financial stability risks from NBFI leverage that they identify, while considering any adverse effects.

- The final report makes an explicit reference to an "integrated approach", according to which authorities should (i) have a domestic framework in place to identify and monitor financial stability risks created by NBFI leverage in an effective, frequent, timely and proportionate manner and (ii) take steps to select, design and calibrate policy measures, or combinations of measures, that address in a flexible, targeted and proportionate way the financial stability risks that they identify.

Acknowledgement of recent policy developments

- The final report clarifies that, following recent episodes of stress, authorities have taken important policy steps to address some of the vulnerabilities that came to the fore, while substantive policy work has also been completed by the SSBs and the FSB. It also acknowledges that policy developments and recommendations are expected to contribute towards addressing financial stability risks created by NBFI leverage, while the recommendations of the final report aim to address financial stability risks created by NBFI leverage that may remain or may arise in the future.

Data sharing and increased harmonisation in reporting and risk metrics

- The final report does not include further details on this issue, but insights will feed into the ongoing FSB effort to address NBFI data challenges.

2.2. Risk identification and monitoring (Recommendations 1-3)

Comments received

Comment 4: Financial stability risks and transmission channels. Most respondents broadly supported the presentation of the financial stability risks arising from NBFI leverage. Some respondents suggested the report should further acknowledge the potential benefits of leverage (hedging and arbitrage), and possible unintended consequences of certain policy measures. A few respondents contested the materiality of risks related to NBFI leverage.

Comment 5: Risk metrics. Most respondents agreed with the list of suggested risk metrics and supported harmonisation of leverage definitions and metrics in order to minimise their own reporting burden, following up on the work done by IOSCO.[3] On specific metrics, many respondents argued that gross leverage is not an appropriate measure as it does not consider hedging and netting arrangements. Some respondents noted that metrics related to initial margins, if not coupled with information of an entity's unencumbered liquid assets, do not provide insights into the ability of firms to meet margin calls under stress. According to some respondents, risk metrics should be tailored to the business models of nonbank entities. Some supported the use of stress testing and scenario analyses, if they did not result in additional costs for the industry. Very few respondents suggested additional risk metrics.

Comment 6: Public disclosures. Most respondents were supportive of public disclosures, provided that any unintended consequences, e.g. front-running or otherwise working against investors' interests, would be addressed. Respondents were more supportive of aggregated disclosures at trading venue or financial market infrastructure level than entity-level disclosures.

3 See e.g. IOSCO (2024), *Investment Funds Statistics Report*, January.

Changes to address comments

Financial stability risks and transmission channels

- The final report further stresses the beneficial effects associated with the use of leverage, while clarifying the financial stability risks that NBFI leverage can create.

- The final report emphasises the need for authorities to consider a system-wide perspective to risk identification and monitoring.

Risk metrics

- The final report better clarifies that the toolkit metrics should be tailored to the business model of different leveraged nonbanks.

Public disclosures

- The report better clarifies the different types and objectives of public disclosures, and that their design should be tailored to their intended outcome of increasing transparency, especially about concentration risk and crowdedness, with the aim to support market participants' ability to manage risks from NBFI leverage. It also clarifies the need to consider potential unintended effects and burden of additional reporting requirements, against their intended benefits.

2.3. NBFI leverage in core financial markets (Recommendations 4-5)

Comments received

Comment 7: Activity-based measures. Several respondents expressed the view that minimum haircuts or initial margin requirements on securities financing transactions (SFTs) backed by government bonds would have several drawbacks and unintended consequences, such as limiting hedging opportunities and reducing liquidity in core financial markets.

Several respondents sought clarity on the scope of enhanced margin requirements for derivatives. Many respondents suggested to focus on implementing the policies included in the recent review of margining practices in centrally and non-centrally cleared markets.

Some respondents suggested that central clearing, depending on the design, would be a more effective tool for authorities compared to margin requirements and minimum haircuts in non-centrally cleared SFT markets. However, some respondents noted that central clearing requires sufficient volume, standardisation and liquidity, and therefore central clearing would not be beneficial in all markets. Some respondents suggested that there may be no suitable clearing model accessible at affordable cost for all clients.

Several respondents cautioned against dynamic approaches to minimum margining and haircut requirements, interpreting them as designed to be procyclical, therefore exacerbating liquidity stress.

Some respondents highlighted increased procyclicality and higher funding and hedging costs as the main unintended consequences of activity-based measures. Respondents also noted that minimum haircuts could reduce incentives to manage risks effectively (e.g. market participants may seek to set haircuts at their respective ‘minimum’ levels, regardless of the risks of the transactions), while extending central clearing would increase risks related to cash variation margins that can exacerbate asset sell-offs in times of stress. Some respondents emphasised the risk of reduced participation and liquidity in repo markets.

Several respondents suggested that a combination of margins, haircuts and expanded central clearing would help to limit leverage in bond and repo markets and may reduce procyclicality in periods of stress.

Comment 8: Entity-based measures.

Several respondents recognised that targeted entity-based constraints can be effective in addressing NBFI leverage where it can create financial stability risks. A few respondents welcomed the examples of direct and indirect entity-based measures implemented by authorities in response to build-up of leverage mentioned in the report and supported the targeted nature of measures such as the yield buffer requirement on LDI funds. Some respondents sought more clarity on the scope of indirect limits. Many respondents however urged avoiding a broad application of such constraints across all nonbanks, noting that such measures should only apply to highly leveraged entities and be targeted to address specifically identified financial stability risks.

Several respondents highlighted concerns on the effectiveness of entity-based measures with respect to challenges in identifying appropriate risk-sensitive metrics and distinguishing leveraged positions from hedging positions. A few respondents suggested that entity-based limits (if any) should be set by leverage providers as part of their counterparty risk management. Some respondents suggested that entity-based constraints should only apply to the fund and not to the asset manager and should target specific activities. Others noted that leverage-related regulation is already in place for certain types of funds (i.e. products) in some jurisdictions.

Respondents expressed scepticism on the effectiveness of entity-based concentration constraints, such as position limits, as these may create market fragmentation, inefficiencies in price discovery and have adverse impact on market liquidity.

As unintended consequences of entity-based measures, most respondents identified limiting hedging and market intermediation activities by nonbanks, which may affect market functioning and price discovery. Some respondents mentioned the potential for leverage risk-shifting to other parts of the financial system, and the risk of regulatory arbitrage.

Changes to address comments

Activity-based measures

- The final report clarifies that the policy intent of including activity-based measures in the report is to indirectly constrain leverage and emphasises the need for authorities to conduct appropriate analysis when selecting, designing and calibrating both activity-based and entity-based measures, to mitigate any adverse effects.

- The report also notes that while some concentration-related measures already exist (for example, CCPs often apply concentration charges), there can be challenges to effectively identify concentrated positions.

Entity-based measures

- The final report acknowledges that some entities are already subject to regulatory constraints on leverage use and clarify that additional measures could address identified gaps in relation to financial stability risks created by NBFI leverage.

- The final report clarifies that entities in scope could also be defined in terms of their activities (e.g. liability driven investment, loan origination) to tailor entity-based measures to risks associated with specific activities.

- The final report acknowledges the importance of having appropriate risk-sensitive metrics when setting leverage limits, tailored to the risks posed by different entities or by certain products or segments of their portfolios.

2.4. Interlinkages with systemically important financial institutions (Recommendations 6-7)

Comments received

Comment 9: BCBS Guidelines on counterparty credit risk. Most respondents expressed support for the BCBS counterparty credit risk (CCR) guidelines published in December 2024, advocating for their adoption across all jurisdictions. They generally agreed that no additional changes should be contemplated until the guidelines are fully implemented and their effectiveness is thoroughly evaluated. Some respondents also highlighted that leverage providers currently tailor credit risk management based on the risk profile of their nonbank clients and that existing practices are largely sufficient to ensure leverage providers can assess the full extent of their counterparties' leverage. A few respondents suggested that while leverage providers are well positioned to manage counterparty credit risk, in some cases they fail to do so.

Comment 10: Counterparty disclosure. Many respondents claimed that leverage providers already have the necessary information to manage their counterparty risk or can obtain access to this information. Some respondents noted that much of the necessary information is reported to regulators who could utilise it more comprehensively.

Many respondents noted that the significant heterogeneity of leveraged nonbanks makes designing and implementing uniform private disclosure minimum standards very challenging. Many respondents also called for a risk-based, proportionate application of any new requirements for counterparty disclosure (i.e. disclosure by leverage users to leverage providers).

Most respondents cautioned that counterparty disclosure requirements would need to protect the confidentiality of leverage users' sensitive proprietary information and should not impose overly granular or detailed disclosure requirements (e.g. at position level), as this could lead to predatory behaviour (e.g. front running) or have an adverse commercial impact, particularly for smaller market participants with less power *vis-à-vis* leverage providers.

Some respondents agreed that harmonised data and metrics would help leverage providers to set expectations for leverage users and improve the quality and consistency of the information they receive and the efficiency of their risk management. Several respondents highlighted specific metrics whose counterparty disclosure would best support counterparty risk management, ranging from value-at-risk and stress test results to collateral composition and funding sources, as well as information on concentrated exposures, counterparty exposures and liquidity profile.

On enhanced counterparty disclosure during stress, most respondents acknowledged that leverage providers should be able to demand additional information during periods of market stress. Some respondents also argued that prescribing enhanced counterparty disclosure requirements in such circumstances could inundate leverage providers with information, potentially preventing them from focussing on the most pressing risk management issues.

Several respondents cautioned that the recommendation could have other unintended consequences, e.g. leading market participants to reduce the number of counterparties they use, which would reduce resilience to counterparty default and therefore increase systemic risk. Other respondents flagged that providing enhanced counterparty disclosure would likely create additional costs and operational burdens for market participants, particularly for smaller firms. Few respondents expressed concern that establishing minimum counterparty disclosure standards would lead leverage users to limit the information they provide to that minimum set.

Most respondents supported establishing an industry working group with balanced representation from the buy-side and sell-side, as they believe it would be most effective in addressing both sides' concerns and therefore gain widespread acceptance. Most respondents also preferred that authorities set out a set of principles or best practices instead of prescriptive regulatory rules or guidance. To this end, several respondents identified a code of conduct as an attractive vehicle for promoting such best practice.

Changes to address comments

BCBS Guidelines on counterparty credit risk

- The final report better clarifies that the FSB supports the full implementation of the BCBS guidelines and the BCBS's call for strong counterparty credit risk management practices, particularly the need for banks' risk management practices to incorporate the quantity and quality of counterparty disclosure received.

Counterparty disclosure

- The final report calls for authorities, in cooperation with the FSB, to consider establishing a public-private partnership with industry to develop standards for the type of information to be provided by leveraged nonbanks to leverage providers, with both buy side and sell side representatives.
- The final report emphasises the importance of proportionality in counterparty disclosure, given the high degree of heterogeneity across leveraged nonbanks.
- The final report further emphasises the need to protect confidentiality of sensitive information and clarifies that enhanced counterparty disclosure requirements should not typically require disclosure of individual positions. The report also signals the possibility to explore technological solutions to potentially resolve the inherent tension in a way that meets both sides' needs.
- The final report recognises that potential harmonisation of data and metrics and standardisation of counterparty disclosure practices could be considered to facilitate comparisons and aggregation across clients.
- The final report better outlines the possible unintended consequences of enhanced counterparty disclosure, as well as mitigants.

2.5. Addressing incongruences in regulatory treatment of NBFI leverage (Recommendation 8)

Comments received

Comment 11. Same risk, same regulatory treatment. The principle was interpreted in varying ways by respondents. Most respondents argued that risk and regulation differ, and should differ, based on the type of nonbank entity, even if they are engaged in the same activities, indicating that a one-size-fits-all approach would be ineffective. Some respondents expressed concerns that applying this principle might lead to uniform rules for all entity types or similar regulations for banks and nonbanks. They emphasised that the structures and business models within the NBFI ecosystem are not only highly diverse but also significantly distinct from those in the banking sector. Additionally, some respondents pointed out that different nonbanks employ leverage in varying ways, resulting in different risks and levels of risk associated with the use of leverage.

Changes to address comments

- The final report clarifies the intent of the recommendation, which is to identify and address instances where various forms of NBFI leverage provision are subject to incongruent regulatory treatments which may result in regulatory arbitrage that can increase financial stability risks. The expression "same risk, same regulation" is deleted.

- The final report clarifies that the focus is not on a comparison between banks and nonbanks, the risks they pose, and the regulations they are subject to. The focus instead is on the diverse modalities in which leverage is provided to nonbanks and how these different modalities can pose (the same or similar) financial stability risks.

Annex: Questions of the consultation report

Recommendation 1

1. Is the description of the financial stability risks from leverage in NBFI accurate and comprehensive? Are there additional vulnerabilities or risk dimensions related to NBFI leverage that authorities should consider for monitoring purposes?
2. What are the most effective risk metrics that should be considered by authorities to identify and monitor financial stability risks arising from NBFI leverage?
3. What are the most effective metrics for the monitoring of financial stability risks resulting from

   (i) specific market activities, such as trading and investing in repos and derivatives?

   (ii) specific types of entities, such as hedge funds, other leveraged investment funds, insurance companies and pension funds?

   (iii) concentration and crowded trading strategies?

Recommendation 3

4. What types of publicly disclosed information (e.g. transaction volumes, outstanding amounts, aggregated regulatory data) are useful for market participants to enhance their liquidity or counterparty risk management? Are there trade-offs in publicly disclosing such information and, if so, what would be the most important elements to consider? What is the appropriate publication frequency and level of aggregation of publicly disclosed information?

Recommendation 5

5. Do Recommendations 4 and 5 sufficiently capture measures that would be used to address the scope of non-bank financial entities under consideration in this report? In what ways may the policy measures proposed in the consultation report need to be adjusted to account for different types of non-bank financial entities?
6. In what circumstances can activity-based measures, such as (i) minimum haircuts in securities financing transactions, including government bond repos, (ii) enhanced margin requirements between non-bank financial entities and their derivatives counterparties, or (iii) central clearing, be effective in addressing financial stability risks related to NBFI leverage in core financial markets, including government bond markets? To what extent can these three types of policy measures complement each other?
7. Are there benefits to dynamic approaches to minimum margin and haircut requirements, e.g. where the requirements change based on changes in concentration or system-wide leverage? If so, what types of indicators capturing concentration or system-wide leverage should the requirements be linked to?
8. Are there any potential unintended consequences from activity-based measures beyond those identified in the consultation report?

9. For non-centrally cleared securities financing transactions, including government bond repos, what are the merits of margin requirements compared to minimum haircuts?
10. In what circumstances can entity-based measures, such as (i) direct and (ii) indirect leverage limits be effective in addressing financial stability risks related to NBFI leverage in core financial markets?
11. Are there ways to design and calibrate entity-based measures to increase their risk sensitivity and/or their effectiveness in addressing financial stability risks from NBFI leverage?
12. Are there any potential unintended consequences from entity-based measures beyond those identified in the consultation report?
13. To what extent can activity-based and entity-based measures complement each other? What are the main considerations around using these two types of measures in combination?

Recommendation 6

14. How could counterparty credit risk management requirements for leverage providers be enhanced to be more effective in addressing financial stability risks from NBFI leverage in core financial markets, such as government bond repo markets? In what circumstances can they be most effective?

Recommendation 7

15. Would a minimum set of disclosures to be provided by leverage users to leverage providers be beneficial in improving counterparty credit risk management and reducing financial stability risks from NBFI leverage, including concentration risks? If so, which types of information and what level of granularity should (and should not) be included in this minimum set and why?
16. What are the main impediments that leverage users face in sharing additional or more granular data with their leverage providers? Is there a risk that a minimum recommended set of disclosures may lead leverage users to limit the information they share with their leverage providers to that minimum set?
17. Should such a minimum set of disclosures rely on harmonised data and metrics to ensure transparency and efficiency in the use of such information for risk management purposes? Do respondents agree that such a minimum set of disclosures should be based on the list of principles outlined in the consultation report? If not, which principles should be added, deleted or amended?
18. Should leverage users be required or expected to provide enhanced disclosures (beyond that provided in normal market conditions) to their leverage providers during times of stress?
19. Should authorities design a minimum set of harmonised disclosures and guidelines on its application, or should they convene a cross-industry working group to do so? How do respondents believe such a standard should be incorporated into market

practice? Through regulation, supervisory guidance, and/or via a Code of Conduct or similar approach?

Recommendation 8

20. Are there areas where the principle of “same risk, same regulatory treatment” should be more consistently applied? Are there circumstances in which the principle should not apply or should not apply comprehensively?