Leverage in Non-Bank Financial Intermediation: Consultation report

Response to Consultation

BlackRock

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?**

   We welcome the FSB's recognition that leverage is "a characteristic feature of modern economies and financial markets" which can "enhance efficiency and support liquidity." It is also an important tool for investors in hedging risks and matching liabilities.

   That said, we do recognise that leverage - if not properly managed - can pose a vulnerability and may impact markets more broadly if investors react to market shocks and sell assets to meet margin calls or to deleverage, particularly if those markets are highly concentrated.

   It is important that policymakers can make an informed assessment of how leverage is used relative to the underlying investment strategy, but it needs to be acknowledged that risk does not arise from 'leverage' in and of itself. Leverage is a relative concept – it measures the level of borrowing of an individual entity relative to its assets/equity.

   This means that as the Global Association of Risk Professionals has noted, a simple statement about leverage (i.e., 'a fund is two times leveraged') contains little information about the implications of that leverage or the risk posed to the portfolio without wider context – i.e., the baseline (or unleveraged portfolio) against which leverage is measured. The characteristics of the underlying portfolio, including the risk or liquidity of assets, will in turn influence the riskiness of the leverage.

   It also means that aggregating up leverage of individual investment vehicles or positions within a particular sector, or across the financial system, will not give an indication of system-wide risks from leverage.

   Looking at the leverage of a particular investment portfolio (whether in the form of a segregated mandate or a collective vehicle) in isolation yields some information – but only about that portfolio or vehicle. This could include the percentage by which asset values would need to fall to generate insolvency; the potential margin/collateral call that a market move could generate; or assets that might be sold to deleverage.

   This is fundamental for the risk management of individual portfolios or vehicles. However, from a financial stability perspective, the key question for policymakers regarding the use of leverage in non-bank financial intermediation is how these risks, in the event of a plausible shock scenario, might interact and transmit through the system to threaten the financial stability of core markets and/or systemically important institutions.

Answering this question should start with an assessment of ecosystem-wide data, in order to develop an understanding of how different parts of the system interact. In parallel, policymakers should identify the institutions and markets that are core to financial stability – where the impact of leverage could cause genuine systemic risk:

[ ] Critical institutions could include, for example, highly interconnected commercial banks and CCPs. Failure in these types of institutions can cause severe disruption to the financial system – as recognised and addressed by policymakers through the development of the Global Systemically Important Banks (G-SIB) framework and Basel prudential requirements; as well as CPMI-IOSCO Principles for Financial Market Infrastructures, applied to CCPs.

[ ] Core markets clearly start with sovereign bond markets. Sovereign bonds are the base asset for financial markets, the mechanism for governments' funding, and transmission of monetary policy. As such, they have been the focal point for central bank interventions since the GFC. Policymakers may decide other markets – for example repo markets – require further attention.

Once critical institutions and core markets have been identified, policymakers should agree possible sources of unacceptable disruption to them, for example through the liquidation channel if core markets were to be affected, or through the counterparty channel if a critical institution were to be impacted. They should then assess the potential of these shocks to cause genuine systemic risk (i.e. serious negative consequences for the real economy), consider whether policy intervention would be appropriate and then tailor policy interventions accordingly.

The insolvency of a single fund or margin calls faced by an individual market participant are not in themselves examples of systemic risk. While potentially disruptive for some market participants, they do not impair the functioning of wider financial markets or have negative consequences for the real economy unless the impact is severe for a critical institution or core market.

Incidents like the failure of Archegos Capital Management are noteworthy primarily because of the impact on a highly interconnected commercial bank - a critical institution for financial stability purposes. While the losses generated for several banks following Archegos' collapse did not ultimately generate systemic risk, the incident revealed bank risk management failures. These are most effectively mitigated by focusing on commercial banks' risk management practices and the regulations underpinning them. (See response to Q. 15 & Q. 16 for more detail)

We believe a holistic, data-driven assessment of risks must come before any interventions on financial stability grounds to ensure they are balanced against the benefits that leverage brings to markets and the real economy in terms of investment, trading and hedging risk.

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?**

[Note: Questions 2 & 3 are taken together.]

With respect to metrics for assessing risk from derivatives and SFTs (Q.3), we note there is already extensive market reporting in place, encompassing both derivatives (e.g., G20 derivatives reporting rules, European Market Infrastructure Regulation reporting in Europe and similar regimes in Australia and Singapore) and SFTs (EU Securities Financing Transactions Regulation, with similar rules under implementation in the US). We would urge regulators to consider ways to make better use of the output of these reporting regimes, before introducing new requirements.

As regards metrics for assessing leverage more broadly (Q.2), and as noted in our answer to Q. 1, there is no set level where leverage becomes excessive or risky. The most important consideration is whether or not that leverage has the potential to significantly impact a critical institution or a core market.

Detailed data is usually available for investment funds' use of leverage, but may be missing or incomplete for certain market participants. That said, it is understandable that supervisors wish to understand the extent of, and potential risks from, leverage in investment funds.

As a starting point, leverage reporting at the fund level should be viewed as a measure of potential amplification of risk, rather than an intrinsic measure of risk. In turn, aggregating up leverage of individual investment vehicles within a particular sector, or across the financial system, will not give an indication of system-wide risks from leverage. Measurement of leverage is not straightforward, and the level of risk is highly dependent on the underlying investment strategy.

We agree with the view put forward by IOSCO in its 2019 consultation on leverage that aggregate Gross Notional Exposure (GNE) provides little information, aside from the fact that a fund uses derivatives. As such, we suggest funds should report GNE on an asset-class-by-asset-class basis with both long and short positions. This approach will allow regulators to assess a fund's basic asset allocation and distinguish between exposure to different types of assets, rather than relying on a single figure of exposure from all asset classes. This will also minimise confusion caused by reliance upon single, aggregated GNE figures, which can overstate a fund's true exposure and risk.We support the use of reported leverage as a starting point to conduct a risk-based analysis of funds with higher levels of leverage, while avoiding the automatic treatment of these funds as risky. Using a risk measure like Value-at-Risk (VaR) alongside leverage measures is important when assessing the risk of a fund's overall use of derivatives and leverage. The use of VaR in fund regulation (e.g. EU UCITS or the SEC Derivatives Rule) assists both managers and supervisors in understanding the impact of the use of (more sophisticated) derivative management techniques on portfolio risk.

Unlike the commitment approach which only measures the extent to which a portfolio or vehicle uses leverage, VaR is measure of downside risk that seeks to quantify a maximum potential loss at a given confidence interval. While VaR is not a measure of leverage (rather, it is a measure of overall portfolio risk) it is useful for understanding the amount of risk that leverage may be introducing to a portfolio. Most existing regulatory reporting regimes request data on VaR. However, there is inconsistency in the specifications of VaR in various reporting regimes.

Further, there is scepticism with respect to using VaR as a regulatory measure given that it can be calculated using different methods (e.g., parametric, historical, Monte Carlo), and the results can differ based on the models and assumptions used.

We recommend a focus on standardising the approach to collecting data on VaR, as we believe these concerns can be mitigated by using common parameters and back-testing, to provide a baseline for the model being used to calculate VaR, recognising that there may be legitimate reasons for using different VaR models. For example in the EU, when UCITS utilise the VaR method, they must provide results of back-testing assessments that denote how many overshoots occurred over a 250 day period, as well as the amount of the overshoot in excess of VaR. Recognising that funds use derivatives to achieve investment objectives, align portfolio risks to benchmark risks, or to reduce overall risk, we recommend tailoring measures according to the different ways in which a fund uses derivatives, including measuring both absolute risk and risk relative to a benchmark (where applicable).

Stress testing is another means of assessing downside risk that is often used as a complement to VaR. Stress testing looks at various stressed scenarios and assesses potential losses that could arise from such scenarios. To be clear, stress testing in this context is different to liquidity stress testing, as it relates to the mark-to-market losses a portfolio could experience during a period of market volatility, rather than a fund's ability to meet its redemption obligations. Stress testing addresses a valid criticism of VaR in that VaR may not provide reliable insight as to the magnitude of potential losses in the tail end of the distribution, i.e. 1 in 1000 events.

Overall, we support efforts to better share the results of the multiple current processes used to collect data about leverage. We would support more alignment around the definition of leverage, albeit with room for jurisdictional specificities - to streamline regulatory reporting and facilitate better comparisons across funds (including across fund structures). The current process is onerous and leads to duplication and inconsistency in reporting by firms, as well as operational complexity, with many processes requiring manual intervention.

Finally, we note that some policymakers have used alternative methods to identify and monitor financial stability risks, using scenario analysis and feedback loops with market participants to identify potential sources of vulnerability. Policymakers could consider where these exercises could be a complement or alternative to reporting as a means of identifying risks.

[ ] Fixed income funds (where a fund is using derivatives for duration management, not for investment returns

but they still can't be netted), face challenges in applying duration netting rules due to the target duration. The use of duration netting for a short duration fund may actually lead to an increase in commitment exposure, due to the adjustment by the target duration. Another problem is that full netting is only permitted within some maturity ranges, but not between them. This raises issues for unconstrained fixed income funds which don't work this way and invest across all possible maturity ranges.

[ ] Multi-asset funds also run into problems with the commitment approach. Since derivatives in these funds are being used not for increased returns, but for managing duration risk or aligning to a benchmark, (which can't be netted) the commitment approach creates a significant leverage figure – which is inaccurate and suggests leverage is much higher than it is.

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 credit 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?**

   To answer this question, we take sovereign bond markets as an example and outline the types of information that can inform a holistic assessment of that market and any associated liquidity or counterparty risks. As mentioned, sovereign bond markets are core markets for financial stability. Disclosures in other markets however, are largely sufficient.

   Firstly, understanding transaction volumes and outstanding positions grouped by maturity bucket (e.g., 1-2 years, 2-7 years, 7-15 years, 15-25 years, 25+ years etc.) would be helpful. Information pertaining to dynamics in related instruments is also informative; for example cash and inflation linked bonds, as well as repo (bilateral, cleared and tri-party), futures, and swap markets linked to those bonds.

   Understanding the investor base of a market is another an important component of any analysis – for example, breaking holdings data down into holdings by sector, i.e. money market funds (MMFs), dealers, mutual funds, hedge funds, insurers, and pension funds. Notably, MMFs, in addition to direct government bond holdings, use tri-party repo, and therefore are participants in the market for longer-dated bonds, which are often pledged as collateral in a repo transaction.

   In terms of reporting coverage and frequency, granularity must be balanced against risks associated with being able to "reverse engineer" sensitive counterparty and trade data.

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?**

   [Note: Since Qs. 6-9 relate to the activity-based proposals and Qs. 10-13 deal with the entity-based proposals, we will use Q. 5 to comment on some of the concentration-related proposals.]

   Concentration Add-Ons for Margins and Haircuts in SFT and Derivatives Markets

   Concentration and liquidity add-ons are already common practice in SFT and derivatives markets. In the US for example, and in accordance with CFTC requirements, derivatives clearing organisations ("DCOs") must have "initial margin requirements that are commensurate with the risks of each product and portfolio, including any unusual characteristics of, or risks associated with, particular products or portfolios."14 The use of margin add-ons, including those that address the impact of concentration and liquidity on the expected closeout costs of a portfolio, allows CCPs to address risks in the market that are unique to certain products or portfolios they clear.

CPMI-IOSCO provided further guidance that "add-on charges can address risks that may be more challenging to model accurately, or are not readily discernible in the price histories of the products cleared." CCPs should have the ability to exercise their expert judgment to apply concentration and liquidity add-ons in their margin methodology in a flexible manner to address risks that are not easily modelled.

Setting overly-prescriptive standards for CCPs on how they should calculate margin add-ons could hamper their ability to manage risk, because it could prevent them from taking into account the unique risks of the products they clear (that may not be covered by standard margin) and clearing member credit.

CCPs should be allowed flexibility to apply margin add-ons that consider the impact of liquidity and portfolio concentration on expected closeout costs. The application of liquidity and concentration add-ons by CCPs should be based on market depth and position exposures and may consider the following factors:

[ ] Clearing member polls or modelling techniques of bid/offer prices should be used to capture possible liquidity add-ons.

[ ] CCPs should consider volume, open interest, order book data, or other similar metrics to capture concentrated position exposures at a product or portfolio-level for possible margin add-ons.

[ ] CCPs should consider position concentration relative to product liquidity and the impact of differences in bid/offer prices of closing out a portfolio in determining the amount of concentration add-on to apply. For less liquid products, or those where fewer participants are active, this may require explicit modelling of liquidation costs.

[ ] The impact of position size on close-out costs, i.e., concentration risk, should be captured at a product or product group level based on the cost of closing out positions or through an analysis of product or product group volume.

[ ] Liquidity and concentration add-ons should be transparent, easily replicable, and where possible, also applied at the customer origin.

Any further liquidity or concentration add-ons or limits applied by clearing members to their customers should also consider similar principles as those outlined above.

Large Position Reporting Requirements

Given the significant amount of post-trade reporting that market participants are obliged to undertake through existing regulation (e.g., SFTR, OFR and EMIR), we suggest authorities should first look to that information, before considering any new reporting requirements. In a European context, the addition of the fixed income bond transparency regime and subsequent consolidated tapes will also improve pre- and post-trade information around liquidity, transparency and efficiency of sovereign bonds and derivative markets.

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?

Minimum Haircuts in SFTs

The application of haircuts is already standard industry practice. It is predicated on a detailed understanding of the composition, characteristics and prevailing complexities of each specific SFT market (e.g. repo, securities lending, prime brokerage etc.) As such, it is a responsibility that should lie with market participants who are parties to the transactions themselves.

The primary purpose of haircuts is to manage counterparty risk. Mandating minimum haircuts on SFT transactions to manage aggregate leverage could carry significant risk if inappropriately calibrated, or should they fail to account for the unique structural features of specific markets. In many markets, leverage plays an important role for market participants themselves, and / or their contribution to market functioning.

Repo is one type of securities financing transaction, but it is a crucial one in that it allows market participants to hedge risks and match liabilities; as well as build exposure to markets and trade, contributing to market liquidity. We acknowledge concerns that haircuts on bilateral government bond repo transactions may be too low relative to the risk that these transactions can pose to the providers of leverage, i.e. to bank balance sheets. While this may require greater scrutiny from bank supervisors, we strongly caution against considering minimum haircuts as a means of managing risk taking or de-leveraging markets by increasing the overall cost of borrowing. We see a risk that changes to minimum haircuts here could also impact activity in government bond markets, including borrowing costs or potentially broader liquidity conditions – depending on how they are calibrated.

Given the potential for disruption, we would urge regulators to undertake a data driven assessment of both the necessity for and impact of minimum haircuts in each SFT market segment (e.g. repo, securities lending, prime brokerage etc.) before acting. That assessment should closely consider the composition and characteristics of each specific market, and the impact changing haircuts may have.

Central Clearing in SFTs

BlackRock remains supportive of central clearing and the use of CCPs. Central clearing brought standardised risk mitigation and transparency to the derivatives markets, addressing many of the risks exposed by the Global Financial Crisis (GFC). We also believe it can play a role in helping to mitigate systemic risk in funding markets through increased settlement efficiency, reduced counterparty credit risk and standardised risk management processes such as margin calibration and haircuts.

Central clearing can however introduce liquidity risks, given the need to post variation margin (VM) in cash to the CCP, in addition to the initial margin (IM) requirements. The Bank of England's SWES exercise highlighted this systemic liquidity demand in critical Sterling markets – a simulated market shock significantly increased liquidity demand, 85% of which arose from variation margin calls, and another 8% from initial margin calls. Widening the scope of transactions that are subject to mandatory clearing – which by default would further increase liquidity demand in the system – without being mindful of where that additional liquidity supply will come from, would further exacerbate liquidity risk. This is especially relevant outside of the US, where there are fewer options for storing and transferring liquidity in the system. The US repo markets are more developed given they benefit from the reverse repo and sponsored repo programmes. This is not the case in Europe for example.

Repo markets serve an absolutely central role in supporting well-functioning financial markets due to their role as liquidity providers, and so the costs and benefits of changing how that market works needs to be very carefully considered.

Instead of mandating central clearing in these markets, we would advocate for continued work by clearing members (CMs), CCPs and asset managers acting on behalf of asset owners on the evolution of the repo clearing model to incentivise voluntary adoption, particularly during periods of dealer balance sheet squeeze.

Repo transactions are already collateralised and as such, counterparty risk is limited. Additionally, it is often purported that CCPs create more balance sheet netting opportunities for banks, which should help support more intermediation and deeper

liquidity. The suggestion that mandatory repo clearing would lead to the enhanced netting opportunities for dealers required to promote market intermediation is inconclusive. Consequently, we believe for repo and bond markets in particular, a mandate would be premature. Instead, we would recommend observing how the implementation of the US Treasuries clearing mandate develops from a regulatory, commercial, accounting and market structure perspective, and to understand the impact on liquidity. It is important to recall that there are significant jurisdictional differences across repo markets.

Focus should also remain on CCPs' resilience and ensuring the pro-cyclicality inherent to central clearing does not excessively amplify shocks during periods of market volatility. For instance, while central clearing of derivatives has helped to reduce counterparty credit risk across the system, it has also contributed to bouts of liquidity stress, by hard-wiring together price volatility and demand for cash to meet margin calls. A further increase in SFT participants moving to clearing would also lead to further concentration risk across a small number of CCPs, underscoring the importance of ensuring an appropriate CCP capital framework that includes incentives to right size initial margin and ensure sufficiently sized default funds.

At a more practical level, there are also new direct and indirect costs associated with repo clearing; the introduction of initial margin on repo transactions means NBFIs will become dependent on how CCP margin models react during periods of volatility, which can be hard to predict and could impede liquidity forecasting and planning. To assist with market participant forecasting, CCPs clearing SFTs should provide enhanced levels of margin transparency. Our response to the BCBS-CPMI-IOSCO Consultation onTransparency and Responsiveness of Initial Margin in Centrally Cleared Markets noted that the degree and quality of CCP margin transparency varies greatly from CCP to CCP. Market participants would benefit from greater transparency regarding the margin models used by their CCPs, as well as user-friendly margin simulation tools to stress test that information. We welcome the recent BCBS-CPMI-IOSCO recommendations and new rules in the EU to this effect, and urge supervisors to implement the proposals expeditiously.

As a complement to these proposals, we also urge the FSB to explore and consider ways to support an expansion of the type of collateral which can be used to meet initial margin requirements for cleared derivatives and initial and variation margin for uncleared derivatives. If carried out appropriately, expansion of eligible collateral to include a wider range of high-quality liquid securities could help achieve the FSB's objective of reducing investors' need to either sell assets or excessively rely on cash. We recommend expanding acceptable collateral to include certain types of Money Market Funds (MMFs) and Exchange Traded Funds (ETFs), where available:

[ ] In March 2020, MMFs played an important role in supporting the movement of cash around the financial system, allowing market participants to meet margin calls. However, the fact that MMF units cannot be pledged as collateral directly resulted in fund liquidations, which may have led to unnecessarily elevated activity in short-term funding markets, given that cash raised from these sales was often re-invested in a similar vehicle.

[ ] We also believe that ETFs whose portfolio holdings consist of assets that would otherwise be eligible collateral can themselves serve as an appropriate form of collateral. ETFs are transferable, liquid and transparently priced, which supports their use in this manner. In addition, in-kind redemptions (via an Authorised Participant) generally provide holders of the ETF with the ability to access securities in the ETF's underlying portfolio should a collateral holder prefer to access ETF portfolio holdings and sell these securities directly.

[ ] Finally, opportunities to increase high-quality liquid assets' (HQLA) mobility through tokenisation could also be beneficial, as it would allow end users to leverage additional forms of non-cash collateral, in turn reducing reliance on cash.

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?**

[Note: Questions 7 & 8 are taken together.]

We agree with the FSB that "activity-based measures should be calibrated to avoid or minimise any unwarranted reduction in market liquidity or increase in transaction, funding and hedging costs." Again, it is important for regulators to have a very clear understanding of how policy interventions would impact each individual core market before acting.

We are highly sceptical about the feasibility of managing system-wide leverage by setting dynamic or fixed minimum margin or haircut requirements on SFTs through regulation. We firmly believe that market participants with the necessary expertise should be able to use their discretion to make informed risk decisions based on what is in the best interest of investors and markets, to avoid procyclical behaviours.

In the case of repo markets for example, banks already adjust haircuts during times of market stress by considering factors such as the liquidity in the underlying market and the creditworthiness of the fund.

Market participants use the repo market for certainty of funding and it is crucial to avoid any scenario whereby a market participant would not be able to access liquid repo markets during times of stress. If market participants cannot predict with some degree of certainty the cost of borrowing over their required funding horizon, this compromises the basic premise of a functioning market, while simultaneously adding more risk into the system.

Finally, from a practical standpoint, dynamic schedules can also present operational challenges to NBFI participants, both in terms of implementation and ongoing usage. For instance, a requirement to make real time changes to minimum margin thresholds and haircut requirements may introduce end user uncertainty from a liquidity planning and preparedness standpoint. Furthermore, the cost of re-papering bilateral legal agreements (GMRAs / CSAs) and technical challenges required to integrate these real time adjustment capabilities into highly automated post trade collateral workflow processes (both bilateral and cleared) would be significant, and risk eroding hard won efficiency gains that support market stability.

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?**

   No comment.

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?**

    Direct Leverage Limits:

    As laid out in more detail in response to Q. 12, we disagree with the use of the word 'entity' to describe funds. We believe 'product-based' measures would be a more accurate description of what is being proposed in the consultation than 'entity-based'.

    We are sceptical about the feasibility of implementing broad-based entity-level leverage limits. Given that there is no single measure that can accurately quantify leverage for all types of funds (as outlined in response to Q.1), regulators would need to develop a suite of leverage and potential loss measures that could be collected on a consistent basis. As recognised by the FSB, assessing the true risk of leverage in funds is complicated by the fact that there are multiple types of derivatives and many funds pursuing different investment strategies.

    As noted above, it is challenging to identify pockets of 'excessive' leverage, and to distinguish between derivatives transactions that may be generated for the purposes of reducing risks or hedging (e.g., via interest rate swap derivatives) compared to leverage that is generated for magnifying returns, thereby increasing risk taking.

    Moreover, because funds are not the only type of vehicle to employ leverage, any limits placed on them risk leakage to elsewhere in the system. This issue would also apply to derivative concentration limits applied solely to funds.

    As described in response to Q.1, this should start with the identification of the markets and/or institutions that are core to financial stability. Any risks identified as part of this assessment should then be mitigated through targeted interventions. For example, the Central Bank of Ireland's use of powers under Article 25 of AIFMD to impose leverage limits on real estate funds is a good example of an appropriately targeted and product specific approach to limiting leverage. Crucially, this was informed by an assessment of a market (Ireland's real estate market) which identified, with a high degree of confidence, a potential concentration risk.

    Indirect Leverage Limits:

    The LDI fund yield buffer implemented following the Gilt crisis is the example of an indirect leverage limit given in the consultation. Yield buffers are a preferable way of managing leverage risk in LDI funds, as opposed to pure leverage-based constraints. The approach taken by the UK's Financial Policy Committee – setting minimum yield buffers based on a clear statistical methodology but leaving some discretion for managers to set an additional operational buffer – has generally been successful in providing sufficient guidance and clarity to the market without being overly prescriptive.

However, yield buffers can come with certain drawbacks. First, how the yield buffer of a given pension fund is calculated can be open to interpretation. Ensuring that factors such as initial margin, haircuts and other potential draws on collateral are taken into account is important to ensure that calculations of yield buffers are robust.

Second, specifying a minimum yield buffer and calibrating this to a specific timeline (e.g., the yield buffers used for GBP-denominated LDI funds in Ireland and Luxembourg which are calibrated to 5 days) can create an unnecessary constraint on investors that have access to highly liquid assets and have strong governance resources that allow them to move very quickly to replenish yield buffers. In effect, this means these funds are subject to over-insurance, which has an impact on both investment returns, and the amount of capital available to invest in productive assets. This can also work in reverse, with funds with less efficient operations and governance, or less liquid assets, potentially receiving false comfort that their yield buffer is technically sufficient, but unrealistic for their operational processes.

Third, the calibration of any yield buffer can never provide complete protection against scenarios in which assets have to be sold to replenish collateral buffers. Any metric calibrated to historical market moves is at risk of being overcome by future unexpectedly large and unforeseen moves. Leverage serves an important role in allowing pension funds to manage risks inherent in their liabilities, while continuing to invest in generating investment returns. It is not feasible to expect pension funds to self-insure against all potential market eventualities. Over-insurance has implications for investment returns and productive investment, especially given the investment horizons of pension funds. Supervisors should therefore consider ways to support an expansion of the type of collateral which can be used to meet margin calls, as described in more detail in response to Q. 6.

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?**

As outlined elsewhere in this response, we believe that any leverage-related regulatory intervention justified on financial stability grounds, needs to avoid outweighing the benefits that leverage brings to markets and the real economy.

Given the important role that leverage plays in risk mitigation (through hedging etc.), interventions that could limit market participants' ability to use leverage should only proceed if supervisors have determined with a high degree of confidence that the role leveraged investors are playing in the underlying market could pose systemic risk. Once identified, interventions must be targeted to the specific product of concern to avoid unintended consequences in other markets.

We agree with the FSB that to "mitigate procyclicality, authorities should consider allowing for temporary breaches of the limits in times of stress. For example, 'soft limits' can serve as an early warning indicator, before 'hard limits' requiring immediate action are breached. Authorities should always clearly explain and communicate their actions to market participants to avoid any undesirable market reaction." This is essential to avoid setting thresholds that would force similar segments of market participants to act in the same way, at the same time, which risks creating one-sided markets and pro-cyclical trading.

12. Are there any potential unintended consequences from entity-based measures beyond those identified in the consultation report?

In our view, a 'products and activities' approach is needed to address risks in non-bank financial intermediation. We are sceptical about the 'entity-based' proposals because applying an entity approach to market-based finance will simply shift risk within the system. Importantly, the risks associated with asset management are substantially different than the risks associated with balance sheet entities such as banks and insurers. It is for that reason that investment fund regulation falls within the 'products and activities' approach.

We believe 'product-based' measures would be a more appropriate description of what is being proposed in the consultation than 'entity-based'. Using the term 'entity-based' measures could lead to unintended consequences. To address risk from NBFI leverage effectively, any targeted measures should be applied to the product where the leveraged nature of investors in that product could pose a risk to financial stability, not the firm (or 'entity') that is offering the product.

In our view, 'entity' risks indiscriminate and potentially ineffective measures being applied to specific firms, while 'product' more accurately describes the leverage limits – both direct and indirect – referenced in the consultation, both of which were introduced to address specific risks in specific products.

For example, in the case of the LDI fund yield buffer post-Gilt crisis, the policy response was applied to LDI funds (i.e. the product), not to the pension fund (i.e. the entity). This was because the pension funds were not highly leveraged themselves - rather it was their use of LDI strategies that exposed them to risk. Applying entity-level leverage limits to pension funds in this scenario would not have addressed the risk.

Nevertheless, we agree that 'entity-based measures' – as defined by the FSB – should be designed to avoid undesirable risk-shifting behaviours, for example by complex non-bank financial entities that can reallocate leveraged activities across different strategies and core markets."

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?

As noted elsewhere in this response, we recommend a two-step process, first identifying where there is clear potential for systemic risk to arise, before assessing whether policy intervention would be appropriate, and tailoring any policy interventions accordingly. This will ensure a focus tailored to potential sources of financial instability and help to avoid unintended consequences associated with some of the proposals put forward in this consultation by the FSB.

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?

[Note: Questions 14 & 15 are taken together.]

Prime brokers' credit risk assessments extend far beyond just considering a counterparty's use of leverage. While understanding exposures is central to any counterparty credit risk analysis, it is just one piece of the puzzle.

Nevertheless, it has long been recognised that banks need to carefully manage exposures to highly leveraged counterparties. It is critical for banks' prime brokerage / secured financing businesses to understand the markets for securities they are financing / taking in as collateral – including liquidity, volatility, central market concentration, and concentration across the prime broker's book.

In 1999 BCBS issued 'Sound Practices for Banks' Interactions with Highly Leveraged Institutions', setting out best practices for banks with respect to due diligence and information gathering, measuring exposures, credit limits, ongoing monitoring, etc.

We welcome BCBS' recent updates to this guidance considering the "significant mismanagement of counterparty credit risk" revealed by the Archegos episode, which highlight the need for banks to:

[ ] Conduct due diligence on an ongoing basis, and not just during the onboarding phase, to foster transparency and ensure that all risks are fully captured, and that in times of stress informed decisions can be made in a timely manner.

[ ] Make credit risk mitigation strategies more effective also using robust contractual arrangements and risk-sensitive margining.

[ ] Monitor counterparty credit risk through comprehensive metrics covering a range of material risks, portfolios, and counterparties.

[ ] Enhance counterparty credit risk governance frameworks through the promotion of risk culture and clear processes, support by sufficiently detailed information.

If a prime broker has good counterparty risk policies which are effectively implemented, we believe that existing practices are largely sufficient to ensure they can assess the full extent of their counterparties' leverage. Before mandating newpolicies, it is equally important to recall that one of the problems with prime brokers in the Archegos incident was that they did not enforce their existing policies.

Banks' ability to measure any financial stability risk posed by NBFI leverage depends on the level of disclosure and information made available by their counterparties and their ability to cross-reference that data with market-wide information. As such, we routinely provide the following financial information to our prime brokers:

[ ] Assets under management (AUM);

[ ] Level of leverage at the fund level and offered by the bank (financing extended vs collateral);

[ ] Fund performance and profit and loss (P&L) volatility;

[ ] Level of unencumbered cash as a measure of portfolio liquidity;

[ ] Investor profile.

Banks can also make use of Audited Financial Statements (AFS) which are published annually and give insights into portfolio positioning. The statements follow an existing industry standard and can be added to ISDA agreements between prime brokers and their counterparties.

While we share financial information regarding our exposures with prime brokers at regular intervals, it would not be appropriate to require the disclosure of actual positions at other prime brokers, which are commercially sensitive.

Generally speaking, we would encourage a more streamlined process by which such financial information is shared across our trading counterparties given the wide range of dealers we have to share this information with when accounting for other products (e.g. swaps, repo, futures etc.).

Banks will be able to make better assessments of their counterparty risks if they can combine the data points outlined above with market-wide data, for example to be able to estimate average trading volumes, market concentration, or volatility of a particular security as discussed in response to Q. 4. This assessment relies on comprehensive post-trade data for equities, which is widely available for US-listed equities, but not elsewhere. In the EU and UK, work is still ongoing to set up consolidated tapes for equities (as well as for fixed income).

In many markets, this data is already available. For example, Credit Suisse's report on Archegos Capital Management notes that Credit Suisse's internal risk management was able to identify that Archegos' "top five long positions represented 175% of its NAV…[and it] held two positions that represented between 5 and 10 days' DTV [daily trading volume], six positions that represented between 2.5 and 4.99 days' DTV, and another nine positions that represented between 1 and 2.49 days' DTV".

Overall, we believe the risks exposed by the Archegos failure are best managed by the providers of leverage. The financial stability risk in this case was that of a potential material impact on a critical financial institution's balance sheet. As the UK PRA/FCA noted in light of this episode, banks should "systematically review their risk appetite for accounts that do not provide wider disclosure of their investment strategy, leverage, and financing relationships".

Separately, while we recognise the importance of leverage providers having clarity on the counterparty's investment strategy, leverage, and financing financial position, we

would be very concerned by any attempt to restrict investors to using a single prime broker. Being able to engage a variety of prime brokers allows access to different regional expertise, and, crucially, risk diversification. The collapse of Lehman Brothers in the Global Financial Crisis provides a clearcase study on the importance of having multiple prime brokers.

Hence, we do not agree with the assumption embedded in the following excerpt from the consultation: "Concentrated leveraged risk exposures can often build up unexpectedly […] when a non-bank financial entity borrows from several prime brokers, no single prime broker would necessarily know the full extent of the concentrated positions built up by the entity."

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?**

    We agree with the FSB that "the granularity of disclosures should be applied proportionately, using a risk-based approach that incorporates the nature, scale and complexity of the risks that a given client poses to its leverage provider." The potential benefits of sharing more granular data with leverage providers must be balanced against the risks of compromising commercially sensitive or proprietary information. Disclosures should only provide what is strictly necessary for the leverage provider to effectively manage risk on a specific exposure. If the disclosures are too onerous, or risk breaching client confidentiality, then market participants may reconsider their use of leverage, including leverage being taken for risk mitigation or hedging purposes.

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?**

    See answers to Q. 15 and Q. 16.

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?**

    Engagement between prime brokers and their counterparties is extensive and points of contact go well beyond the minimum touch points set out in law or contractual terms. In our experience, provision of enhanced disclosures in stressed markets is already standard industry practice and so does not need to be further laid out in regulation.

    Leverage users are often required to inform leverage providers if their net asset value (NAV) or other measure of performance drops below certain thresholds as per their contractual requirements. Such NAV notices were provided by the industry during the drop in equity prices at the beginning of the COVID-19 pandemic, for example. Leverage providers are also able to request this information from leverage users if and when they are concerned about the impact of a market event on particular counterparties.

    The benefit of such an approach is that the prime brokers can focus on the funds that are 'at risk', instead of a scenario where enhanced disclosures are mandated in a 'stress event' and the prime broker is overwhelmed with information from all its counterparties, which may not be useful or relevant.

    It is worth noting that providing this information in normal circumstances is already a large undertaking and introducing new reporting requirements on an ad-hoc basis in a stressed market event could divert resources and time away from firms that should be spent mitigating any negative impact for investors.

    That said, we believe there is scope to streamline the ways in which this kind of information is provided to prime brokers. This would be beneficial for market participants, prime brokers, regulators and investors alike, allowing for quicker turnaround times and ensuring that in a case where there are multiple prime brokers engaged with a leveraged counterparty, that they all receive the same information at the same time.

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?

We support harmonised policies across jurisdictions that are informed by regulator-led consultations and extensive industry feedback sessions. As described elsewhere in this response, we caution against setting regulation in a part of the market where market participants' ability to remain nimble and responsive to external factors is critical in avoiding the well-documented procyclicality risks that margining entails. In stressed market conditions, regulators can play a critical role by issuing supervisory guidance on the system-wide dynamics they see in affected markets, informed by close engagement with the industry on any idiosyncratic issues.

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?

We do not believe the principle of "same risk, same regulatory treatment" holds everywhere. It is most pertinent where 'same risk' means 'same liability structure'. The structures and business models within and inherent to the NBFI sector are highly heterogenous in their own right, but also differ significantly from the banking sector. If the same activity does not result in the same risk because of differences in business models, then the same regulatory treatment need not apply.

Bank depositors represent a debt obligation for the bank, their principal must be returned at par, and bank runs can occur when depositors demand their money bank in short order. Banks by design engage in maturity and liquidity transformation and are characterised by high levels of leverage. While each individual bank might vary in size, commercial focus, or geography, their fundamental structural features and business models are relatively homogenous.

The agency business model of asset management differs fundamentally from banks on all of these fronts:

[ ] Asset managers act as fiduciaries on behalf of asset owners. The assets belong to the asset owners and are held on behalf of the fund's independent depositary by a third-party custodian in bankruptcy-remote accounts. As such, client assets, including investment fund assets, are not commingled with the asset management firm's assets. Clients control the strategic allocation of their assets, not the asset managers. Asset managers are obligated from a legal, regulatory, and ethical perspective to make investment decisions in line with client guidelines.

[ ] Asset managers are not the counterparty to client trades or derivatives contracts, and in this regard the role of an asset manager is never to act as a buffer to the sale of assets or the unwinding of derivatives contracts by its clients.

[ ] Asset managers do not guarantee the returns of an investment portfolio. Investors have an equity stake valued according to their pro-rata share of underlying fund assets and bear all investment risks. Whether the assets appreciate or depreciate, the investment results are dispersed solely among the shareholders of the fund or to the individual investor in a separate account.

[ ] Finally, the balance sheets of asset managers are relatively simple. Asset managers generally do not use significant amounts of leverage or derivatives contracts, and asset managers do not rely on short-term wholesale funding to fund their operations.

Returning to the question asked and the example given in the consultation, the FSB suggests that authorities should "identify incongruences in the regulatory treatment of NBFI leverage resulting from similar exposures, financial instruments or structures", adopting the principle of "same risk, same regulatory treatment." One example given is that "incongruences in margining could have an impact on the provision of leverage to non-bank financial entities and their leverage-taking behaviour, such as shifting leveraged activities between centrally cleared and non-centrally cleared markets, or between products".

We do not agree with the principle of "same risk, same regulatory treatment", unless it also means "same liability". Neither do we believe that the movement of positions from central clearing to bilateral markets for products that are not subject to mandatory clearing is an 'incongruent treatment of risk'. Non-centrally cleared trades executed in bilateral markets are governed by a robust regulatory framework, with prescriptive margin and regulatory reporting requirements. Not only this, but the flexibility with regards to collateral posting under bilateral credit support agreements is an important risk mitigant to protect against the kind of pro-cyclical deleveraging that can be seen during a liquidity squeeze.

BlackRock

28th February 2025

Secretariat to the Financial Stability Board,
Bank for International Settlements,
Centralbahnplatz 2,
CH-4002 Basel
Switzerland

Submitted via email to: fsb@fsb.org

RE: Leverage in Non-Bank Financial Intermediation – Consultation Report

BlackRock[1] is pleased to have the opportunity to respond to the consultation report on leverage in non-bank financial intermediation (NBFI) issued by the Financial Stability Board (FSB).

BlackRock supports a regulatory regime that increases transparency, protects investors, and facilitates responsible growth of capital markets while preserving consumer choice and assessing benefits versus implementation costs.

We welcome the opportunity to comment on the issues raised by this consultation and will continue to contribute to the thinking of the FSB on any issues that may assist in the final outcome.

We welcome further discussion on any of the points that we have raised.

Yours faithfully,

Nafisa Yusuf
Director, Market Structure Team,
Global Trading Group.

Joanna Cound
Managing Director, International Head of Government Affairs and Public Policy.

[1] BlackRock's purpose is to help more and more people experience financial well-being. As a fiduciary to investors and a leading provider of financial technology, we help millions of people build savings that serve them throughout their lives by making investing easier and more affordable. For additional information on BlackRock, please visit www.blackrock.com/corporate

Executive Summary

We welcome the FSB's recognition that leverage is "a characteristic feature of modern economies and financial markets" which can "enhance efficiency and support liquidity in financial markets."[2]

Leverage is a crucial tool for investors to hedge risks and match liabilities. However, if not properly managed, it can pose vulnerabilities and impact markets more broadly.

The task at hand for policymakers is to ensure that any leverage-related regulatory intervention justified on financial stability grounds avoids outweighing the benefits that leverage brings to markets and the real economy in terms of facilitating investment, trading, and hedging risk.

To do so, the key question for policymakers is how leverage, in the event of a plausible shock scenario, might transmit stress through the system to threaten the financial stability of core markets and/or systemically important institutions:

- In our view, critical institutions could include highly interconnected commercial banks and central clearing counterparties (CCPs). Failure in these types of institutions can cause severe disruption to the financial system.

- Core markets, such as sovereign bond markets, are essential for financial stability. Sovereign bonds are the base asset for financial markets, the mechanism for governments' funding, and the transmission of monetary policy.

Once critical institutions and core markets have been identified, policymakers should agree possible sources of unacceptable disruption to them. This could be through the liquidation channel if core markets were to be affected, or through the counterparty channel if a critical institution were to be impacted, for example.

They should then assess the potential for these shocks to cause genuine systemic risk (i.e. serious negative consequences for the real economy), consider whether policy intervention would be appropriate, and then tailor policy interventions accordingly.

For example, the insolvency of a single fund or margin calls faced by an individual market participant are not in themselves examples of systemic risk. While potentially disruptive for some market participants, they do not impair the functioning of wider financial markets or have negative consequences for the real economy unless the impact is severe for a critical institution or core market.

Good quality data is a prerequisite for informed decision-making in the realm of financial stability. Crucially, the heterogeneity of the non-bank financial intermediation ecosystem means that the approach to data will necessarily differ depending on the market, product or market participant in question. For the purposes of this consultation, we consider there to be four main aspects under consideration:

- **System-wide perspectives:** Understanding potential financial stability risks from leverage requires a system-wide perspective based on data that can give a holistic picture of market activity. Detailed data is usually available for investment funds, but may be missing or incomplete for certain market participants.(See response to Q. 2 & Q. 3)

[2] See FSB Consultation Paper, Leverage in Non-Bank Financial Intermediation, December 2024.

- **Feedback loops from supervisory authorities on market concentration:** We support efforts to better share the results of the multiple current processes used to collect data about leverage and markets more broadly to help identify concentrated markets and improve liquidity risk management. (See response to Q. 4)

- **Reporting on the use of derivatives and SFTs**: Market participants are already subject to extensive market reporting, encompassing both derivatives (e.g., G20 derivatives reporting rules, European Market Infrastructure Regulation reporting in Europe and similar regimes in Australia and Singapore) and SFTs (EU Securities Financing Transactions Regulation, with similar rules under implementation in the US). Regulators should consider ways to make better use of the output of those regimes before introducing new requirements here. (See response to Q. 3)

- **Reporting on counterparty exposures:** Banks need to carefully manage their exposures to highly leveraged counterparties. As such, we welcome BCBS' recent updated guidance on counterparty credit risk.[3] If a prime broker has counterparty risk policies which are effectively implemented, we believe that existing levels of information are largely sufficient to enable prime brokers to assess the full extent of their counterparties' leverage. As a reminder, use of leverage is but one of many factors that prime brokers analyse in their credit risk assessments, and should be viewed within that context. (See response to Q. 14 & 15)

As individual jurisdictions consider if and how to adopt policies from the menu set out by the FSB, we recommend a two-step process. First, identify where there is clear potential for systemic risk to arise, before assessing whether and which additional measures might be required. This should help to avoid the unintended consequences associated with the entity and activity-based policies put forward by the FSB:

- **Entity-based leverage limits:** In our view, a 'products and activities' approach is needed to address risks in non-bank financial intermediation. We are sceptical about 'entity-based' proposals because applying an entity approach to market-based finance will simply shift risk within the ecosystem.[4] Importantly, the risks associated with asset management are substantially different than the risks associated with balance sheet entities such as banks and insurers. It is for that reason that investment fund regulation falls within the 'products and activities' approach.[5] Also, we note that what are put forward as 'entity'-based proposals in this consultation, namely leverage limits on real estate funds and yield buffers for LDI funds, are in fact examples of *product*-based regulation. (See response to Q. 12)

- **Minimum haircuts for SFTs (including government bond repos):** Centrally mandating minimum haircuts on securities financing transactions could carry

[3] See BCBS Guidelines for Counterparty Credit Risk Management, December 2024.
[4] See BlackRock, Comments on the Consultative Document (2nd) Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions, May 2015.
[5] In 2024, the Financial Stability Oversight Council defined '**entities**' and **'products'** as follows, for the US market [emphasis added]: "A number of different types of **entities** subject to varying regulatory frameworks engage in asset management activities, including but not limited to registered investment advisers, banks and thrifts, insurance companies, commodity trading advisors, and commodity pool operators. These entities provide a variety of asset management **products,** herein referred to as "**investment vehicles**," such as separately-managed accounts (SMAs) and "pooled investment vehicles." Pooled investment vehicles include investment companies registered under the Investment Company Act of 1940 (Investment Company Act) (registered funds), private funds (including hedge funds), bank collective investment trusts, and commodity pools". See Financial Stability Oversight Council, Notice Seeking Comment on Asset Management Products and Activities, December 2014. Activities' could include activities such as central clearing. See BlackRock, Remarks at the OeNB Macroprudential Policy Conference: 'Agnostic on non-banks?', May 2019.

significant risk. Changes to minimum haircut amounts in government bond repo markets in particular could impact activity in the underlying market, including borrowing costs or broader liquidity conditions. We note the application of haircuts is already standard industry practice, and is predicated on a detailed understanding of the composition, characteristics and prevailing complexities of each specific market. This is a responsibility that should lie with market participants who are parties to the transactions themselves. (See response to Q. 6)

- **Central clearing for SFTs:** Central clearing helps to address credit counterparty risk, but can introduce liquidity risks given the need to post variation margin (VM) in cash to the CCP, in addition to the initial margin (IM) requirements. The Bank of England's System Wide Exploratory Scenario (SWES) exercise showed that a simulated market shock significantly increased liquidity demand, 85% of which arose from variation margin calls, while another 8% came from initial margin calls. Widening the scope of transactions subject to mandatory clearing – and in turn increasing liquidity demand in the system – without being mindful of where additional liquidity supply will come from, could further heighten liquidity risk. This is especially relevant outside of the US, where there are fewer options for storing and transferring liquidity around the system. (See response to Q. 6)

- **Dynamic haircuts and margin requirements:** We strongly contest the assumption that it is possible for regulators to dynamically manage concentration or leverage (either system wide or specific to individual markets) through haircuts or margining without unintended consequences. Any adjustment of risk sensitivity frameworks (real time or otherwise) must be predicated on a detailed understanding of the composition, characteristics and prevailing complexities of each specific market. This is a responsibility that should lie with market participants themselves. Supervisors should instead propose core principles that market participants can adapt to the specific markets they're dealing in. (See response to Q. 7 & 8)

Policymakers should approach the aforementioned proposals with a great degree of caution given the risks involved. Meanwhile, we believe the following would be additive to financial stability:

- Continued work by clearing members (CMs), CCPs and asset managers acting on behalf of asset owners to evolve the repo markets to incentivise voluntary adoption of clearing, particularly during periods of dealer balance sheet squeeze.

- Continued focus on CCPs' resilience to ensure the pro-cyclicality inherent to central clearing does not excessively amplify shocks during periods of market volatility.

- Swift implementation of the recent BCBS-CPMI-IOSCO recommendations and new EU rules on CCP margin model transparency. Supplementing this information with user-friendly margin simulation tools will allow for better liquidity preparedness amongst market participants.

- Expansion of the type of collateral which can be used to meet initial margin requirements for cleared derivatives and initial and variation margin for uncleared derivatives. If carried out appropriately, expansion of eligible collateral to include a wider range of high-quality liquid securities could help achieve the FSB's objective of reducing investors' need to either sell assets or excessively rely on cash. (See response to Q. 6)

Lastly, we agree with the view put forward by IOSCO in 2019[6] that aggregate Gross Notional Exposure (GNE) provides little information aside from the fact that a fund uses derivatives. As such, we suggest funds should report GNE on an asset-class-by-asset-class basis with both long and short positions. This approach will allow regulators to assess a fund's basic asset allocation and distinguish between exposure to different types of assets, rather than relying on a single figure of exposure from all asset classes, which can overstate a fund's true exposure. (See response to Q.2)

In summary, a holistic, data-driven assessment of risks from leverage must come before any intervention on financial stability grounds to ensure that intervention is balanced against the benefits that leverage brings to markets and the real economy in terms of investment, trading and hedging risk.

Responses to Questions:

1. **Is the description of 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 risk monitoring purposes?**

We welcome the FSB's recognition that leverage is "a characteristic feature of modern economies and financial markets" which can "enhance efficiency and support liquidity."[7] It is also an important tool for investors in hedging risks and matching liabilities.

That said, we do recognise that leverage - if not properly managed - can pose a vulnerability and may impact markets more broadly if investors react to market shocks and sell assets to meet margin calls or to deleverage, particularly if those markets are highly concentrated.

It is important that policymakers can make an informed assessment of how leverage is used relative to the underlying investment strategy, but it needs to be acknowledged that risk does not arise from 'leverage' in and of itself. Leverage is a relative concept – it measures the level of borrowing of an individual entity relative to its assets/equity.

This means that as the Global Association of Risk Professionals has noted, a simple statement about leverage (i.e., 'a fund is two times leveraged') contains little information about the implications of that leverage or the risk posed to the portfolio without wider context – i.e., the baseline (or unleveraged portfolio) against which leverage is measured. The characteristics of the underlying portfolio, including the risk or liquidity of assets, will in turn influence the riskiness of the leverage.[8]

It also means that aggregating up leverage of individual investment vehicles or positions within a particular sector, or across the financial system, will not give an indication of system-wide risks from leverage.

Looking at the leverage of a particular investment portfolio (whether in the form of a segregated mandate or a collective vehicle) in isolation yields some information – but only about that portfolio or vehicle. This could include the percentage by which asset values would need to fall to generate insolvency; the potential margin/collateral call that a market move could generate; or assets that might be sold to deleverage.

[6] See BlackRock response to IOSCO Report on Leverage, February 2019.
[7] See FSB Consultation Paper, Leverage in Non-Bank Financial Intermediation, December 2024.
[8] See Global Association of Risk Professionals, Response to FSB Consultative Document for Proposed Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities, September 2016.

This is fundamental for the risk management of individual portfolios or vehicles. However, from a financial stability perspective, the key question for policymakers regarding the use of leverage in non-bank financial intermediation is how these risks, in the event of a plausible shock scenario, might interact and transmit through the system to threaten the financial stability of core markets and/or systemically important institutions.

Answering this question should start with an assessment of ecosystem-wide data, in order to develop an understanding of how different parts of the system interact. In parallel, policymakers should identify the institutions and markets that are core to financial stability – where the impact of leverage could cause genuine systemic risk:

- Critical institutions could include, for example, highly interconnected commercial banks and CCPs. Failure in these types of institutions can cause severe disruption to the financial system – as recognised and addressed by policymakers through the development of the Global Systemically Important Banks (G-SIB) framework and Basel prudential requirements; as well as CPMI-IOSCO Principles for Financial Market Infrastructures, applied to CCPs.

- Core markets clearly start with sovereign bond markets. Sovereign bonds are the base asset for financial markets, the mechanism for governments' funding, and transmission of monetary policy. As such, they have been the focal point for central bank interventions since the GFC. Policymakers may decide other markets – for example repo markets – require further attention.

Once critical institutions and core markets have been identified, policymakers should agree possible sources of unacceptable disruption to them, for example through the liquidation channel if core markets were to be affected, or through the counterparty channel if a critical institution were to be impacted. They should then assess the potential of these shocks to cause genuine systemic risk (i.e. serious negative consequences for the real economy), consider whether policy intervention would be appropriate and then tailor policy interventions accordingly.

The insolvency of a single fund or margin calls faced by an individual market participant are not in themselves examples of systemic risk. While potentially disruptive for some market participants, they do not impair the functioning of wider financial markets or have negative consequences for the real economy unless the impact is severe for a critical institution or core market.

Incidents like the failure of Archegos Capital Management are noteworthy primarily because of the impact on a highly interconnected commercial bank - a critical institution for financial stability purposes. While the losses generated for several banks following Archegos' collapse did not ultimately generate systemic risk, the incident revealed bank risk management failures.[9] These are most effectively mitigated by focusing on commercial banks' risk management practices and the regulations underpinning them. (See response to Q. 15 & Q. 16 for more detail)

We believe a holistic, data-driven assessment of risks must come before any interventions on financial stability grounds to ensure they are balanced against the benefits that leverage brings to markets and the real economy in terms of investment, trading and hedging risk.

[9] See Credit Suisse Group Special Committee of the Board of Directors, Report on Archegos Capital Management, 29 July 2021.

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 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?

[**Note:** Questions 2 & 3 are taken together.]

With respect to metrics for assessing risk from derivatives and SFTs (Q.3), we note there is already extensive market reporting in place, encompassing both derivatives (e.g., G20 derivatives reporting rules, European Market Infrastructure Regulation reporting in Europe and similar regimes in Australia and Singapore) and SFTs (EU Securities Financing Transactions Regulation, with similar rules under implementation in the US). We would urge regulators to consider ways to make better use of the output of these reporting regimes, before introducing new requirements.

As regards metrics for assessing leverage more broadly (Q.2), and as noted in our answer to Q. 1, there is no set level where leverage becomes excessive or risky. The most important consideration is whether or not that leverage has the potential to significantly impact a critical institution or a core market.

Detailed data is usually available for investment funds' use of leverage, but may be missing or incomplete for certain market participants. That said, it is understandable that supervisors wish to understand the extent of, and potential risks from, leverage in investment funds.

As a starting point, leverage reporting at the fund level should be viewed as a measure of potential amplification of risk, rather than an intrinsic measure of risk. In turn, aggregating up leverage of individual investment vehicles within a particular sector, or across the financial system, will not give an indication of system-wide risks from leverage. Measurement of leverage is not straightforward, and the level of risk is highly dependent on the underlying investment strategy.

We agree with the view put forward by IOSCO in its 2019 consultation on leverage that aggregate Gross Notional Exposure (GNE) provides little information, aside from the fact that a fund uses derivatives. As such, we suggest funds should report GNE on an asset-class-by-asset-class basis with both long and short positions. This approach will allow regulators to assess a fund's basic asset allocation and distinguish between exposure to different types of assets, rather than relying on a single figure of exposure from all asset classes. This will also minimise confusion caused by reliance upon single, aggregated GNE figures,[10]which can overstate a fund's true exposure and risk.[11]We

[10] See BlackRock response to IOSCO Report on Leverage, February 2019.
[11] The commitment approach has rules which allow for a reduction in gross commitment through netting, hedging or duration netting rules. However, these rules can be applied only in specific conditions which complicates their use and prevents an automation of the calculation. For some funds the commitment approach can make leverage look much higher than it is:

support the use of reported leverage as a *starting point* to conduct a risk-based analysis of funds with higher levels of leverage, while avoiding the automatic treatment of these funds as risky. Using a risk measure like Value-at-Risk (VaR) alongside leverage measures is important when assessing the risk of a fund's overall use of derivatives and leverage. The use of VaR in fund regulation (e.g. EU UCITS or the SEC Derivatives Rule) assists both managers and supervisors in understanding the impact of the use of (more sophisticated) derivative management techniques on portfolio risk.

Unlike the commitment approach which only measures the extent to which a portfolio or vehicle uses leverage, VaR is measure of downside risk that seeks to quantify a maximum potential loss at a given confidence interval. While VaR is not a measure of leverage (rather, it is a measure of overall portfolio risk) it is useful for understanding the amount of risk that leverage may be introducing to a portfolio. Most existing regulatory reporting regimes request data on VaR. However, there is inconsistency in the specifications of VaR in various reporting regimes.

Further, there is scepticism with respect to using VaR as a regulatory measure given that it can be calculated using different methods (e.g., parametric, historical, Monte Carlo), and the results can differ based on the models and assumptions used.

We recommend a focus on standardising the approach to collecting data on VaR, as we believe these concerns can be mitigated by using common parameters and back-testing, to provide a baseline for the model being used to calculate VaR, recognising that there may be legitimate reasons for using different VaR models. For example in the EU, when UCITS utilise the VaR method, they must provide results of back-testing assessments that denote how many overshoots occurred over a 250 day period, as well as the amount of the overshoot in excess of VaR.[12] Recognising that funds use derivatives to achieve investment objectives, align portfolio risks to benchmark risks, or to reduce overall risk, we recommend tailoring measures according to the different ways in which a fund uses derivatives, including measuring both absolute risk and risk relative to a benchmark (where applicable).

Stress testing is another means of assessing downside risk that is often used as a complement to VaR. Stress testing looks at various stressed scenarios and assesses potential losses that could arise from such scenarios. To be clear, stress testing in this context is different to liquidity stress testing, as it relates to the mark-to-market losses a portfolio could experience during a period of market volatility, rather than a fund's ability to meet its redemption obligations. Stress testing addresses a valid criticism of VaR in that VaR may not provide reliable insight as to the magnitude of potential losses in the tail end of the distribution, i.e. 1 in 1000 events.

Overall, we support efforts to better share the results of the multiple current processes used to collect data about leverage. We would support more alignment around the

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- **Fixed income funds** (where a fund is using derivatives for duration management, not for investment returns but they still can't be netted)**,** face challenges in applying duration netting rules due to the target duration. The use of duration netting for a short duration fund may actually lead to an increase in commitment exposure, due to the adjustment by the target duration. Another problem is that full netting is only permitted within some maturity ranges, but not between them. This raises issues for unconstrained fixed income funds which don't work this way and invest across all possible maturity ranges.
- **Multi-asset funds** also run into problems with the commitment approach. Since derivatives in these funds are being used not for increased returns, but for managing duration risk or aligning to a benchmark, (which can't be netted) the commitment approach creates a significant leverage figure – which is inaccurate and suggests leverage is much higher than it is.

[12] The UCITS Global Exposure guidelines provide information on how to convert the standard 99% one month limit into alternate parameters (e.g., a 95% one day limit). While the intention is to use 99% one month, funds may use alternate parameters.

definition of leverage, albeit with room for jurisdictional specificities - to streamline regulatory reporting and facilitate better comparisons across funds (including across fund structures). The current process is onerous and leads to duplication and inconsistency in reporting by firms, as well as operational complexity, with many processes requiring manual intervention.

Finally, we note that some policymakers have used alternative methods to identify and monitor financial stability risks, using scenario analysis and feedback loops with market participants to identify potential sources of vulnerability.[13] Policymakers could consider where these exercises could be a complement or alternative to reporting as a means of identifying risks.

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

To answer this question, we take sovereign bond markets as an example and outline the types of information that can inform a holistic assessment of that market and any associated liquidity or counterparty risks. As mentioned, sovereign bond markets are core markets for financial stability. Disclosures in other markets however, are largely sufficient.

Firstly, understanding transaction volumes and outstanding positions grouped by maturity bucket (e.g., 1-2 years, 2-7 years, 7-15 years, 15-25 years, 25+ years etc.) would be helpful. Information pertaining to dynamics in related instruments is also informative; for example cash and inflation linked bonds, as well as repo (bilateral, cleared and tri-party), futures, and swap markets linked to those bonds.

Understanding the investor base of a market is another an important component of any analysis – for example, breaking holdings data down into holdings by sector, i.e. money market funds (MMFs), dealers, mutual funds, hedge funds, insurers, and pension funds. Notably, MMFs, in addition to direct government bond holdings, use tri-party repo, and therefore are participants in the market for longer-dated bonds, which are often pledged as collateral in a repo transaction.

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[13] See Bank of England, SWES Final Report, 29 November 2024: The Bank of England's system-wide exploratory scenario (SWES) exercise explored how the UK financial system would respond to a market shock. It was the first exercise of its kind globally and asked around 50 participating firms, including banks, insurers, pension schemes, hedge funds, asset managers and central counterparties, to evaluate how they would be affected by, and respond to, a hypothetical stress scenario. **The SWES was not a test of the resilience of the individual participants. Its focus was system-wide, including on important UK financial markets and their resilience in stress**. The aims of the SWES were to (i) enhance understanding of the risks to and from non-bank financial institutions (NBFIs), and the behaviour of NBFIs and banks in stress, including what drives those behaviours; and (ii) to investigate how these behaviours and market dynamics could amplify shocks in markets and potentially pose risks to UK financial stability. According to the BoE: "*To date, system-wide analysis carried out by central banks has tended to be model-based without the direct participation of firms. These model-based exercises are well suited to investigating system-wide dynamics, but have limitations, such as struggling to capture complex behaviours in a stress, which have limited their influence on surveillance and policy making. Conversely, traditional firm-focused stress tests actively involve firms and have become an essential part of the regulatory and financial stability toolkit. But these exercises are not designed to explore system-wide dynamics – they typically focus on a single sector and do not capture interactions with other parts of the financial system.*" The SWES found that the hypothetical shock caused significant losses for some participants, triggering a spike in variation margin calls. Increased volatility caused initial margin required by CCPs to increase, and some funds experienced redemptions. Taken together, this led to a significant redistribution of liquidity across the financial system.

In terms of reporting coverage and frequency, granularity must be balanced against risks associated with being able to "reverse engineer" sensitive counterparty and trade data.

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 financial entities?

[**Note:** Since Qs. 6-9 relate to the activity-based proposals and Qs. 10-13 deal with the entity-based proposals, we will use Q. 5 to comment on some of the concentration-related proposals.]

Concentration Add-Ons for Margins and Haircuts in SFT and Derivatives Markets

Concentration and liquidity add-ons are already common practice in SFT and derivatives markets. In the US for example, and in accordance with CFTC requirements, derivatives clearing organisations ("DCOs") must have "initial margin requirements that are commensurate with the risks of each product and portfolio, including any unusual characteristics of, or risks associated with, particular products or portfolios."[14] The use of margin add-ons, including those that address the impact of concentration and liquidity on the expected closeout costs of a portfolio, allows CCPs to address risks in the market that are unique to certain products or portfolios they clear.

CPMI-IOSCO provided further guidance that "add-on charges can address risks that may be more challenging to model accurately, or are not readily discernible in the price histories of the products cleared."[15] CCPs should have the ability to exercise their expert judgment to apply concentration and liquidity add-ons in their margin methodology in a flexible manner to address risks that are not easily modelled.

Setting overly-prescriptive standards for CCPs on how they should calculate margin add-ons could hamper their ability to manage risk, because it could prevent them from taking into account the unique risks of the products they clear (that may not be covered by standard margin) and clearing member credit.

CCPs should be allowed flexibility to apply margin add-ons that consider the impact of liquidity and portfolio concentration on expected closeout costs. The application of liquidity and concentration add-ons by CCPs should be based on market depth[16] and position exposures and may consider the following factors:

- Clearing member polls or modelling techniques of bid/offer prices should be used to capture possible liquidity add-ons.
- CCPs should consider volume, open interest, order book data, or other similar metrics to capture concentrated position exposures at a product or portfolio-level for possible margin add-ons.
- CCPs should consider position concentration relative to product liquidity and the impact of differences in bid/offer prices of closing out a portfolio in determining the amount of concentration add-on to apply. For less liquid products, or those

[14] See CFTC 17 CFR § 39.13 (g)(2)(i)
[15] See Cover Note to the CPMI-IOSCO Report on the Resilience of CCPs: Further Guidance on the Principles for Financial Market Infrastructures (PFMI) P. 30 (Paragraph 5.2.12)
[16] For new product launches, market depth assumptions made at launch can be reassessed over time and as trading patterns emerge or change.

where fewer participants are active, this may require explicit modelling of liquidation costs.
- The impact of position size on close-out costs, i.e., concentration risk, should be captured at a product or product group level based on the cost of closing out positions or through an analysis of product or product group volume.
- Liquidity and concentration add-ons should be transparent, easily replicable, and where possible, also applied at the customer origin.

Any further liquidity or concentration add-ons or limits applied by clearing members to their customers should also consider similar principles as those outlined above.

Large Position Reporting Requirements

Given the significant amount of post-trade reporting that market participants are obliged to undertake through existing regulation (e.g., SFTR, OFR and EMIR), we suggest authorities should first look to that information, before considering any new reporting requirements. In a European context, the addition of the fixed income bond transparency regime and subsequent consolidated tapes will also improve pre- and post-trade information around liquidity, transparency and efficiency of sovereign bonds and derivative markets.

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?

Minimum Haircuts in SFTs

The application of haircuts is already standard industry practice. It is predicated on a detailed understanding of the composition, characteristics and prevailing complexities of each specific SFT market (e.g. repo, securities lending, prime brokerage etc.) As such, it is a responsibility that should lie with market participants who are parties to the transactions themselves.

The primary purpose of haircuts is to manage counterparty risk. Mandating minimum haircuts on SFT transactions to manage aggregate leverage could carry significant risk if inappropriately calibrated, or should they fail to account for the unique structural features of specific markets. In many markets, leverage plays an important role for market participants themselves, and / or their contribution to market functioning.

Repo is one type of securities financing transaction, but it is a crucial one in that it allows market participants to hedge risks and match liabilities; as well as build exposure to markets and trade, contributing to market liquidity. We acknowledge concerns that haircuts on bilateral government bond repo transactions may be too low relative to the risk that these transactions can pose to the providers of leverage, i.e. to bank balance sheets. While this may require greater scrutiny from bank supervisors, we strongly caution against considering minimum haircuts as a means of managing risk taking or de-leveraging markets by increasing the overall cost of borrowing. We see a risk that changes to minimum haircuts here could also impact activity in government bond markets, including borrowing costs or potentially broader liquidity conditions – depending on how they are calibrated.

Given the potential for disruption, we would urge regulators to undertake a data driven assessment of both the necessity for and impact of minimum haircuts in each SFT market segment (e.g. repo, securities lending, prime brokerage etc.) before acting. That assessment should closely consider the composition and characteristics of each specific market, and the impact changing haircuts may have.

Central Clearing in SFTs

BlackRock remains supportive of central clearing and the use of CCPs. Central clearing brought standardised risk mitigation and transparency to the derivatives markets, addressing many of the risks exposed by the Global Financial Crisis (GFC). We also believe it can play a role in helping to mitigate systemic risk in funding markets through increased settlement efficiency, reduced counterparty credit risk and standardised risk management processes such as margin calibration and haircuts.

Central clearing can however introduce liquidity risks, given the need to post variation margin (VM) in cash to the CCP, in addition to the initial margin (IM) requirements. The Bank of England's SWES exercise highlighted this systemic liquidity demand in critical Sterling markets – a simulated market shock significantly increased liquidity demand, 85% of which arose from variation margin calls, and another 8% from initial margin calls. Widening the scope of transactions that are subject to mandatory clearing – which by default would further increase liquidity demand in the system – without being mindful of where that additional liquidity supply will come from, would further exacerbate liquidity risk. This is especially relevant outside of the US, where there are fewer options for storing and transferring liquidity in the system. The US repo markets are more developed given they benefit from the reverse repo[17] and sponsored repo[18] programmes. This is not the case in Europe for example.

Repo markets serve an absolutely central role in supporting well-functioning financial markets due to their role as liquidity providers, and so the costs and benefits of changing how that market works needs to be very carefully considered.

Instead of mandating central clearing in these markets, we would advocate for continued work by clearing members (CMs), CCPs and asset managers acting on behalf of asset owners on the evolution of the repo clearing model to incentivise voluntary adoption, particularly during periods of dealer balance sheet squeeze.

Repo transactions are already collateralised and as such, counterparty risk is limited. Additionally, it is often purported that CCPs create more balance sheet netting opportunities for banks, which should help support more intermediation and deeper

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[17] The Federal Reserve's **reverse repo facility**, also known as the Overnight Reverse Repurchase Agreement (ON RRP) facility, is a tool used by the Federal Reserve to help control short-term interest rates and manage the supply of reserves in the banking system. Through this facility, eligible institutions such as money market funds, government-sponsored enterprises, primary dealers, and banks can invest overnight with the Federal Reserve by entering into a reverse repurchase agreement. In this transaction, the Federal Reserve sells a security to the eligible counterparty with an agreement to repurchase that same security at a specified price at a specific time in the future. The facility provides a safe and flexible investment option for these institutions, especially when there is excess cash in the market that banks cannot absorb.

[18] The **sponsored repo model** in the US is a mechanism that allows non-dealer counterparties to access the Fixed Income Clearing Corporation's (FICC) cleared repo platform through a sponsoring member, typically a large bank. This model provides significant balance sheet relief for banks and enhances liquidity in the repo market. In a sponsored repo transaction, the sponsoring member facilitates the trade and handles the clearing and settlement processes. The non-dealer counterparty, such as a hedge fund or money market fund, benefits from the efficiencies of central clearing without having to manage these processes themselves. This model helps to reduce the regulatory costs associated with fixed-income financing and creates more capacity for banks to provide liquidity to the market.

liquidity. The suggestion that mandatory repo clearing would lead to the enhanced netting opportunities for dealers required to promote market intermediation is inconclusive. Consequently, we believe for repo and bond markets in particular, a mandate would be premature. Instead, we would recommend observing how the implementation of the US Treasuries clearing mandate develops from a regulatory, commercial, accounting and market structure perspective, and to understand the impact on liquidity. It is important to recall that there are significant jurisdictional differences across repo markets.

Focus should also remain on CCPs' resilience and ensuring the pro-cyclicality inherent to central clearing does not excessively amplify shocks during periods of market volatility. For instance, while central clearing of derivatives has helped to reduce counterparty credit risk across the system, it has also contributed to bouts of liquidity stress, by hard-wiring together price volatility and demand for cash to meet margin calls. A further increase in SFT participants moving to clearing would also lead to further concentration risk across a small number of CCPs, underscoring the importance of ensuring an appropriate CCP capital framework that includes incentives to right size initial margin and ensure sufficiently sized default funds.

At a more practical level, there are also new direct and indirect costs associated with repo clearing; the introduction of initial margin on repo transactions means NBFIs will become dependent on how CCP margin models react during periods of volatility, which can be hard to predict and could impede liquidity forecasting and planning. To assist with market participant forecasting, CCPs clearing SFTs should provide enhanced levels of margin transparency. Our response to the BCBS-CPMI-IOSCO *Consultation on Transparency and Responsiveness of Initial Margin in Centrally Cleared Markets*[19] noted that the degree and quality of CCP margin transparency varies greatly from CCP to CCP. Market participants would benefit from greater transparency regarding the margin models used by their CCPs, as well as user-friendly margin simulation tools to stress test that information. We welcome the recent BCBS-CPMI-IOSCO recommendations and new rules in the EU to this effect, and urge supervisors to implement the proposals expeditiously.

As a complement to these proposals, we also urge the FSB to explore and consider ways to support an expansion of the type of collateral which can be used to meet initial margin requirements for cleared derivatives and initial and variation margin for uncleared derivatives. If carried out appropriately, expansion of eligible collateral to include a wider range of high-quality liquid securities could help achieve the FSB's objective of reducing investors' need to either sell assets or excessively rely on cash. We recommend expanding acceptable collateral to include certain types of Money Market Funds (MMFs) and Exchange Traded Funds (ETFs), where available:

- In March 2020, MMFs played an important role in supporting the movement of cash around the financial system, allowing market participants to meet margin calls. However, the fact that MMF units cannot be pledged as collateral directly resulted in fund liquidations, which may have led to unnecessarily elevated activity in short-term funding markets, given that cash raised from these sales was often re-invested in a similar vehicle.

- We also believe that ETFs whose portfolio holdings consist of assets that would otherwise be eligible collateral can themselves serve as an appropriate form of collateral. ETFs are transferable, liquid and transparently priced, which supports

[19] BlackRock response to BCBS-CPMI-IOSCO: Transparency and Responsiveness of Initial Margin in Centrally Cleared Markets, April 2024.

their use in this manner. In addition, in-kind redemptions (via an Authorised Participant) generally provide holders of the ETF with the ability to access securities in the ETF's underlying portfolio should a collateral holder prefer to access ETF portfolio holdings and sell these securities directly.

- Finally, opportunities to increase high-quality liquid assets' (HQLA) mobility through tokenisation could also be beneficial, as it would allow end users to leverage additional forms of non-cash collateral, in turn reducing reliance on cash.

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?

[**Note:** Questions 7 & 8 are taken together.]

We agree with the FSB that "activity-based measures should be calibrated to avoid or minimise any unwarranted reduction in market liquidity or increase in transaction, funding and hedging costs." Again, it is important for regulators to have a very clear understanding of how policy interventions would impact each individual core market before acting.

We are highly sceptical about the feasibility of managing system-wide leverage by setting dynamic or fixed minimum margin or haircut requirements on SFTs through regulation. We firmly believe that market participants with the necessary expertise should be able to use their discretion to make informed risk decisions based on what is in the best interest of investors and markets, to avoid procyclical behaviours.

In the case of repo markets for example, banks already adjust haircuts during times of market stress by considering factors such as the liquidity in the underlying market and the creditworthiness of the fund.

Market participants use the repo market for certainty of funding and it is crucial to avoid any scenario whereby a market participant would not be able to access liquid repo markets during times of stress. If market participants cannot predict with some degree of certainty the cost of borrowing over their required funding horizon, this compromises the basic premise of a functioning market, while simultaneously adding more risk into the system.

Finally, from a practical standpoint, dynamic schedules can also present operational challenges to NBFI participants, both in terms of implementation and ongoing usage. For instance, a requirement to make real time changes to minimum margin thresholds and haircut requirements may introduce end user uncertainty from a liquidity planning and preparedness standpoint. Furthermore, the cost of re-papering bilateral legal agreements (GMRAs / CSAs) and technical challenges required to integrate these real time adjustment capabilities into highly automated post trade collateral workflow processes (both bilateral and cleared) would be significant, and risk eroding hard won efficiency gains that support market stability.

9. For non-centrally cleared securities financing transactions, including government bond repos, what are the merits of margin requirements compared to minimum haircuts?

No comment.

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?

Direct Leverage Limits:

As laid out in more detail in response to Q. 12, we disagree with the use of the word 'entity' to describe funds. We believe 'product-based' measures would be a more accurate description of what is being proposed in the consultation than 'entity-based'.

We are sceptical about the feasibility of implementing broad-based entity-level leverage limits. Given that there is no single measure that can accurately quantify leverage for all types of funds (as outlined in response to Q.1), regulators would need to develop a suite of leverage and potential loss measures that could be collected on a consistent basis. As recognised by the FSB, assessing the true risk of leverage in funds is complicated by the fact that there are multiple types of derivatives and many funds pursuing different investment strategies.

As noted above, it is challenging to identify pockets of 'excessive' leverage, and to distinguish between derivatives transactions that may be generated for the purposes of reducing risks or hedging (e.g., via interest rate swap derivatives) compared to leverage that is generated for magnifying returns, thereby increasing risk taking.

Moreover, because funds are not the only type of vehicle to employ leverage, any limits placed on them risk leakage to elsewhere in the system. This issue would also apply to derivative concentration limits applied solely to funds.

As described in response to Q.1, this should start with the identification of the markets and/or institutions that are core to financial stability. Any risks identified as part of this assessment should then be mitigated through targeted interventions. For example, the Central Bank of Ireland's use of powers under Article 25 of AIFMD to impose leverage limits on real estate funds is a good example of an appropriately targeted and product specific approach to limiting leverage. Crucially, this was informed by an assessment of a market (Ireland's real estate market) which identified, with a high degree of confidence, a potential concentration risk.

Indirect Leverage Limits:

The LDI fund yield buffer implemented following the Gilt crisis is the example of an indirect leverage limit given in the consultation. Yield buffers are a preferable way of managing leverage risk in LDI funds, as opposed to pure leverage-based constraints. The approach taken by the UK's Financial Policy Committee – setting minimum yield buffers based on a clear statistical methodology but leaving some discretion for managers to set an additional operational buffer – has generally been successful in providing sufficient guidance and clarity to the market without being overly prescriptive.[20]

[20] See Bank of England, Bank Staff Paper: LDI Minimum Resilience – Recommendation and Explainer, March 2023.

However, yield buffers can come with certain drawbacks. First, how the yield buffer of a given pension fund is calculated can be open to interpretation. Ensuring that factors such as initial margin, haircuts and other potential draws on collateral are taken into account is important to ensure that calculations of yield buffers are robust.

Second, specifying a minimum yield buffer and calibrating this to a specific timeline (e.g., the yield buffers used for GBP-denominated LDI funds in Ireland and Luxembourg which are calibrated to 5 days) can create an unnecessary constraint on investors that have access to highly liquid assets and have strong governance resources that allow them to move very quickly to replenish yield buffers. In effect, this means these funds are subject to over-insurance, which has an impact on both investment returns, and the amount of capital available to invest in productive assets. This can also work in reverse, with funds with less efficient operations and governance, or less liquid assets, potentially receiving false comfort that their yield buffer is technically sufficient, but unrealistic for their operational processes.

Third, the calibration of any yield buffer can never provide complete protection against scenarios in which assets have to be sold to replenish collateral buffers. Any metric calibrated to historical market moves is at risk of being overcome by future unexpectedly large and unforeseen moves. Leverage serves an important role in allowing pension funds to manage risks inherent in their liabilities, while continuing to invest in generating investment returns. It is not feasible to expect pension funds to self-insure against all potential market eventualities. Over-insurance has implications for investment returns and productive investment, especially given the investment horizons of pension funds. Supervisors should therefore consider ways to support an expansion of the type of collateral which can be used to meet margin calls, as described in more detail in response to Q. 6.

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?

As outlined elsewhere in this response, we believe that any leverage-related regulatory intervention justified on financial stability grounds, needs to avoid outweighing the benefits that leverage brings to markets and the real economy.

Given the important role that leverage plays in risk mitigation (through hedging etc.), interventions that could limit market participants' ability to use leverage should only proceed if supervisors have determined with a high degree of confidence that the role leveraged investors are playing in the underlying market could pose systemic risk. Once identified, interventions must be targeted to the specific product of concern to avoid unintended consequences in other markets.

We agree with the FSB that to "mitigate procyclicality, authorities should consider allowing for temporary breaches of the limits in times of stress. For example, 'soft limits' can serve as an early warning indicator, before 'hard limits' requiring immediate action are breached. Authorities should always clearly explain and communicate their actions to market participants to avoid any undesirable market reaction." This is essential to avoid setting thresholds that would force similar segments of market participants to act in the same way, at the same time, which risks creating one-sided markets and pro-cyclical trading.

12. Are there any potential unintended consequences from entity-based measures beyond those identified in the consultation report?

In our view, a 'products and activities' approach is needed to address risks in non-bank financial intermediation. We are sceptical about the 'entity-based' proposals because applying an entity approach to market-based finance will simply shift risk within the system.[21] Importantly, the risks associated with asset management are substantially different than the risks associated with balance sheet entities such as banks and insurers. It is for that reason that investment fund regulation falls within the 'products and activities' approach.[22]

We believe 'product-based' measures would be a more appropriate description of what is being proposed in the consultation than 'entity-based'. Using the term 'entity-based' measures could lead to unintended consequences. To address risk from NBFI leverage effectively, any targeted measures should be applied to the *product* where the leveraged nature of investors in that product could pose a risk to financial stability, not the firm (or 'entity') that is offering the product.

In our view, 'entity' risks indiscriminate and potentially ineffective measures being applied to specific firms, while 'product' more accurately describes the leverage limits – both direct and indirect – referenced in the consultation, both of which were introduced to address specific risks in specific products.

For example, in the case of the LDI fund yield buffer post-Gilt crisis, the policy response was applied to LDI funds (i.e. the product), not to the pension fund (i.e. the entity). This was because the pension funds were not highly leveraged themselves - rather it was their use of LDI strategies that exposed them to risk. Applying entity-level leverage limits to pension funds in this scenario would not have addressed the risk.

Nevertheless, we agree that 'entity-based measures' – as defined by the FSB – should be designed to avoid undesirable risk-shifting behaviours, for example by complex non-bank financial entities that can reallocate leveraged activities across different strategies and core markets."

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?

As noted elsewhere in this response, we recommend a two-step process, first identifying where there is clear potential for systemic risk to arise, before assessing whether policy intervention would be appropriate, and tailoring any policy interventions accordingly. This will ensure a focus tailored to potential sources of

[21] See BlackRock, Comments on the Consultative Document (2nd) Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions, May 2015.
[22] In 2024, the Financial Stability Oversight Council defined '**entities**' and **'products'** as follows, for the US market [emphasis added]: "A number of different types of **entities** subject to varying regulatory frameworks engage in asset management activities, including but not limited to registered investment advisers, banks and thrifts, insurance companies, commodity trading advisors, and commodity pool operators. These entities provide a variety of asset management **products,** herein referred to as "**investment vehicles**," such as separately-managed accounts (SMAs) and "pooled investment vehicles." Pooled investment vehicles include investment companies registered under the Investment Company Act of 1940 (Investment Company Act) (registered funds), private funds (including hedge funds), bank collective investment trusts, and commodity pools". See Financial Stability Oversight Council, Notice Seeking Comment on Asset Management Products and Activities, December 2014. Activities' could include activities such as central clearing. See BlackRock, Remarks at the OeNB Macroprudential Policy Conference: 'Agnostic on non-banks?', May 2019.

financial instability and help to avoid unintended consequences associated with some of the proposals put forward in this consultation by the FSB.

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?

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?

[**Note:** Questions 14 & 15 are taken together.]

Prime brokers' credit risk assessments extend far beyond just considering a counterparty's use of leverage. While understanding exposures is central to any counterparty credit risk analysis, it is just one piece of the puzzle.

Nevertheless, it has long been recognised that banks need to carefully manage exposures to highly leveraged counterparties. It is critical for banks' prime brokerage / secured financing businesses to understand the markets for securities they are financing / taking in as collateral – including liquidity, volatility, central market concentration, and concentration across the prime broker's book.

In 1999 BCBS issued 'Sound Practices for Banks' Interactions with Highly Leveraged Institutions', setting out best practices for banks with respect to due diligence and information gathering, measuring exposures, credit limits, ongoing monitoring, etc.[23]

We welcome BCBS' recent updates to this guidance considering the "significant mismanagement of counterparty credit risk"[24] revealed by the Archegos episode, which highlight the need for banks to:

- Conduct **due diligence** on an ongoing basis, and not just during the onboarding phase, to foster transparency and ensure that all risks are fully captured, and that in times of stress informed decisions can be made in a timely manner.
- Make **credit risk mitigation strategies** more effective also using robust contractual arrangements and risk-sensitive margining.
- Monitor **counterparty credit risk** through comprehensive metrics covering a range of material risks, portfolios, and counterparties.
- Enhance counterparty credit risk **governance frameworks** through the promotion of risk culture and clear processes, support by sufficiently detailed information.[25]

If a prime broker has good counterparty risk policies which are effectively implemented, we believe that existing practices are largely sufficient to ensure they can assess the full extent of their counterparties' leverage. Before mandating new policies, it is equally important to recall that one of the problems with prime brokers in the Archegos incident was that they did not enforce their *existing* policies.

[23] See BCBS, Sound Practices for Banks' Interactions with Highly Leveraged Institutions, January 1999.
[24] See BCBS Guidelines for Counterparty Credit Risk Management, December 2024.
[25] See BCBS Guidelines for Counterparty Credit Risk Management, December 2024.

Banks' ability to measure any financial stability risk posed by NBFI leverage depends on the level of disclosure and information made available by their counterparties and their ability to cross-reference that data with market-wide information. As such, we routinely provide the following financial information to our prime brokers:

- Assets under management (AUM);
- Level of leverage at the fund level and offered by the bank (financing extended vs collateral);
- Fund performance and profit and loss (P&L) volatility;
- Level of unencumbered cash as a measure of portfolio liquidity;
- Investor profile.

Banks can also make use of Audited Financial Statements (AFS) which are published annually and give insights into portfolio positioning. The statements follow an existing industry standard and can be added to ISDA agreements between prime brokers and their counterparties.

While we share financial information regarding our exposures with prime brokers at regular intervals, it would not be appropriate to require the disclosure of actual *positions* at other prime brokers, which are commercially sensitive.

Generally speaking, we would encourage a more streamlined process by which such financial information is shared across our trading counterparties given the wide range of dealers we have to share this information with when accounting for other products (e.g. swaps, repo, futures etc.).

Banks will be able to make better assessments of their counterparty risks if they can combine the data points outlined above with market-wide data, for example to be able to estimate average trading volumes, market concentration, or volatility of a particular security as discussed in response to Q. 4. This assessment relies on comprehensive post-trade data for equities, which is widely available for US-listed equities, but not elsewhere. In the EU and UK, work is still ongoing to set up consolidated tapes for equities (as well as for fixed income).

In many markets, this data is already available. For example, Credit Suisse's report on Archegos Capital Management notes that Credit Suisse's internal risk management was able to identify that Archegos' "top five long positions represented 175% of its NAV…[and it] held two positions that represented between 5 and 10 days' DTV [daily trading volume], six positions that represented between 2.5 and 4.99 days' DTV, and another nine positions that represented between 1 and 2.49 days' DTV".[26]

Overall, we believe the risks exposed by the Archegos failure are best managed by the providers of leverage. The financial stability risk in this case was that of a potential material impact on a critical financial institution's balance sheet. As the UK PRA/FCA noted in light of this episode, banks should "systematically review their risk appetite for accounts that do not provide wider disclosure of their investment strategy, leverage, and financing relationships".[27]

Separately, while we recognise the importance of leverage providers having clarity on the counterparty's investment strategy, leverage, and financing financial position, we

[26] Credit Suisse Group Special Report of the Board of Directors: *Report on Archegos Capital Management*, July 29, 2021, pp. 17-18.
[27] See PRA/FCA 'Dear CEO' Letter – Supervisory Review of Global Equity Finance Businesses following the Default of Archegos Capital Management, December 2021.

would be very concerned by any attempt to restrict investors to using a single prime broker. Being able to engage a variety of prime brokers allows access to different regional expertise, and, crucially, risk diversification. The collapse of Lehman Brothers in the Global Financial Crisis provides a clear case study on the importance of having multiple prime brokers.

Hence, we do not agree with the assumption embedded in the following excerpt from the consultation: "Concentrated leveraged risk exposures can often build up unexpectedly [...] when a non-bank financial entity borrows from several prime brokers, no single prime broker would necessarily know the full extent of the concentrated positions built up by the entity."

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?

We agree with the FSB that "the granularity of disclosures should be applied proportionately, using a risk-based approach that incorporates the nature, scale and complexity of the risks that a given client poses to its leverage provider." The potential benefits of sharing more granular data with leverage providers must be balanced against the risks of compromising commercially sensitive or proprietary information. Disclosures should only provide what is strictly necessary for the leverage provider to effectively manage risk on a specific exposure. If the disclosures are too onerous, or risk breaching client confidentiality, then market participants may reconsider their use of leverage, including leverage being taken for risk mitigation or hedging purposes.

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?

See answers to Q. 15 and Q. 16.

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?

Engagement between prime brokers and their counterparties is extensive and points of contact go well beyond the minimum touch points set out in law or contractual terms. In our experience, provision of enhanced disclosures in stressed markets is already standard industry practice and so does not need to be further laid out in regulation.

Leverage users are often required to inform leverage providers if their net asset value (NAV) or other measure of performance drops below certain thresholds as per their contractual requirements. Such NAV notices were provided by the industry during the drop in equity prices at the beginning of the COVID-19 pandemic, for example. Leverage providers are also able to request this information from leverage users if and when they are concerned about the impact of a market event on particular counterparties.

The benefit of such an approach is that the prime brokers can focus on the funds that are 'at risk', instead of a scenario where enhanced disclosures are mandated in a 'stress event' and the prime broker is overwhelmed with information from all its counterparties, which may not be useful or relevant.

It is worth noting that providing this information in normal circumstances is already a large undertaking and introducing new reporting requirements on an ad-hoc basis in a stressed market event could divert resources and time away from firms that should be spent mitigating any negative impact for investors.

That said, we believe there is scope to streamline the ways in which this kind of information is provided to prime brokers. This would be beneficial for market participants, prime brokers, regulators and investors alike, allowing for quicker turnaround times and ensuring that in a case where there are multiple prime brokers engaged with a leveraged counterparty, that they all receive the same information at the same time.

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?

We support harmonised policies across jurisdictions that are informed by regulator-led consultations and extensive industry feedback sessions. As described elsewhere in this response, we caution against setting regulation in a part of the market where market participants' ability to remain nimble and responsive to external factors is critical in avoiding the well-documented procyclicality risks that margining entails. In stressed market conditions, regulators can play a critical role by issuing supervisory guidance on the system-wide dynamics they see in affected markets, informed by close engagement with the industry on any idiosyncratic issues.

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?

We do not believe the principle of "same risk, same regulatory treatment" holds everywhere. It is most pertinent where 'same risk' means 'same liability structure'. The structures and business models within and inherent to the NBFI sector are highly heterogenous in their own right, but also differ significantly from the banking sector. If the same activity does not result in the same risk because of differences in business models, then the same regulatory treatment need not apply.

Bank depositors represent a debt obligation for the bank, their principal must be returned at par, and bank runs can occur when depositors demand their money bank in short order. Banks by design engage in maturity and liquidity transformation and are characterised by high levels of leverage. While each individual bank might vary in size, commercial focus, or geography, their fundamental structural features and business models are relatively homogenous.

The agency business model of asset management differs fundamentally from banks on all of these fronts:

- Asset managers act as fiduciaries on behalf of asset owners. The assets belong to the asset owners and are held on behalf of the fund's independent depositary by a third-party custodian in bankruptcy-remote accounts. As such, client assets, including investment fund assets, are not commingled with the asset management firm's assets. Clients control the strategic allocation of their assets, not the asset managers. Asset managers are obligated from a legal, regulatory, and ethical perspective to make investment decisions in line with client guidelines.

- Asset managers are not the counterparty to client trades or derivatives contracts, and in this regard the role of an asset manager is never to act as a buffer to the sale of assets or the unwinding of derivatives contracts by its clients.

- Asset managers do not guarantee the returns of an investment portfolio. Investors have an equity stake valued according to their pro-rata share of underlying fund assets and bear all investment risks. Whether the assets appreciate or depreciate, the investment results are dispersed solely among the shareholders of the fund or to the individual investor in a separate account.

- Finally, the balance sheets of asset managers are relatively simple. Asset managers generally do not use significant amounts of leverage or derivatives contracts, and asset managers do not rely on short-term wholesale funding to fund their operations.

Returning to the question asked and the example given in the consultation, the FSB suggests that authorities should "identify incongruences in the regulatory treatment of NBFI leverage resulting from similar exposures, financial instruments or structures", adopting the principle of "same risk, same regulatory treatment." One example given is that "incongruences in margining could have an impact on the provision of leverage to non-bank financial entities and their leverage-taking behaviour, such as shifting leveraged activities between centrally cleared and non-centrally cleared markets, or between products".

We do not agree with the principle of "same risk, same regulatory treatment", unless it also means "same liability". Neither do we believe that the movement of positions from central clearing to bilateral markets for products that are not subject to mandatory clearing is an 'incongruent treatment of risk'. Non-centrally cleared trades executed in bilateral markets are governed by a robust regulatory framework, with prescriptive margin and regulatory reporting requirements. Not only this, but the flexibility with regards to collateral posting under bilateral credit support agreements is an important risk mitigant to protect against the kind of pro-cyclical deleveraging that can be seen during a liquidity squeeze.