FSB FINANCIAL STABILITY BOARD

Liquidity Preparedness for Margin and Collateral Calls: Consultation report

Response to Consultation

BlackRock

1. **Does the outlined approach identify all key causes of some non-bank market participant's inadequate liquidity preparedness with respect to spikes in margin and collateral calls during times of stress? Are there any sector specific causes that should be considered?**

   Like the FSB, we recognise the critical importance of liquidity stress testing, planning for a range of market conditions, monitoring and managing positions, robust collateral management, maintaining appropriate levels of liquidity and/or reliable contingent funding sources, and efficient decision-making processes. However, we do not believe it is right to ascribe actions taken by market participants during recent market stresses solely to 'inadequate liquidity preparedness' or 'weaknesses in liquidity risk management'.

   Indeed, as the FSB notes in the consultation document, even during stress events like March 2020, "the substantial majority of market participants were able to meet margin calls". And, as market participants made clear during recent FSB outreach meetings, while "holding broadly defined liquid assets is not an issue […] transformation [of assets] into cash to cover margin calls may become an issue during periods of stress". (Footnote 1) This highlights that margin and collateral calls have a liability component as well as a liquidity component: whether a market participant can meet a margin call is a solvency issue; how they meet it is a liquidity issue.

   Margin calls can be met by drawing on cash buffers, raising temporary liquidity from banks (i.e. repo), or by selling assets. The extent to which each of these options can be relied upon is influenced by assessments of potential market conditions, the costs to end-investors, regulation, and the behaviour of other market participants.

   Market participants can and do maintain cash or liquidity buffers to meet margin calls. The size of these buffers will be a function of the size of the margin calls they might expect to incur. Appropriately sized cash buffers can help to avoid unnecessary transaction costs and are prudent from a portfolio and risk management perspective. However, holding ever-larger cash balances will not necessarily prevent asset liquidations: buffers have to be replenished, often by selling assets, and – particularly during market dislocations – liquidations will also be driven by the need to re-balance or de-risk portfolios. Maintenance of cash buffers also carries an opportunity cost, and must be balanced against the costs of

foregone returns for end-investors. From a macroeconomic perspective, cash buffers also represent a deadweight economic loss in terms of foregone productive investment in the real economy.

Selling assets is another legitimate way for market participants to meet margin calls. However, it may not be desirable from a portfolio management or volatility mitigation perspective. Selling assets can generate unnecessary transaction costs for end-investors or restructure their portfolio such that long-term returns are compromised.

As laid out previously, good liquidity preparedness and the ability to source cash for margin and collateral calls requires a constant balancing between using liquidity buffers, selling assets and using temporary sources of liquidity, like repo. Repo has the added benefit of allowing market participants time to re-structure their portfolios. While some contingent funding sources are committed in advance, they require counterparties that are willing and able to lend cash against portfolio assets. This has been impacted by post-global financial crisis regulation that rightly seeks to ensure banks do not rely excessively on short-term funding. This means that, as the Bank of England has noted, “intermediation capacity […] particularly from dealer banks […] struggles to meet the consequent demand for liquidity, particularly at times of stress.” (Footnote 2)

As noted previously, individual market participants’ ability to model, predict, and respond to margin calls, hold cash buffers, use contingent funding sources, and pre-position collateral are all dependent on assessments of what future market conditions could plausibly be; and/or behaviours of other market participants or intermediaries.

Moreover, risk models are historically based, so can underestimate the likelihood of extreme or unprecedented market events; predictability of margin calls is dependent on the level of transparency given to counterparties; and availability of contingent funding sources can be uncertain during stress events.

Market participants must balance these uncertainties with their hedging requirements, and the opportunity cost of holding higher cash buffers or liquidity buffers more generally. Taken together, we believe this means market participants selling assets to meet margin calls should not necessarily be ascribed to weak risk management or liquidity preparedness.

Footnotes:

(1) FSB, Liquidity Preparedness for Margin and Collateral Calls – Consultation Report. See Pages 3 & 6.

(2) Bank of England, A journey of 1000 miles begins with a single step, September 2023: https://www.bankofengland.co.uk/speech/2023/september/andrew-hauser-speech-at-market-news-international-connect-event

2. **Is the scope of the proposed policy recommendations appropriate?**

The proposals should apply to all non-bank market participants, including non-financial entities. As drafted, they appear to apply only to regulated and supervised entities. If new requirements are not applied to all participants in financial markets, policymakers may

create incentives to shift activities into structures that do not fall within their supervisory scope.

3. **Is the focus of the FSB's policy recommendations on liquidity risk management and governance, stress testing and scenario design and collateral management practices appropriate? Are there any other areas the FSB should consider?**

   Yes, subject to concerns raised about the proposals elsewhere in this response, especially in relation to the impact on banks' intermediation capacity presented by post-GFC regulatory constraints, and the effect that has on well-functioning repo markets as outlined in our executive summary.

   Within the collateral management practices section, explicit consideration should be given by policymakers to exploring ways to expand the range of eligible collateral that can be used for margin and collateral calls to include certain MMFs and ETFs with a view to alleviating procyclical effects. This is outlined in more detail in our response to question 8.

4. **Is the approach to proportionality and materiality clear for all non-bank market participants?**

   Application of these recommendations should be proportionately linked to the likelihood of a market participant being unable to meet a margin or collateral call. Many existing regulatory frameworks already require market participants to make these assessments and prepare accordingly.

   Separately, a number of these recommendations suggest that market participants should be held to different regulatory standards on account of their size and market footprint. We are concerned that this would create the potential for discriminatory treatment of some participants, and/or for regulatory arbitrage within and between jurisdictions. Per our executive summary, we recommend that these aspects of the proposals be removed to reflect the fact that entity size is not easily measured, but more importantly, is not relevant in considerations of market liquidity risk.

5. **Section 3.1 sets out key elements of a liquidity risk management framework to identify, monitor and manage liquidity risk exposures arising from margin and collateral calls. Are these sufficiently clear for all non-bank market participants?**

   Market participants should include the processes and systems necessary for timely mitigation of liquidity risks arising from margin and collateral calls in their liquidity risk management and governance frameworks – indeed this is already required by regulation in many jurisdictions. It is essential for all market participants to allocate clear responsibilities for addressing liquidity risks arising from spikes in margin and collateral calls, to prevent unnecessary delays during stress events.

   We also agree market participants should be prepared to meet margin and collateral calls even if there are multiple stakeholders in the liquidity risk and collateral management process, be they advisors, trustees, company management or fund managers.

   However, we disagree with the proposals for liquidity risk management obligations to be differentiated based on the size of the market participant in question, as envisaged in

recommendations 1, 2 and 3. There is no correlation between the absolute size of a market participant, its ability to respond to margin or collateral calls, or potential liquidity risk.

Recommendation 3 suggests “market participants should regularly monitor market depth, liquidity and concentration of their portfolio positions, and take into consideration how the risk management practices of their counterparties may respond, in particular in stressed market conditions.” While we support the FSB suggestion that market participants should, where possible, take into consideration the risk management practices of their counterparties and the resilience of short-term funding markets during stress, we don’t believe it is reasonable to require market participants to calibrate their risk management based on their footprint in the financial system or the actions of other market participants – this assumes access to a greater level of information about the wider financial system than what is actually available in practice.

6. **Are the recommendations on liquidity stress testing and scenario design with respect to margin and collateral calls clear and sufficiently specified?**

Recommendation 4

We believe many of the practices proposed under Recommendation 4 are appropriate.

Stress testing is an integral part of any risk management framework, and indeed is already required in several pieces of regulation. For example, in the European Union, ESMA guidelines on stress testing for UCITS and AIFs requires consideration of potential idiosyncratic, market-wide, and combined shocks leading to margin and collateral calls.

At BlackRock, these stress testing methodologies include assessments of historical data, forward-looking ‘what if’ stress testing, and reverse stress testing to assess the validity of assumptions ex-post.

The actions of counterparties and other market participants experiencing liquidity stresses can be indirectly assessed by considering the market depth of a given security and of the wider sector. This is helpful for larger portfolios and portfolio groups where simultaneous sales of securities (i.e. distinct issuers from the same sector) can quickly saturate the market’s capacity and prevent the market from absorbing more of these securities.

We routinely use the results of these assessments to calibrate liquidity levels and determine the adequacy of the diversity of our funding sources and collateral arrangements.

However, while we agree that “the level and diversification of liquid assets should be calibrated to the results of such liquidity stress testing”, as outlined already, we do not believe this calibration should be further determined by “the entity’s size, international footprint and activity in affected market and the complexity of its activities, organisational structure and business model, as well as its liquidity risk profile and leverage.”

Again, manager size is not an appropriate metric on which to measure risk, nor is it accurate to imply that larger market participants are more prone to liquidity shocks from

margin or collateral calls. In practice, scale can give access to larger pools of liquidity, a wider view of the market, and more advanced liquidity risk management software.

Secondly, Annex 3 suggests that non-bank market participants should “use available data from trading venues, trade repositories and other public disclosures, combined with market intelligence to identify and factor in the impact of any concentrated exposures or ‘crowded’ strategies on potential loss projections”. While we agree with this suggestion, we would urge the FSB to recognise current data limitations in developing its guidance, and work with other authorities to improve data availability and quality across the board.

For example, post trade data in UK and EU Fixed Income markets can be of a poor quality, fragmented and inconsistent, making it difficult to use. We therefore welcome both jurisdictions' commitments to the development and implementation of a consolidated tape to provide greater transparency in OTC bond and derivative markets. Benefits of a consolidated tape include improved transparency, assisted decision-making, and the provision of improved market insight across the investor spectrum.

Recommendation 5

We agree in principle that stress testing should consider a range of margin and collateral call scenarios, and changes in overall liquidity positions – indeed, we believe this is already common practice for many market participants.

At BlackRock, testing for potential liquidity stresses caused by margin and collateral calls includes assessments for both bilateral and cleared arrangements, and we have specific collateral schedules in place for products in both.

However, it is worth noting that the degree and quality of CCP transparency varies greatly from CCP to CCP. As outlined in our response to the BCBS-CPMI-IOSCO Margin Group consultative report on Transparency and Responsiveness of Initial Margin in Centrally Cleared Markets (Footnote 3) , market participants would benefit from a greater degree of transparency regarding the margin models used by their CCPs, as well as user-friendly margin simulation tools to stress test that information. We called for standardisation of CCP disclosures and implementation of audit requirements to ensure that disclosures are accurate, consistent, and timely. We would benefit from greater insight into how and when CCPs and clearing members might apply margin add-ons.

Similarly, the FSB suggests that “market participants should also consider whether they participate in crowded strategies or concentrated market segments and are therefore prone to liquidating the same assets at the same time as other market participants. Where this is the case, they should incorporate an estimate for the incremental market impact and liquidation costs, based for example on reduced market depth and wider bid-ask spreads associated with extreme stressed conditions.”

From a practical perspective, identifying ‘crowded’ strategies is very difficult with the existing set of data available to market participants. As mentioned previously, transaction data can often be limited in scope and/or of poor quality. Assessing the ‘crowdedness’ of a trade would also require detailed information on the holdings of different market

participants, levels of leverage, and investment strategy – which is not available to market participants.

Finally, the FSB suggests that market participants should consider “the terms of each bilateral financing agreement (e.g. ISDA, GMRA etc.), including eligible collateral types and any margin-lock features or Additional Termination Events (ATEs)”. At BlackRock, we perform some calculations on documentation types like netting sets on an ad-hoc basis and do have agreements with ATE triggers on leverage. However, recording eligible collateral types or ATE triggers in a way that can be assessed systemically is not currently standard industry practice. The FSB could explore whether this might be something market participants could do on a more systematic basis, and how this might be done most effectively.

Footnotes:

(3) BlackRock response to BCBS-CPMI-IOSCO: Transparency and Responsiveness of Initial Margin in Centrally Cleared Markets. April 2024. https://www.blackrock.com/corporate/literature/publication/bcbs-cpmi-iosco-transparency-responsiveness-of-im-in-centrally-cleared-markets-041624.pdf

7. **Are there any jurisdictional or sector-specific differences that are not accounted for in the recommendations?**

No further comments.

8. **Collateral readiness at the right time, quality and location is a critical aspect of effective liquidity preparedness for spikes in margin and collateral calls to mitigate the risk of having to liquidate collateral under stressed market conditions. Do the FSB’s recommendations in Section 3.3 address all key elements required to be effective in mitigating liquidity risk arising from margin and collateral calls?**

Recommendation 6

We welcome the provisions requiring market participants to take measures to ensure collateral is unencumbered and accessible during the required timeframe. We also recognise that, as the FSB suggests, collateral management processes “should be commensurate with the size, nature and complexity of the market participant’s transactions in order to ensure a well-designed operationally resilient and continue to meet expectations”.

However, internal operational capabilities of each market participant will vary, and as such, each market participant will be best placed to conduct their own due diligence to ensure they have in place the appropriate control and governance framework, systems and procedures relative to the scale of business they support. We recommend the FSB revise the proposals to reflect this.

Collateral readiness oversight should also account for the interconnected nature of the derivative post-trade ecosystem. The ability of non-financial market participants to meet margin and collateral calls is contingent on the performance and capabilities of both brokers and custodians, who should also be brought into scope for conducting their own

due diligence, particularly with respect to their ability to provide appropriate levels of network connectivity, real-time transparency into unencumbered collateral inventory and collateral settlement status.

Recommendation 7

We agree that collateral should be held in sufficient quantity, after taking account of potential haircuts, and be pre-positioned at the appropriate entities to be operationally ready for use during times of stress. Similarly, we agree that market participants should build up, maintain, and monitor readily available liquidity to ensure enough collateral is positioned that they can meet margin and collateral calls in the required timeframe and at the likely value.

However, given the issues raised elsewhere in this response, we are concerned about the requirement to “hold sufficient available cash to meet cash-only margin calls with a high degree of certainty”.

As noted in our response to question 1, individual market participants’ ability to model and predict the size of margin calls is dependent on assessments of what future market conditions could plausibly be; and/or behaviours of other market participants or intermediaries.

Holding cash balances of sufficient size to meet all possible margin calls ‘with a high degree of certainty’ is likely to entail over-insurance in practice, impacting the economic viability of hedging arrangements; and also creating a cost in terms of foregone investment returns and productive investment more generally. Widening the set of eligible collateral to be exchanged, subject to clear parameters for acceptability (i.e. liquidity, appropriate haircuts), will avoid over reliance on cash buffers that have a detrimental impact on productive real economy investment and retirement savings. As such, we recommend that the FSB remove or clarify the requirement to hold cash balances sufficient to meet all cash-only margin calls ‘with a high degree of certainty’, and urge the FSB to work with other policymakers and authorities to expand the range of eligible collateral.

While it is possible to use non-standard collateral such as corporate bonds for repo transactions, and a wide range of collateral is eligible for initial margin (IM) schedules in uncleared swaps, variation margin (VM) for uncleared swaps is typically restricted to cash and government bonds. Expanding lists of eligible collateral to include certain MMFs and ETFs, would help to alleviate the procyclical impact of margin calls during market volatility for both cleared and uncleared trades. See Box A for further discussion.

For expanded collateral eligibility to be most impactful, consideration should be given to the way collateral concentration limits are applied at CCPs. Concentration limits tend to be applied at the clearing member-level (e.g., no more than X% or equity collateral as IM) which can restrict the eligibility of certain collateral types at the end-investor level. If the aim is to reduce the pro-cyclical impacts of margin calls and to ensure market participants are better prepared for liquidity risk, then we suggest regulators initiate a conversation around collateral eligibility and collateral concentration limits. CCPs should ensure that clients have access to limits for alternative collateral types and that collateral limits are aligned with the liquidity in the underlying assets.

Box A: Potential for MMFs and ETFs as Collateral

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 unnecessary elevated activity in short-term funding markets, given that cash raised from these sales was often re-invested in a similar vehicle. Opportunities to increase high-quality liquid assets' (HQLA) mobility through tokenisation could therefore be beneficial, as it would allow end users to leverage additional forms of non-cash collateral (i.e. MMFs), in turn reducing reliance on cash.

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. [Box A ends.]

Recommendation 8

We recognise the value in maintaining close working relationships with counterparties, custodians and any other third-party providers that support collateralised transactions. At BlackRock, we undertake robust evaluation assessments of credit worthiness before a broker is approved for a specific asset class or product. Reviews are conducted on a frequent basis. Further, we conduct frequent pre- and post-trade performance reviews across all brokers. Finally, we conduct ongoing engagement regarding operational efficiencies, margin and reconciliation exceptions and process improvement.

9. **Are there any material challenges to collateral management practices that some non-bank market participants may face that should be considered?**

See previous answers.

If you have any additional comments, please provide them below.

Executive Summary:

As the 2022 BCBS-CPMI-IOSCO Review of Margining Practises made clear, steps taken post-Global Financial Crisis (GFC) to increase central clearing of derivatives, and to reform practices around non-cleared derivatives, meant that counterparty risk was not a significant concern during the market stress events of March 2020. However, the reforms have significantly increased liquidity requirements and the need to raise cash across the financial system during volatile market conditions, illustrating the potentially pro-cyclical effects of margin and collateral calls at an aggregate level.

We support the work program initiated by the FSB, BCBS, CPMI, and IOSCO post-2020 to address these issues, by assessing the activities of a wide range of market participants and intermediaries. Ensuring that market participants are properly prepared for margin and collateral calls is an important strand of this work program, and recent events have

highlighted room for improvement in some operational and risk management practises. The FSB is right to focus on governance, stress testing, and collateral management as the critical aspects of preparedness for margin and collateral calls, and we believe most of the recommendations proposed are, in principle, sensible.

We agree that market participants should have robust operational and governance processes for managing margin and collateral calls; liquidity risk management frameworks that include robust stress tests that are subject to regular review and used to calibrate liquidity and collateral; regular reviews of collateral management arrangements; and regular interaction with relevant counterparties and third parties.

However, there are several aspects of the proposals which we would strongly urge the FSB to revise or reconsider, primarily relating to:

- The difficulty faced by market participants in accessing and using data in the ways foreseen in the consultation;

- The risk of regulatory arbitrage presented by certain proposals;

- A lack of clear definitions for some key concepts;

- The inaccurate assumptions put forward in relation to entity size and international footprint, and the impact the FSB suggests those factors have on liquidity risk.

We believe some of the proposals, and the language therein, should be clarified to more accurately reflect the areas individual market participants have direct influence over and can be held accountable for - as opposed to areas where market-wide structural reforms are required for change to be effective - the practical constraints they may face, and their capacity to influence market-wide outcomes.

Individual market participants' ability to model and respond to margin calls, maintain cash buffers, use contingent funding sources, and pre-position collateral are dependent both on the quality of existing market data, and the behaviours of other market participants and intermediaries. As such, addressing pro-cyclicality at a market-wide level must be informed by a market-wide perspective; responsibility cannot rest solely with end-investors.

For example, market participants' ability to conduct rigorous stress testing and scenario analysis for margin and collateral calls is dependent on the information made available to them by their intermediaries, and specifically Central Clearing Counterparties (CCPs). Our response to the BCBS-CPMI-IOSCO consultation on Transparency and Responsiveness of Initial Margin in Centrally Cleared Markets (Footnote 4) 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 have called for standardisation of CCP disclosures and implementation of audit requirements to ensure that disclosures are accurate, consistent, and timely. Improving the quality of the data in these feedback loops will be central to enhancing the effectiveness of stress testing models. We welcome the proposals in the consultation, which – subject to

implementation – will help market participants prepare for stress events. We believe there should be greater emphasis on the interdependencies outlined in our BCBS-CPMI-IOSCO response in any final recommendations on liquidity preparedness.

Also, in several places, the proposed recommendations suggest that market participants' risk management, governance, stress testing, and collateral management should reflect their role in the financial system, their degree of interconnectedness with other market participants, the possible behaviour of other market participants, and assessments of how crowded the markets they trade in are. However, the consultation does not clarify how these assessments might be made. In many cases, it will not be possible as accurately assessing any of these factors would require data on markets and market participants with a degree of coverage and granularity that does not currently exist. In some jurisdictions, the data quality available to market participants on trading activity can be fragmented, inconsistent or of poor quality.

Secondly, as written, and depending on how they are implemented, the proposals could create risks of regulatory arbitrage, both within and between jurisdictions. The proposals could be read as applying only to non-bank financial market participants, and/or only to regulated and supervised entities. We believe that these requirements should apply to all relevant financial and non-financial market participants. Otherwise, policymakers may create incentives to shift activities into structures that do not fall within their regulatory scope.

Moreover, the FSB suggests that individual market participants should be held to different regulatory standards on account of, for example, their assets under management (AUM). Manager size is irrelevant to risks in market functioning; it is not an appropriate metric on which to measure risk, nor is it accurate to imply that larger market participants are more prone to liquidity shocks from margin or collateral calls. Market functioning reflects bank intermediation capacity, market infrastructure, and the extent to which specific products and activities are appropriately regulated, and whether those regulations are operationalised. These conditions apply irrespective of the size of the investor. Applying different rules to larger vs. smaller entities would create an unlevel playing field and risk regulatory arbitrage.

Thirdly, we note some instances of ambiguous or non-defined terminology, which, if used to inform regulatory requirements, could either create scope for regulatory arbitrage, or inadvertently prescribe strict limits on portfolio construction and risk management decisions.

In particular, we are concerned about subjective terms such as 'extreme but plausible stress' being used to inform specific regulatory requirements, particularly if, as suggested in Recommendation 7, they are used to set minimum cash balances.

Similarly, a single, conservative, definition of 'extreme but plausible stress' could be set at a global level and implemented by all jurisdictions. However, any such definition is likely to be inappropriate for a wide range of market participants and could create over-insurance in the form of excessive cash or collateral buffers, carrying a significant opportunity cost for end-investors, and potentially disincentivising hedging.

More generally, we believe it is important to recognise that whether margin and collateral calls can be met (a solvency issue) is distinct from how they are (a liquidity issue). Cash and liquidity buffers are one way to meet margin calls, but cash buffers represent a deadweight economic loss in terms of foregone productive investment in the real economy. Other legitimate ways to meet margin calls include sourcing temporary liquidity (i.e. through repo), or selling assets.

Market participants need to balance uncertainties around the level of margin or collateral calls they are likely to face, and the capacity of counterparties to provide contingent funding against their hedging requirements, their investment and return objectives, and the cost of holding higher cash buffers or liquidity buffers more generally. As mentioned, effective liquidity preparedness is contingent on the intermediation capacity of banks and dealers, which is determined by their balance sheet capacity.

We therefore recommend the FSB revise proposed recommendations as follows:

- Remove references to ‘role in the financial system’, ‘entity size’, and ‘footprint in markets’ as a factor to be considered by market participants.

- Clarify that ‘authority guidance on scenario design’ should not mean setting specific parameters for stress testing or constraints on portfolio management.

- Relatedly, ensure guidance doesn’t inadvertently mandate over-insurance.

- Remove or clarify the requirement to hold cash balances sufficient to meet all cash-only margin calls ‘with a high degree of certainty’, keeping the prospect of less productive investment in the real economy in mind.

Any actions policymakers can take to make these trade-offs less stark will, we believe, help to alleviate some of the pro-cyclical effects of margin and collateral calls. As a complement to these proposals, we also urge the FSB to explore and consider ways to support an expansion of the range of collateral used to meet margin requirements. If carried out appropriately, expansion of eligible collateral to include a wider range of high-quality liquid securities could reduce investors’ need to either sell assets or rely on cash. We recommend expanding acceptable collateral to include certain types of Money Market Funds (MMFs) and Exchange Traded Funds (ETFs), where available.

Finally, we recognise that the aggregate impact of market participants on certain markets – e.g., government bond markets – can be cause of policymaker concern. We therefore urge the FSB to recognise limitations in data on both markets and market participants, and work with industry and other authorities to improve data availability and quality across the board. This will allow for more targeted, risk-based interventions by policymakers and enhance the analysis individual market participants are able to undertake.

Footnotes:

(4) BlackRock response to BCBS-CPMI-IOSCO: Transparency and Responsiveness of Initial Margin in Centrally Cleared Markets. April 2024. https://www.blackrock.com/corporate/literature/publication/bcbs-cpmi-iosco-transparency-responsiveness-of-im-in-centrally-cleared-markets-041624.pdf

18th June 2024

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Submitted via online form to: https://www.fsb.org/survey/236355?newtest=Y&lang=en

RE: Liquidity Preparedness for Margin and Collateral Calls – Consultation Report

BlackRock[1] is pleased to have the opportunity to respond to the consultation report on liquidity preparedness for margin and collateral calls, 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,

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[1] BlackRock is one of the world's leading asset management firms. We manage assets on behalf of institutional and individual clients worldwide, across equity, fixed income, liquidity, real estate, alternatives, and multi-asset strategies. Our client base includes pension plans, endowments, foundations, charities, official institutions, insurers and other financial institutions, as well as individuals around the world.

BlackRock.

Executive Summary

As the *2022 BCBS-CPMI-IOSCO Review of Margining Practises* made clear, steps taken post-Global Financial Crisis (GFC) to increase central clearing of derivatives, and to reform practices around non-cleared derivatives, meant that counterparty risk was not a significant concern during the market stress events of March 2020. However, the reforms have significantly increased liquidity requirements and the need to raise cash across the financial system during volatile market conditions, illustrating the potentially pro-cyclical effects of margin and collateral calls at an aggregate level.

We support the work program initiated by the FSB, BCBS, CPMI, and IOSCO post-2020 to address these issues, by assessing the activities of a wide range of market participants and intermediaries. Ensuring that market participants are properly prepared for margin and collateral calls is an important strand of this work program, and recent events have highlighted room for improvement in some operational and risk management practises. **The FSB is right to focus on governance, stress testing, and collateral management as the critical aspects of preparedness for margin and collateral calls, and we believe most of the recommendations proposed are, in principle, sensible.**

We agree that market participants should have robust operational and governance processes for managing margin and collateral calls; liquidity risk management frameworks that include robust stress tests that are subject to regular review and used to calibrate liquidity and collateral; regular reviews of collateral management arrangements; and regular interaction with relevant counterparties and third parties.

However, **there are several aspects of the proposals which we would strongly urge the FSB to revise or reconsider, primarily relating to:**

- **The difficulty faced by market participants in accessing and using data in the ways foreseen in the consultation**;
- **The risk of regulatory arbitrage presented by certain proposals**;
- **A lack of clear definitions for some key concepts**;
- **The inaccurate assumptions put forward in relation to entity size and international footprint, and the impact the FSB suggests those factors have on liquidity risk.**

We believe some of the proposals, and the language therein, should be clarified to more accurately reflect the areas individual market participants have direct influence over and can be held accountable for – as opposed to areas where market-wide structural reforms are required for change to be effective – the practical constraints they may face, and their capacity to influence market-wide outcomes.

Individual market participants' ability to model and respond to margin calls, maintain cash buffers, use contingent funding sources, and pre-position collateral are dependent both on the quality of existing market data, and the behaviours of other market participants and intermediaries. As such, addressing pro-cyclicality at a market-wide level must be informed by a market-wide perspective; responsibility cannot rest solely with end-investors.

For example, market participants' ability to conduct rigorous stress testing and scenario analysis for margin and collateral calls is dependent on the information made available to them by their intermediaries, and specifically Central Clearing Counterparties (CCPs). Our response to the BCBS-CPMI-IOSCO consultation on Transparency and Responsiveness of Initial Margin in Centrally Cleared Markets[2] 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 have called for standardisation of CCP disclosures and implementation of audit requirements to ensure that disclosures are accurate, consistent, and timely. Improving the quality of the data in these feedback loops will be central to enhancing the effectiveness of stress testing models. We welcome the proposals in the consultation, which – subject to implementation – will help market participants prepare for stress events. We believe there should be greater emphasis on the interdependencies outlined in our BCBS-CPMI-IOSCO response in any final recommendations on liquidity preparedness.

Also, in several places, the proposed recommendations suggest that market participants' risk management, governance, stress testing, and collateral management should reflect their role in the financial system, their degree of interconnectedness with other market participants, the possible behaviour of other market participants, and assessments of how crowded the markets they trade in are. However, the consultation does not clarify how these assessments might be made. In many cases, it will not be possible as accurately assessing any of these factors would require data on markets and market participants with a degree of coverage and granularity that does not currently exist. In some jurisdictions, the data quality available to market participants on trading activity can be fragmented, inconsistent or of poor quality.

Secondly, as written, and depending on how they are implemented, the proposals could create risks of regulatory arbitrage, both within and between jurisdictions. The proposals could be read as applying only to non-bank financial market participants, and/or only to regulated and supervised entities. We believe that these requirements should apply to all relevant financial and non-financial market participants. Otherwise, policymakers may create incentives to shift activities into structures that do not fall within their regulatory scope.

Moreover, the FSB suggests that individual market participants should be held to different regulatory standards on account of, for example, their assets under management (AUM). Manager size is irrelevant to risks in market functioning; it is not an appropriate metric on which to measure risk, nor is it accurate to imply that larger market participants are more prone to liquidity shocks from margin or collateral calls. Market functioning reflects bank intermediation capacity, market infrastructure, and the extent to which specific products and activities are appropriately regulated, and whether those regulations are operationalised. These conditions apply irrespective of the size of the investor. Applying different rules to larger vs. smaller entities would create an unlevel playing field and risk regulatory arbitrage.

Thirdly, we note some instances of ambiguous or non-defined terminology, which, if used to inform regulatory requirements, could either create scope for regulatory arbitrage, or inadvertently prescribe strict limits on portfolio construction and risk management decisions.

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

In particular, we are concerned about subjective terms such as 'extreme but plausible stress' being used to inform specific regulatory requirements, particularly if, as suggested in Recommendation 7, they are used to set minimum cash balances.

Similarly, a single, conservative, definition of 'extreme but plausible stress' could be set at a global level and implemented by all jurisdictions. However, any such definition is likely to be inappropriate for a wide range of market participants and could create over-insurance in the form of excessive cash or collateral buffers, carrying a significant opportunity cost for end-investors, and potentially disincentivising hedging.

More generally, we believe it is important to recognise that *whether* margin and collateral calls can be met (a solvency issue) is distinct from *how* they are (a liquidity issue). Cash and liquidity buffers are one way to meet margin calls, but cash buffers represent a deadweight economic loss in terms of foregone productive investment in the real economy. Other legitimate ways to meet margin calls include sourcing temporary liquidity (i.e. through repo), or selling assets.

Market participants need to balance uncertainties around the level of margin or collateral calls they are likely to face, and the capacity of counterparties to provide contingent funding against their hedging requirements, their investment and return objectives, and the cost of holding higher cash buffers or liquidity buffers more generally. As mentioned, effective liquidity preparedness is contingent on the intermediation capacity of banks and dealers, which is determined by their balance sheet capacity.

We therefore recommend the FSB revise proposed recommendations as follows:

- **Remove references to 'role in the financial system', 'entity size', and 'footprint in markets'** as a factor to be considered by market participants.
- **Clarify that 'authority guidance on scenario design' should not mean setting specific parameters** for stress testing or constraints on portfolio management.
- Relatedly, **ensure guidance doesn't inadvertently mandate over-insurance**.
- **Remove or clarify the requirement to hold cash balances sufficient to meet all cash-only margin calls 'with a high degree of certainty',** keeping the prospect of less productive investment in the real economy in mind.

Any actions policymakers can take to make these trade-offs less stark will, we believe, help to alleviate some of the pro-cyclical effects of margin and collateral calls. **As a complement to these proposals, we also urge the FSB to explore and consider ways to support an expansion of the range of collateral used to meet margin requirements.** If carried out appropriately, expansion of eligible collateral to include a wider range of high-quality liquid securities could reduce investors' need to either sell assets or rely on cash. We recommend expanding acceptable collateral to include certain types of Money Market Funds (MMFs) and Exchange Traded Funds (ETFs), where available.

Finally, we recognise that the aggregate impact of market participants on certain markets – e.g., government bond markets – can be cause of policymaker concern. **We therefore urge the FSB to recognise limitations in data on both markets and market participants, and work with industry and other authorities to improve data**

availability and quality across the board. This will allow for more targeted, risk-based interventions by policymakers and enhance the analysis individual market participants are able to undertake.

Responses to Questions:

1. **Does the outlined approach identify all key causes of some non-bank participants' inadequate liquidity preparedness with respect to spikes in margin and collateral calls during times of stress? Are there any sector specific causes that should be considered?**

Like the FSB, we recognise the critical importance of liquidity stress testing, planning for a range of market conditions, monitoring and managing positions, robust collateral management, maintaining appropriate levels of liquidity and/or reliable contingent funding sources, and efficient decision-making processes. However, we do not believe it is right to ascribe actions taken by market participants during recent market stresses solely to 'inadequate liquidity preparedness' or 'weaknesses in liquidity risk management'.

Indeed, as the FSB notes in the consultation document, even during stress events like March 2020, "the substantial majority of market participants were able to meet margin calls". And, as market participants made clear during recent FSB outreach meetings, while "holding broadly defined liquid assets is not an issue [...] transformation [of assets] into cash to cover margin calls may become an issue during periods of stress".[3] This highlights that margin and collateral calls have a liability component as well as a liquidity component: *whether* a market participant can meet a margin call is a solvency issue; *how* they meet it is a liquidity issue.

Margin calls can be met by drawing on cash buffers, raising temporary liquidity from banks (i.e. repo), or by selling assets. The extent to which each of these options can be relied upon is influenced by assessments of potential market conditions, the costs to end-investors, regulation, and the behaviour of other market participants.

Market participants can and do maintain cash or liquidity buffers to meet margin calls. The size of these buffers will be a function of the size of the margin calls they might expect to incur. Appropriately sized cash buffers can help to avoid unnecessary transaction costs and are prudent from a portfolio and risk management perspective. **However, holding ever-larger cash balances will not necessarily prevent asset liquidations: buffers have to be replenished, often by selling assets, and – particularly during market dislocations – liquidations will also be driven by the need to re-balance or de-risk portfolios.** Maintenance of cash buffers also carries an opportunity cost, and must be balanced against the costs of foregone returns for end-investors. From a macroeconomic perspective, cash buffers also represent a deadweight economic loss in terms of foregone productive investment in the real economy.

Selling assets is another legitimate way for market participants to meet margin calls. However, it may not be desirable from a portfolio management or volatility mitigation perspective. Selling assets can generate unnecessary transaction costs for end-investors or restructure their portfolio such that long-term returns are compromised.

[3] FSB, Liquidity Preparedness for Margin and Collateral Calls – Consultation Report. See p. 3 and p. 6.

As laid out previously, good liquidity preparedness and the ability to source cash for margin and collateral calls requires a constant balancing between using liquidity buffers, selling assets and using temporary sources of liquidity, like repo. Repo has the added benefit of allowing market participants time to re-structure their portfolios. While some contingent funding sources are committed in advance, they require counterparties that are willing and able to lend cash against portfolio assets. This has been impacted by post-global financial crisis regulation that rightly seeks to ensure banks do not rely excessively on short-term funding. This means that, as the Bank of England has noted, "intermediation capacity […] particularly from dealer banks […] struggles to meet the consequent demand for liquidity, particularly at times of stress."[4]

As noted previously, individual market participants' ability to model, predict, and respond to margin calls, hold cash buffers, use contingent funding sources, and pre-position collateral are all dependent on assessments of what future market conditions could plausibly be; and/or behaviours of other market participants or intermediaries.

Moreover, risk models are historically based, so can underestimate the likelihood of extreme or unprecedented market events; predictability of margin calls is dependent on the level of transparency given to counterparties; and availability of contingent funding sources can be uncertain during stress events.

Market participants must balance these uncertainties with their hedging requirements, and the opportunity cost of holding higher cash buffers or liquidity buffers more generally. Taken together, we believe this means market participants selling assets to meet margin calls should not necessarily be ascribed to weak risk management or liquidity preparedness.

2. Is the scope of the proposed policy recommendations appropriate?

The proposals should apply to all non-bank market participants, including non-financial entities. As drafted, they appear to apply only to regulated and supervised entities. If new requirements are not applied to all participants in financial markets, policymakers may create incentives to shift activities into structures that do not fall within their supervisory scope.

3. Is the focus of the FSB's policy recommendations on liquidity risk management and governance, stress testing and scenario design and collateral management practices appropriate? Are there any other areas the FSB should consider?

Yes, subject to concerns raised about the proposals elsewhere in this response, especially in relation to the impact on banks' intermediation capacity presented by post-GFC regulatory constraints, and the effect that has on well-functioning repo markets as outlined in our executive summary.

Within the collateral management practices section, explicit consideration should be given by policymakers to exploring ways to expand the range of eligible collateral that can be used for margin and collateral calls to include certain MMFs and ETFs with a view to alleviating procyclical effects. This is outlined in more detail in our response to question 8.

4. Is the approach to proportionality and materiality clear for all non-bank participants?

[4] Bank of England, *A journey of 1000 miles begins with a single step*, September 2023.

Application of these recommendations should be proportionately linked to the likelihood of a market participant being unable to meet a margin or collateral call. Many existing regulatory frameworks already require market participants to make these assessments and prepare accordingly.

Separately, a number of these recommendations suggest that market participants should be held to different regulatory standards on account of their size and market footprint. We are concerned that this would create the potential for discriminatory treatment of some participants, and/or for regulatory arbitrage within and between jurisdictions. Per our executive summary, we recommend that these aspects of the proposals be removed to reflect the fact that entity size is not easily measured, but more importantly, is not relevant in considerations of market liquidity risk.

Section 3.1 – Liquidity Risk Management Processes and Governance:

5. **Section 3.1 sets out key elements of a liquidity risk management framework to identify, monitor and manage liquidity risk exposures arising from margin and collateral calls. Are these sufficiently clear for all non-bank market participants?**

Market participants should include the processes and systems necessary for timely mitigation of liquidity risks arising from margin and collateral calls in their liquidity risk management and governance frameworks – indeed this is already required by regulation in many jurisdictions. It is essential for all market participants to allocate clear responsibilities for addressing liquidity risks arising from spikes in margin and collateral calls, to prevent unnecessary delays during stress events.

We also agree market participants should be prepared to meet margin and collateral calls even if there are multiple stakeholders in the liquidity risk and collateral management process, be they advisors, trustees, company management or fund managers.

However, we disagree with the proposals for liquidity risk management obligations to be differentiated based on the size of the market participant in question, as envisaged in recommendations 1, 2 and 3. There is no correlation between the absolute size of a market participant, its ability to respond to margin or collateral calls, or potential liquidity risk.

Recommendation 3 suggests "market participants should regularly monitor market depth, liquidity and concentration of their portfolio positions, and take into consideration how the risk management practices of their counterparties may respond, in particular in stressed market conditions." While we support the FSB suggestion that market participants should, where possible, take into consideration the risk management practices of their counterparties and the resilience of short-term funding markets during stress, we don't believe it is reasonable to require market participants to calibrate their risk management based on their footprint in the financial system or the actions of other market participants – this assumes access to a greater level of information about the wider financial system than what is actually available in practice.

Section 3.2 – Liquidity Stress Testing and Scenario Design:

6. **Are the recommendations on liquidity stress testing and scenario design with respect to margin and collateral calls clear and sufficiently specified?**

Recommendation 4

We believe many of the practices proposed under Recommendation 4 are appropriate.

Stress testing is an integral part of any risk management framework, and indeed is already required in several pieces of regulation. For example, in the European Union, ESMA guidelines on stress testing for UCITS and AIFs requires consideration of potential idiosyncratic, market-wide, and combined shocks leading to margin and collateral calls.

At BlackRock, these stress testing methodologies include assessments of historical data, forward-looking 'what if' stress testing, and reverse stress testing to assess the validity of assumptions ex-post.

The actions of counterparties and other market participants experiencing liquidity stresses can be indirectly assessed by considering the market depth of a given security and of the wider sector. This is helpful for larger portfolios and portfolio groups where simultaneous sales of securities (i.e. distinct issuers from the same sector) can quickly saturate the market's capacity and prevent the market from absorbing more of these securities.

We routinely use the results of these assessments to calibrate liquidity levels and determine the adequacy of the diversity of our funding sources and collateral arrangements.

However, while we agree that "the level and diversification of liquid assets should be calibrated to the results of such liquidity stress testing", as outlined already, we do not believe this calibration should be further determined by "the entity's size, international footprint and activity in affected market and the complexity of its activities, organisational structure and business model, as well as its liquidity risk profile and leverage."

Again, manager size is not an appropriate metric on which to measure risk, nor is it accurate to imply that larger market participants are more prone to liquidity shocks from margin or collateral calls. In practice, scale can give access to larger pools of liquidity, a wider view of the market, and more advanced liquidity risk management software.

Secondly, Annex 3 suggests that non-bank market participants should "use available data from trading venues, trade repositories and other public disclosures, combined with market intelligence to identify and factor in the impact of any concentrated exposures or 'crowded' strategies on potential loss projections". **While we agree with this suggestion, we would urge the FSB to recognise current data limitations in developing its guidance, and work with other authorities to improve data availability and quality across the board.**

For example, post trade data in UK and EU Fixed Income markets can be of a poor quality, fragmented and inconsistent, making it difficult to use. We therefore welcome both jurisdictions' commitments to the development and implementation of a consolidated tape to provide greater transparency in OTC bond and derivative markets. Benefits of a consolidated tape include improved transparency, assisted decision-making, and the provision of improved market insight across the investor spectrum.

Recommendation 5

We agree in principle that stress testing should consider a range of margin and collateral call scenarios, and changes in overall liquidity positions – indeed, we believe this is already common practice for many market participants.

At BlackRock, testing for potential liquidity stresses caused by margin and collateral calls includes assessments for both bilateral and cleared arrangements, and we have specific collateral schedules in place for products in both.

However, it is worth noting that the degree and quality of CCP transparency varies greatly from CCP to CCP. As outlined in our response to the BCBS-CPMI-IOSCO Margin Group consultative report on *Transparency and Responsiveness of Initial Margin in Centrally Cleared Markets*[5], market participants would benefit from a greater degree of transparency regarding the margin models used by their CCPs, as well as user-friendly margin simulation tools to stress test that information. We called for standardisation of CCP disclosures and implementation of audit requirements to ensure that disclosures are accurate, consistent, and timely. We would benefit from greater insight into how and when CCPs and clearing members might apply margin add-ons.

Similarly, the FSB suggests that "market participants should also consider whether they participate in crowded strategies or concentrated market segments and are therefore prone to liquidating the same assets at the same time as other market participants. Where this is the case, they should incorporate an estimate for the incremental market impact and liquidation costs, based for example on reduced market depth and wider bid-ask spreads associated with extreme stressed conditions."

From a practical perspective, identifying 'crowded' strategies is very difficult with the existing set of data available to market participants. As mentioned previously, transaction data can often be limited in scope and/or of poor quality. Assessing the 'crowdedness' of a trade would also require detailed information on the holdings of different market participants, levels of leverage, and investment strategy – which is not available to market participants.

Finally, the FSB suggests that market participants should consider "the terms of each bilateral financing agreement (e.g. ISDA, GMRA etc.), including eligible collateral types and any margin-lock features or Additional Termination Events (ATEs)". At BlackRock, we perform some calculations on documentation types like netting sets on an ad-hoc basis and do have agreements with ATE triggers on leverage. However, recording eligible collateral types or ATE triggers in a way that can be assessed systemically is not currently standard industry practice. The FSB could explore whether this might be something market participants could do on a more systematic basis, and how this might be done most effectively.

7. Are there any jurisdictional or sector-specific differences that are not accounted for in the recommendations?

No further comments.

<u>Section 3.3 – Collateral Management Practices:</u>

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

BlackRock.

8. **Collateral readiness at the right time, quality and location is a critical aspect of effective liquidity preparedness for spikes in margin and collateral calls to mitigate the risk of having to liquidate collateral under stressed market conditions. Do the FSB's recommendations in Section 3.3 address all key elements required to be effective in mitigating liquidity risk arising from margin and collateral calls?**

Recommendation 6

We welcome the provisions requiring market participants to take measures to ensure collateral is unencumbered and accessible during the required timeframe. We also recognise that, as the FSB suggests, collateral management processes "should be commensurate with the size, nature and complexity of the market participant's transactions in order to ensure a well-designed operationally resilient and continue to meet expectations".

However, internal operational capabilities of each market participant will vary, and as such, each market participant will be best placed to conduct their own due diligence to ensure they have in place the appropriate control and governance framework, systems and procedures relative to the scale of business they support. We recommend the FSB revise the proposals to reflect this.

Collateral readiness oversight should also account for the interconnected nature of the derivative post-trade ecosystem. The ability of non-financial market participants to meet margin and collateral calls is contingent on the performance and capabilities of both brokers and custodians, who should also be brought into scope for conducting their own due diligence, particularly with respect to their ability to provide appropriate levels of network connectivity, real-time transparency into unencumbered collateral inventory and collateral settlement status.

Recommendation 7

We agree that collateral should be held in sufficient quantity, after taking account of potential haircuts, and be pre-positioned at the appropriate entities to be operationally ready for use during times of stress. Similarly, we agree that market participants should build up, maintain, and monitor readily available liquidity to ensure enough collateral is positioned that they can meet margin and collateral calls in the required timeframe and at the likely value.

However, given the issues raised elsewhere in this response, we are concerned about the requirement to "hold sufficient available cash to meet cash-only margin calls with a high degree of certainty".

As noted in our response to question 1, individual market participants' ability to model and predict the size of margin calls is dependent on assessments of what future market conditions could plausibly be; and/or behaviours of other market participants or intermediaries.

Holding cash balances of sufficient size to meet all possible margin calls 'with a high degree of certainty' is likely to entail over-insurance in practice, impacting the economic viability of hedging arrangements; and also creating a cost in terms of foregone investment returns and productive investment more generally. Widening the set of eligible collateral to be exchanged, subject to clear parameters for acceptability (i.e. liquidity, appropriate haircuts), will avoid over reliance on cash

buffers that have a detrimental impact on productive real economy investment and retirement savings. As such, we recommend that the FSB remove or clarify the requirement to hold cash balances sufficient to meet all cash-only margin calls 'with a high degree of certainty', and urge the FSB to work with other policymakers and authorities to expand the range of eligible collateral.

While it is possible to use non-standard collateral such as corporate bonds for repo transactions, and a wide range of collateral is eligible for initial margin (IM) schedules in uncleared swaps, variation margin (VM) for uncleared swaps is typically restricted to cash and government bonds. **Expanding lists of eligible collateral to include certain MMFs and ETFs, would help to alleviate the procyclical impact of margin calls during market volatility for both cleared and uncleared trades. See Box A for further discussion.**

For expanded collateral eligibility to be most impactful, consideration should be given to the way collateral concentration limits are applied at CCPs. Concentration limits tend to be applied at the clearing member-level (e.g., no more than X% or equity collateral as IM) which can restrict the eligibility of certain collateral types at the end-investor level. If the aim is to reduce the pro-cyclical impacts of margin calls and to ensure market participants are better prepared for liquidity risk, then we suggest regulators initiate a conversation around collateral eligibility and collateral concentration limits. CCPs should ensure that clients have access to limits for alternative collateral types and that collateral limits are aligned with the liquidity in the underlying assets.

Box A: Potential for MMFs and ETFs as Collateral

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 unnecessary elevated activity in short-term funding markets, given that cash raised from these sales was often re-invested in a similar vehicle. Opportunities to increase high-quality liquid assets' (HQLA) mobility through tokenisation could therefore be beneficial, as it would allow end users to leverage additional forms of non-cash collateral (i.e. MMFs), in turn reducing reliance on cash.

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.

Recommendation 8

We recognise the value in maintaining close working relationships with counterparties, custodians and any other third-party providers that support collateralised transactions. At BlackRock, we undertake robust evaluation assessments of credit worthiness before a broker is approved for a specific asset class or product. Reviews are conducted on a frequent basis. Further, we conduct frequent pre- and post-trade performance reviews across all brokers. Finally, we conduct ongoing engagement

regarding operational efficiencies, margin and reconciliation exceptions and process improvement.

9. Are there any material challenges to collateral management practices that some non-bank market participants may face that should be considered?

See previous answers.

Conclusion

We appreciate the opportunity to address and comment on the issues raised by this consultation and will continue to work with the FSB on any specific issues which may assist in the ongoing review of market participants' liquidity preparedness for margin and collateral calls.