FSB FINANCIAL STABILITY BOARD

Liquidity Preparedness for Margin and Collateral Calls: Consultation report

Response to Consultation

International Swaps and Derivatives Association

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?**

   We note that the FSB identifies "weaknesses in liquidity risk management and governance for margin and collateral calls" as key causes of some non-bank market participant's inadequate liquidity preparedness. The FSB bases this finding on case-study analyses of four recent episodes of market stress – the March 2020 dash-for-cash, the March 2021 Archegos failure, the 2022 turmoil in some commodities markets, and the September 2022 issues experienced by pooled lability-driven investment funds.

   These events are clearly cause for concern and merit analysis and consideration of their causes and potential mitigants. ISDA and our members are committed to working constructively to do so.

   It is important to note that these four events involved different types of market participants operating under different regulatory frameworks in different jurisdictions amidst different market dynamics. While it is true that some of these market participants in some of these situations faced liquidity challenges, the episodes vary greatly in terms of their underlying causes and the nature of the resulting market disruptions and liquidity issues. This makes it especially difficult to draw overarching conclusions or posit overarching solutions to the challenges the episodes posed – and it reinforces the need to ensure that policy recommendations aimed at doing so recognize the differences that exist in terms of NBFIs' business models, financial activities and regulatory and risk management frameworks, as well as ensuring a robust range of collateral is eligible to post as margin for derivative transactions.

   For example, the March 2020 dash-for-cash was, as the FSB consultation notes, characterized by significant redemptions at MMFs, which tested their resilience. On a broader level, however, as Federal Reserve Governor Lael Brainard has stated:

   "Selling pressures were widespread, reflecting sales by foreign official institutions, rebalancing by asset managers, a rapid unwinding of levered positions, and precautionary

liquidity raising. Available data suggest that foreign institutions liquidated about $400 billion in Treasury securities in March, with more than half from official institutions and the remainder from private foreign investors, at a time when offshore dollar funding markets also experienced acute stress. Domestic mutual funds sold about $200 billion during the first quarter, selling their less-liquid Treasury securities in order to raise cash to meet investor redemptions. Hedge funds reduced long cash Treasury positions by an estimated $35 billion."

Economists at the Federal Reserve Board of Governors have also written that "…we show that, although hedge fund selling of Treasury securities in Q1 2020, at just over $170 billion, was sizable, it was not outsized relative to the selling by other types of investors such as the foreign and mutual fund sectors."

Amidst this challenging market dynamic, both the FSB Holistic Review of the March market turmoil (the 'FSB's holistic review') and the BCBS-CPMI-IOSCO Review of margining practices highlight that, overall, despite sudden increases in margin calls, market participants were able to meet sizable margin calls, suggesting that they were prepared:

"In general, intermediaries indicated they were relatively unaffected by changes in margin, and made few, if any, changes to counterparty margin call policies and procedures. Some indicated that they did make material changes to credit limits applied to counterparty positions or the credit limits imposed on those positions. The majority of intermediaries reported that they did not experience or observe material issues when converting high-quality liquid assets into cash during the Covid-19 period…"

In contrast to the March 2020 dash-for-cash, which involved government, financial institutions and corporations around the world, the Archegos situation revolved largely around the actions of one investment firm and one of its counterparties.

Two important points about Archegos should be noted. The first relates to transparency between counterparties. As stated in Credit Suisse Group's Special Board Committee Report:

"The Archegos default exposed several significant deficiencies in CS's risk culture, revealing a Prime Services business with a lackadaisical attitude towards risk and risk discipline; a lack of accountability for risk failures; risk systems that identified acute risks, which were systematically ignored by business and risk personnel;… Notably, this is not a situation…where the architecture of risk controls and processes was lacking or the existing risk systems failed to operate sufficiently to identify critical risks and related concerns. The Archegos risks were identified and were conspicuous. The persistent failure of the business and risk to manage and remediate the risks, and pervasive issues of business competence and resourcing adequacy, described in detail in this Report, require CS's urgent attention." (Emphasis added.)

The second point relates to regulatory transparency. It is important to realize that the US Securities and Exchange Commission's (SEC) regulatory framework for security-based swaps was not yet in place at the time of the Archegos incident. As a result, Archegos did not have to either report or post margin on securities-based swaps transactions. Today,

however, the rules are in place. Even though it operated as a family office, Archegos would be required to report its transactions to, and would have fallen under the margining regime of, the SEC.

Reporting its transactions would have enabled regulators to spot the build-up of positions and exposure. A report by the European Securities and Markets Authority (ESMA) is a case in point. ESMA determined in an ex-post analysis of Archegos that regulatory reporting data it receives under the European Market Infrastructure Regulation (EMIR) made it "possible to track the steep increase in concentrated exposures that [Archegos] undertook in February and March 2021" and that such data can "be used to monitor leverage and concentration risk in derivatives markets" . Archegos' counterparties that were based in the EU (and UK) were required to report their trades under EMIR, allowing regulators to build a picture of Archegos' exposures.

The Consultation Report also cites the 2022 commodities market stress as further evidence of insufficient liquidity preparedness among non-bank market participants. This event was, of course, precipitated by the onset of war between Russia and Ukraine, which caused a large spike in margin requirements for some types of transactions. The FSB's previous report on the Financial Stability Aspects of Commodities markets (2023) , which analyses the 2022 episodes of market stress, emphasizes that a key risk that commodities market players face in a scenario of margin spikes arises from (i) the constraints that banks face when it comes to providing them with more credit, for credit counterparty risk management reasons, and from (ii) lower market liquidity in some commodity markets as market participants retrench from these markets, which exacerbates volatility and leads to a negative feedback loop. These observations suggest that the key vulnerability exposed by the 2022 market stress in commodities markets does not so much pertain to individual players' liquidity preparedness, but rather to increased risk aversion and capacity constraints arising from capital, leverage, G-SIB and prudential liquidity frameworks, which can lead intermediaries to cut back activities on these markets in times of stress. We also note that this situation was exacerbated for non-bank market participants by a lack of transparency of CCP margining practices.

The 2023 FSB report also discusses whether there was a migration of commodity derivatives activity in some segments of the market from centrally cleared ETD markets to largely uncleared, bilateral OTC markets:

"European commodities market firms adapted to the spike in margin requirements at the end of Q1:2022 by optimising the level and composition of the market, funding liquidity (i.e. obtaining the necessary funds to pay margin) and counterparty credit (when trading OTC) risks they take on. This has led to the migration of some activity by highly-rated commodities traders that were able to take advantage of the beneficial collateral terms in OTC markets. There, however, has not been a wholesale migration of activity as there are limits to the amount of OTC trading that can take place due to counterparty credit limits, and because many commodities firms typically transact in ETD trades where liquidity is higher."

Several points are worth noting here. The "beneficial collateral terms" described in the report presumably refers to the fact that bilateral contracts allow for a broader range of collateral to be exchanged and also the higher degree of visibility and predictability of

margin requirements in bilateral OTC transactions, as compared to those under the centrally-cleared ETD markets given the lack of transparency of CCP margin models. This flexibility, transparency and predictability are important considerations, particularly for end-users and other non-financial market participants who may not have as much ready access to cash to fund margin calls and in this way may mitigate risks of widespread selling of non-cash assets for such calls. In addition, commodity derivatives, like other swaps, are required to be reported to regulators, who therefore have access to transaction-level data. Many commodity derivatives traded on exchanges are also subject to additional risk mitigants such as position management and position accountability levels and position reporting requirements, to which regulators also have access.

The fourth episode discussed in the consultation about liquidity preparedness relates specifically to Liability Driven Investors (LDIs) in the UK. In this regard, the Bank of England (BoE) noted in 2023 that "Last autumn saw moves in UK government bond yields the speed and scale of which were unprecedented. That period saw two daily increases in 30-year gilt yields of more than 35 basis points; the biggest daily increase before that week in data that goes back to 2000 was 29 basis points. Measured over a four-day period, the increase in 30-year gilt yields was more than twice as large as the largest move since 2000, which occurred during the 'dash for cash' in 2020. It was more than three times larger than any other historical move."

As a result, the BoE noted that "the scale and speed of repricing leading up to Wednesday 28 September [2022] far exceeded historical moves, and therefore exceeded price moves that are likely to have been part of risk management practices or regulatory stress tests" . UK regulators have since taken measures to address vulnerabilities specific to UK LDI funds in order to "promote financial stability by preventing forced deleveraging and gilt sales from LDI funds and pension schemes in the event of severe but plausible moves in yields." This approach underscores our view that efforts to mitigate the impact of margin calls and enhance liquidity preparedness should take into account a firm's business model, risk profile and appetite, existing regulatory framework and the benefits of practically enhancing the range of collateral that can be posted for derivatives transactions.

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

The NBFIs in scope of the proposed recommendations are very broadly defined – including insurance companies, pension funds, hedge funds, other investment funds and family offices.

Each of these categories of NBFIs differ widely in the nature of their activities, the reasons why they hold positions in derivatives and securities markets, their ability to hold cash or liquid asset buffers, as well as the impact that their individual failure would have on the financial system or on end-investors or other non-financial clients or counterparties of those NBFIs. We appreciate that these differences are accounted for by the FSB in the proposed approach to proportionality (which we discuss in response to Question 4), but the multifaceted nature of the firms in scope of the recommendations means that the practices should remain very high-level and adaptable to the specific needs and practices of each type of NBFI.

The FSB mentions that non-financial entities such as commodities traders "might also benefit from the recommendations […] as sound practices", however we note and agree with the FSB's statement that "…financial authorities do not directly supervise all non-bank market participants and are not expected to do so". ISDA members would welcome a clearer statement that non-financial entities are not in scope of these recommendations but that they may wish to consider whether it could be beneficial to consider some of them as indicative guidance as to examples of sound practices.

Repeated use of the term "non-bank market participants" and references to "commodity traders" (some of whom may fall into the category of NBFIs and some of whom may be non-financial market participants) throughout the FSB's Consultation Report is unhelpful and creates uncertainty as to the scope of the recommendations for non-financial market participants. This could lead to inappropriate read-across by SSBs and/ or certain financial markets regulatory authorities as to the intended scope of these recommendations and increase the risk of divergence of approach across different sectors and jurisdictions.

We also question which categories of NBFIs the recommendations would apply to, and who the relevant SSBs would be for each sector.

A distinction should be made between NBFIs that are already subject to regulatory obligations regarding Risk Management – including Liquidity Risk Management – and those that are not.

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?**

We agree that the focus on the FSB's policy recommendations on liquidity risk management and governance, stress-testing and scenario design, and collateral management practices are appropriate, setting out what NBFIs can do – and largely already do – to improve their individual liquidity resilience to market stress events. To further ensure adequate liquidity preparedness, these initiatives should be supported by increased transparency from CCPs on their margining practices.

We have also identified a number of issues that the FSB, SSBs and authorities should consider, in relation to NBFI liquidity preparedness.

Although the BCBS-IOSCO framework for eligible collateral is broad, economic, capital, and operational constraints prevent some counterparties from exchanging non-cash securities beyond government securities. ISDA, together with NBFIs, along with their counterparties and regulators, is leading discussions to address the conflicting constraints. To further help with liquidity preparedness, we encourage the FSB, SSBs, and authorities to explore and consider ways to support extending the range of collateral that can be used to meet margin requirements and not to over-emphasize the need for cash collateral.

We encourage the FSB, SSBs and authorities to consider inconsistencies in collateral requirements across jurisdictions. Ways to simplify and harmonize collateral requirements across jurisdictions should therefore be explored.

We also suggest that the FSB, SSBs and authorities look at NBFI liquidity preparedness in conjunction with banks' ability to perform their intermediation function, especially in times of stress. The various constraints that banks' balance-sheets operate within – in terms of capital, leverage, liquidity and G-SIB requirement – may affect their ability to extend funding or make markets during periods of stress. The Bank of England, in its report on "Assessing the resilience of market-based finance" , highlighted that during the dash-for-cash, "regulation to safeguard the core banking system may have played a part in constraining dealers' capacity to intermediate", suggesting that there would be "merit in exploring ways to enhance dealer capacity", pointing to buffer usability as a potential avenue. Similarly, the BCBS, in its report on "Early lessons from the Covid-19 pandemic on the Basel reforms", noted that "while the leverage ratio helps enhance overall bank resilience, an in-depth analysis of data from two jurisdictions [the US and UK] indicates that leverage ratio constraints may have affected banks' responses to the extraordinary demand for liquidity that arose early in the pandemic", such that temporary leverage ratio exemptions had to be implemented to ease constraints on banks' intermediation capacity. More recently, in relation to the US Supplementary Leverage Ratio (SLR), ISDA has highlighted that "a permanent exclusion of US Treasury securities from total leverage exposure would free capacity for banks to participate in US Treasury markets and facilitate access to cleared markets, especially during periods of stress".

Addressing constraints to banks' ability to perform their intermediation function will also contribute to the resilience of repo markets. The ability to rely on well-functioning, deep and liquid repo markets is a key factor in NBFIs' capacity to manage liquidity and meet increase liquidity demands arising from collateral and margin calls in times of stress. The FSB, SSBs and authorities should therefore focus on ways to strengthen the resilience of repo markets under stress – by not applying inappropriate impediments to banks' ability to provide intermediation services.

We invite the FSB, SSBs and authorities to consider ways to make full use of key data about derivatives activity and exposures, which is already made available to regulators in all major jurisdictions due to mandated derivatives trade reporting requirements. Such data includes counterparty identification, notional amounts, valuations and risk metrics, and can already enable regulators to track exposures of all counterparties to a trade, and to build management dashboards that can flag large increases/decreases in positions and exposures. We would urge that regulators use what they have before they consider imposing additional requirements.

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

We agree that the recommendations should be applied proportionately to the underlying risks of the different NBFIs, as suggested in the consultation report. The FSB suggests that the proportionality assessment should consider factors such as "size, international footprint, organizational structure, business model, risk profile (including the market participant's leverage and exposure to concentrated positions), degree of interconnectedness with other market participants, and role in the global financial system (including systemic considerations), as well as the potential impact of idiosyncratic and system-wide risk events". We agree that these factors are relevant to the assessment of

how to apply the recommendations in a manner that is proportionate to risks but refer back to our answer to Question 2 regarding the FSB's use of the term "market participants". For example, regarding regulated funds, a fund manager cannot be required to apply the same level of obligations in absolute terms for each of their funds if the risks involved are not of the same magnitude or nature for each of their funds. A fund with a low derivative leverage cannot be required to be scrutinized by the relevant fund manager to the same degree as a significantly leveraged one.

We are, however, concerned about two aspects of the suggested approach to proportionality and materiality. The first relates to how proportionality assessments will be made. If they are made by regulators of different market segments in different jurisdictions, the potential for regulatory inconsistency and regulatory arbitrage increases. If, however, they are developed by policymakers globally, then they may not be sufficiently adaptable to different market segments and individual firms within those segments.

As regards the approach to materiality of exposures, the Consultation Report notes that this – quite rightly – should consider the potential impact on the liquidity needs of NBFIs "which could threaten their financial viability or financial stability" as a result of their exposures to spikes in margin and collateral calls in times of stress. We would note, however, the importance of appropriately calibrating the parameters of such stress scenario to ensure their credibility and relevancy when assessing the materiality of exposures to spikes in margin and collateral calls.

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?**

The elements set out under Recommendation 1, 2 and 3 as regards liquidity risk management frameworks are clear, and we would highlight that most market participants already follow these practices. We agree that NBFIs should integrate the management of margin and collateral calls into their liquidity risk management systems, processes and governance frameworks, as suggested under Recommendation 1. Many NBFIs are already required to do this under existing regulations.

We also agree with the specification under Recommendation 2 that a liquidity risk appetite should be appropriate for an NBFI's business model and investment strategy. We are unclear about the meaning of the term "role in the financial system", which a NBFI would be expected to consider as part of the definition of its risk appetite, as proposed under this recommendation. It is unclear what such consideration should entail when defining a firms' own risk appetite.

Similarly, as regards the recommendation to "take into consideration the risk management practices of its counterparties", as suggested in Recommendation 1, 2 and 3, we would highlight that while an individual NBFI will generally be able to understand what the risk management practices of its counterparties are, it does not necessarily mean that it will be able to model the reaction function of its counterparties in a stress event, as this would also depend on their exposures, information about which is commercially sensitive. Only authorities may have access to such information and be able to develop a holistic view of

the market, identify pockets of concentration and model the liquidity reaction function of various market participants.

We welcome the suggestion with regards to contingency funding plans as one way NBFIs may choose to increase preparedness to increased liquidity needs arising from spikes in margin and collateral calls. We agree that the various sources of liquidity to be considered in such a plan should be determined according to stress-testing results, as set out under Recommendation 3. However, we question the soundness of including strategies such as “unwinding leveraged exposures” as part of contingency funding plans. Certain NBFIs (e.g. pension funds, insurance companies) might consider that unwinding transactions would not be a viable option. For example, there are hedging strategies that need to be executed in order to meet liability requirements, such as long dated swaps to help mitigate volatility tied to future annuity or life insurance payments. Unwinding swaps solely due to liquidity reasons has the potential to create significant near-term asset-liability management challenges that would need to be addressed through actions such as portfolio repositioning. That activity could create significant additional market volatility. In the case of pension funds, unwinding hedges would have a long-term impact on the retirement income of future pensioners. Finally, unwinding hedges does not appear to be an effective measure to include in a contingency funding plan. Unwinding hedges could take multiple weeks or months, with no impact in terms of reducing the liquidity demands arising from margin calls in the short run.

The FSB notes that contingency funding plans may include third-party liquidity sources. We agree that, if relied upon, such third-party liquidity sources should be “committed”. However, there should not be any expectation that such lines be mandated as part of a firm’s contingency funding plan. Committed lines are one source of funding collateral calls; they depend on the banking sector’s ability to extend such lines, and an NBFI might not be able to obtain such committed lines, in the appropriate size, in all circumstances. The ability to rely on well-functioning, deep and liquid repo markets in times of stress, around which market participants could build their contingency funding plans options, is also an important factor.

In addition, as regards contingency funding plans and third-party liquidity sources, regulators should continue to expect that robust liquidity and risk management practices at NBFIs are best positioned to design the most effective liquidity risk strategies for a given entity, and overly prescriptive requirements could come at the cost of optimal risk management.

Recommendation 2 suggests that market participants should “assess the circumstances that would lead to a movement from central clearing to bilateral markets and the consequences this would have for the market participant’s risk profile”. We have a number of comments in relation to this point.

In markets that are subject to mandatory clearing, for most NBFIs, the decision to clear is dictated by regulation, not choice. According to the BIS OTC derivatives statistics, as of end 2023, 76% of OTC derivatives interest rate contracts and 65% of credit default swaps were centrally cleared (by notional amounts outstanding).

In the vast majority of markets, for products that are not mandatorily cleared, the market often dictates (via different pricing) whether a product is cleared or not. Transactions on illiquid contracts cannot and should not be cleared. Non-cleared bilateral trades are for the most part trades that are not appropriate for central clearing. They may have bespoke terms, including longer tenures, that make them less liquid and not suitable for central clearing.

It is only in very specific situations that NBFIs (and other non-financial market participants) are able to choose between centrally cleared and non-centrally cleared (e.g. such as in the EU, for non-financial counterparties below the clearing threshold established under the European Market Infrastructure Regulation). Incidentally, we note that for the minor subset of market participants who can indeed choose, a key obstacle to voluntary clearing is the reduced range of eligible collateral for cleared variation margin. Relatedly, having the ability to move from central clearing to bilateral markets in time of stress might provide valuable flexibility.

Non-centrally cleared trades executed in bilateral markets are governed by a robust regulatory framework, with prescriptive margin and regulatory reporting requirements. A movement of positions from central clearing to bilateral markets for products that are not subject to mandatory clearing, should therefore not be considered as a source of increased systemic risk. In fact, the flexibility with regards to collateral posting under bilateral credit support agreements may be a source of strength amidst difficult market conditions. Restrictive categories of eligible collateral and a lack of transparency of CCP margining practices plus unpredictability of cleared margin requirements, particularly during periods of extreme market stress, can be a cause of increased liquidity risk.

Finally, we would also highlight a sector-specific consideration relevant to the recommendations on liquidity risk management: fund managers will typically adjust their liquidity risk management framework depending on each fund portfolio. They cannot be applied in a one-size-fits-all manner in strictly the same way for each fund: in particular, many funds are not leveraged and should not therefore bear disproportionate or non-justified constraints.

From that perspective, the example given in Annex 3 as an illustrative example should be clarified as not applicable in the case of fund managers: the notion of “business line” is not meaningful for a fund manager, where the risks are assessed at fund level and not at “business line” level (which is not meaningful as such in the case of a fund manager).

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

As regards liquidity stress-testing, we emphasize that ISDA’s NBFI members – and many of the policymakers who currently supervise and regulate them – already consider this issue very thoroughly. Many entities, including leveraged funds, are currently subject to stress-testing requirements. As a result, market discipline and existing regulatory requirements mean that NBFIs largely follow practices akin to these outlined in the Consultation Report.

Under Recommendation 5, the Consultation Report suggests that authorities would provide guidance on “scenario design and methodology, such as assumptions around liquidity of assets they expect to be forced to liquidate under stress”. A more appropriate and more common model for NBFIs are regulations that establish principles that firms should apply in ways that are suitable in light of their business and operating models, as well as risk profiles and risk appetites. Detailed regulatory guidelines are unlikely to work for the myriad of types of NBFIs and the variety of firms within each type.

Similarly, as noted above, Recommendation 5 suggests that NBFIs should analyze “a range of extreme but plausible liquidity stresses caused by changes in margin and collateral calls”. What constitutes “extreme but plausible” could take very different forms for different market participants, such that it would not be appropriate to define any uniform regulatory standard based on “extreme but plausible” stress scenarios across the many different segments and types of NBFIs. Therefore, instead of referring to “extreme but plausible” liquidity stresses, the recommendation should be that scenarios be developed in a manner that is appropriate, credible, and relevant to NBFI’s own risk profiles.

Recommendation 5 on the consideration of extreme but plausible liquidity stresses suggests that NBFIs should consider crowded strategies or concentrated market segments as part of their liquidity stress-testing. We note that our members already consider a multitude of liquidity and concentration profiles as part of their stress testing.

Regarding the conduct of stress tests at “aggregate level” and “at individual entity level” as suggested under Recommendation 4, we would like to clarify our understanding that the suggestion that this should depend “on the structure of the market participant” means that not all participants would be expected to conduct stress tests at “aggregate level”: in the case of fund managers, stress tests should typically be carried out at the individual entity level, i.e. at individual fund level. Otherwise, the aggregation of stress tests at the level of all funds would not make sense, as each fund is autonomous, even if managed by the same fund manager, and behaves in its own specific way. Aggregating results across all funds would create inconsistent expectations for funds managed by asset managers versus standalone hedge funds or family offices, for example.

Finally, as noted in response to Question 5, we emphasize that NBFIs can and do consider how markets overall react to turmoil in assessing their market, credit and liquidity risk. However, individual NBFIs cannot get an exhaustive picture of how other market participants may be affected by a specific stress event. In that regard, there is a role for authorities to play: they already receive information from market participants and could leverage this to identify potential sources of systemic liquidity risks better than any individual NBFI or other financial market participant. Regulators already have access to a significant amount of data and should look to use this more effectively before considering whether it is appropriate to require NBFIs or other market participants to provide more.

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

There are already variations of liquidity stress tests required in some sub-sectors (such as for the insurance sector and for U.S. private funds), and it is unlikely that a unified approach to stress testing for liquidity risk in the NBFI sector can be developed.

We would also caution against expecting national authorities to develop approaches to stress testing at a jurisdictional level, as it is likely to result in an unlevel playing field on the levels of liquidity resilience expected of NBFIs across jurisdictions, as we set out in response to Question 6. In addition, jurisdiction-specific requirements could be operationally challenging to implement for some NBFIs, such as asset managers that oversee entities that are regulated under different jurisdictions.

As mentioned in Annex 2 of the Consultation Report, some jurisdictions have already developed very specific requirements: for example, the UK has defined a stress testing framework applying to LDI funds, as part of which the expectation is that these funds are expected to be resilient to a yield shock of 250 basis points at a minimum. Further to that, the FCA has provided further guidance on stress testing for LDI funds. As noted in response to Question 1, this approach underscores our view that efforts to enhance liquidity preparedness should take into account an NBFI's business model, risk profile and appetite, and existing regulatory framework.

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?**

As regards collateral readiness, it would be helpful to consider ways to extend the range of collateral that can be used for margin purposes in non-centrally cleared markets. For example, funds having the flexibility to post instruments in line with their investment management mandates would be helpful. We recognize that there is limited flexibility in terms of the collateral that can be used to meet cleared VM calls. But providing NBFIs (and other non-financial market participants) with broader options to meet margin requirements where possible, in tandem with increased predictability and transparency in margin practices, following the BCBS-CPMI-IOSCO proposal on CCP transparency, would go a long way in helping NBFI's liquidity preparedness. Each NBFI would then define its own liquidity risk management framework, as most appropriate for its business model, practices, risk profile and clients.

With regards to Recommendation 7, ISDA supports the view that "market participants should maintain sufficient levels of cash and readily available as well as diverse liquid assets and establish appropriate collateral arrangements to meet margin and collateral calls." We would note, however, the importance of liquidity management recommendations taking into consideration sector-specific considerations. A number of NBFIs, such as registered funds, pension funds and insurance companies, may have regulatory guidelines that impact their ability to hold cash and cash-like assets. A separate minimum cash or liquid asset or pre-positioning requirement might consequently conflict with these existing guidelines. In addition, recommendations with regards to the pre-positioning of assets should acknowledge that NBFIs are in the best position to determine how to maintain sufficient means to attract liquidity in times of stress (be that by having repo, repo facility agreements, access to MMFs, or otherwise).

The recommendation also raises the question of how such cash should be held: e.g. whether at a commercial bank account, in reverse repos, or invested in a MMF. We also

note that the expectation that sufficient cash be held to meet cash-only margin calls with a "high degree of certainty" leaves significant room for significant differences in interpretation, and could be implemented in inconsistent ways between jurisdictions and different types of NBFIs.

On the recommendation to consider correlations, even where NBFIs are able to monitor the correlation between the collateral held and the value of their collateralized portfolio, they cannot guarantee in all circumstances such absence of correlation despite their best efforts. Any regulatory action following these recommendations should acknowledge this practical constraint.

Finally, NBFIs could also review their collateral agreements with counterparties for non-centrally cleared transactions, and review whether they could negotiate posting bilateral variation margin in non-cash collateral. This could be facilitated by ensuring that haircuts on non-cash collateral for banks (and NBFIs who are subject to prudential requirements) are not punitive.

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

We would highlight that the industry has conducted significant work to address challenges in collateral management practices – with some initiatives already tackling some of the proposals in Recommendation 7 and 8.

ISDA has developed Suggested Operational Practices (SOPs) for Collateral Management, which may be relevant to the suggestions included under recommendation 6 as regards standardization/automation. As regards dispute resolution mechanism, also covered under recommendation 6, ISDA developed SOPs on Portfolio Reconciliation, Dispute Resolution, and Reporting. NBFIs that have not yet deployed such SOPs, that emphasize automation and data standardization, may wish to consider whether to do so, where this is applicable and appropriate for their markets, products and business.

In addition, using the Common Domain Model to digitize documents, collateral representation and automate workflows, where this is applicable and appropriate could improve interoperability within the collateral management ecosystem and reduce operational friction. Using a common data model that has been developed as open-source and with financial industry consensus, could mitigate collateral-related data disputes, reduce operational and legal resources, and streamline processes within the collateral and liquidity management ecosystems.

As regards the suggestion, under Recommendation 7, that NBFIs consider the potential for optimizing bilateral counterparty arrangements to be able to deliver non-cash collateral to meet margin and collateral calls, we highlight that ISDA's whitepaper "Mitigating Eligible Collateral Risks: From Documentation to Operations" includes a similar suggestion. It recommends that firms consider expanding the collateral options specified in their Credit Support Annexes to include additional types of collateral which they can economically and operationally support with their counterparties and custodians. Again, this could be facilitated by ensuring that haircuts on non-cash collateral for banks (and NBFIs who are subject to prudential requirements) are not excessively punitive.

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

ISDA Safe, Efficient Markets

Response to the FSB Consultation report
"Liquidity Preparedness for Margin and Collateral Calls"

MANAGEMENT SUMMARY

The International Swaps and Derivatives Association (ISDA) welcomes the Financial Stability Board's (FSB) consultation report on Liquidity Preparedness for Margin and Collateral Calls (the Consultation Report).

Overall, the recommendations are sensible, and seek to incorporate a proportionate and risk-based approach. They recognize that non-bank market participants' exposure to liquidity risk is dependent on factors such as "complexity of business models, risk profiles (including concentration and leverage), structure and size of market participants, and interconnectedness" and that NBFIs (and other non-bank market participants) are often subject to distinct regulatory frameworks within and across jurisdictions.[1] In addition, the FSB has noted that NBFIs play an important role in financing the real economy and real economic activity.

Against this backdrop, we would offer the following general comments before providing specific answers to the questions posed in the Consultation Report.

First, it is important to reiterate that due to the diverse nature of the NBFI segment (in terms of business models, risk profiles, and the like), and the fact that many NBFIs and other non-bank market participants are already subject to financial and/ or market regulation within their home jurisdictions, overly prescriptive regulatory recommendations could be for a number of reasons inappropriate for all such firms across all geographies and market sectors. Consequently, we would suggest that the FSB clearly states that the details and illustrative examples provided by the FSB in discussing the high-level recommendations do not comprise a set of minimum standards or even a best practice framework / checklist across the NBFI sector. We would also welcome a clearer statement that non-financial entities are not in scope of these recommendations.

Second, increased transparency in CCP margining practices, which has been addressed as part of the BCBS-CPMI-IOSCO consultation "Transparency and responsiveness of initial margin in centrally cleared markets: review and policy proposals"[2] is a critically important aspect to liquidity preparedness and will help NBFIs and other market participants better prepare for potential margin calls in centrally cleared markets. Increasing transparency in CCP margining practices will only serve to increase the accuracy and robustness of liquidity risk management at NBFIs, where overly prescriptive requirements that do not account for the diverse nature of the NBFI segment will likely serve to constrain NBFIs from implementing optimal liquidity risk procedures. ISDA expressed support for the proposals on CCP transparency in its response to the BCBS-CPMI-IOSCO consultation. Relatedly, and as also noted in ISDA's response to the BCBS-CPMI-IOSCO consultation, further work on the calibration of anti-procyclicality tools would be welcome. [3]

[1] https://www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/non-bank-financial-intermediation/
[2] Transparency and responsiveness of initial margin in centrally cleared markets: review and policy proposals (bis.org)
[3] ISDA-Response-to-Margin-Transparency.pdf

Third, liquidity preparedness by NBFIs is dependent in part on banks' balance-sheet capacity and the ability of banks to perform their intermediation function on core funding and lending markets. With that in mind, regulators should weigh how any restrictions on that capacity will affect NBFIs' and other market participants' liquidity preparedness. For example, regulatory haircuts on collateral for banks and NBFIs that are subject to such requirements should be appropriately sized and reflective of the risk of collateral transferred, and not punitive.

Fourth, to further help with liquidity preparedness, we encourage the FSB, standard setting bodies (SSBs), and authorities to explore and consider ways to support extending the range of collateral that can be used to meet margin requirements. We would also like to highlight that there are other issues that SSBs and authorities could address to help market participants manage increased collateral demands, such as increased transparency of CCP margining practices, as noted above. One other such issue arises from the fact that collateral requirements are not consistent between jurisdictions. Ways to simplify and harmonize collateral requirements across jurisdictions should therefore be explored, bearing in mind that making eligible collateral and margin requirements for both cleared[4] and uncleared transactions too strict risks disincentivizing hedging for some market participants. The ability to build flexibility in collateral arrangements through wider collateral eligibility would also reduce reliance on other sources of liquidity. Addressing operational constraints and data interoperability challenges with non-cash collateral could also be helpful.

Fifth, we agree that financial institutions such as clearing members and intermediaries in bilateral transactions should perform robust due diligence on all their counterparties. However, we would emphasize that intermediaries should not be the conduit for oversight of their counterparties. Relatedly, any regulatory changes following from these recommendations must consider that, for a variety of reasons, NBFIs cannot access and cannot guarantee their counterparties' risk management practices.

Sixth, we would also draw attention to ongoing industry efforts to further automate and standardize collateral management, where appropriate, through various mechanisms including but not limited to ISDA's Collateral Management Suggested Operational Practices[5] and the Common Domain Model. [6] Automation and data standards support stable markets. While more manual operational workflow and variance in data standards do not cause market volatility themselves, straight-through processes driven by interoperability through the collateral management ecosystem can, for those markets and products where this is pragmatic and appropriate, help stabilize a fallout and mitigate the negative impact of increased collateral demands under stress. Also, more use of post-trade risk reduction tools (PTRR, especially multilateral rebalancing tools), where appropriate, could reduce counterparty risk and liquidity requirements linked to counterparty risk, e.g. from margin requirements. The use of such tools could be incentivized by exempting the output transactions from PTRR exercises from the clearing obligation, as foreseen in the changes to the European Market Infrastructure Regulation (EMIR) and in the UK Financial Services and Markets Act.[7]

[4] For example, some CCPs accept a wider range of collateral for initial margin requirements.

[5] Collateral Management Suggested Operational Practices – International Swaps and Derivatives Association (isda.org)

[6] The CDM is a standardized data and process model for how financial products are traded and managed across the transaction lifecycle. More information on the ISDA CDM is available here: CDM – International Swaps and Derivatives Association (isda.org)

[7] Such exemption is foreseen under Article 4b of the provisional EMIR 3 text and under Article 6b of UK EMIR, as amended by the Financial Services and Market Act (2023).

Seventh, a number of key terms used in the Consultation Report may be interpreted ambiguously as they will likely mean different things to different types of NBFIs and SSBs and regulators. Inappropriate and ambiguous application of such terms could lead to an inconsistent regulatory framework, potentially creating competitive imbalances, regulatory arbitrage and inappropriately over-insuring against liquidity risk and trapping too much cash or other highly liquid collateral, thus rendering it unavailable for use or investment in the real economy. One specific example: instead of recommending that NBFIs consider "extreme but plausible" liquidity stresses, ISDA members suggest that the recommendation should be that scenarios be developed in a manner that is appropriate, credible, and relevant to NBFIs' own risk profiles.

Eighth and finally, key data about derivatives activity and exposures is currently available to regulators in all major jurisdictions due to mandated derivatives trade reporting requirements – via derivatives trade repositories – that have been established over the past decade.[8] Such data includes counterparty identification, notional amounts, valuations and risk metrics. Consequently, regulators have access to available data to track exposures of all counterparties to a trade and the data provides regulators with the ability to build management dashboards that can flag large increases/decreases in positions and exposures. It is important that such data be used more effectively to improve the ability of regulators to monitor exposures. Toward this end, we support the FSB's recommendation to "mak[e] more intensive use of existing data, such as those available in trade repositories"[9] and would urge that regulators optimize their use of the data they currently receive before they consider imposing additional requirements.

A case in point that ties together a number of these issues: Recommendation 7, which suggests that NBFIs should maintain sufficient available cash to meet cash-only margin calls with a high degree of certainty in times of stress, could be problematic for some NBFIs. For non-banks, the ability to hold large positions in cash may be significantly constrained by operational limitations or regulatory requirements, depending on their business model and investment strategies. The options that NBFIs (and other non-financial market participants) have in terms of holding cash are either to use a commercial bank account, which has operational and credit risk implications, or to invest the cash in money market funds (MMFs). In turn, transforming assets into cash depends on banks' ability to intermediate. This suggests that one key facet of the NBFI liquidity preparedness challenge relies on having access to deep and liquid markets to repo or sell assets in, or meet margin calls through bank funding. However, banks are themselves constrained in their capacity to intermediate, through capital, leverage, and Global-Systemically Important Bank (G-SIB) and prudential liquidity frameworks. Similarly, if other NBFIs that are subject to prudential requirements are required to apply punitive haircuts to non-cash collateral, it can be more difficult to accept this from their counterparties, increasing the pressure on cash as collateral. It should be noted that this Recommendation could lead to an over-emphasis on cash when there could be more focus on other non-cash forms of collateral. Finally, it might be worth considering how innovation in collateral and tokenization may offer improvements in collateral mobility and reduce the need for collateral holders to liquidate collateral to realize cash.

[8] https://www.isda.org/a/pu7gE/Hidden-in-Plain-Sight-Derivatives-Exposures-Regulatory-Transparency-and-Trade-Repositories.pdf

[9] https://www.fsb.org/wp-content/uploads/P060923-2.pdf

RESPONSES TO THE QUESTIONS SET OUT IN THE CONSULTATION REPORT

Section 1: Introduction

Question 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?

We note that the FSB identifies "weaknesses in liquidity risk management and governance for margin and collateral calls" as key causes of some non-bank market participant's inadequate liquidity preparedness. The FSB bases this finding on case-study analyses of four recent episodes of market stress – the March 2020 dash-for-cash, the March 2021 Archegos failure, the 2022 turmoil in some commodities markets, and the September 2022 issues experienced by pooled lability-driven investment funds.

These events are clearly cause for concern and merit analysis and consideration of their causes and potential mitigants. ISDA and our members are committed to working constructively to do so.

It is important to note that these four events involved different types of market participants operating under different regulatory frameworks in different jurisdictions amidst different market dynamics. While it is true that *some* of these market participants in *some* of these situations faced liquidity challenges, the episodes vary greatly in terms of their underlying causes and the nature of the resulting market disruptions and liquidity issues. This makes it especially difficult to draw overarching conclusions or posit overarching solutions to the challenges the episodes posed – and it reinforces the need to ensure that policy recommendations aimed at doing so recognize the differences that exist in terms of NBFIs' business models, financial activities and regulatory and risk management frameworks, as well as ensuring a robust range of collateral is eligible to post as margin for derivative transactions.

For example, the March 2020 dash-for-cash was, as the FSB consultation notes, characterized by significant redemptions at MMFs, which tested their resilience. On a broader level, however, as Federal Reserve Governor Lael Brainard has stated:

> "Selling pressures were widespread, reflecting sales by foreign official institutions, rebalancing by asset managers, a rapid unwinding of levered positions, and precautionary liquidity raising. Available data suggest that foreign institutions liquidated about $400 billion in Treasury securities in March, with more than half from official institutions and the remainder from private foreign investors, at a time when offshore dollar funding markets also experienced acute stress. Domestic mutual funds sold about $200 billion during the first quarter, selling their less-liquid Treasury securities in order to raise cash to meet investor redemptions. Hedge funds reduced long cash Treasury positions by an estimated $35 billion."[10]

Economists at the Federal Reserve Board of Governors have also written that "…we show that, although hedge fund selling of Treasury securities in Q1 2020, at just over $170 billion, was sizable, it was not outsized relative to the selling by other types of investors such as the foreign and mutual fund sectors."

[10] Some Preliminary Financial Stability Lessons from the COVID-19 Shock, Speech by Governor Brainard (federalreserve.gov)

Amidst this challenging market dynamic, both the FSB Holistic Review of the March market turmoil[11] (the 'FSB's holistic review') and the BCBS-CPMI-IOSCO Review of margining practices highlight that, overall, despite sudden increases in margin calls, market participants were able to meet sizable margin calls, suggesting that they were prepared:

> "In general, intermediaries indicated they were relatively unaffected by changes in margin, and made few, if any, changes to counterparty margin call policies and procedures. Some indicated that they did make material changes to credit limits applied to counterparty positions or the credit limits imposed on those positions. The majority of intermediaries reported that they did not experience or observe material issues when converting high-quality liquid assets into cash during the Covid-19 period…"

In contrast to the March 2020 dash-for-cash, which involved government, financial institutions and corporations around the world, the Archegos situation revolved largely around the actions of one investment firm and one of its counterparties.

Two important points about Archegos should be noted. The first relates to transparency between counterparties. As stated in Credit Suisse Group's Special Board Committee Report:

> "The Archegos default exposed several significant deficiencies in CS's risk culture, revealing a Prime Services business with a lackadaisical attitude towards risk and risk discipline; a lack of accountability for risk failures; ***risk systems that identified acute risks, which were systematically ignored by business and risk personnel***;… Notably, this is not a situation…where the architecture of risk controls and processes was lacking or the existing risk systems failed to operate sufficiently to identify critical risks and related concerns. ***The Archegos risks were identified and were conspicuous.*** The persistent failure of the business and risk to manage and remediate the risks, and pervasive issues of business competence and resourcing adequacy, described in detail in this Report, require CS's urgent attention."[12] (Emphasis added.)

The second point relates to regulatory transparency. It is important to realize that the US Securities and Exchange Commission's (SEC) regulatory framework for security-based swaps was not yet in place at the time of the Archegos incident. As a result, Archegos did not have to either report or post margin on securities-based swaps transactions. Today, however, the rules are in place. Even though it operated as a family office, Archegos would be required to report its transactions to, and would have fallen under the margining regime of, the SEC.

Reporting its transactions would have enabled regulators to spot the build-up of positions and exposure. A report by the European Securities and Markets Authority (ESMA) is a case in point. ESMA determined in an ex-post analysis of Archegos that regulatory reporting data it receives under the European Market Infrastructure Regulation (EMIR) made it "possible to track the steep increase in concentrated exposures that [Archegos] undertook in February and March 2021" and that such data can "be used to monitor leverage and concentration risk in derivatives markets"[13]. Archegos' counterparties that were based in the EU (and UK) were required to report their trades under EMIR, allowing regulators to build a picture of Archegos' exposures.

[11] Holistic review of the March market turmoil (fsb.org)
[12] Credit Suisse Group Special Committee of the Board of Directors - Report on Archegos Capital Management (July 2021) (credit-suisse.com)
[13] Leverage and derivatives: the case of Archegos (esma.europa.eu)

The Consultation Report also cites the 2022 commodities market stress as further evidence of insufficient liquidity preparedness among non-bank market participants. This event was, of course, precipitated by the onset of war between Russia and Ukraine, which caused a large spike in margin requirements for some types of transactions. The FSB's previous report on the Financial Stability Aspects of Commodities markets (2023)[14], which analyses the 2022 episodes of market stress, emphasizes that a key risk that commodities market players face in a scenario of margin spikes arises from (i) the constraints that banks face when it comes to providing them with more credit, for credit counterparty risk management reasons, and from (ii) lower market liquidity in some commodity markets as market participants retrench from these markets, which exacerbates volatility and leads to a negative feedback loop. These observations suggest that the key vulnerability exposed by the 2022 market stress in commodities markets does not so much pertain to individual players' liquidity preparedness, but rather to increased risk aversion and capacity constraints arising from capital, leverage, G-SIB and prudential liquidity frameworks, which can lead intermediaries to cut back activities on these markets in times of stress. We also note that this situation was exacerbated for non-bank market participants by a lack of transparency of CCP margining practices.

The 2023 FSB report also discusses whether there was a migration of commodity derivatives activity in some segments of the market from centrally cleared ETD markets to largely uncleared, bilateral OTC markets:

> "European commodities market firms adapted to the spike in margin requirements at the end of Q1:2022 by optimising the level and composition of the market, funding liquidity (i.e. obtaining the necessary funds to pay margin) and counterparty credit (when trading OTC) risks they take on. This has led to the migration of some activity by highly-rated commodities traders that were able to take advantage of the beneficial collateral terms in OTC markets. There, however, has not been a wholesale migration of activity as there are limits to the amount of OTC trading that can take place due to counterparty credit limits, and because many commodities firms typically transact in ETD trades where liquidity is higher."

Several points are worth noting here. The "beneficial collateral terms" described in the report presumably refers to the fact that bilateral contracts allow for a broader range of collateral to be exchanged and also the higher degree of visibility and predictability of margin requirements in bilateral OTC transactions, as compared to those under the centrally-cleared ETD markets given the lack of transparency of CCP margin models. This flexibility, transparency and predictability are important considerations, particularly for end-users and other non-financial market participants who may not have as much ready access to cash to fund margin calls and in this way may mitigate risks of widespread selling of non-cash assets for such calls. In addition, commodity derivatives, like other swaps, are required to be reported to regulators, who therefore have access to transaction-level data. Many commodity derivatives traded on exchanges are also subject to additional risk mitigants such as position management and position accountability levels and position reporting requirements, to which regulators also have access.

The fourth episode discussed in the consultation about liquidity preparedness relates specifically to Liability Driven Investors (LDIs) in the UK. In this regard, the Bank of England (BoE) noted in 2023 that "Last autumn saw moves in UK government bond yields the speed and scale of which were unprecedented. That period saw two daily increases in 30-year gilt yields of more than 35 basis

[14] The Financial Stability Aspects of Commodities Markets: The Financial Stability Aspects of Commodities Markets (fsb.org)

points; the biggest daily increase before that week in data that goes back to 2000 was 29 basis points. Measured over a four-day period, the increase in 30-year gilt yields was more than twice as large as the largest move since 2000, which occurred during the 'dash for cash' in 2020. It was more than three times larger than any other historical move."[15]

As a result, the BoE noted that "the scale and speed of repricing leading up to Wednesday 28 September [2022] far exceeded historical moves, and therefore exceeded price moves that are likely to have been part of risk management practices or regulatory stress tests"[16]. UK regulators have since taken measures to address vulnerabilities specific to UK LDI funds in order to "promote financial stability by preventing forced deleveraging and gilt sales from LDI funds and pension schemes in the event of severe but plausible moves in yields." This approach underscores our view that efforts to mitigate the impact of margin calls and enhance liquidity preparedness should take into account a firm's business model, risk profile and appetite, existing regulatory framework and the benefits of practically enhancing the range of collateral that can be posted for derivatives transactions.

Section 2: Overview

Question 2: Is the scope of the proposed policy recommendations appropriate?

The NBFIs in scope of the proposed recommendations are very broadly defined – including insurance companies, pension funds, hedge funds, other investment funds and family offices.

Each of these categories of NBFIs differ widely in the nature of their activities, the reasons why they hold positions in derivatives and securities markets, their ability to hold cash or liquid asset buffers, as well as the impact that their individual failure would have on the financial system or on end-investors or other non-financial clients or counterparties of those NBFIs. We appreciate that these differences are accounted for by the FSB in the proposed approach to proportionality (which we discuss in response to Question 4), but the multifaceted nature of the firms in scope of the recommendations means that the practices should remain very high-level and adaptable to the specific needs and practices of each type of NBFI.

The FSB mentions that non-financial entities such as commodities traders "might also benefit from the recommendations […] as sound practices", however we note and agree with the FSB's statement that "…financial authorities do not directly supervise all non-bank market participants and are not expected to do so". ISDA members would welcome a clearer statement that non-financial entities are not in scope of these recommendations but that they may wish to consider whether it could be beneficial to consider some of them as indicative guidance as to examples of sound practices.

Repeated use of the term "non-bank market participants" and references to "commodity traders" (some of whom may fall into the category of NBFIs and some of whom may be non-financial market participants) throughout the FSB's Consultation Report is unhelpful and creates uncertainty as to the scope of the recommendations for non-financial market participants. This could lead to inappropriate read-across by SSBs and/ or certain financial markets regulatory authorities as to the intended scope of these recommendations and increase the risk of divergence of approach across different sectors and jurisdictions.

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[15] Bank staff paper: LDI minimum resilience - recommendation and explainer (bankofengland.co.uk)
[16] Cunliffe (2022), Letter to the Chair of the Treasury Committee of the House of Commons, 5 October

We also question which categories of NBFIs the recommendations would apply to, and who the relevant SSBs would be for each sector.

A distinction should be made between NBFIs that are already subject to regulatory obligations regarding Risk Management – including Liquidity Risk Management – and those that are not.

Question 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?

We agree that the focus on the FSB's policy recommendations on liquidity risk management and governance, stress-testing and scenario design, and collateral management practices are appropriate, setting out what NBFIs can do – and largely already do – to improve their individual liquidity resilience to market stress events. To further ensure adequate liquidity preparedness, these initiatives should be supported by increased transparency from CCPs on their margining practices.

We have also identified a number of issues that the FSB, SSBs and authorities should consider, in relation to NBFI liquidity preparedness.

Although the BCBS-IOSCO framework for eligible collateral is broad, economic, capital, and operational constraints prevent some counterparties from exchanging non-cash securities beyond government securities. ISDA, together with NBFIs, along with their counterparties and regulators, is leading discussions to address the conflicting constraints. To further help with liquidity preparedness, we encourage the FSB, SSBs, and authorities to explore and consider ways to support extending the range of collateral that can be used to meet margin requirements and not to over-emphasize the need for cash collateral.

We encourage the FSB, SSBs and authorities to consider inconsistencies in collateral requirements across jurisdictions. Ways to simplify and harmonize collateral requirements across jurisdictions should therefore be explored.

We also suggest that the FSB, SSBs and authorities look at NBFI liquidity preparedness in conjunction with banks' ability to perform their intermediation function, especially in times of stress. The various constraints that banks' balance-sheets operate within – in terms of capital, leverage, liquidity and G-SIB requirement – may affect their ability to extend funding or make markets during periods of stress. The Bank of England, in its report on "Assessing the resilience of market-based finance"[17], highlighted that during the dash-for-cash, "regulation to safeguard the core banking system may have played a part in constraining dealers' capacity to intermediate", suggesting that there would be "merit in exploring ways to enhance dealer capacity", pointing to buffer usability as a potential avenue. Similarly, the BCBS, in its report on "Early lessons from the Covid-19 pandemic on the Basel reforms", noted that "while the leverage ratio helps enhance overall bank resilience, an in-depth analysis of data from two jurisdictions [the US and UK] indicates that leverage ratio constraints may have affected banks' responses to the extraordinary demand for liquidity that arose early in the pandemic", such that temporary leverage ratio exemptions had to be implemented to ease constraints on banks' intermediation capacity.[18] More recently, in relation to the US Supplementary Leverage Ratio (SLR), ISDA has highlighted that "a permanent exclusion of US Treasury securities

[17] Assessing the resilience of market-based finance (bankofengland.co.uk)
[18] Early lessons from the Covid-19 pandemic on the Basel reforms (bis.org)

from total leverage exposure would free capacity for banks to participate in US Treasury markets and facilitate access to cleared markets, especially during periods of stress".[19]

Addressing constraints to banks' ability to perform their intermediation function will also contribute to the resilience of repo markets. The ability to rely on well-functioning, deep and liquid repo markets is a key factor in NBFIs' capacity to manage liquidity and meet increase liquidity demands arising from collateral and margin calls in times of stress. The FSB, SSBs and authorities should therefore focus on ways to strengthen the resilience of repo markets under stress – by not applying inappropriate impediments to banks' ability to provide intermediation services.

We invite the FSB, SSBs and authorities to consider ways to make full use of key data about derivatives activity and exposures, which is already made available to regulators in all major jurisdictions due to mandated derivatives trade reporting requirements. Such data includes counterparty identification, notional amounts, valuations and risk metrics, and can already enable regulators to track exposures of all counterparties to a trade, and to build management dashboards that can flag large increases/decreases in positions and exposures. We would urge that regulators use what they have before they consider imposing additional requirements.

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

We agree that the recommendations should be applied proportionately to the underlying risks of the different NBFIs, as suggested in the consultation report. The FSB suggests that the **proportionality assessment** should consider factors such as "size, international footprint, organizational structure, business model, risk profile (including the market participant's leverage and exposure to concentrated positions), degree of interconnectedness with other market participants, and role in the global financial system (including systemic considerations), as well as the potential impact of idiosyncratic and system-wide risk events". We agree that these factors are relevant to the assessment of how to apply the recommendations in a manner that is proportionate to risks but refer back to our answer to Question 2 regarding the FSB's use of the term "market participants". For example, regarding regulated funds, a fund manager cannot be required to apply the same level of obligations in absolute terms for each of their funds if the risks involved are not of the same magnitude or nature for each of their funds. A fund with a low derivative leverage cannot be required to be scrutinized by the relevant fund manager to the same degree as a significantly leveraged one.

We are, however, concerned about two aspects of the suggested approach to proportionality and materiality. The first relates to how proportionality assessments will be made. If they are made by regulators of different market segments in different jurisdictions, the potential for regulatory inconsistency and regulatory arbitrage increases. If, however, they are developed by policymakers globally, then they may not be sufficiently adaptable to different market segments and individual firms within those segments.

As regards the **approach to materiality of exposures**, the Consultation Report notes that this – quite rightly – should consider the potential impact on the liquidity needs of NBFIs "which could threaten their financial viability or financial stability" as a result of their exposures to spikes in margin and collateral calls in times of stress. We would note, however, the importance of appropriately

[19] Time to Relook at the SLR – International Swaps and Derivatives Association (isda.org)

calibrating the parameters of such stress scenario to ensure their credibility and relevancy when assessing the materiality of exposures to spikes in margin and collateral calls.

Section 3: FSB policy recommendations

Section 3.1: Liquidity risk management practices and governance

Question 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?

The elements set out under Recommendation 1, 2 and 3 as regards **liquidity risk management frameworks** are clear, and we would highlight that most market participants already follow these practices. We agree that NBFIs should integrate the management of margin and collateral calls into their liquidity risk management systems, processes and governance frameworks, as suggested under Recommendation 1. Many NBFIs are already required to do this under existing regulations.

We also agree with the specification under Recommendation 2 that a **liquidity risk appetite** should be appropriate for an NBFI's business model and investment strategy. We are unclear about the meaning of the term "role in the financial system", which a NBFI would be expected to consider as part of the definition of its risk appetite, as proposed under this recommendation. It is unclear what such consideration should entail when defining a firms' own risk appetite.

Similarly, as regards the recommendation to "take into consideration the risk management practices of its counterparties", as suggested in Recommendation 1, 2 and 3, we would highlight that while an individual NBFI will generally be able to understand what the risk management practices of its counterparties are, it does not necessarily mean that it will be able to model the reaction function of its counterparties in a stress event, as this would also depend on their exposures, information about which is commercially sensitive. Only authorities may have access to such information and be able to develop a holistic view of the market, identify pockets of concentration and model the liquidity reaction function of various market participants.

We welcome the suggestion with regards to **contingency funding plans** as one way NBFIs may choose to increase preparedness to increased liquidity needs arising from spikes in margin and collateral calls. We agree that the various sources of liquidity to be considered in such a plan should be determined according to stress-testing results, as set out under Recommendation 3. However, we question the soundness of including strategies such as "unwinding leveraged exposures" as part of contingency funding plans. Certain NBFIs (e.g. pension funds, insurance companies) might consider that unwinding transactions would not be a viable option. For example, there are hedging strategies that need to be executed in order to meet liability requirements, such as long dated swaps to help mitigate volatility tied to future annuity or life insurance payments. Unwinding swaps solely due to liquidity reasons has the potential to create significant near-term asset-liability management challenges that would need to be addressed through actions such as portfolio repositioning. That activity could create significant additional market volatility. In the case of pension funds, unwinding hedges would have a long-term impact on the retirement income of future pensioners. Finally, unwinding hedges does not appear to be an effective measure to include in a contingency funding plan. Unwinding hedges could take multiple weeks or months, with no impact in terms of reducing the liquidity demands arising from margin calls in the short run.

The FSB notes that contingency funding plans may include third-party liquidity sources. We agree that, if relied upon, such third-party liquidity sources should be "committed". However, there should not be any expectation that such lines be mandated as part of a firm's contingency funding plan. Committed lines are one source of funding collateral calls; they depend on the banking sector's ability to extend such lines, and an NBFI might not be able to obtain such committed lines, in the appropriate size, in all circumstances. The ability to rely on well-functioning, deep and liquid repo markets in times of stress, around which market participants could build their contingency funding plans options, is also an important factor.

In addition, as regards contingency funding plans and third-party liquidity sources, regulators should continue to expect that robust liquidity and risk management practices at NBFIs are best positioned to design the most effective liquidity risk strategies for a given entity, and overly prescriptive requirements could come at the cost of optimal risk management.

Recommendation 2 suggests that market participants should "assess the circumstances that would lead to a **movement from central clearing to bilateral markets** and the consequences this would have for the market participant's risk profile". We have a number of comments in relation to this point.

In markets that are subject to mandatory clearing, for most NBFIs, the decision to clear is dictated by regulation, not choice. According to the BIS OTC derivatives statistics, as of end 2023, 76% of OTC derivatives interest rate contracts[20] and 65% of credit default swaps[21] were centrally cleared (by notional amounts outstanding).

In the vast majority of markets, for products that are not mandatorily cleared, the market often dictates (via different pricing) whether a product is cleared or not. Transactions on illiquid contracts cannot and should not be cleared. Non-cleared bilateral trades are for the most part trades that are not appropriate for central clearing. They may have bespoke terms, including longer tenures, that make them less liquid and not suitable for central clearing.

It is only in very specific situations that NBFIs (and other non-financial market participants) are able to choose between centrally cleared and non-centrally cleared (e.g. such as in the EU, for non-financial counterparties below the clearing threshold established under the European Market Infrastructure Regulation). Incidentally, we note that for the minor subset of market participants who can indeed choose, a key obstacle to voluntary clearing is the reduced range of eligible collateral for cleared variation margin. Relatedly, having the ability to move from central clearing to bilateral markets in time of stress might provide valuable flexibility.

Non-centrally cleared trades executed in bilateral markets are governed by a robust regulatory framework, with prescriptive margin and regulatory reporting requirements. A movement of positions from central clearing to bilateral markets for products that are not subject to mandatory clearing, should therefore not be considered as a source of increased systemic risk. In fact, the flexibility with regards to collateral posting under bilateral credit support agreements may be a source of strength amidst difficult market conditions. Restrictive categories of eligible collateral and a lack of transparency of CCP margining practices plus unpredictability of cleared margin requirements, particularly during periods of extreme market stress, can be a cause of increased liquidity risk.

[20] BIS OTC derivatives statistics (Table D5.1)
[21] BIS OTC derivatives statistics (Table D10.1)

Finally, we would also highlight a sector-specific consideration relevant to the recommendations on liquidity risk management: fund managers will typically adjust their liquidity risk management framework depending on each fund portfolio. They cannot be applied in a one-size-fits-all manner in strictly the same way for each fund: in particular, many funds are not leveraged and should not therefore bear disproportionate or non-justified constraints.

From that perspective, the example given in Annex 3 as an illustrative example should be clarified as not applicable in the case of fund managers: the notion of "business line" is not meaningful for a fund manager, where the risks are assessed at fund level and not at "business line" level (which is not meaningful as such in the case of a fund manager).

Section 3.2: Liquidity stress testing and scenario design

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

As regards liquidity stress-testing, we emphasize that ISDA's NBFI members – and many of the policymakers who currently supervise and regulate them – already consider this issue very thoroughly. Many entities, including leveraged funds, are currently subject to stress-testing requirements. As a result, market discipline and existing regulatory requirements mean that NBFIs largely follow practices akin to these outlined in the Consultation Report.

Under Recommendation 5, the Consultation Report suggests that authorities would provide guidance on "**scenario design and methodology**, such as assumptions around liquidity of assets they expect to be forced to liquidate under stress". A more appropriate and more common model for NBFIs are regulations that establish principles that firms should apply in ways that are suitable in light of their business and operating models, as well as risk profiles and risk appetites. Detailed regulatory guidelines are unlikely to work for the myriad of types of NBFIs and the variety of firms within each type.

Similarly, as noted above, Recommendation 5 suggests that NBFIs should analyze "a range of **extreme but plausible** liquidity stresses caused by changes in margin and collateral calls". What constitutes "extreme but plausible" could take very different forms for different market participants, such that it would not be appropriate to define any uniform regulatory standard based on "extreme but plausible" stress scenarios across the many different segments and types of NBFIs. Therefore, instead of referring to "extreme but plausible" liquidity stresses, the recommendation should be that scenarios be developed in a manner that is appropriate, credible, and relevant to NBFI's own risk profiles.

Recommendation 5 on the consideration of extreme but plausible liquidity stresses suggests that NBFIs should consider **crowded strategies or concentrated market segments** as part of their liquidity stress-testing. We note that our members already consider a multitude of liquidity and concentration profiles as part of their stress testing.

Regarding the **conduct of stress tests at "aggregate level" and "at individual entity level"** as suggested under Recommendation 4, we would like to clarify our understanding that the suggestion that this should depend "on the structure of the market participant" means that not all participants would be expected to conduct stress tests at "aggregate level": in the case of fund managers, stress tests should typically be carried out at the individual entity level, i.e. at individual fund level. Otherwise, the aggregation of stress tests at the level of all funds would not make sense, as each

fund is autonomous, even if managed by the same fund manager, and behaves in its own specific way. Aggregating results across all funds would create inconsistent expectations for funds managed by asset managers versus standalone hedge funds or family offices, for example.

Finally, as noted in response to Question 5, we emphasize that NBFIs can and do consider how markets overall react to turmoil in assessing their market, credit and liquidity risk. However, individual NBFIs cannot get an exhaustive picture of how other market participants may be affected by a specific stress event. In that regard, there is a role for authorities to play: they already receive information from market participants and could leverage this to identify potential sources of systemic liquidity risks better than any individual NBFI or other financial market participant. Regulators already have access to a significant amount of data and should look to use this more effectively before considering whether it is appropriate to require NBFIs or other market participants to provide more.

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

There are already variations of liquidity stress tests required in some sub-sectors (such as for the insurance sector and for U.S. private funds), and it is unlikely that a unified approach to stress testing for liquidity risk in the NBFI sector can be developed.

We would also caution against expecting national authorities to develop approaches to stress testing at a jurisdictional level, as it is likely to result in an unlevel playing field on the levels of liquidity resilience expected of NBFIs across jurisdictions, as we set out in response to Question 6. In addition, jurisdiction-specific requirements could be operationally challenging to implement for some NBFIs, such as asset managers that oversee entities that are regulated under different jurisdictions.

As mentioned in Annex 2 of the Consultation Report, some jurisdictions have already developed very specific requirements: for example, the UK has defined a stress testing framework applying to LDI funds, as part of which the expectation is that these funds are expected to be resilient to a yield shock of 250 basis points at a minimum.[22] Further to that, the FCA has provided further guidance on stress testing for LDI funds.[23] As noted in response to Question 1, this approach underscores our view that efforts to enhance liquidity preparedness should take into account an NBFI's business model, risk profile and appetite, and existing regulatory framework.

Section 3.3: Collateral management practices

Question 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?

As regards collateral readiness, it would be helpful to consider ways to extend the range of collateral that can be used for margin purposes in non-centrally cleared markets. For example, funds having the flexibility to post instruments in line with their investment management mandates would be helpful. We recognize that there is limited flexibility in terms of the collateral that can be used to

[22] Financial Policy Summary and Record - March 2023 (bankofengland.co.uk)
[23] Further guidance on enhancing resilience in Liability Driven Investment (fca.org.uk)

meet cleared VM calls. But providing NBFIs (and other non-financial market participants) with broader options to meet margin requirements where possible, in tandem with increased predictability and transparency in margin practices, following the BCBS-CPMI-IOSCO proposal on CCP transparency, would go a long way in helping NBFI's liquidity preparedness. Each NBFI would then define its own liquidity risk management framework, as most appropriate for its business model, practices, risk profile and clients.

With regards to Recommendation 7, ISDA supports the view that "market participants should maintain sufficient levels of cash and readily available as well as diverse liquid assets and establish appropriate collateral arrangements to meet margin and collateral calls." We would note, however, the importance of liquidity management recommendations taking into consideration sector-specific considerations. A number of NBFIs, such as registered funds, pension funds and insurance companies, may have regulatory guidelines that impact their ability to hold cash and cash-like assets. A separate minimum cash or liquid asset or pre-positioning requirement might consequently conflict with these existing guidelines. In addition, recommendations with regards to the pre-positioning of assets should acknowledge that NBFIs are in the best position to determine how to maintain sufficient means to attract liquidity in times of stress (be that by having repo, repo facility agreements, access to MMFs, or otherwise).

The recommendation also raises the question of how such cash should be held: e.g. whether at a commercial bank account, in reverse repos, or invested in a MMF. We also note that the expectation that sufficient cash be held to meet cash-only margin calls with a "high degree of certainty" leaves significant room for significant differences in interpretation, and could be implemented in inconsistent ways between jurisdictions and different types of NBFIs.

On the recommendation to consider correlations, even where NBFIs are able to monitor the correlation between the collateral held and the value of their collateralized portfolio, they cannot guarantee in all circumstances such absence of correlation despite their best efforts. Any regulatory action following these recommendations should acknowledge this practical constraint.

Finally, NBFIs could also review their collateral agreements with counterparties for non-centrally cleared transactions, and review whether they could negotiate posting bilateral variation margin in non-cash collateral. This could be facilitated by ensuring that haircuts on non-cash collateral for banks (and NBFIs who are subject to prudential requirements) are not punitive.

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

We would highlight that the industry has conducted significant work to address challenges in collateral management practices – with some initiatives already tackling some of the proposals in Recommendation 7 and 8.

ISDA has developed Suggested Operational Practices (SOPs)[24] for Collateral Management, which may be relevant to the suggestions included under recommendation 6 as regards standardization/automation. As regards dispute resolution mechanism, also covered under recommendation 6, ISDA developed SOPs on Portfolio Reconciliation, Dispute Resolution, and Reporting. NBFIs that have not yet deployed such SOPs, that emphasize automation and data

[24] Collateral Management Suggested Operational Practices – International Swaps and Derivatives Association (isda.org)

standardization, may wish to consider whether to do so, where this is applicable and appropriate for their markets, products and business.

In addition, using the Common Domain Model[25] to digitize documents, collateral representation and automate workflows, where this is applicable and appropriate could improve interoperability within the collateral management ecosystem and reduce operational friction. Using a common data model that has been developed as open-source and with financial industry consensus, could mitigate collateral-related data disputes, reduce operational and legal resources, and streamline processes within the collateral and liquidity management ecosystems.

As regards the suggestion, under Recommendation 7, that NBFIs consider the potential for optimizing bilateral counterparty arrangements to be able to deliver non-cash collateral to meet margin and collateral calls, we highlight that ISDA's whitepaper "Mitigating Eligible Collateral Risks: From Documentation to Operations"[26] includes a similar suggestion. It recommends that firms consider expanding the collateral options specified in their Credit Support Annexes to include additional types of collateral which they can economically and operationally support with their counterparties and custodians. Again, this could be facilitated by ensuring that haircuts on non-cash collateral for banks (and NBFIs who are subject to prudential requirements) are not excessively punitive.

[25]The CDM is a standardized data and process model for how financial products are traded and managed across the transaction lifecycle. More information on the CDM is available here: CDM – International Swaps and Derivatives Association (isda.org)CDM – International Swaps and Derivatives Association (isda.org) CDM – International Swaps and Derivatives Association (isda.org)

[26] Mitigating-Eligible-Collateral-Risks-From-Documentation-to-Operations.pdf (isda.org)

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