Leverage in Non-Bank Financial Intermediation: Consultation report

Response to Consultation

London Stock Exchange Group

Recommendation 1

1. **Is the description of the financial stability risks from leverage in NBFI accurate and comprehensive? Are there additional vulnerabilities or risk dimensions related to NBFI leverage that authorities should consider for monitoring purposes?**

   We broadly agree with the description of the financial stability risks from leverage in the NBFI as described in the CR. Nevertheless, we believe that NBFIs' papered panel of liquidity providers, could prove insufficient especially during times of market stress. The overreliance of NBFIs on a few liquidity providers and inability to document and sign a GMRA with new ones when most needed should also be considered as a potential vulnerability. Having access to alternative liquidity providers/liquidity pools will avoid the need for deleveraging in an attempt to obtain cash.

2. **What are the most effective risk metrics that should be considered by authorities to identify and monitor financial stability risks arising from NBFI leverage?**

3. **What are the most effective metrics for the monitoring of financial stability risks resulting from:**

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

   With regards to specific market activities, such as trading and investing in repos and derivatives the use of sensitivity-based approach would be aligned to the risk management implemented into Banks through CRR and to an extent for Insurance Company through Solvency II. However, the use of sensitivity-based measurement poses two issues:

   • Potential Loss Measure requires model validation from National Competent Authorities (NCAs) unless Standardized Method (including curvature) is applied. It could be more efficient to apply a standardised approach that would enable joining the dots with the leverage provider i.e. the Bank.

   • Market risk metrics that are not linked directly to variation margin would be ineffective as NBFI don't have capital requirement (RWA) such as Credit Financial Institutions.

   Mirroring the standardised stress testing, that is performed by CCPs could therefore provide more helpful metrics to regulators risk monitoring purposes as it would allow direct comparison between entities having the same risk profile. This comparison was

implemented for Banks in the Basel Framework FRTB and could be extended to the NBFI sector from a monitoring perspective.

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

(iii) concentration and crowded trading strategies

With regards to concentration and crowded trading strategies, it would be beneficial to add a wrongway risk measure as metrics to ensure that correlation between the NBFI and the underlying asset is captured. This would be relevant for NBFI acting as warehouse of their national government bond issuance.

Recommendation 3

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

   We believe that public data on the European government bond repo markets, given their importance in global funding markets, could provide a useful basis for market participants to consider for their funding decisions. For example, aggregate nominal and position data at an ISIN/market level. We agree with the CP that it could make sense for entities with a holistic view of trading, such as trading venues, to report these figures as opposed to individual counterparties. One should note the current European landscape, where CCPs are yet to tip the balance into clearing the majority of flows. CCPs have the potential to be valuable providers of such information but not necessarily at this time.

Recommendation 5

5. **Do Recommendations 4 and 5 sufficiently capture measures that would be used to address the scope of non-bank financial entities under consideration in this report? In what ways may the policy measures proposed in the consultation report need to be adjusted to account for different types of non-bank financial entities?**

   We broadly agree that Recommendations 4 and 5 capture measures that would be used to address the scope of NBFIs in scope of this CP. However, it is important to distinguish between minimum haircuts in SFTs and a potential mandated initial margining methodology as activity-based measures. Although mentioned elsewhere in the CP, Recommendation 5 does not make this important distinction. We elaborate further in question 9.

6. **In what circumstances can activity-based measures, such as (i) minimum haircuts in securities financing transactions, including government bond repos, (ii) enhanced margin requirements between non-bank financial entities and their derivatives counterparties, or (iii) central clearing, be effective in addressing financial stability risks related to NBFI leverage in core financial markets, including government bond markets? To what extent can these three types of policy measures complement each other?**

In line with the CP's observations, we find that the introduction for minimum haircuts in SFTs could help reduce NBFI financial stability risks in core financial markets, including in government bond repo.

Regarding, minimum Haircuts in SFTs including government bond repos as an effective policy we find that by definition haircuts reflect two attributes of risk:

- The mark-to-market risk of the underlying asset
- The probability of default of the counterparty

As of today, the government bond repo market largely trades at zero haircut. However, zero haircut implies not only there is no market risk which, as recent stresses in government bond markets has demonstrated is not the case, but also that there is no counterparty credit risk. It is important to recognise that a zero-haircut landscape does not remove the cost but merely transfers it elsewhere. Zero haircut trades can increase banks' RWA exposures for these trades since they are seen as undercollateralised when accounting for market risk. Thus, zero haircuts transfer the cost from buyside to banks. Minimum haircuts would thus partially transfer this cost back. Ultimately, the increase in the RWA cost due to zero haircuts further constrains the bank intermediation capacity as a result of internal and regulatory ratios. This can become problematic during periods of stress where these ratios being close to their limits can reduce intermediation capacity in a time when it is already strained. Hence, a minimum haircut policy could alleviate bank capital constraints and free up intermediation capacity.

Deleveraging can have negative consequences on financial stability, mostly due to its autoperpetuating nature. Indeed, in periods of "dash for cash", and when there is a liquidity crisis, the first solution is to reduce positions. However, this asset fire sale can make prices for all assets classes move away from their true value and this de-pegging can also drive haircut spikes further upwards, increasing the need for cash and propagating risks to all market participants.

Hence a fixed minimum haircut (when compared to zero haircut) does work to disincentivise leverage since it puts a cost on leverage through the haircut value.; however, in practice haircuts may move above these minimum levels in a stressed market environment. This reduces their effectiveness as a policy to promote financial stability.

The natural extension of this margin framework is to assess how the provision of access to highly liquid centrally cleared Repo markets as an alternative solution can alleviate the abovementioned markets stresses particularly during turbulent times. (ii) Central clearing can address financial stability with regards to NBFI leverage and liquidity access.

Central clearing can effectively support the FSB's work on addressing financial stability risks related to NBFI leverage in core financial markets, including government bond markets. Whilst cleared repo market liquidity has been reliable during multiple periods of capital market stress over the last two decades, such as with the European sovereign debt and the Covid-19 crises, overall access to clearing in Repos can be challenging for some parts of the markets, especially some of the NBFIs. This is partly due to the limited intermediation capacity to support their access to repo markets, including to cleared repo markets.

Banks operate and serve their clients with limited resources capacity subject to a variety of constraining ratios (e.g., Leverage Ratio and RWA output floor). As such, buy-side firms may struggle to find adequate capacity from banks to intermediate their repo activities. This

is even more visible in stressed market conditions, where banks face increased demand for intermediation and might not be able to adequately serve the entirety of their client base.

In recent years, CCPs have worked to create dedicated models that enable NBFIs to be integrated into central clearing of repos. Due to the significant balance sheet impact of FCM-like derivative client models, the repo models usually involve the client directly facing the CCP, with a bank 'Sponsor' or 'Agent' facilitating their access by providing key operational services and a level of liability. Compared to the USA, these models are relatively new and underutilised in Europe, but they have significant potential to promote financial stability with regards to NBFI leverage.

Sponsored / Guaranteed Sponsored clearing (access model for buy-side)

During times of stress, banks have less balance sheet capacity to serve their clients due to a combination of constraining regulatory ratios and internal limits. When facing such constraints, the buy side may struggle to find adequate intermediation capacity from banks. This ultimately perpetuates a period of stressed deleveraging caused by the scarcity of HQLA collateral, generally used for funding NBFI positions in normal times.

Sponsored / Guaranteed Sponsored Clearing are precisely designed to address these issues. These extend the benefits of direct CCP membership to the broader investor community in a model specifically designed for the buy-side. This membership model enables NBFIs members to have direct full Membership with the CCP, sponsored by an Agent / Guaranteed Agent Member (Bank). Agent Members provide a range of services for their Sponsored / Guaranteed Sponsored Member, including provision of Default Fund and margin payment and management. Sponsored Members are ultimately responsible for margin payments and trade settlement. The benefits of these models for the buy-side and sell side include:

- Access to a deep liquidity pool via a single membership agreement, providing access to over 100 execution counterparties.

- Potential for bank capital savings to be reflected in improved pricing / additional balance sheet capacity for Sponsored Member activity, potentially providing increased access to competitively priced liquidity.

- A reduction in bilateral credit risk and default exposures.

- A comprehensive risk management package within the CCP as Agent / Guaranteed Agent provide a guarantee of the tail loss above and beyond Initial Margin and Default Fund contribution preserving the risk management framework and risk exposure of the CCPs.

These factors combine to create a resilient liquidity pool which NBFIs could benefit from via CCP hybrids models, especially during stress when liquidity is constrained and pressure to deleverage is high. Increased capacity through freeing up bank constraints also translates into increased collateral circulation, further decreasing pressure to deleverage. Furthermore, similarly to the other activitybased measures discussed in the CP, CCP margins act to disincentivise directional and leveraged positions through associated initial margins, preventing excessive leverage from occurring in the first place.

Increased operational efficiencies through settlement netting, where LCH RepoClear typically nets 70% of activity cleared before settlement, reduce settlement and liquidity risk

and increase settlement efficiency. This reduces frictions in the market that can hamper NBFI liquidity access, especially during stress where settlement efficiency materially worsens.

Hence, increased uptake of new CCP access models for NBFIs have the potential to effectively address financial stability risks associated with excessive leverage.

(iii) Central Clearing Mandate

Separately from assessing the effectiveness of wider central clearing, a central clearing mandate as a tool in the regulatory toolbox, has its own merits and challenges in addressing NBFI leverage. Regulators should distinguish between and assess independently policies that encourage clearing vs a full mandate, supported by a thorough cost-benefit analysis.

A central clearing mandate could effectively address several points of concern raised by the FSB. For example, CCPs take into account positions of NBFIs across their liquidity providers when calculating margins, eliminating the need for private disclosures as liquidity providers can rely on CCPs to measure correlated positions effectively. Similarly, a central clearing mandate would create a central source of information which could be accessible to regulators and certain data made public where appropriate.

Furthermore, CCP haircutting methodology increases the cost of leveraged positions and large exposures, which should act to prevent excessive leverage by individual market players. CCPs would also be responsible for managing counterparty credit risk across the market, eliminating the need to regulate this more extensively at a counterparty pair level.

Whilst a central clearing mandate in sovereign repos does not address all NBFI risk, one must recognise the increasingly important role that sovereign repo plays in obtaining leverage and in collateral reuse chains and therefore the sizeable impact such a policy would have. For example, measuring leverage NBFIs are taking as the CP suggests can be difficult to calibrate and expensive to monitor. A central clearing mandate on repos as a key source of information on leverage for NBFIs (alongside other policies to address alternative sources of leverage) could be an efficient solution.

It is important to recognise the interaction between proposals for minimum haircuts and central clearing mandate for government bond markets. Given CCPs' use of initial margining, minimum haircuts can be seen as a policy which brings bilateral practices closer to cleared ones. Hence, a minimum haircut policy could be seen as a piece to the puzzle of encouraging wider central clearing on a voluntary basis; however, this is mutually exclusive to a central clearing mandate.

7. **Are there benefits to dynamic approaches to minimum margin and haircut requirements, e.g. where the requirements change based on changes in concentration or system-wide leverage? If so, what types of indicators capturing concentration or system-wide leverage should the requirements be linked to?**

Haircuts or margins are a "theoretical" mark-to-market based value. But in case of deleveraging or default, liquidation loss will naturally be a function of the market value but also of the size of the position to liquidate. Therefore, an add-on should be used to assess the real impact on the market when a lot of assets from a same range and or issuers are put on the market for sale. This is naturally captured in the concentration risk.

Moreover, each bond has its own dynamic (liquidity) that should be captured through an idiosyncratic measurement. Even for government bonds, a Z-spread measure doesn't translate the real liquidity when large portfolio is reversed on the market.

We therefore welcome the FSB's suggestions for dynamic haircuts that would reflect the current market condition and provide additional assurance to liquidity provider. This brings haircut policies closer to promoting financial stability given their potential to address spiking haircuts in stressed market conditions and bank balance sheet constraints (less in-progress trades with a lack of protection). This mechanism would clarify that liquidity access (bilateral, central counterparty or even Central Bank liquidity facilities) has a cost that need to be factored in the NBFI strategy.

Dynamic haircuts would be a step closer to the risk management that CCPs are applying. However, in this case, the haircut will still be a single point in time snapshot. A more developed approach could be to combine dynamic haircut to the current Variation Margin process already in place to have an overall Margin Requirement framework (from inception to maturity of the transactions). This type of arrangement would then mitigate to an extent the risk of default of a counterparty, on a bilateral basis, and therefore enhance financial stability.

8. **Are there any potential unintended consequences from activity-based measures beyond those identified in the consultation report?**

All activity-based measures have the impact of increasing liquidity requirements in the market. Which market participant will be mostly impacted by those requirements will depend on how the policy is implemented but, in any case, there is the potential to inadvertently increase liquidity strain. If policies are not carefully calibrated, this strain could outweigh capital benefits to intermediaries and dampening NBFI leverage from a financial stability point of view. Hence, efforts should be made to ensure this calibration produces the desired benefits. There are nuances between the measures; for example, central clearing and margin requirements require liquidity from cash lenders which a minimum haircut policy usually would not. Level of minimum haircuts and margin requirements also will determine the relative impacts.

Mandatory clearing will likely trigger the largest increase in liquidity requirement of the discussed policies, as well as subjecting the entire market to the same methodology which could cause spikes in market liquidity requirements. As mentioned in the CP, it is therefore important to explore policies which ensure NBFIs can cope with this sensitivity of margin requirement, alongside any potential mandate. Regulators should also consider the implications of a central clearing mandate in the local context of their funding markets. For example, European regulators should consider the fact that the European sovereign repo market is fragmented, from both a pricing and settlement perspective. Furthermore, regulators should take into account the situation in their jurisdiction regarding clearing accessibility.

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

When establishing a comprehensive set of measures to address risks associated with NBFI leverage obtained through government bond repo, it is important to differentiate between minimum haircuts and margin requirements for government bond SFTs. Haircuts are at a

trade level and fixed for the life of the trade, margin requirements are usually at portfolio level and, even if at trade-level, change throughout life of the trade. Minimum haircuts for sovereign repo would mechanically reduce leverage, bring bilateral and cleared practices closer together and protect against counterparty credit risk. Since they are usually only applied to the cash borrower, they would imply an overall lower funding requirement across the market and more closely align with market practices today, whereby typical cash lenders such as MMFs would normally receive, rather than post a haircut.

However, minimum haircuts are not necessarily effective in protecting counterparties against market risk of a trade, both for longer-dated trades and from the point of view of the cash borrower who could incur a loss purchasing collateral on the market if their counterparty defaults and bond price increases. Furthermore, static minimum haircuts may reduce the impact of a haircut spike during stress, but they do not solve the problem entirely, especially if calibrated too low. A dynamic minimum haircut, as mentioned in the CP would be a step in addressing this defect.

LSEG welcomes recommendations for regulators to consider the benefits of an initial margining policy alongside those of a minimum haircut policy for SFTs. This is because calibrating market-wide leverage measures to address this defect in minimum haircuts, could be an unnecessarily convoluted route. Margin requirements bring bilateral practices closer to cleared practices also by increasing sensitivities of margin requirements in bilateral space, where NBFIs are used to fixed haircuts, if any. This simultaneously incentivises voluntary central clearing, promoting financial stability as outlined in our response to Question 6, as well as acting as a path towards a central clearing mandate, if regulators deem appropriate.

10. **In what circumstances can entity-based measures, such as (i) direct and (ii) indirect leverage limits be effective in addressing financial stability risks related to NBFI leverage in core financial markets?**

11. **Are there ways to design and calibrate entity-based measures to increase their risk sensitivity and/or their effectiveness in addressing financial stability risks from NBFI leverage?**

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

13. **To what extent can activity-based and entity-based measures complement each other? What are the main considerations around using these two types of measures in combination?**

    In line with our response to question 6, a mandate for central clearing for sovereign repo could reduce the need for certain entity-based measures such as private disclosures practices in these markets since liquidity providers would ultimately face the CCP who would manage potential concentration risks. Similarly, public disclosure obligations on individual NBFIs with regards to this type of activity would similarly not be relevant whereby the CCP would act as a centralised information hub.

Recommendation 6

14. **How could counterparty credit risk management requirements for leverage providers be enhanced to be more effective in addressing financial stability risks from NBFI**

leverage in core financial markets, such as government bond repo markets? In what circumstances can they be most effective?

Recommendation 7

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

Recommendation 8

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

    When considering sources of NBFI leverage, both synthetic and financial, the CP correctly identifies risks associated with inconsistencies of regulatory treatment. For example, increasing costs of obtaining leverage via SFTs may push NBFIs to instead use derivatives to obtain the same exposure. Therefore, policies addressing leverage should be assessed across markets, avoiding regulatory arbitrage which could dampen policy effectiveness.

    With regards to considering cleared and uncleared exposures, current regulatory treatment does not apply this 'same risk same regulatory treatment' principle. This is because, as mentioned in our responses to questions 7 and 9, CCPs are subject to strict requirements with respect to their risk practices, incurring margin requirements that incur an operational and financial burden. Conversely, the bilateral repo landscape lacks haircuts and margining, rendering clearing relatively expensive and disincentivising wider central clearing. Therefore, the discussed activity-based measures would bring cleared and bilateral practices closer together and align better with the discussed principle. This would also

encourage wider voluntary central clearing (outside of a mandate). As mentioned in Questions 7 and 9, the extent to which they would do this varies between policies and it also depends on the level at which they are calibrated.

Introduction

LSEG (London Stock Exchange Group) is a diversified global financial markets infrastructure and data business, headquartered in London, with significant operations in Europe, North America, and Asia. With extensive experience, deep knowledge and worldwide presence across financial markets, we enable businesses and economies around the world to fund innovation, manage risk and create jobs. At LSEG, we help to drive financial stability, empower economies and enable customers to create sustainable growth through three business divisions: data and analytics, capital markets and post-trade.

LSEG has majority ownership of the multi-asset global central counterparty clearing house (“CCP”) operator, LCH Group (“LCH”). LCH has two licensed CCP subsidiaries – LCH Ltd in the UK and LCH S.A. in France. Both are leading multi-asset class and international clearing houses, serving major international exchanges and platforms as well as a range of OTC markets. They clear a broad range of asset classes, including securities, exchange-traded derivatives, commodities, foreign exchange derivatives, interest rate swaps, credit default swaps, Euro and Sterling denominated bonds and repos.

LSEG feedback

LSEG welcomes the opportunity to comment on the FSB consultation report ("CR") on the Leverage in the Non-Bank Financial Intermediation ("NBFI"). LSEG is broadly supportive of the FSB's proposed policy recommendations to monitor and address financial stability risks from leverage in NBFIs. We would note however the following:

- We broadly agree with the description of the financial stability risks from leverage in the NBFI as described in the CR. Whilst addressing the overall financial stability risk, our comments will be mainly valid from a Securities Financing Transactions (SFTs) perspective and more precisely obtaining leverage through Repurchase Agreements (Repos).
- In line with the FSB's recommendations for minimum haircuts particularly for sovereign repo we find that those recommendations can reduce leverage, provide a level playing field between bilateral and cleared practices thereby incentivizing voluntary adoption of centrally cleared activities and further enhance counterparty credit risk management.
- Liquidity access in the form of repurchase agreement generates a large footprint onto the dealer balance sheet alongside its Capital Adequacy Ratio given that a large portion of the NBFI to dealer market is traded on an uncleared bilateral basis. Aligning risk management techniques of NBFI to the ones regulating Banks would allow looking at the leverage risk from a holistic point of view rather than entity based solely. Indeed, the biggest risk of deleveraging is the contamination and propagation to all market participants.
- We are of the view that NBFIs' selected panel of liquidity providers, could prove insufficient especially during times of market stress. The overreliance of NBFIs on a few liquidity providers and inability to onboard with new ones when most needed should also be considered as a potential vulnerability. Having access to alternative liquidity providers/liquidity pools will avoid the need for deleveraging in an attempt to obtain cash.
- Central clearing can effectively support the FSB's work on addressing financial stability risks related to NBFI leverage in core financial markets, including government bond markets. Banks operate and serve their clients with limited resources capacity subject to a variety of constraining ratios (e.g., Leverage Ratio and Counterparty Credit Risk).
- NBFI centric central clearing access models are precisely designed to address these issues. These extend the benefits of direct CCP membership to the broader investor community in a model specifically designed for the buy-side whilst preserving the CCP risk management compared to a third-party client clearing access model. This membership model enables NBFIs to have direct full Membership with the CCP, sponsored by an Agent Member (Bank). Agent Members provide a range of services for their NBFIs Sponsored Member, including provision of Default Fund and margin payment, tail loss provision above and beyond Initial Margin and Default Fund contribution and risk management. NBFI members are ultimately responsible for margin payments and trade settlement.
- A central clearing mandate as a tool in the toolbox, has its own merits and challenges in addressing NBFI leverage. Regulators should distinguish between and assess independently policies that encourage clearing supported by a thorough cost-benefit analysis.

Questions

Recommendation 1

1. Is the description of the financial stability risks from leverage in NBFI accurate and comprehensive? Are there additional vulnerabilities or risk dimensions related to NBFI leverage that authorities should consider for monitoring purposes?

We broadly agree with the description of the financial stability risks from leverage in the NBFI as described in the CR. Nevertheless, we believe that NBFIs' papered panel of liquidity providers, could prove insufficient especially during times of market stress. The overreliance of NBFIs on a few liquidity providers and inability to document and sign a GMRA with new ones when most needed should also be considered as a potential vulnerability. Having access to alternative liquidity providers/liquidity pools will avoid the need for deleveraging in an attempt to obtain cash.

2. What are the most effective risk metrics that should be considered by authorities to identify and monitor financial stability risks arising from NBFI leverage?

3. What are the most effective metrics for the monitoring of financial stability risks resulting from (i) specific market activities, such as trading and investing in repos and derivatives? (ii) specific types of entities, such as hedge funds, other leveraged investment funds, insurance companies and pension funds? (iii) concentration and crowded trading strategies?

With regards to specific market activities, such as trading and investing in repos and derivatives the use of sensitivity-based approach would be aligned to the risk management implemented into Banks through CRR and to an extent for Insurance Company through Solvency II. However, the use of sensitivity-based measurement poses two issues:

- Potential Loss Measure requires model validation from National Competent Authorities (NCAs) unless Standardized Method (including curvature) is applied. It could be more efficient to apply a standardised approach that would enable joining the dots with the leverage provider i.e. the Bank.

- Market risk metrics that are not linked directly to variation margin would be ineffective as NBFI don't have capital requirement (RWA) such as Credit Financial Institutions.

Mirroring the standardised stress testing, that is performed by CCPs could therefore provide more helpful metrics to regulators risk monitoring purposes as it would allow direct comparison between entities having the same risk profile. This comparison was implemented for Banks in the Basel Framework FRTB and could be extended to the NBFI sector from a monitoring perspective.

With regards to concentration and crowded trading strategies, it would be beneficial to add a wrong-way risk measure as metrics to ensure that correlation between the NBFI and the underlying asset is captured. This would be relevant for NBFI acting as warehouse of their national government bond issuance.

Recommendation 3

4. What types of publicly disclosed information (e.g. transaction volumes, outstanding amounts, aggregated regulatory data) are useful for market participants to enhance their

liquidity or counterparty credit risk management? Are there trade-offs in publicly disclosing such information and, if so, what would be the most important elements to consider? What is the appropriate publication frequency and level of aggregation of publicly disclosed information?

We believe that public data on the European government bond repo markets, given their importance in global funding markets, could provide a useful basis for market participants to consider for their funding decisions. For example, aggregate nominal and position data at an ISIN/market level. We agree with the CP that it could make sense for entities with a holistic view of trading, such as trading venues, to report these figures as opposed to individual counterparties. One should note the current European landscape, where CCPs are yet to tip the balance into clearing the majority of flows. CCPs have the potential to be valuable providers of such information but not necessarily at this time.

Recommendation 5

5. Do Recommendations 4 and 5 sufficiently capture measures that would be used to address the scope of non-bank financial entities under consideration in this report? In what ways may the policy measures proposed in the consultation report need to be adjusted to account for different types of non-bank financial entities?

We broadly agree that Recommendations 4 and 5 capture measures that would be used to address the scope of NBFIs in scope of this CP. However, it is important to distinguish between minimum haircuts in SFTs and a potential mandated initial margining methodology as activity-based measures. Although mentioned elsewhere in the CP, Recommendation 5 does not make this important distinction. We elaborate further in question 9.

6. In what circumstances can activity-based measures, such as (i) minimum haircuts in securities financing transactions, including government bond repos, (ii) enhanced margin requirements between non-bank financial entities and their derivatives counterparties, or (iii) central clearing, be effective in addressing financial stability risks related to NBFI leverage in core financial markets, including government bond markets? To what extent can these three types of policy measures complement each other?

(i) Minimum haircuts

In line with the CP's observations, we find that the introduction for minimum haircuts in SFTs could help reduce NBFI financial stability risks in core financial markets, including in government bond repo.

Regarding, minimum Haircuts in SFTs including government bond repos as an effective policy we find that by definition haircuts reflect two attributes of risk:

- The mark-to-market risk of the underlying asset
- The probability of default of the counterparty

As of today, the government bond repo market largely trades at zero haircut. However, zero haircut implies not only there is no market risk which, as recent stresses in government bond markets has demonstrated is not the case, but also that there is no counterparty credit risk. It is important to recognise that a zero-haircut landscape does not remove the cost but merely transfers it elsewhere. Zero haircut trades can increase banks' RWA exposures for these trades since they are seen as undercollateralised when accounting for market risk. Thus, zero haircuts transfer the cost from buy-side to banks. Minimum haircuts would thus partially transfer this cost back. Ultimately, the increase in the RWA cost due to zero haircuts further constrains the bank intermediation capacity as a result of internal and regulatory ratios. This can become problematic during periods of stress where these

ratios being close to their limits can reduce intermediation capacity in a time when it is already strained. Hence, a minimum haircut policy could alleviate bank capital constraints and free up intermediation capacity.

Deleveraging can have negative consequences on financial stability, mostly due to its auto-perpetuating nature. Indeed, in periods of "dash for cash", and when there is a liquidity crisis, the first solution is to reduce positions. However, this asset fire sale can make prices for all assets classes move away from their true value and this de-pegging can also drive haircut spikes further upwards, increasing the need for cash and propagating risks to all market participants.

Hence a fixed minimum haircut (when compared to zero haircut) does work to disincentivise leverage since it puts a cost on leverage through the haircut value.; however, in practice haircuts may move above these minimum levels in a stressed market environment. This reduces their effectiveness as a policy to promote financial stability.

The natural extension of this margin framework is to assess how the provision of access to highly liquid centrally cleared Repo markets as an alternative solution can alleviate the abovementioned markets stresses particularly during turbulent times.

(ii) Central clearing can address financial stability with regards to NBFI leverage and liquidity access.

Central clearing can effectively support the FSB's work on addressing financial stability risks related to NBFI leverage in core financial markets, including government bond markets. Whilst cleared repo market liquidity has been reliable during multiple periods of capital market stress over the last two decades, such as with the European sovereign debt and the Covid-19 crises, overall access to clearing in Repos can be challenging for some parts of the markets, especially some of the NBFIs. This is partly due to the limited intermediation capacity to support their access to repo markets, including to cleared repo markets.

Banks operate and serve their clients with limited resources capacity subject to a variety of constraining ratios (e.g., Leverage Ratio and RWA output floor). As such, buy-side firms may struggle to find adequate capacity from banks to intermediate their repo activities. This is even more visible in stressed market conditions, where banks face increased demand for intermediation and might not be able to adequately serve the entirety of their client base.

In recent years, CCPs have worked to create dedicated models that enable NBFIs to be integrated into central clearing of repos. Due to the significant balance sheet impact of FCM-like derivative client models, the repo models usually involve the client directly facing the CCP, with a bank 'Sponsor' or 'Agent' facilitating their access by providing key operational services and a level of liability. Compared to the USA, these models are relatively new and underutilised in Europe, but they have significant potential to promote financial stability with regards to NBFI leverage.

<u>Sponsored / Guaranteed Sponsored clearing (access model for buy-side)</u>

During times of stress, banks have less balance sheet capacity to serve their clients due to a combination of constraining regulatory ratios and internal limits. When facing such constraints, the buy side may struggle to find adequate intermediation capacity from banks. This ultimately perpetuates a period of stressed deleveraging caused by the scarcity of HQLA collateral, generally used for funding NBFI positions in normal times.

Sponsored / Guaranteed Sponsored Clearing are precisely designed to address these issues. These extend the benefits of direct CCP membership to the broader investor community in a model specifically designed for the buy-side. This membership model enables NBFIs members to have direct full Membership with the CCP, sponsored by an Agent / Guaranteed Agent Member (Bank). Agent Members provide a range of services for their Sponsored / Guaranteed Sponsored Member, including provision of Default Fund and margin payment and management. Sponsored Members are ultimately responsible for margin payments and trade settlement. The benefits of these models for the buy-side and sell side include:

- Access to a deep liquidity pool via a single membership agreement, providing access to over 100 execution counterparties.
- Potential for bank capital savings to be reflected in improved pricing / additional balance sheet capacity for Sponsored Member activity, potentially providing increased access to competitively priced liquidity.
- A reduction in bilateral credit risk and default exposures.
- A comprehensive risk management package within the CCP as Agent / Guaranteed Agent provide a guarantee of the tail loss above and beyond Initial Margin and Default Fund contribution preserving the risk management framework and risk exposure of the CCPs.

These factors combine to create a resilient liquidity pool which NBFIs could benefit from via CCP hybrids models, especially during stress when liquidity is constrained and pressure to deleverage is high. Increased capacity through freeing up bank constraints also translates into increased collateral circulation, further decreasing pressure to deleverage. Furthermore, similarly to the other activity-based measures discussed in the CP, CCP margins act to disincentivise directional and leveraged positions through associated initial margins, preventing excessive leverage from occurring in the first place.

Increased operational efficiencies through settlement netting, where LCH RepoClear typically nets 70% of activity cleared before settlement, reduce settlement and liquidity risk and increase settlement efficiency. This reduces frictions in the market that can hamper NBFI liquidity access, especially during stress where settlement efficiency materially worsens.

Hence, increased uptake of new CCP access models for NBFIs have the potential to effectively address financial stability risks associated with excessive leverage.

(iii) Central Clearing Mandate

Separately from assessing the effectiveness of wider central clearing, a central clearing mandate as a tool in the regulatory toolbox, has its own merits and challenges in addressing NBFI leverage. Regulators should distinguish between and assess independently policies that encourage clearing vs a full mandate, supported by a thorough cost-benefit analysis.

A central clearing mandate could effectively address several points of concern raised by the FSB. For example, CCPs take into account positions of NBFIs across their liquidity providers when calculating margins, eliminating the need for private disclosures as liquidity providers can rely on CCPs to measure correlated positions effectively. Similarly, a central clearing mandate would create a central source of information which could be accessible to regulators and certain data made public where appropriate.

Furthermore, CCP haircutting methodology increases the cost of leveraged positions and large exposures, which should act to prevent excessive leverage by individual market players. CCPs

would also be responsible for managing counterparty credit risk across the market, eliminating the need to regulate this more extensively at a counterparty pair level.

Whilst a central clearing mandate in sovereign repos does not address all NBFI risk, one must recognise the increasingly important role that sovereign repo plays in obtaining leverage and in collateral reuse chains and therefore the sizeable impact such a policy would have. For example, measuring leverage NBFIs are taking as the CP suggests can be difficult to calibrate and expensive to monitor. A central clearing mandate on repos as a key source of information on leverage for NBFIs (alongside other policies to address alternative sources of leverage) could be an efficient solution.

It is important to recognise the interaction between proposals for minimum haircuts and central clearing mandate for government bond markets. Given CCPs' use of initial margining, minimum haircuts can be seen as a policy which brings bilateral practices closer to cleared ones. Hence, a minimum haircut policy could be seen as a piece to the puzzle of encouraging wider central clearing on a voluntary basis; however, this is mutually exclusive to a central clearing mandate.

7. Are there benefits to dynamic approaches to minimum margin and haircut requirements, e.g. where the requirements change based on changes in concentration or system-wide leverage? If so, what types of indicators capturing concentration or system-wide leverage should the requirements be linked to?

Haircuts or margins are a "theoretical" mark-to-market based value. But in case of deleveraging or default, liquidation loss will naturally be a function of the market value but also of the size of the position to liquidate. Therefore, an add-on should be used to assess the real impact on the market when a lot of assets from a same range and or issuers are put on the market for sale. This is naturally captured in the concentration risk.

Moreover, each bond has its own dynamic (liquidity) that should be captured through an idiosyncratic measurement. Even for government bonds, a Z-spread measure doesn't translate the real liquidity when large portfolio is reversed on the market.

We therefore welcome the FSB's suggestions for dynamic haircuts that would reflect the current market condition and provide additional assurance to liquidity provider. This brings haircut policies closer to promoting financial stability given their potential to address spiking haircuts in stressed market conditions and bank balance sheet constraints (less in-progress trades with a lack of protection). This mechanism would clarify that liquidity access (bilateral, central counterparty or even Central Bank liquidity facilities) has a cost that need to be factored in the NBFI strategy.

Dynamic haircuts would be a step closer to the risk management that CCPs are applying. However, in this case, the haircut will still be a single point in time snapshot. A more developed approach could be to combine dynamic haircut to the current Variation Margin process already in place to have an overall Margin Requirement framework (from inception to maturity of the transactions). This type of arrangement would then mitigate to an extent the risk of default of a counterparty, on a bilateral basis, and therefore enhance financial stability.

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

All activity-based measures have the impact of increasing liquidity requirements in the market. Which market participant will be mostly impacted by those requirements will depend on how the policy is implemented but, in any case, there is the potential to inadvertently increase liquidity strain. If policies are not carefully calibrated, this strain could outweigh capital benefits to intermediaries and dampening NBFI leverage from a financial stability point of view. Hence, efforts should be made to ensure this calibration produces the desired benefits. There are nuances between the measures; for example, central clearing and margin requirements require liquidity from cash lenders which a minimum haircut policy usually would not. Level of minimum haircuts and margin requirements also will determine the relative impacts.

Mandatory clearing will likely trigger the largest increase in liquidity requirement of the discussed policies, as well as subjecting the entire market to the same methodology which could cause spikes in market liquidity requirements. As mentioned in the CP, it is therefore important to explore policies which ensure NBFIs can cope with this sensitivity of margin requirement, alongside any potential mandate. Regulators should also consider the implications of a central clearing mandate in the local context of their funding markets. For example, European regulators should consider the fact that the European sovereign repo market is fragmented, from both a pricing and settlement perspective. Furthermore, regulators should take into account the situation in their jurisdiction regarding clearing accessibility.

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

When establishing a comprehensive set of measures to address risks associated with NBFI leverage obtained through government bond repo, it is important to differentiate between minimum haircuts and margin requirements for government bond SFTs. Haircuts are at a trade level and fixed for the life of the trade, margin requirements are usually at portfolio level and, even if at trade-level, change throughout life of the trade. Minimum haircuts for sovereign repo would mechanically reduce leverage, bring bilateral and cleared practices closer together and protect against counterparty credit risk. Since they are usually only applied to the cash borrower, they would imply an overall lower funding requirement across the market and more closely align with market practices today, whereby typical cash lenders such as MMFs would normally receive, rather than post a haircut.

However, minimum haircuts are not necessarily effective in protecting counterparties against market risk of a trade, both for longer-dated trades and from the point of view of the cash borrower who could incur a loss purchasing collateral on the market if their counterparty defaults and bond price increases. Furthermore, static minimum haircuts may reduce the impact of a haircut spike during stress, but they do not solve the problem entirely, especially if calibrated too low. A dynamic minimum haircut, as mentioned in the CP would be a step in addressing this defect.

LSEG welcomes recommendations for regulators to consider the benefits of an initial margining policy alongside those of a minimum haircut policy for SFTs. This is because calibrating market-wide leverage measures to address this defect in minimum haircuts, could be an unnecessarily convoluted route. Margin requirements bring bilateral practices closer to cleared practices also by increasing sensitivities of margin requirements in bilateral space, where NBFIs are used to fixed haircuts, if any. This simultaneously incentivises voluntary central clearing, promoting financial stability as outlined in our response to Question 6, as well as acting as a path towards a central clearing mandate, if regulators deem appropriate.

10. In what circumstances can entity-based measures, such as (i) direct and (ii) indirect leverage limits be effective in addressing financial stability risks related to NBFI leverage in core financial markets?

11. Are there ways to design and calibrate entity-based measures to increase their risk sensitivity and/or their effectiveness in addressing financial stability risks from NBFI leverage?

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

13. To what extent can activity-based and entity-based measures complement each other? What are the main considerations around using these two types of measures in combination?

In line with our response to question 6, a mandate for central clearing for sovereign repo could reduce the need for certain entity-based measures such as private disclosures practices in these markets since liquidity providers would ultimately face the CCP who would manage potential concentration risks. Similarly, public disclosure obligations on individual NBFIs with regards to this type of activity would similarly not be relevant whereby the CCP would act as a centralised information hub.

Recommendation 6

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

Recommendation 7

15. Would a minimum set of disclosures to be provided by leverage users to leverage providers be beneficial in improving counterparty credit risk management and reducing financial stability risks from NBFI leverage, including concentration risks? If so, which iii types of information and what level of granularity should (and should not) be included in this minimum set and why?

16. What are the main impediments that leverage users face in sharing additional or more granular data with their leverage providers? Is there a risk that a minimum recommended set of disclosures may lead leverage users to limit the information they share with their leverage providers to that minimum set?

17. Should such a minimum set of disclosures rely on harmonised data and metrics to ensure transparency and efficiency in the use of such information for risk management purposes? Do respondents agree that such a minimum set of disclosures should be based on the list of principles outlined in the consultation report? If not, which principles should be added, deleted or amended?

18. Should leverage users be required or expected to provide enhanced disclosures (beyond that provided in normal market conditions) to their leverage providers during times of stress?

19. Should authorities design a minimum set of harmonised disclosures and guidelines on its application, or should they convene a cross-industry working group to do so? How do respondents believe such a standard should be incorporated into market practice? Through regulation, supervisory guidance, and/or via a Code of Conduct or similar approach?

Recommendation 8

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

When considering sources of NBFI leverage, both synthetic and financial, the CP correctly identifies risks associated with inconsistencies of regulatory treatment. For example, increasing costs of obtaining leverage via SFTs may push NBFIs to instead use derivatives to obtain the same exposure. Therefore, policies addressing leverage should be assessed across markets, avoiding regulatory arbitrage which could dampen policy effectiveness.

With regards to considering cleared and uncleared exposures, current regulatory treatment does not apply this 'same risk same regulatory treatment' principle. This is because, as mentioned in our responses to questions 7 and 9, CCPs are subject to strict requirements with respect to their risk practices, incurring margin requirements that incur an operational and financial burden. Conversely, the bilateral repo landscape lacks haircuts and margining, rendering clearing relatively expensive and disincentivising wider central clearing. Therefore, the discussed activity-based measures would bring cleared and bilateral practices closer together and align better with the discussed principle. This would also encourage wider voluntary central clearing (outside of a mandate). As mentioned in Questions 7 and 9, the extent to which they would do this varies between policies and it also depends on the level at which they are calibrated.

We hope that you will find LSEG's input provided in this consultation paper useful, and we remain at your disposal for any additional clarifications.