CITADEL

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Basel Committee on Banking Supervision
Committee on Payments and Market Infrastructures
Financial Stability Board
International Organization of Securities Commissions

Re: Consultative Document on Incentives to Centrally Clear OTC Derivatives

Citadel[1] appreciates the opportunity to provide input on the consultative document analyzing incentives to centrally clear OTC derivatives (the "Draft Report").[2] In the following pages, we provide our feedback on the specific questions in the consultation. Our recommendations are also presented in consolidated format in an Annex at the end.

The following observations inform our response to the consultation:

- **Clearing Rates**. While material progress has been made in achieving the G20 goal of clearing all standardized OTC derivatives, headline statistics based solely on the US market (which has implemented the most comprehensive clearing mandate) or on the percentage of outstanding notional amounts cleared obscure the fact that significant additional implementation work remains. Analysis based solely on outstanding notional amounts dramatically underestimates the ongoing trading activity of clients, as it includes legacy positions and types of OTC derivatives that are not covered by a clearing mandate at all, and does not take into account the ongoing compression occurring at CCPs that significantly reduces outstanding cleared notional. Instead, clearing rates should be closely tracked based on the percentage of new trading activity that is being cleared in order to accurately evaluate client incentives to clear. *(See response to question 14 for additional detail)*

- **Risks Associated with Overly Broad Exemptions**. Addressing systemic risk in the OTC derivatives market cannot be accomplished simply by bring the largest firms into central clearing. To the extent material trading volumes or a significant number of financial firms remain outside central clearing, bilateral counterparty credit exposures persist. While the uncleared trading activity and exposures of any given smaller financial firm may not present systemic risk concerns in isolation, the sheer number of these bilateral exposures outside of central clearing perpetuates systemic risk in aggregate, acting as a risk transmission channel in the event of a significant counterparty default. *(See response to question 14 for additional detail)*

[1] Citadel is a global financial firm built around world-class talent, sound risk management, and innovative market-leading technology. For more than a quarter of a century, Citadel's hedge funds and capital markets platforms have delivered meaningful and measurable results to top-tier investors and clients around the world. Citadel operates in all major asset classes and financial markets, with offices in the world's leading financial centers, including Chicago, New York, San Francisco, Boston, London, Dublin, Hong Kong, and Shanghai.

[2] Incentives to centrally clear over-the-counter (OTC) derivatives: A post-implementation evaluation of the effects of the G20 financial regulatory reforms (7 Aug 2018), available at: http://www.fsb.org/wp-content/uploads/P070818.pdf.

- **Clearing Mandates: Implementation Timing and Scope**. Determining whether a particular type of client is subject to a clearing mandate is critical in evaluating incentives to clear. However, this determination varies significantly by jurisdiction. For example, the clearing mandate has been fully implemented in the US, but remains only partially implemented in the EU, with a phase-in yet to occur for "Category 3" financial counterparties, pension schemes, and "Category 4" non-financial counterparties. In addition, except for the US, material exemptions exist for financial counterparties, with many jurisdictions applying clearing mandates only to the dealer-to-dealer market, leaving all clients exempt. *(See response to questions 2, 13, and 14 for additional detail)*

- **Uncleared Initial Margin Requirements: Implementation Timing and Scope**. Regulatory initial margin requirements for uncleared derivatives have not yet been implemented in the dealer-to-client market, with the phase-in expected to occur in September 2019 and September 2020. Given the importance of uncleared initial margin requirements in determining incentives to clear, this means that incentives for all clients, regardless of the level of trading activity, are likely to be quite different now compared to post-implementation of these rules. This should be explicitly acknowledged in any analysis of client incentives to clear. In addition, it is worth noting that many financial counterparties will fall below the 8 billion threshold and therefore will not be subject to regulatory uncleared initial margin requirements. *(See response to questions 1, 2, 3, and 14 for additional detail)*

Responses to Questions for Public Consultation

Questions on Incentives

1. **Do you agree or disagree with the finding that, in general, there are strong incentives for dealers and larger (in terms of level of derivatives activity) clients to centrally clear OTC derivatives? Do you agree or disagree with the finding that some categories of clients have less strong incentives to use central clearing?**

The Draft Report comprehensively analyzes various regulatory and non-regulatory factors that influence incentives to centrally clear OTC derivatives. However, we believe that it is premature to draw definitive conclusions regarding clearing incentives for any category of client – large or small – while the implementation of initial margin requirements for uncleared derivatives is yet to be completed.

Both the qualitative and quantitative data summarized in the Draft Report clearly demonstrate the importance of initial margin requirements for uncleared derivatives in assessing incentives to centrally clear. Dealers and client clearing service providers identified the uncleared margin requirements as incentivizing central clearing more than any other regulatory reform.[3] In turn, the quantitative data shows that where uncleared initial margin requirements do not apply (but variation margin requirements do), bilateral OTC trading is less costly than central clearing, regardless of the activity level of the client.[4]

[3] Draft Report at Figure D.1 (page 24).

[4] Draft Report at pages 34-35 and Table A4.3 (page 96).

Importantly, due to the ongoing phase-in, regulatory uncleared initial margin requirements will not apply to clients (i.e. non-clearing members) until September 2019 at the earliest.[5] Until then, many clients are trading uncleared derivatives under CSAs that either require (a) 2-way variation margin but no initial margin or (b) 2-way variation margin and 1-way initial margin (with the client posting but not the dealer).[6] As discussed above, the quantitative data suggests that bilateral trading under option (a) is less costly then central clearing. Option (b) was not considered in the Draft Report, which is an unfortunate omission, given that such arrangements are also likely to skew the economics in favor of bilateral trading, particularly for dealers.

It is therefore the case that client incentives, regardless of the level of trading activity, are likely to be quite different now compared to post-implementation of the uncleared initial margin requirements. For those clients that are not currently required to post initial margin when trading uncleared derivatives, the initial margin requirements for cleared trades create an unlevel playing field that disincentivizes voluntary clearing. This helps to explain why clients identified cleared initial margin as the biggest disincentive for voluntary clearing[7] and did not identify uncleared initial margin as a significant incentive in favor of voluntary clearing (given that these requirements do not yet apply).[8]

We therefore recommend that the final report should:

- Ensure that the current implementation status of the uncleared initial margin requirements is clearly described, including that dealer-to-client trades will be generally unaffected until September 2019 at the earliest. In several areas, the Draft Report could be read to suggest that uncleared initial margin requirements (and the corresponding incentives) already apply to certain clients.[9]

- Clearly state when conclusions regarding clearing incentives are based on the assumption that uncleared initial margin requirements either apply or will apply pursuant to the current phase-in schedule.[10] As discussed above, client incentives, regardless of the level of trading activity, are likely to be quite different now compared to post-implementation of the uncleared initial margin requirements.

- Recommend follow-up research to verify any preliminary conclusions regarding client clearing incentives after the full phase-in of the uncleared initial margin requirements.

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[5] We note there has been one reported exception. *See* "Brevan Howard is the first non-bank caught by margin rules, sources say," Risk (17 Aug 2018), available at: https://www.risk.net/derivatives/5867231/brevan-howard-is-first-non-bank-caught-by-margin-rules-sources-say.

[6] It would be useful to publish the aggregate responses to client survey questions 16a and 16b in the final report in order to detail the types of CSAs currently used by clients.

[7] Draft Report at Figure D.2 (page 25).

[8] Draft Report at Figure D.3 (page 26).

[9] *See, e.g.,* Draft Report at pages 2, 16, 27 (Table D.5), and 28.

[10] *See, e.g.,* the findings summarized on page 2 of the Draft Report.

2. Do you agree or disagree with the finding that relevant post-crisis reforms have, overall, contributed to the incentives to centrally clear? Is the consultative report's characterisation of distinctions in how the reforms have affected incentives for different types of clients consistent or inconsistent with your experience?

We agree that the post-crisis regulatory reforms create incentives to centrally clear OTC derivatives. In addition to the clearing mandates implemented by various G20 jurisdictions, the qualitative responses summarized in the Draft Report highlight the importance of uncleared margin requirements and bank capital requirements in incentivizing central clearing.[11] The impact of these regulatory reforms can be seen in quoted spreads for dealer-to-dealer trades, with the cost advantage of cleared (versus bilateral) increasing as the various reforms have been implemented.[12]

Given the significance of the post-crisis regulatory reforms, it is therefore true that market participants subject to the reforms will have very different incentives than those exempted from the reforms. For clients, however, this determination of in-scope vs. out-of-scope is currently in a state of flux as specific regulatory reforms continue to be gradually phased-in. In addition, this determination may vary across jurisdictions due to local implementation decisions, resulting in identical types of clients experiencing very different incentives depending on location. We provide a summary of implementation status and available exemptions for both the clearing mandate and uncleared initial margin requirements below.

Clearing Mandates

- **Implementation Status**: The clearing mandate has been fully implemented in the US, but remains only partially implemented in the EU, with a phase-in yet to occur for "Category 3" financial counterparties, pension schemes, and "Category 4" non-financial counterparties.[13] With respect to other jurisdictions, some have implemented clearing mandates, some have final regulations that would allow for a subsequent implementation of a clearing mandate, and some are still considering whether to implement a clearing mandate.[14]

- **Available Exemptions**: For financial counterparties, the US clearing mandate contains a narrow exemption for credit institutions with less than $10 billion in assets.[15] Broader exemptions for small financial counterparties are contemplated in the EMIR Refit legislation in the EU, with outstanding gross notional thresholds set at EUR 3 billion

[11] Draft Report at Figure D.1 (page 24).

[12] Draft Report at Figure D.17 (page 40).

[13] *See* "OTC Derivatives Market Reforms: Twelfth Progress Report on Implementation," FSB (29 June 2017) at Appendix J, available at http://www.fsb.org/wp-content/uploads/P290617-2.pdf.

[14] *Id.* at Appendix C.

[15] Other minor exemptions exist, such as for "community development financial institutions." *See* Amendments to Clearing Exemption for Swaps Entered Into by Certain Bank Holding Companies, Savings and Loan Holding Companies, and Community Development Financial Institutions, available at: https://www.cftc.gov/sites/default/files/2018-08/federalregister082318.pdf.

for interest rate derivatives and EUR 1 billion for credit derivatives.[16] Many other jurisdictions have provided even broader exemptions that result in only dealer-to-dealer transactions being subject to the clearing mandate.[17]

Uncleared Initial Margin Requirements

- **Implementation Status**: Requirements will not apply to dealer-to-client trades until Phase 4 (threshold of 750 billion) and Phase 5 (threshold of 8 billion) implementation in September 2019 and September 2020, respectively.
- **Available Exemptions**: Clients below an 8 billion threshold in outstanding uncleared notional are exempt.

Example Scenario Comparing US and EU Rules

Financial counterparty that regularly trades OTC derivatives, but has less than 8 billion in outstanding gross notional of uncleared derivatives.

	US	EU
Clearing Mandate	In scope	Part of "Category 3," so currently out-of-scope. Upon finalization of EMIR Refit, may be brought in-scope depending on the outstanding gross notional threshold.
Uncleared Initial Margin	Out-of-scope	Out-of-scope

The summary above illustrates the difficulty in making broad generalizations about clearing incentives based on client type or level of trading activity. As indicated in the example, an identical type of client may have very different incentives depending on whether they are located in the US or the EU, as the Draft Report highlights that clients subject to clearing mandates are more likely to voluntarily clear other derivatives.[18] In addition, for all types of clients, regardless of level of trading activity, bilateral trading may still be more cost effective prior to the implementation of uncleared initial margin requirements.[19] However, incentives should be expected to shift significantly for many clients once these requirements are introduced, with the exception of those clients permanently exempted.

[16] *See* https://ec.europa.eu/info/law/better-regulation/initiatives/com-2017-208_en.

[17] *See supra* note 13.

[18] Draft Report at page 33.

[19] Draft Report at pages 34-35 and Table A4.3 (page 96).

For these reasons, the final report should:

- Acknowledge the limitations of broad generalizations about clearing incentives based on client type or level of trading activity. Given that many incentives are based on whether a particular client is in-scope or out-of-scope of a particular regulatory reform, it may be preferable to focus on (a) the observed and expected impact of various regulatory reforms on clearing incentives, (b) whether the implementation of each regulatory reform is complete or ongoing (which may vary by regulatory reform and jurisdiction), and (c) the client segments that are eligible for exemptions (which will vary by regulatory reform and jurisdiction).

3. Do the margin requirements for uncleared derivatives give a sufficient incentive to clear? How do these requirements interact with mandatory clearing obligations to incentivise clearing? Are there particular instruments, and specific types of entities where the incentive to clear is not adequate? In such cases, are there specific aspects of the requirements that diminish incentives to clear?

Data summarized in the Draft Report suggests that the initial margin requirements for uncleared derivatives, where implemented, do incentivize central clearing, consistent with one of the explicit objectives of the reform.[20] Following Phase 1 implementation for the largest dealer banks in September 2016, voluntary central clearing of dealer-to-dealer inflation swaps and non-deliverable forwards significantly increased.[21] In addition, quoted spreads for dealer-to-dealer trades moved in favor of cleared (vs bilateral) trades during the same time period.[22]

Similar incentives in favor of central clearing are expected to apply to dealer-to-client trades once Phase 4 and Phase 5 implementation occurs in September 2019 and September 2020, respectively. The Draft Report underscores the importance of completing this implementation in order to ensure that central clearing is appropriately incentivized for all standardized OTC derivatives. At the moment, in contrast to the observed increase in voluntary clearing of dealer-to-dealer transactions in standardized OTC derivatives not subject to a clearing mandate, dealer-to-client voluntary clearing rates remain relatively low. According to the Draft Report, only 43% of clients indicated that they currently engage in voluntary clearing and, of those that do, 80% did so for less than 20% of their trading activity as measured by gross notional outstanding.[23] Separate analysis of the US market also found relatively low levels of voluntary clearing for interest rate derivatives and index CDS.[24]

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[20] Draft Report at page 10. We note that the variation margin requirements for uncleared derivatives largely formalized existing market practice and, therefore, do not separately serve as a material incentive to clear.

[21] Draft Report at Figure C.7 (page 20).

[22] Draft Report at Figure D.17 (page 40).

[23] Draft Report at page 43.

[24] In the US market, approximately 3% of total cleared notional for both interest rate derivatives and index CDS was voluntarily cleared in 2017. "Actual Cleared Volumes vs. Mandated Cleared Volumes: Analyzing the US Derivatives Market," ISDA (July 2018) at pages 3 and 16, available at: https://www.isda.org/a/6yYEE/Actual-Cleared-Volumes-vs-Mandated-Cleared-Volumes.pdf.

Voluntary clearing rates for dealer-to-client trades are directly impacted by the gradual phase-in of the uncleared initial margin requirements. Until the uncleared initial margin requirements apply to dealer-to-client trades, the disparity between cleared and uncleared initial margin requirements can create an unlevel playing field that discourages clearing and quoted dealer spreads may not materially favor clearing.[25] Therefore, in the absence of uncleared initial margin requirements for dealer-to-client trades, voluntary clearing rates for many standardized OTC derivatives not yet subject to a clearing mandate, such as interest rate derivatives in non-mandated currencies, single-name CDS, CDS referencing non-mandated indices, and FX non-deliverable forwards may remain at sub-optimal levels even though viable clearing offerings exist. As a result, we believe the full phase-in of uncleared initial margin requirements as scheduled is necessary to achieve the G20 goal of clearing all standardized OTC derivatives.

The Draft Report also highlights that any general relaxation of the uncleared initial margin requirements prior to this phase-in could reduce or eliminate the incentives in favor of central clearing. The quantitative data suggests that the difference between required cleared and uncleared initial margins is less than expected.[26] In fact, CFTC research summarized in the Draft Report found that the uncleared margin required for certain portfolios can even be lower than the corresponding cleared margins, specifically as low as "54% of the 'all risks' cleared margin for the same portfolio."[27] This helps to explain why the Draft Report found that some dealers were able to provide lower quotes for bilateral trades than for cleared trades, even when taking into account uncleared initial margin requirements.[28] While targeted calibrations may be warranted, any general relaxation of uncleared initial margin requirements would, therefore, risk eliminating any incentive to clear created by this post-crisis reform (and could even create a disincentive to clear if cleared initial margins became consistently higher for similar portfolios).

Although the uncleared initial margin requirements provide an important incentive in favor of central clearing, they do not replace the need for a clearing mandate for the most liquid and commonly cleared OTC derivatives. Only a clearing mandate ensures an orderly transition of liquidity to the cleared version of an OTC derivative, avoiding the risk of liquidity bifurcation. This mandated transition also encourages client clearing service providers to support the available CCP offerings and encourages dealers to provide quotes for the cleared version of an

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[25] Draft Report at page 39.

[26] Draft Report at pages 37 and 95.

[27] Draft Report at page 37. We note that this research also found that 32% of dealer firms had higher cleared margin requirements (vs uncleared) when all initial margin costs were included. Roberson, M., "Cleared and uncleared margin comparison for Interest Rate Swaps," CFTC staff paper (April 2018) at page 10, available at: https://www.cftc.gov/sites/default/files/idc/groups/public/%40economicanalysis/documents/file/dcr_cleared_uncleared_margin.pdf.

[28] Draft Report at page 30. We note that the quantitative data may even include cleared prices that are better than clients can reasonably expect to receive, given that it appears dealers were asked to assume that they were serving as both the client's trading counterparty and clearing broker (Draft Report at page 106). Assuming a "bundled" trading and clearing offering could result in discounted pricing for those clients, but may not be permitted by relevant regulation. *See* CFTC Conflicts of Interest Rules- §23.605(d), 77 Fed. Reg. 20128 at 20211, available at: http://www.cftc.gov/idc/groups/public/@lrfederalregister/documents/file/2012-5317a.pdf.

instrument, neither of which may occur for non-mandated OTC derivatives. Finally, by requiring clients to enter into a clearing relationship and test the associated operational workflows, a clearing mandate can remove hurdles preventing clients from voluntarily clearing. In fact, the Draft Report highlights that clients subject to clearing mandates are more likely to voluntarily clear other derivatives.[29]

The importance of the clearing mandate is clearly demonstrated in the qualitative responses, with dealers, client clearing service providers, CCPs, and clients all ranking the clearing mandate as the most important driver of increased volumes of cleared OTC derivatives.[30] It is also important to note that a market-wide transition of liquidity to central clearing has yet to occur for any non-mandated instruments, even where clearing offerings are available.

In effect, the clearing mandate and the uncleared initial margin requirements work together to incentivize the central clearing of standardized OTC derivatives. While the clearing mandate applies to the most liquid and commonly cleared OTC derivatives, the uncleared initial margin requirements help to identify the next batch of instruments that should be considered for inclusion in the mandate by creating the appropriate incentives for CCPs, clearing members, dealers, and clients to expand clearing offerings and support voluntary clearing.

Based on the above, the final report should:

- Recommend additional research to track voluntary clearing rates across non-mandated products with viable clearing offerings as the uncleared initial margin requirements continue to be phased-in.
- Recommend additional research comparing uncleared margin requirements under the SIMM model with cleared margin requirements for identical portfolios.

4. The consultative report seeks to identify the most important regulatory and non-regulatory factors which affect incentives to centrally clear OTC derivatives for dealers, other financial intermediaries, large clients and small clients. Please identify any significant missing factors and comment on the relative strength of regulatory and non-regulatory factors discussed in the consultative report.

We agree with the Draft Report's analysis of the regulatory factors that affect incentives to centrally clear OTC derivatives, and the particular emphasis placed on the clearing mandate, uncleared initial margin requirements, and bank capital requirements.[31] These post-crisis reforms are critical in establishing the appropriate incentive structure to achieve the G20 goal of clearing all standardized OTC derivatives.

[29] Draft Report at page 33.

[30] Draft Report at page 40.

[31] Draft Report at page 2.

However, once a market participant starts to centrally clear, non-regulatory factors can play an important role in incentivizing the voluntary clearing of additional products. For clients, as indicated in the Draft Report, these factors tend to relate to netting and compression opportunities, counterparty risk management, and trading and transparency enhancements.[32] While the Draft Report discusses the multilateral netting benefits of central clearing,[33] more detail could be provided regarding these other non-regulatory factors. In particular:

- **Portfolio Compression**: CCPs and third-party services, such as TriOptima, are beginning to expand the portfolio compression opportunities available to clients for cleared OTC derivatives.[34]

- **Counterparty Risk Management**: Clients are protected from the default of their trading counterparties through the CCP's risk and default management frameworks and collateral is held at the CCP rather than on the balance sheet of trading counterparties.

- **Trading and Transparency Enhancements**: Clients obtain transparent end-of-day pricing on cleared positions from the CCP and can unlock various trading-related benefits. By eliminating bilateral counterparty credit risk (and, therefore, the need for bilateral trading documentation), central clearing enables clients to access a broader range of trading counterparties.[35] As a result, price competition is enhanced and new liquidity providers have a reason to enter the market. This should be expected to result in increased liquidity and more competitive spreads.[36]

  While the Draft Report acknowledges research has found that spreads do tend to be tighter in cleared markets, there is a suggestion that this might also be due to trading reforms.[37] However, it is important to note that trading reforms cannot occur unless central clearing is first in place, as regulatory trading mandates only apply to OTC derivatives already subject to a clearing mandate and other market-driven trading reforms (such as order book trading) require the elimination of complex bilateral trading documentation. For this reason, trading-related benefits for cleared OTC derivatives should be considered when analyzing the benefits of central clearing.

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[32] *See* Draft Report at Figure D.3 (page 26). Of the top six factors identified by clients as incentivizing clearing in non-mandated products, only one is clearly regulatory-related.

[33] Draft Report at page 55.

[34] "TriOptima and SwapClear include first client-cleared trades in triReduce swap compression cycle," NEX (24 October 2016), available at: https://www.trioptima.com/news/trioptima-and-swapclear-include-first-client-clear.

[35] Accessing a larger set of counterparties was the fourth highest incentive in favor of voluntary clearing identified by clients. *See* Draft Report at Figure D.3 (page 26).

[36] Spreads were the second highest incentive in favor of voluntary clearing identified by clients. *See* Draft Report at Figure D.3 (page 26).

[37] Draft Report at page 42. We would also include the findings of Benos, E., Payne, R., and Vasios, M., Centralized trading, transparency and interest rate swap market liquidity: evidence from the implementation of the Dodd-Frank Act, Bank of England Staff Working Paper, May 2018, available at: https://www.bankofengland.co.uk/-/media/boe/files/working-paper/2018/centralized-trading-transparency-and-interest-rate-swap-market-liquidity-update.

We recommend that the final report provide more detail on the non-regulatory factors identified by clients as incentivizing voluntary clearing, including netting and compression opportunities, counterparty risk management, and trading and transparency enhancements.

Questions on Markets

5. **Is the consultative report's characterisation of the shift of activity and trading liquidity towards centrally cleared products, and the consequent impact on uncleared products, consistent or inconsistent with your experience?**

The post-crisis regulatory reforms for OTC derivatives seek to mitigate systemic risk by, among others, incentivizing central clearing and ensuring that uncleared exposures are subject to appropriate capital and margin safeguards. As a result, these reforms are expressly intended to impact trading volumes in uncleared OTC derivatives.

In particular, for those OTC derivatives subject to a clearing mandate that has been fully phased-in across a broad spectrum of market participants, trading volumes have definitely shifted to the cleared version of the instrument. For other OTC derivatives, bank capital requirements and uncleared initial margin requirements will likely change the economics associated with transacting bilaterally, though, in principle, in a manner that ensures that inherent risks are now properly accounted for, increasing the overall safety and soundness of the financial system.

Nevertheless, it is important to note that a market-wide transition of liquidity to central clearing has yet to occur for any non-mandated instruments, even where clearing offerings are available. Relatively low voluntary clearing rates for clients[38] and the finding that some dealers were able to provide lower quotes for bilateral trades than for cleared trades[39] both suggest that uncleared derivatives continue to be actively traded, notwithstanding the continued implementation of the post-crisis reforms.

We, therefore, recommend further research on voluntary clearing rates for OTC derivatives in order to track trends in liquidity and trading activity for instruments and market participants that are not subject to a clearing mandate.

6. **There are various industry efforts underway to reduce the cost of clearing, including portfolio compression and direct clearing membership models. Based on your experience are these proposals, or other forthcoming changes to clearing infrastructure and models, likely to affect incentives to provide or use clearing services?**

Industry efforts to mitigate the impact of the leverage ratio on client clearing service providers may positively impact incentives to clear. These efforts include (a) treating variation margin on cleared OTC derivatives as settlement in order to reduce regulatory capital

[38] Draft Report at page 43.

[39] Draft Report at page 30.

requirements[40] and (b) holding client initial margin off balance sheet so that it does not contribute to the leverage ratio.[41] Given the observed challenges created by the leverage ratio (as discussed in Question 9 below), these efforts have the potential to unlock additional clearing capacity but are ultimately not a substitute for a recalibration of the leverage ratio.

Questions on Reforms

7. Do you agree or disagree with the report's characterisation of the effects of the following reforms on incentives to centrally clear?

a. central clearing mandates (both in terms of product scope and entity scope);

b. minimum standards for margin requirements for uncleared derivatives;

c. capital requirements for credit valuation adjustment (CVA) risk;

d. capital requirements for jump-to-default risk (including where applicable the Standardised approach for counterparty credit risk (SA-CCR) and the Current exposure method (CEM));

e. G-SIB requirements; and

f. The leverage ratio.

Yes, we agree with the Draft Report's analysis of the regulatory factors that affect incentives to centrally clear OTC derivatives, and the particular emphasis placed on the clearing mandate, uncleared initial margin requirements, and bank capital requirements.[42]

8. Do you agree or disagree with the consultative report's characterisation of the impact of these reforms on the incentives to provide client clearing services?

We agree with the Draft Report's finding that the leverage ratio can negatively impact incentives to provide client clearing services. Client clearing service providers identified the leverage ratio as disincentivizing clearing far more than any other regulatory reform,[43] given that it does not take into account the exposure reducing effect of client initial margin when calculating potential future exposure. This treatment of client initial margin is inconsistent with regulatory efforts to incentivize the clearing of OTC derivatives.

On the other hand, we recommend that the final report specifically acknowledge that the post-crisis reforms incentivizing central clearing, in particular the clearing mandate and uncleared initial margin requirements, can help to alleviate clearing access issues, as CCPs and client clearing service providers are motivated to invest in expanding their offerings. Implementing these regulatory requirements pursuant to clear and firm timelines provides CCPs and client clearing service providers with the necessary certainty regarding when client

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[40] *See* "U.S. Banking Agencies Clarify Capital Treatment of Cleared Derivatives with Settled-to-Market Variation Margin," Davis Polk Client Memorandum (21 Aug 2017), available at: https://www.davispolk.com/files/2017-08-21_u.s._banking_agencies_clarify_capital_treatment_of_cleared_derivatives_with_settled-to-market_variation_margin.pdf.

[41] Draft Report at page 65.

[42] Draft Report at page 2.

[43] Draft Report at Figure D.1 (page 24).

clearing volumes can be expected to materially increase.

In contrast, extended implementation delays, such as those that have been provided under the phase-in of the EU clearing mandate, can undermine the commercial incentives to provide client clearing services. While well-intentioned, extended implementation delays of key regulatory requirements can disincentivize CCPs, clearing members, and related service providers from further investing in client clearing offerings and innovative solutions to meet the needs of specific client segments. The commercial viability of current client clearing offerings may also depend on client clearing volumes growing as anticipated under the original phase-in schedules. Lastly, final commercial negotiations between clients and their clearing members that ultimately dictate the cost of clearing typically do not occur until the effective date of a clearing mandate is imminent.

9. Are there any areas where potential policy adjustments should be considered which would enhance the incentives for or access to central clearing of OTC derivatives, or the incentives to provide client clearing services?

As discussed in Question 8 above, client clearing service providers identified the leverage ratio as disincentivizing clearing far more than any other regulatory reform.[44] In fact, 89% of client clearing service providers indicated that the leverage ratio had a negative impact on their ability to offer client clearing.[45] For context, no other capital standard received negative feedback from even a majority of client clearing service providers.[46] Adjusting the current calibration of the leverage ratio is, therefore, the most obvious solution to alleviating the clearing access issues identified in the Draft Report.

For example, client feedback summarized in the Draft Report indicates that there are challenges in obtaining back-up clearing service providers,[47] leading to concerns about portability and market access in the event of a clearing member default.[48] Recalibrating the leverage ratio should reduce these challenges, as research summarized in the Draft Report finds that the leverage ratio significantly reduces a clearing member's willingness to take on new clients.[49] Similarly, capital requirements were identified as the most common reason for off-boarding clearing clients.[50]

Client feedback also indicates that fixed costs (including minimum clearing fees) are the

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[44] Draft Report at Figure D.1 (page 24).

[45] Draft Report at page 63.

[46] Draft Report at page 62.

[47] Draft Report at Figure A5.9 (page 103). We note that clients may only use one clearing member at a given CCP in order to maximize netting opportunities, even where they have a back-up clearing member in place (see Figure C.8 at page 20).

[48] Draft Report at page 52.

[49] Draft Report at page 64.

[50] Draft Report at page 48.

most significant factor disincentivizing clearing.[51] Recalibrating the leverage ratio should be expected to reduce these costs, as nearly all client clearing service providers reported increasing fees specifically due to regulatory capital costs.[52] In light of the above, we recommend that policymakers and regulators consider adjustments to the leverage ratio to ensure it is aligned with the overall regulatory objective of incentivizing OTC derivatives clearing.

Separately, we recommend that regulators continue to fully phase-in the post-crisis reforms that are intended to incentivize clearing, including the clearing mandate in the EU and the uncleared initial margin requirements globally. Doing so will enhance the incentives for clearing standardized OTC derivatives as intended by the G20 reforms.

Questions on Access

10. Do you agree or disagree with the report's characterisation of the difficulties some clients, especially clients with smaller or more directional derivatives activity, face in:
a. accessing clearing arrangements; and
b. conducting trading and/or hedging activity given the restrictions imposed by their client clearing service providers?

Please see our response to Question 9 above.

11. Do you agree or disagree with the finding that the provision of client clearing services is concentrated in a relatively small number of banks? Does the current level of concentration raise any concerns about incentives to centrally clear, or risks to the continuity of provision of critical economic functions, including during periods of stress?

As indicated in the Draft Report, a relatively small number of banks currently provide client clearing services, with approximately 80% of total volume handled by the top five clearing members.[53] When attempting to evaluate the level of concentration this represents, it is important to consider that (a) concentration levels have remained relatively constant since the start of client clearing,[54] and (b) the Herfindahl-Hirschman Index, a commonly accepted measure of market concentration, does not indicate even moderate levels of concentration.[55]

Nonetheless, it is worthwhile to consider whether there are policy responses that could be expected to decrease current levels of concentration. One way to decrease concentration would be to incentivize the entry of new client clearing service providers. However, the Draft Report

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[51] Draft Report at page 49.

[52] Draft Report at page 49.

[53] Draft Report at pages 19-20.

[54] Draft Report at page 20.

[55] *See* "Final 2017 FCM Rankings & Concentration," Clarus Financial Technology (28 Feb 2018), available at: https://www.clarusft.com/final-2017-fcm-rankings-concentration/ and "Herfindahl-Hirschman Index," available at: https://www.justice.gov/atr/herfindahl-hirschman-index.

highlights the many non-regulatory barriers to entry that exist for OTC derivatives client clearing. These include the sophisticated risk management and operational capabilities required, as well as the access to experienced traders needed to fulfill default management responsibilities.[56] In addition, new entrants would have to overcome the substantial economies of scale benefitting the largest incumbents. As a result, it appears unlikely that adjustments to regulatory policy would quickly lead to a material increase in the number of client clearing service providers for OTC derivatives.

We, therefore, recommend focusing on policy responses that promote the economic viability of current client clearing offerings. In this regard, recalibrating the leverage ratio to take into account the exposure reducing effect of client initial margin should be prioritized. As discussed in Question 9 above, the feedback summarized in the Draft Report clearly indicates that the leverage ratio is negatively impacting the provision of client clearing.

Longer term, in order to increase the universe of potential client clearing service providers for OTC derivatives, it will be necessary to increase the number of liquidity providers in these instruments. As detailed in the Draft Report, there are significant synergies between the trading and clearing businesses, including the trading expertise required to fulfill clearing-related default management responsibilities. Given that, historically, there have been far fewer liquidity providers in OTC derivatives than in other asset classes, such as exchange-traded derivatives, it is relatively unsurprising that the number of client clearing service providers is similarly low. Post-crisis reforms in the OTC derivatives market, including central clearing, organized trading, and post-trade public reporting are intended to increase market transparency and competition over time.

We also recommend that jurisdictions regularly compile, or require CCPs to compile, data on (a) the number of clearing members offering client clearing services and (b) the amount of client margin held by those clearing members in order to track concentration over time.[57]

12. Do you agree or disagree with the report's characterisation of the incentive effects created by up-front and ongoing fixed costs of:
   a. using clearing services?
   b. providing client clearing services?

Please see our response to Question 9 above.

[56] Draft Report at page 50.

[57] For example, the US CFTC regularly publishes financial data for FCMs. *See* https://www.cftc.gov/MarketReports/financialfcmdata/index.htm.

13. In light of the finding in this report that economic factors generally incentivize central clearing for certain market participants but perhaps not for others, please describe your views regarding the costs and benefits of the scope of the clearing mandates, both in terms of the products and entities covered.

While the Draft Report finds that several post-crisis reforms, including the clearing mandate, uncleared initial margin requirements, and bank capital requirements, operate jointly to incentivize central clearing,[58] the qualitative responses from dealers, client clearing service providers, CCPs, and clients all identify the clearing mandate as the most important driver in transitioning trading activity in standardized OTC derivatives into central clearing.[59] This consistent feedback from all market segments suggests that the clearing mandate is uniquely effective in changing market structure to achieve the G20 goal of clearing all standardized OTC derivatives. In particular, a clearing mandate has several important advantages compared to voluntary incentives, including:

- **Efficient Transition of Liquidity**. A clearing mandate provides for an orderly transition of liquidity to the cleared version of an OTC derivative pursuant to a defined timeline. This eliminates first-mover disadvantages and liquidity bifurcation risks that are present for voluntarily cleared instruments. In addition, clients are provided with the necessary confidence that there will be sufficient cleared liquidity to properly risk manage their positions.

- **Availability of Client Clearing Offerings**. A clearing mandate encourages client clearing service providers to support the available CCP offerings in the relevant OTC derivatives. Due to associated costs, client clearing service providers may not prioritize offering client clearing solutions for non-mandated instruments despite client interest in voluntary clearing. The Draft Report highlights the difference between the number of available clearing offerings for mandated versus non-mandated products, with only 33% of client clearing service providers offering client clearing for FX derivatives.[60]

- **Availability of Trading Liquidity**. A clearing mandate encourages dealers to provide quotes for the cleared version of the relevant OTC derivatives, as this becomes the market standard version of the contract. In contrast, a decision to voluntarily clear a transaction requires the agreement of not only the client, but also its dealer counterparty. Dealers may not be incentivized to support a voluntary transition of dealer-to-client liquidity to the cleared version of an OTC derivative due to the increased transparency and competition that can be expected to result,[61] and therefore may not quote a competitive price to enter into a non-mandated cleared dealer-to-client transaction.

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[58] Draft Report at page 2.

[59] Draft Report at page 40.

[60] Draft Report at page 22.

[61] *See generally* Hau, H., Hoffmann, P., Langfield, S., and Timmer, Y., "Discriminatory pricing of over-the-counter derivatives," ESRB Working Paper No. 61 (Dec. 2017), available at: https://www.esrb.europa.eu/pub/pdf/wp/esrb.wp61.en.pdf?3a730a4155a853c30d2523f6a387159f.

- **Resolving Legal and Operational Hurdles**. A clearing mandate establishes a firm deadline for clients to enter into a clearing relationship and test the associated operational workflows. Overcoming these initial hurdles and fixed costs can then pave the way for voluntary clearing to subsequently occur, as observed in the Draft Report.[62]

Given the above, it is important that clearing mandates are regularly re-assessed in order to ensure that the most liquid and commonly cleared OTC derivatives are covered. Feedback summarized in the Draft Report suggests that a significant number of market participants believe that the current clearing mandates are too narrow in terms of product scope.[63] While the US has led with the broadest clearing mandate, other instruments such as interest rate derivatives in non-mandated currencies, CDS referencing non-mandated indices, single-name CDS, and FX non-deliverable forwards may merit consideration for inclusion as clearing offerings continue to mature. Other jurisdictions have yet to match the US clearing mandate with respect to either the interest rate currencies or CDS indices covered.[64] Thus far, a market-wide transition of liquidity to central clearing has yet to occur for any non-mandated instruments, even where clearing offerings are available.

Similarly, a clearing mandate must cover the vast majority of market participants in order to be effective in transitioning liquidity to the cleared version of an OTC derivative. Otherwise, there is a risk that liquidity becomes bifurcated, negatively impacting clearing incentives for *all* market participants and undermining the benefits of the mandate detailed above. Therefore, to the extent regulators consider allowing entity-based exemptions from a clearing mandate, it is important that they be carefully calibrated based on data showing both (a) the percentage of new transactions and (b) the number of financial counterparties that would be eligible for the proposed exemption. Interestingly, the Draft Report indicates that most market participants believe the entity scope of the current clearing mandates is generally appropriate.[65]

Going forward, we recommend that global regulators regularly re-assess the scope of clearing mandates to ensure that the most liquid and commonly cleared OTC derivatives are covered and that any entity-based exemptions are appropriately calibrated based on current market data.

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[62] Draft Report at page 33.

[63] Draft Report at Figure D.21 (page 44).

[64] *See* Draft Report at Table A2.2 (page 81).

[65] Draft Report at Figure D.21 (page 44).

14. Should regulation seek to create incentives to centrally clear OTC derivatives for all financial firms, including the smallest and least active? If so, what would that imply for the costs of uncleared trades? If not, for which types of firm and product is it most important to have incentives for central clearing? Conversely for which types of firm and product would it be acceptable not to have incentives for central clearing? Please elaborate.

The financial crisis exposed the OTC derivatives markets as opaque, interconnected, and under-collateralized, resulting in the G20 reforms which seek to improve market transparency, mitigate systemic risk, and protect against market abuse.[66] A central pillar of these reforms is transitioning all standardized OTC derivatives into central clearing.[67] Central clearing provides unique and superior risk mitigation benefits compared to bilateral trading, including the elimination of interconnected bilateral counterparty credit exposures, a centralized default management process, multilateral netting and compression opportunities, and transparent end-of-day pricing.

At the same time, similar to other post-crisis regulatory reforms, central clearing can impose new costs on market participants. These costs are largely an intended consequence of regulatory efforts to increase overall market resiliency, and are outweighed by the systemic benefits detailed above and the more specific market structure benefits of central clearing detailed in client feedback summarized in the Draft Report.[68] Nonetheless, it is worthwhile to assess whether the regulatory reforms that most directly impact incentives to centrally clear, in particular the clearing mandate and the uncleared initial margin requirements, are being implemented in an appropriate manner, with exemptions permitted where warranted. In doing so, it is important to ensure that the overall objectives of these post-crisis reforms are not undermined by overly broad exemptions for financial firms.

The first step in analyzing the implementation of the clearing mandate and the uncleared initial margin requirements is to assess the exemptions currently available to financial firms, as summarized below.

Clearing Mandates: Key Exemptions for Financial Firms

- **US**: Permits only a narrow exemption for credit institutions with less than $10 billion in assets.[69]

- **EU**: Pension funds and financial firms with less than EUR 8 billion in outstanding

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[66] *See* "G20 Leaders Statement: The Pittsburgh Summit," Sept. 25, 2009, available at: http://www.g20.utoronto.ca/2009/2009communique0925.html.

[67] *Id.*

[68] *See* Draft Report at Figure D.3 (page 26).

[69] Other minor exemptions exist, such as for "community development financial institutions." *See* Amendments to Clearing Exemption for Swaps Entered Into by Certain Bank Holding Companies, Savings and Loan Holding Companies, and Community Development Financial Institutions, available at: https://www.cftc.gov/sites/default/files/2018-08/federalregister082318.pdf.

uncleared notional (i.e. "Category 3" entities) are currently exempt from the EU clearing mandate.[70] The EMIR Refit legislation in the EU contemplates establishing new permanent exemptions for financial firms as part of eventually applying the clearing mandate to "Category 3" entities, with outstanding gross notional thresholds proposed to be set at EUR 3 billion for interest rate derivatives and EUR 1 billion for credit derivatives.[71]

- **Other jurisdictions**: Several G20 jurisdictions employ notional-based thresholds to define exemptions or have applied the clearing mandate only to dealer-to-dealer trading.[72]

Uncleared Initial Margin Requirements: Key Exemptions for Financial Firms

- Given the globally harmonized BCBS-IOSCO standards, there is greater consistency with respect to exemptions. In general, once the Phase 4 and Phase 5 phase-in occurs for clients, financial firms below an 8 billion threshold in outstanding uncleared notional will be exempt from the uncleared initial margin requirements.

The summary above demonstrates that the determination of whether a particular client is in-scope or out-of-scope can vary greatly across jurisdictions, in particular with respect to the clearing mandate. While a "low activity" client (defined in the Draft Report to mean a client trading one IRS contract per month)[73] would likely be out-of-scope of most clearing mandates, many of the notional-based thresholds can also exempt much more active financial firms. Given the Draft Report's finding that market participants subject to the post-crisis reforms will have very different incentives than those exempted from the reforms, it is important to understand *how much new trading activity in OTC derivatives subject to a clearing mandate is not being cleared due to an available exemption*.

New research in the EU provides insight into this question and demonstrates just how broad the existing exemptions can be. Under the current scope of the EU clearing mandate, with pension funds and financial firms below a EUR 8 billion outstanding uncleared notional threshold (i.e. "Category 3" entities) exempt, the clearing rate for new interest rate derivatives remains under 50%, both in terms of trade count and traded notional.[74] This contrasts sharply with the US clearing rate of 88% of traded notional of new interest rate derivatives,[75]

[70] *See* "OTC Derivatives Market Reforms: Twelfth Progress Report on Implementation," FSB (29 June 2017) at Appendix J, available at http://www.fsb.org/wp-content/uploads/P290617-2.pdf.

[71] *See* https://ec.europa.eu/info/law/better-regulation/initiatives/com-2017-208_en.

[72] *See supra* note 70.

[73] Draft Report at page 31.

[74] Fiedor, P., "Clearinghouse-Five: determinants of voluntary clearing in European derivatives markets," ESRB Working Paper No. 72 (March 2018) at Figures 1 and 2 (pages 11-12), available at: https://www.esrb.europa.eu/pub/pdf/wp/esrb.wp72.en.pdf?87d519a1fd278d359b6d5a33499d0e26.

[75] "Actual Cleared Volumes vs. Mandated Cleared Volumes: Analyzing the US Derivatives Market," ISDA (July 2018) at page 3, available at: https://www.isda.org/a/6yYEE/Actual-Cleared-Volumes-vs-Mandated-Cleared-Volumes.pdf.

particularly when noting that the product scope of both the US and EU clearing mandates is very similar for these instruments. As a result, this research suggests that the current exemptions granted to financial firms under the EU clearing mandate may account for up to 40% of new trading activity in the OTC derivatives subject to the mandate. Assessments of notional-based exemptions from the clearing mandate granted in other jurisdictions appear to reach similar conclusions.[76]

This recent research regarding EU clearing rates also demonstrates why it is important to focus specifically on new trading activity in the OTC derivatives actually subject to a clearing mandate when assessing the scope of available exemptions. Analysis based solely on outstanding notional amounts on a given date dramatically underestimates the ongoing trading activity of clients, as these figures include legacy positions and types of OTC derivatives that are not covered by a clearing mandate at all, and do not take into account the ongoing compression occurring at CCPs that significantly reduces outstanding cleared notional.[77] As an example, estimates based on outstanding notional amounts suggested that "Category 3" entities in the EU should account for no more than 2.2% of the trading activity in interest rate derivatives.[78] Based on the recent ESRB Working Paper detailed above, this estimate appears to be incorrect by several orders of magnitude.

We recommend that regulators regularly assess the percentage of new trading activity in OTC derivatives subject to a clearing mandate that is not being cleared due to an available exemption. Otherwise, there is a risk that exemptions are miscalibrated, undermining the objectives of the post-crisis reforms.

For the clearing mandate, overly broad exemptions can undermine the objectives of mitigating systemic risk and increasing market transparency. To the extent material trading volumes or a significant number of financial firms are exempted from the clearing mandate, bilateral counterparty credit exposures therefore persist. While the uncleared trading activity and exposures of any given smaller financial firm may not present systemic risk concerns in isolation, the sheer number of these bilateral exposures outside of central clearing perpetuates systemic risk in aggregate, acting as a risk transmission channel in the event of a significant counterparty default. This is true even if the uncleared initial margin requirements are fully phased-in, as these bilateral exposures may not be subject to those requirements (due to either the involvement of an out-of-scope client or the portfolio being below the $50 million initial margin transfer threshold) and do not benefit from the risk mitigation benefits of clearing, such as a centralized default management process, multilateral netting and compression opportunities, and transparent end-of-day pricing.

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[76] *See, e.g.,* "Overview of the Hong Kong Trade Repository", Clarus Financial Technology (March 6, 2018), available at: https://www.clarusft.com/overview-of-the-hong-kong-trade-repository.

[77] *See, e.g.,* Consultation Paper on the Clearing Obligation for Financial Counterparties with a Limited Volume of Activity (13 July 2016), available at: https://www.esma.europa.eu/sites/default/files/library/2016-1125_cp_on_clearing_obligation_for_financial_counterparties.pdf and FCA Research Note "EMIR data and derivatives market policies" (August 2018), available at: https://www.fca.org.uk/publication/research/research-note-emir-data-derivatives-market-policies.pdf.

[78] Consultation Paper on the Clearing Obligation for Financial Counterparties with a Limited Volume of Activity (13 July 2016) at page 19.

With respect to OTC derivatives market transparency and liquidity, overly broad clearing exemptions can impede the transition of liquidity onto regulated, transparent, and competitive multilateral platforms since regulatory trading mandates only apply to transactions subject to a clearing mandate.[79] In addition, an incomplete transition to clearing can cause liquidity to become bifurcated between the cleared and uncleared version of an instrument. While the Draft Report highlights that the intended shift to clearing may reduce trading volumes in the uncleared version of certain instruments,[80] it should be noted that any implementation resulting in liquidity bifurcation between cleared and uncleared markets would be expected to have far more negative consequences for all market participants.

In turn, overly broad exemptions from the uncleared initial margin requirements can undermine the objectives of mitigating systemic risk and promoting central clearing. With respect to the latter objective, the quantitative data summarized in the Draft Report shows that bilateral trading is less costly than central clearing where there is an exemption from the uncleared initial margin requirements (as long as variation margin requirements apply).[81] Therefore, broad exemptions can be expected to negatively impact incentives to clear. However, the Draft Report omits discussing the systemic risk implications of providing broad exemptions from the uncleared initial margin requirements. These requirements are designed to prevent a repeat of the financial crisis, where under-collateralized bilateral positions served as a source of contagion and transmitted risk throughout the financial system. In doing so, the uncleared initial margin requirements are intended to be calibrated to reflect the "generally higher risk" associated with uncleared OTC derivatives.[82] As detailed in the Draft Report, in general these requirements do not appear to be overly punitive, and can often be lower than corresponding cleared margins for identical portfolios.[83]

While the uncleared trading activity and exposures of any given smaller financial firm may not present systemic risk concerns in isolation, the number of bilateral exposures exempted from uncleared initial margin requirements can create systemic risk in aggregate. As a result, we recommend that regulators regularly assess the number of market participants and bilateral exposures that are exempt from these requirements. The research detailed above finding that "Category 3" entities in the EU (which are below the same EUR 8 billion threshold that applies to the uncleared initial margin rules) are responsible for significant trading activity should prompt follow-up research on the scope of the existing exemptions. This research should also

[79] See, for example, initial analysis of the MiFID II derivatives trading obligation, which may not be capturing as much as 60% of dealer-to-client trading activity in the relevant OTC derivatives. "Tradeweb and Bloomberg MTF Market Share" (6 Feb 2018), Clarus Financial Technology, available at: https://www.clarusft.com/tradeweb-and-bloomberg-mtf-market-share/.

[80] Draft Report at page 60.

[81] Draft Report at pages 34-35 and Table A4.3 (page 96).

[82] BCBS-IOSCO, Margin requirements for non-centrally cleared derivatives (March 2015) at page 3, available at: www.bis.org/bcbs/publ/d317.htm.

[83] Draft Report at page 37.

caution against entertaining requests to further broaden exemptions from uncleared initial margin requirements, as is being suggested by some.[84]

Instead of broadening available exemptions from the post-crisis reforms, regulators should adjust the current calibration of the leverage ratio in order to address any identified clearing access issues. As detailed in Question 9 above, 89% of client clearing service providers indicated that the leverage ratio had a negative impact on their ability to offer client clearing.[85] Recalibrating the leverage ratio should be expected to address identified client concerns regarding back-up clearing service providers, portability, and fixed costs, while at the same time safeguarding the core objectives of the post-crisis reforms to improve market transparency, mitigate systemic risk, and protect against market abuse.

[84] *See* "Industry seeks smaller 'big bang' for margin," Risk (26 July 2018), available at: https://www.risk.net/derivatives/5805861/industry-seeks-smaller-big-bang-for-margin.

[85] Draft Report at page 63.

Annex: Summary of Recommendations

A. Suggested Enhancements to the Draft Report

1.	Ensure the current implementation status of the uncleared initial margin requirements is clearly described, including that dealer-to-client trades will be generally unaffected until September 2019.
2.	State when conclusions regarding clearing incentives are based on the assumption that uncleared initial margin requirements either apply or will apply pursuant to the current phase-in schedule.
3.	Acknowledge the limitations of broad generalizations about clearing incentives based on client type or level of trading activity. Focus on (a) the observed and expected impact of each regulatory reform, (b) whether the implementation of such regulatory reform is complete or ongoing, and (c) the clients eligible for exemptions, noting differences across regulatory reforms and jurisdictions.
4.	Provide more detail on the non-regulatory factors identified by clients as incentivizing voluntary clearing, including netting and compression opportunities, counterparty risk management, and trading and transparency enhancements.
5.	Highlight how the post-crisis reforms incentivizing central clearing can help to alleviate clearing access issues, as CCPs and client clearing service providers are provided with the certainty needed to invest in expanding their offerings.

B. Academic Research to Include in the Literature Review

1.	Fiedor, P., "Clearinghouse-Five: determinants of voluntary clearing in European derivatives markets," ESRB Working Paper No. 72 (March 2018).
2.	Hau, H., Hoffmann, P., Langfield, S., and Timmer, Y., "Discriminatory pricing of over-the-counter derivatives," ESRB Working Paper No. 61 (Dec. 2017).

C. Follow-up Market Research to Recommend

1.	Verify any preliminary conclusions regarding client clearing incentives after the full phase-in of the uncleared initial margin requirements.
2.	Track clearing rates based on new trading activity, and assess the scope of exemptions from the clearing mandates and the uncleared initial margin requirements (following full phase-in).
3.	Track voluntary clearing rates across non-mandated products with viable clearing offerings as the uncleared initial margin requirements continue to be phased-in.
4.	Compare uncleared margin requirements under the SIMM model with cleared margin requirements.

D. Related Policy Recommendations

1.	Continue to phase-in the reforms that incentivize clearing, including the clearing mandate and the uncleared initial margin requirements, without expanding existing, or creating new, exemptions.
2.	Consider adjustments to the leverage ratio to ensure it is aligned with the overall regulatory objective of incentivizing OTC derivatives clearing.
3.	Regularly re-assess the scope of clearing mandates to ensure that (a) the most liquid and commonly cleared OTC derivatives are covered and (b) any entity-based exemptions are appropriately calibrated based on current market data regarding new trading activity and clearing rates.
4.	Regularly compile data on (a) the number of clearing members offering client clearing services and (b) the amount of client margin held by those clearing members.