



Response: BCBS-CPMI-IOSCO Review of Margining Practices

26 January 2022

Background

The World Federation of Exchanges (WFE) is the global trade association for regulated exchanges and clearing houses. We represent over 250 market-infrastructures, spread across the Asia-Pacific region (~37%), EMEA (~43%) and the Americas (~20%). with everything from local entities in emerging markets to groups based in major financial centres. Collectively, member exchanges are home to nearly 53,000 listed companies, and the market capitalisation of these entities is over \$95 trillion, while the 50 distinct CCP clearing services (both vertically integrated and stand-alone) collectively ensure that traders put up \$1 trillion of resources to back their risk positions.

With extensive experience of developing and enforcing high standards of conduct, WFE members support an orderly, secure, fair and transparent environment for investors; for companies that raise capital; and for all who deal with financial risk. We seek outcomes that maximise financial stability, consumer confidence and economic growth. And we engage with policy makers and regulators in an open, collaborative way, reflecting the central, public role that exchanges and CCPs play in an internationally integrated financial system.

If you have any further questions, or wish to follow-up on our contribution, the WFE remains at your disposal. Please contact:

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Response to BCBS-CPMI-IOSCO's Review of Margining Practices

The WFE and its members share regulatory authorities' goals of ensuring the safety and soundness of the global financial system, which is critical to enhancing investor and consumer confidence, and promoting economic growth. In that context, the WFE appreciates the opportunity to respond to the Consultative Report of the Basel Committee on Banking Supervision (BCBS), the Committee on Payments and Market Infrastructures (CPMI) and the International Organisation of Securities Commissions (IOSCO) relating to margining practices (BCBS-CPMI-IOSCO report).

In our view, the key areas that warrant further analysis and policy work are:

- Increased overall transparency in non-centrally cleared markets, which are still very opaque. The lack of detailed data on the performance of non-centrally cleared markets as opposed to the granular data on centrally cleared markets contained in the BCBS-CPMI-IOSCO report prevents an adequate overview of the whole financial system during the market turmoil in early 2020.
- Increased transparency from intermediaries, especially in relation to liquidity management and calls for liquidity (e.g., margin calls) to their clients, particularly in March 2020. Furthermore, we believe intermediaries should make regular public disclosures on their centrally cleared and non-centrally cleared positions.

We do not consider further analysis of central counterparty margining practices is warranted as the data presented in the BCBS-CPMI-IOSCO report shows that central counterparties (CCPs) weathered the market stress in early 2020 successfully and muted the impact of the turmoil on market stakeholders effectively. We also do not see a need to further increase transparency at CCPs given the abundance of data the sector already discloses on a regular basis to the regulators, the market, and the public.

General comments

The market turmoil triggered by the Covid-19 pandemic in the first weeks of March 2020, put the global financial system under severe strain as volatility levels exceeded those seen during the Global Financial Crisis of 2008 in many cases and market liquidity, even in the most liquid assets, deteriorated as asset prices plunged.¹ Against this background an analysis of the factors that contributed to the increased pressure on liquidity in the system was warranted.

Whilst we appreciate market stakeholders' ongoing focus on fostering financial stability, we disagree with conclusions reached by some that CCPs were the cause of undue liquidity pressures. On the contrary, CCPs' risk management practices and in particular, their initial margin (IM) models appropriately addressed the prevailing market conditions during March 2020. Thus, whilst CCPs monitor and manage the appropriateness of their IM models on an ongoing basis, the overall performance of these models during March 2020 should not be cause for broad overhauls of the models. CCPs successfully overcame the extreme market changes in early 2020 and were able to dampen the impact of those changes on market stakeholders. Data contained in the BCBS-CPMI-IOSCO report supports this view and demonstrates that CCP IM models were sufficiently anti-procyclical.

The CCPs' role as creditworthy risk managers that are market risk-neutral on a day-to-day basis is one of the key reasons for the promotion of central clearing after the Global Financial Crisis. CCPs' ability to process collateral

¹ In its [Holistic Review of the March Market Turmoil](#), the Financial Stability Board noted that "volatility rose substantially and suddenly" with global financial markets experiencing "significant corrections" which led to "broad-based selling in mid-March, when even the safest and most highly liquid assets such as government bonds experienced large price declines."

more efficiently and resiliently than the uncleared over-the-counter system as well as to provide multilateral, rather than bilateral netting, should be taken into account. Multilateral netting can deliver superior results in terms of recognizing the risk reducing nature of a participant's exposures.

Moreover, CCPs can and do apply membership criteria as a first line of defence that are designed to ensure that all clearing members are able to meet their financial obligations, including margin payments.

Unlike for CCPs, the data for other parts of the market presented in the BCBS-CPMI-IOSCO report is insufficient to allow for evidence-based conclusions about their performance during the turmoil. In that sense, we recommend that the focus of future policy work be placed on further analysis of margin flows and liquidity behaviours in the non-centrally cleared markets.

We also recommend that transparency about the performance of the non-centrally cleared space is provided to the public as well as to regulatory authorities. We further advocate for additional transparency on intermediaries' centrally and non-centrally cleared positions in the form of public disclosures, similar to those of CCPs.

A comparison² between CCP margin changes and levels of volatility recorded in March and April 2020, which has been presented in the report, shows that volatility exceeded and, in most cases, significantly exceeded the margin changes made by CCPs across the board.

Compared to the 400% increase in the VIX volatility index, cited in the report, IM required by CCPs increased by approximately 40%, which suggests a relatively mild model response. There is also no evidence in the report that CCP IM models overreacted to the market stress. By way of comparison, when looking at variation margin (VM) as a measure of volatility, as noted in the report, CCPs reported that daily VM calls increased from around \$25 billion in February 2020 to a peak of \$140 billion on 9 March 2020 – an increase of approximately 460%.

Furthermore, extraordinary levels of volatility prevailed in various asset classes during the early 2020 market turmoil. Yet, whilst VM did (as usual) flow on a daily basis, increases in IM were gradual. Moreover, margin calls in the form of VM far exceeded those that were driven by IM, and IM calls can also be driven by changes in the composition of the underlying portfolio or in the value of collateral posted.

Data presented in the BCBS-CPMI-IOSCO report also shows that even at their peak total (VM and IM) margin calls in the centrally and non-centrally cleared space accounted for 2.5% or less of the overall liquidity resources and an average of 5% or less of the central bank reserves held by larger intermediaries during the early 2020 market turmoil. These ratios demonstrate that margin calls even at the height of the market stress had a very small impact on liquidity, were not procyclical and did not have a destabilising effect on market stakeholders.

Therefore, based on the data available, we do not believe a further analysis of CCP margining practices is warranted.

In our paper³ on procyclicality we argue that rather than placing an emphasis on IM models, the issue of mitigation of future liquidity crises should be approached from a systemic perspective for the following reasons:

- IM models are inherently risk sensitive, which is a necessary characteristic of these models, which provides for appropriate collateralization of the exposures of a CCP's participants. Thus, there must be a limit to how much procyclicality can be reduced through model recalibration, so as to not compromise the CCP's safety or the economic viability of central clearing.

² [BCBS-CPMI-IOSCO, *Review of Margining Practices*, p. 26, Fig. 15](#)

³ [WFE, *Procyclicality of CCP margin models: systemic problems need systemic approaches*, January 2021.](#)

- It is well-known that financial systems are complex. Complexity is characterised, among other features, by feedback loops. The propensity to feedback loops is a property of the interactions in the system and not of its individual elements. Since concerns around procyclicality are fundamentally about the generation of adverse feedback loops that could amplify a stress, then the focus should be directed to understand and control the system interactions and not solely to change the behaviour of one single node or agent.

A systemic approach requires an understanding of behaviours across all parts of the system. Therefore, we believe it is important to aim future policy work at increasing transparency in the non-centrally cleared markets.

Compared to the central clearing markets, there is limited visibility into what occurred in the bilateral clearing space during the period of extreme volatility in early 2020. This is reflected in the survey results presented in the BCBS-CPMI-IOSCO report, which states that, “Information gathered through the CCP survey covers the vast majority of CCPs and is therefore **a reasonable indication of the overall market**, while the coverage of responses to the other surveys [intermediaries, clients and regulatory authorities] is more limited and **represents only a sample of market participants or jurisdictions.**”

The lack of detailed data regarding the performance of non-centrally cleared markets as opposed to the granular data on central clearing contained in the report prevents an adequate overview of the whole financial system during March 2020.

Survey results from the BCBS-CPMI-IOSCO report show that on the days that clients experienced the largest IM and VM calls these appeared to be driven by the non-centrally cleared markets. It is crucial that margin flows and liquidity behaviours in the non-centrally cleared markets are further examined to allow a full analysis of the impact those markets had on financial stability. We believe that should be a key area of focus for future policy work.

We also welcome the BCBS-CPMI-IOSCO proposal for additional international work to further enhance the liquidity preparedness of market participants, especially when it comes to an analysis of intermediaries’ provision of liquidity to clients. Along these same lines, we would welcome work to increase the transparency on the extent of intermediaries calls for liquidity (e.g., margin calls) to their clients, particularly during March 2020.

We further welcome the proposed analysis of current regulatory data for the purpose of identifying and bridging gaps at the jurisdictional level.

Anecdotal evidence (in the form of presentations made at industry conferences over the past year) suggests that some market participants (buy-side as well as sell-side) are conscious enough of the potential implications in terms of margining that they model the potential liquidity demands of changes in price and volatility. However, it is unclear whether all market participants are doing so.

Response to questions

Q1: Does the report accurately describe the key market events of the Covid-related period of stress from February to April 2020 and its effects on the magnitude and frequency of the calculation and payment of margin in centrally and non-centrally cleared markets? If not, in what ways are the descriptions not fully representative of the events? Are there any other important events or effects missing? If so, please provide any information or data that are relevant to the missing events or effects to the extent feasible.

In our view, the report contains abundant and detailed data on margin changes and performance within the centrally cleared markets but the data on non-centrally cleared markets is less fulsome and granular.

It is stated in the report that the client and intermediaries' survey results are limited and represent only a sample of the actual markets. Therefore, further analysis of margin flows in the non-centrally cleared markets is necessary to assess the actual performance of those markets during the market stress in early 2020.

As noted in our response to Q8, the data contained in the BCBS-CPMI-IOSCO report shows that CCP margin models were sufficiently anti-procyclical and responded appropriately to the extreme market shifts experienced in March 2020.

The data shows that volatility levels exceeded and, in most cases, significantly exceeded the margin changes. Furthermore, compared to the overall size of liquidity resources held by intermediaries, total centrally and non-centrally cleared margin calls, remained in the low single-digit percentage range throughout the market stress. This suggests that even at their peak, margin calls had a small impact on liquidity and did not have a destabilising effect on market stakeholders.

Different analyses have indicated that the liquidity pressures in the March 2020 market turmoil were generated in other parts of the system, not necessarily by CCPs, and some market participants were unprepared for margin calls. However, the current lack of granular data in the non-central clearing space prevents a comprehensive evidence-based analysis of the market changes experienced in early 2020.

Therefore, we believe the focus of further policy work should be placed on increasing transparency in non-centrally cleared markets. It is essential to increase transparency, especially regarding the calls for liquidity made by intermediaries to clients, to adequately assess the performance of the financial system as a whole during the March 2020 market stress.

For further details we refer you to our response to Q8.

Q2: Does the report draw appropriate conclusions from the presented observations and analysis of the various aspects of centrally and non-centrally cleared margin during the 2020 stress period? If not, in what cases do you feel the conclusions are not justified by the included analysis? Are there any areas or specific topics of analysis you consider to be missing? If so, please provide any information or data that are relevant to the extent feasible. Please set out your views across the following sections:

a. The drivers of margin calls during the period of market stress covered by the report.

b. The current level of transparency in margin practices by CCPs and intermediaries.

c. The preparedness of intermediaries and clients for meeting the increased margin calls seen during the period of market stress covered by the report.

d. The relationship between margin demands and other liquidity demands during the period February–April 2020.

As noted above, data contained in the report supports our view that CCP IM models reacted appropriately to the abrupt market changes in early 2020 and were sufficiently anti-procyclical.

Survey results and data presented in the report show that margin parameter changes were not among the top five drivers of margin calls and margin calls did not appear to strain liquidity. At their peak, margin calls (VM and IM) in the centrally and non-centrally cleared space accounted for 2.5% or less of the overall liquidity resources and an average of 5% or less of the central bank reserves held by larger intermediaries during the early 2020 market turmoil. These ratios demonstrate that margin calls even at the height of the market stress had a very small impact on liquidity, were not procyclical and did not have a destabilising effect on market stakeholders.

Whilst volatility rose by 400%, as measured by the VIX index, the average increase of IM required by CCPs was 40% which indicates IM models merely reflected underlying market volatility, i.e. reacted as expected. Additionally, when looking at variation margin as a measure of volatility, as noted in the report, CCPs reported that daily VM calls increased from around \$25 billion in February 2020 to a peak of \$140 billion on 9 March 2020 – an increase of approximately 460%.

Whilst we believe transparency about intermediaries’ centrally-cleared and non-centrally cleared exposures, including their margining practices with respect to clients, should be improved, we consider the current level of transparency about CCPs’ margining practices adequate.

Q3: Do you agree with the proposals for further international work regarding good practices, metrics and disclosures concerning procyclicality in CCP IM models? Are there other aspects of CCP IM where additional disclosures should be prioritised for further work?

Whilst we welcome efforts to further improve transparency, it is important to recognise the extent of disclosures that CCPs already provide. CCPs by far are the most transparent party in the centrally cleared ecosystem. In particular, CCPs disclose information about their IM models and margining practices that allow stakeholders to appropriately assess the potential changes in margin requirements. Additionally, many CCPs also offer margin replication tools.

The quantitative disclosures set in the Public Quantitative Disclosure Standards (PQDs) for Central Counterparties are reported quarterly by each CCP and are publicly available.⁴ This is complementary to the qualitative disclosures CCPs make in line with the Principles for Financial Market Infrastructures (PFMI): Disclosure Framework and Assessment Methodology⁵. Both CCPs’ quantitative and qualitative disclosures provide, among other things, comprehensive information on CCPs’ margin methodologies, as well as the performance of those methodologies.

We believe that the frequency of reporting for these disclosures is appropriate, since CCPs do not change their margin methodologies on a frequent basis and when such changes do occur, they are typically subject to a public rule filing process. Moreover, there are constraints to how much data a CCP could disclose before it encounters competition or confidentiality issues.

⁴ [CPMI-IOSCO, Public quantitative disclosure standards for central counterparties](#)

⁵ CPSS-IOSCO, [Principles for financial market infrastructures](#)

We would also like to note that regardless of how much information the CCPs disclose, the willingness of market participants to use the available data to prepare for changes in margin levels is crucial for the impact of margin calls on liquidity in the financial system. Survey results presented in the BCBS-CPMI-IOSCO report indicate that some clients still do not utilise available tools and support for cleared margin calculations.

We would question intermediaries' suggestions cited in the report that CCPs could provide predictive simulators that would allow users to estimate future margin calls or changes in margin parameters with "reasonable accuracy". We believe that it would be challenging to provide tools that run an accurate "what-if" analysis of potential changes in IM requirements under different volatility scenarios. Furthermore, we doubt this would be either feasible or realistic given that even if the simulators replicate past high-volatility and liquidity-pressure scenarios, they might still not give an accurate picture of potential future episodes of market stress.

Q4: Does the report identify appropriate aspects of transparency in centrally and non-centrally cleared markets for further international work, including identifying data gaps, enhancing disclosures to clearing members and increasing margin model transparency?

a. What specific areas of transparency would be most helpful? What (if any) are the barriers to providing those points of transparency?

b. Should any other areas of increased transparency be considered?

Please refer to WFE's response to Q3 with regards to the transparency of CCPs' practices, which WFE notes extends beyond just disclosures with respect to margining but covers all key areas of CCPs' risk management practices. In contrast, the non-centrally cleared bilateral markets remain very opaque, as do the risk management practices of intermediaries, including their margining practices with respect to clients.

We would urge for more transparency to regulators but also the public about margining practices, risk management and exposures in the non-centrally cleared markets, as well as transparency with respect to intermediaries including with respect to cleared markets. This is essential for providing a holistic view of the financial system, as well as a better understanding of risk distribution and concentration in those markets.

As noted above, the data in the BCBS-CPMI-IOSCO report on the performance of non-centrally cleared markets is not as detailed as that on centrally cleared markets, which are already very transparent. The lack of sufficient data prevents an evidence-based performance analysis of the non-centrally cleared markets during the March 2020 market turmoil and therefore a complete and conclusive assessment of the state of liquidity and the potential causes of liquidity stresses during that period.

It is crucial that margin flows and liquidity behaviours in the non-centrally cleared markets are further examined to allow a full analysis of the impact those markets had on financial stability. We believe that should be a key area of focus for future policy work.

We would also advocate for increased transparency from intermediaries with respect to exposures to the centrally and non-centrally cleared markets. Quarterly disclosures, similar to the PQDs of CCPs, would shed more light into those exposures and would contribute to the better management and monitoring of risk in the financial system. These types of disclosures could have been particularly helpful in BCBS-CPMI-IOSCO's work, since, like the PQDs, they could cover intermediaries' margining practices with respect to clients (e.g., sizes of margin calls).

We invite regulatory authorities to consider the recommendations for clearing member PQDs we have outlined below. We believe such disclosures made on a regular basis would greatly improve transparency in the marketplace and contribute to the reduction of risk.

Recommendations for Clearing Member PQDs

▪ Method and Frequency for Disclosures

- I) CMPQD published at the legal entity level for the entity that is registered as a clearing member/ market participant to avail direct services of at a CCP ; and
- II) CMPQD published on a quarterly basis

▪ Disclosures for Centrally Cleared Markets

- I) Number and name of CCPs the clearing member is connected to directly, including if it provides client clearing services;
- II) For a clearing members' own and client clearing activity, reported separately for client and own/house activity:
 - 1) Total initial margin required and deposited across all CCPs, split by collateral type;
 - 2) Maximum and average aggregate initial margin call on any given business day at any given CCP and across all CCPs; and
 - 3) Maximum and average total variation margin paid on any given business day at any given CCP and across all CCPs.
- III) Total default fund required and deposited across all CCPs, split by collateral type;
- IV) For a clearing members' client clearing activity:
 - 1) Total initial margin required from and deposited by clients, split by collateral type; and
 - 2) Number of client default(s) and the related amount of the loss caused as a result of default in excess of initial margin for each default.
 - 3) Percentage of open position and IM required
 - 4) Concentration – for the Top 10 Clients and Top 5 Clients, as a peak and average over the quarter
- V) Results of back testing and stress testing – e.g., actual peak and average margin breaches and achieved margin coverage level; and
- VI) Average daily notional for OTC and average daily volume for exchange-traded derivatives.
- VII) Maximum and average margin calls as a percentage of total liquid assets and percentage of total reserves at central banks ;
- VIII) Maximum and average daily security settlement payments (i.e receive versus payment) ;
- IX) Maximum and average daily FX settlement payments (i.e payment versus payment), including Continuous Linked Settlement activity;

▪ Disclosures for Non-centrally Cleared Markets

- I) Number of connections – e.g., number of master agreements and number of counterparties faced with:
 - 1) Two-way IM and VM;
 - 2) IM;
 - 3) VM
- II) Maximum and average IM paid and received across all counterparties and to any given counterparty;
- III) Maximum and average VM paid and received across all counterparties and to any given counterparty;
- IV) Maximum and average gross credit exposure and gross market value;
- V) Results of measures to risk metrics – e.g., sensitivities to basis point move for primary factors (e.g., DV01), VaR, and peak and average margin breaches, as well as achieved margin coverage level; and
- VI) Average daily notional volume and notional outstanding by asset class.
- VII) Maximum and average margin calls as a percentage of total liquid assets and percentage of total reserves at central banks ;
- VIII) Maximum and average daily security settlement payments (i.e receive versus payment) ;
- IX) Maximum and average daily FX settlement payments (i.e payment versus payment), including Continuous Linked Settlement activity;

▪ Legal Entity Disclosures

- I) Targeted and actual availability for core systems;
- II) Sources of liquidity, including split by currency and regulatory ratios for liquidity, if applicable; and
- III) Annual financial statements.

In addition to the disclosures above, clearing members should provide a high-level description of the models they use to set IM for their clients, including:

- 1) *Type of model (e.g. value at risk)*
- 2) *Margin period of risk (e.g. two days, five days, 10 days, etc.)*
- 3) *Lookback period (e.g. two years, 5 years, etc.)*
- 4) *Add-ons (e.g. concentration, liquidity, etc.)*

In the case of Archegos Capital, poor risk management practices, including insufficient margining for certain uncleared exposures, led to the margin calls and eventual collapse of the firm. Since the event, regulators and policymakers have asked the banks involved with Archegos for more information about the management of counterparty risk. In a letter⁶ in April 2021, Senator Sherrod Brown, Chairman of the U.S. Senate Committee on Banking, Housing, and Urban Affairs, called on the banks to provide more details about the onboarding of family offices and “how collateral, including initial margin and variation margin, is maintained for transactions with those clients”.

Arguably, more transparency about the risk management practices of intermediaries here could have led to the identification of issues with Archegos earlier and potentially could have helped prevent some of the impact. In his letter, Senator Brown noted “the stunning speed and size of the stock sales leading to Archegos’ failure” and asked for more information about “market activity, or other factors that ... [may have] caused or contributed to the margin call”.

Q5: Do you agree with the proposals for further international work to enhance liquidity preparedness in the NBFIs sector, including the development of appropriate liquidity metrics and disclosures, analysis of liquidity provision robustness and expanded information sharing between intermediaries and clients? Have the proposals identified all key aspects of NBFIs sector liquidity preparedness which should be included?

Whilst, as explained above and as demonstrated in the BCBS-CPMI-IOSCO report, CCPs margining practices were not overly procyclical during March 2020, nor do we believe they are the cause of systemic liquidity issues, the WFE welcomes the BCBS-CPMI-IOSCO proposals to enhance the liquidity preparedness of market participants, especially in the area of liquidity management and information exchange between intermediaries and clients.

We would add that increasing transparency to the public would also be beneficial.

Survey results presented in the BCBS-CPMI-IOSCO report showed that some clients considered the actions of intermediaries could have contributed to margin unpredictability and that mismatches between the processes and their timing at different intermediaries could have increased the need for clients to hold liquidity buffers.

An example for intermediary-driven margin fluctuations has been observed in the exchange-traded derivatives markets, where clients have flagged delays – sometimes lasting several days - in the transfer of positions from executing brokers to clearing brokers during the market stress in early 2020. This meant executing brokers had to pay the margin on the positions, whilst clearing brokers / their clients did not immediately have those positions on their books. Such a breakdown in operational processes could have a much bigger impact on changes to margin levels than margin models and anecdotal evidence suggests that this is exactly what occurred.

In a statement⁷ in April 2020, ISDA Chief Executive Officer Scott O'Malia said banks' value-at-risk (VaR) models came under pressure during the market turmoil. This meant that banks had “to apply multipliers because of market volatility rather than shortcomings in their models.” He added that the related jump in capital requirements could impede banks' ability to provide liquidity in that period of stress.

There is evidence of the banks' inability to meet buy-side demand for liquidity in the repo market during the period of extreme volatility in early 2020. Research⁸ by the International Capital Market Association's (ICMA) European

⁶ [U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Brown Presses Banks for Answers on Risky Trades and Recent Market Turmoil*](#)

⁷ [ISDA, *derivatiViews, A Pro-cyclical Problem*](#)

⁸ [ICMA, *The European repo market and the COVID-19 crisis*](#)

Repo and Collateral Council (ERCC) found that buy-side market participants' reliance on the repo market increased driven, among other factors, by the need to generate cash to meet margin calls. "While the demand to access the repo market increased during the height of the crisis, banks' capacity to intermediate that access did not," according to the report.

The varied degrees of preparedness of market participants to meet margin obligations may end up putting an inappropriate amount of reliance on the ability of prime brokers and other intermediaries to monitor levels of leverage.

Q7: Does the report identify appropriate proposals for further international work on streamlining VM processes in centrally and non-centrally cleared markets? Should any other aspects of VM processes be included in this work?

Whilst we understand the streamlining of VM processes could be a means to enhance the preparedness of market participants for large VM calls in times of stress, as noted in the BCBS-CPMI-IOSCO report, we would suggest that the focus of this work is not placed on the central clearing space.

We would also note that CCP practices often reflect local jurisdictions they serve and therefore a 'one-size-fits-all approach' would not be appropriate.

Data presented in the BCBS-CPMI-IOSCO report shows that centrally cleared VM calls were predominantly made on an end-of-day basis and VM for non-centrally cleared positions generally seemed to exceed that for centrally cleared for most of the duration of the market stress.

In terms of non-central clearing, there is, again, a reference in the report about limited data available for developments in that part of the market: "The increases in centrally cleared VM were substantial for most client groups, though they differed in magnitude across client sectors. However, most authorities were unable or unwilling to provide sectoral non-centrally cleared VM data for NBFIs clients, indicating a potential data gap."

Q8: Does the report identify appropriate proposals for further international work on the degree and nature of the responsiveness of CCP IM models to market stress? Should any other aspects of CCP margin models be included in this initiative?

A recalibration of CCP IM models is not necessary given that the data presented in the BCBS-CPMI-IOSCO report suggests an appropriate model response as compared to the levels of volatility during the market turmoil and no evidence of excessive procyclicality.

In the report, a comparison of CCP margin rate and IM levels to asset price volatility levels during the market stress in early 2020, shows that, "Generally, margin rate and IM increases were lower than the corresponding increases in the price volatility of key risk factors for CCPs." The data shows that volatility levels exceeded and, in most cases, significantly exceeded the margin changes.

Additionally, as noted above, the 40% average increase in IM required by CCPs compared to the 400% surge in VIX suggests a mild and appropriate response to the abrupt change in market conditions. Furthermore, when looking at variation margin as a measure of volatility, as noted in the report, CCPs reported that daily VM calls increased from around \$25 billion in February 2020 to a peak of \$140 billion on 9 March 2020 – an increase of approximately 460%.

Data presented in the BCBS-CPMI-IOSCO report also shows that even at their peak total (VM and IM) margin calls in the centrally and non-centrally cleared space accounted for 2.5% or less of the overall liquidity resources and an average of 5% or less of the central bank reserves held by larger intermediaries during the early 2020 market

turmoil. These ratios demonstrate that margin calls even at the height of the market stress had a very small impact on liquidity, were not procyclical and did not have a destabilising effect on market stakeholders.

Different analyses have indicated that the liquidity shocks experienced in March 2020 were generated in other parts of the system, not necessarily in the CCPs, and that there was a lack of preparedness of market participants for margin calls.

A survey⁹ done by Greenwich Associates on behalf of ISDA, has found that, “The top financial event affecting liquidity in the swaps market was perceived to be the reduced risk appetite of the banks.”

In our research paper published in January 2021, we argue that the focus on recalibration of CCP IM models as a means to reduce impacts on liquidity in the financial system is misplaced. First, margin calls are largely driven by VM, not IM. Second, the inherent risk sensitivity of margin models, the stochastic nature of the problem, and the different trade-offs involved, constrain what can be achieved with model calibration. We further argue that since the ultimate objective is to minimize systemic propensities to adverse feedback loops, it is necessary to approach the problem from a systemic perspective, focusing on the interactions between participants rather than on a single node.

There is further evidence to suggest that the liquidity squeeze during the “dash for cash” in March 2020 was not related to the change in CCPs’ margin requirements. In its Holistic Review of the March Market Turmoil 2020¹⁰, the Financial Stability Board (FSB) noted that whilst CCPs accept various types of assets, such as high-quality sovereign debt, as non-cash IM collateral, “anecdotal evidence indicates that firms chose to post cash instead”. This also supports the conclusion that IM calls from CCPs did not cause systemic liquidity issues in March 2020, according to the FSB.

Q9: Do you agree with the proposals in the report to evaluate the degree and nature of responsiveness of non-centrally cleared IM models to market stresses, remediation of IM shortfalls and the level of disclosure of non-centrally cleared IM model performance? Should any other aspects of non-centrally cleared IM models be included in this initiative?

We welcome the proposal for further analysis of non-centrally cleared IM models. Visibility of exposures in the bilateral clearing space remains very limited. Unlike for centrally cleared transactions, there is no readily available data about the margin changes, particularly IM, in the bilateral clearing space during the March 2020 market turmoil.

We would like to point out that the lack of granular and fulsome data about the performance of non-centrally cleared markets in the BCBS-CPMI-IOSCO report prevents a complete analysis of behaviours and the response to stress in those markets during the turmoil in early 2020.

There is a need to increase transparency and enhance disclosures in the non-centrally cleared markets, not only in terms of Standard Initial Margin Model (SIMM) parameters. Margin calls that fall out of the current scope of the SIMM models could also greatly contribute to liquidity pressures.

The collapse of Archegos Capital has raised numerous questions about the non-centrally cleared space, including margin models.

⁹ [ISDA, Greenwich Associates, The Impact of COVID-19 and Government Intervention on Swaps Market Liquidity](#)

¹⁰ [FSB, Holistic Review of the March Market Turmoil](#)

In a speech¹¹ in May 2021, IOSCO Board Chairman Ashley Alder said the implementation of the latest BCBS-IOSCO margin requirements for non-centrally cleared derivatives was delayed until September 2022. He noted that, “Total return swaps are equity derivatives which would be subject to these margin requirements; therefore, it is reasonable to ask whether, assuming full implementation, the margin requirements would have worked to reduce losses arising in this type of incident.”

Mr Alder added that another area that may warrant further examination is the margin requirements of prime brokers, given that “in addition to the regulatory margin requirements, prime brokers may choose to collect additional margin as part of their own internal risk management, depending on factors such as the counterparty’s credit quality and underlying exposures as well as the concentration of these exposures.”

We would encourage regulatory authorities to make use of the bilateral transaction data available in trade repositories (TRs) to provide a more comprehensive picture of the exposures and related risks in the bilateral clearing space.

As Mr Alder noted in his speech, TRs were “established as a core element of the response to the Global Financial Crisis” and “were intended to give regulators an overview of derivatives activity to see where there might be a build-up of systemic risk and also to detect potential misconduct.” However, the Archegos collapse has triggered questions “as to the ability of regulators to use information in TRs to quickly detect an untoward build-up of risk before any blow-up.”

Mr Alder said, “The Archegos incident provides a good opportunity to assess the degree to which TRs are achieving their original objectives. An assessment could cover any problems with data quality and the comparability and aggregation of information across different global TRs.”

In a system where collateral is (or should be) the norm, CCPs can process collateral more efficiently and resiliently than the over-the-counter system. By recognising the risk-reducing nature of exposures; multilateral netting, which CCPs are able to provide, delivers superior results as compared to bilateral netting. Furthermore, the membership criteria applied by CCPs provide a first line of defence against potential risks.

Given that the varied degrees of preparedness of market participants to meet margin obligations could introduce uncertainty about counterparty performance, we would note that this uncertainty would be mitigated much more in a central clearing context than in a bilateral context.

¹¹[SFC, A global perspective on derivatives regulation](#)