01/26/2022

VIA ELECTRONIC SUBMISSION

Re: Consultative report on *Review of margining practices*

To Whom It May Concern:

CME Group Inc. ("CME Group")[1] appreciates the opportunity to comment on the Basel Committee on Banking Supervision ("BCBS"), Committee on Payments and Market Infrastructures ("CPMI") and Board of the International Organization of Securities Commissions ("IOSCO") consultative report on *Review of margining practices* (the "Consultation").[2]

Chicago Mercantile Exchange Inc. ("CME") is a wholly-owned subsidiary of CME Group. CME is registered with the Commodity Futures Trading Commission ("CFTC") as a derivatives clearing organization ("DCO"). "CME Clearing", a division of CME, offers clearing and settlement services for listed futures and options on futures contracts, as well as over-the-counter derivatives transactions, including interest rate swaps ("IRS") products. On July 18, 2012, the Financial Stability Oversight Council designated CME as a systemically important financial market utility under Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act. As a SIFMU, CME is also a systemically important DCO.

CME Group recognizes the importance of the work done by policy-makers to analyze the performance of centrally and non-centrally cleared financial markets in the wake of the volatility driven by the once in a century COVID-19 pandemic and appreciates the significant amount of work it entailed, as evidenced by the amount of data and analysis contained in the Consultation. Data-driven policy making is critical to identifying areas for improvement and supporting the ongoing stability of financial markets.

As described further below, it was unsurprising that the data on central counterparties' ("CCPs") performance in the Consultation provides for a conclusion that is consistent with CME Group's own analysis, that CCPs successfully supported the stability of the markets they clear and in turn, the broader financial system. CCPs' strong risk management performance is particularly striking considering the unprecedented market volatility during the COVID-19 market stress of 2020. The results of CME Group's analysis are included in a paper it published last year ("CME Group Paper").[3] The comprehensive, detailed data covering CCPs' practices gathered and analyzed by BCBS-CPMI-IOSCO in the Consultation, in conjunction with the CME Group Paper and other

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[1] As a leading and diverse derivatives marketplace, CME Group enables clients to trade in futures, cash and over-the-counter markets, optimize portfolios, and analyze data – empowering market participants worldwide to efficiently manage risk and capture opportunities. CME Group's exchanges offer the widest range of global benchmark products across all major asset classes based on interest rates, equity indexes, foreign exchange, energy, agricultural products, and metals. CME Group offers futures trading through the CME Globex platform, fixed income trading via BrokerTec, foreign exchange trading on the EBS platform. In addition, it operates one of the world's leading central counterparty clearing providers, CME Clearing.

[2] Basel Committee on Banking Supervision, Committee on Payments and Market Infrastructures, and Board of the International Organization of Securities Commissions, Consultative report, *Review of margining practices* [hereafter, "*Consultation*"] (Oct. 2021).

[3] CME Group, Stability in Times of Stress: CME Clearing's Anti-Procyclical Margining Regime [hereafter, "*CME Group Paper*"] (May 2021), *available at* https://www.cmegroup.com/clearing/files/stability-in-times-of-stresscme-clearings-anti-procyclical-margining-regime.pdf.

industry publications, provides powerful evidence of CCPs successful, anti-procyclical response to the market stresses resulting from the global pandemic.[4] As demonstrated in the Consultation and CME Group Paper with respect to centrally cleared markets, variation margin ("VM") calls, which can be used as a measure of market volatility, far exceeded initial margin ("IM") calls which were relatively modest considering the unprecedented volatility. In particular, the Consultation notes "that risk factor IM changes were lower in all cases, on a relative basis, than volatility increases."[5] This was despite the uncertainty during the early days of the pandemic and the violent moves in the markets as a result. The Consultation also appropriately recognizes that IM increases are to be expected following an unprecedented market shock.[6]

While the data presented in the Consultation is comprehensive with respect to CCPs, there are gaps in the data on the performance of non-centrally cleared markets and what impact those markets had on financial stability, as well as the impacts intermediaries' practices had on clients (e.g., liquidity). This reduces BCBS-CPMI-IOSCO's ability to fulsomely analyze the events that transpired during the COVID-related volatility. It is also in stark comparison to CCPs that are by far the most transparent party in derivatives markets. While centrally cleared markets are inherently more transparent than non-centrally cleared markets, one of multiple reasons clearing was embraced following the 2008 Global Financial Crisis, CCPs have continued to evaluate and enhance their transparency. For example, in addition to public rulebooks, CCPs publish qualitative and quantitative disclosures consistent with international standards that comprehensively describe their risk management practices and provide detailed data metrics.[7] In addition to these disclosures,[8] CME Clearing has taken a number of steps to increase transparency, as demonstrated by CME Group's landing page focused on the transparency of CME Clearing's risk management practices, the "CME Clearing Knowledge Center".[9]

CME Group shares policy-makers' goals of supporting the safety and soundness of the global financial system. It is evident that CCPs' risk management practices promoted financial stability that allowed the global economy to weather the COVID-related volatility. Further, it is clear that based on data contained in the Consultation on centrally cleared markets, policy-makers should focus their efforts on the transparency and performance of non-centrally cleared markets from February to April 2020, as well as the transparency and practices of intermediaries.

CME Group elaborates on its views in responses to the Consultation's questions below.

Responses 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

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4 *See also* Commodity Futures Trading Commission's Division of Clearing and Risk Staff, Cleared Derivatives Market: March-April 2020 [hereafter, "*CFTC Report*"] (June 2021), *available at* https://www.cftc.gov/media/5971/InterimStaffClearedDerivativesMarket0420_0621/download.

5 *Consultation* at pg. 26.

6 *Consultation* at pg. 20.

7 Committee on Payment and Settlement Systems (later renamed the Committee on Payments and Market Infrastructures) and Board of the International Organization of Securities Commissions, *Principles for financial market infrastructures: Disclosure framework and Assessment methodology* [hereafter, "*PFMI*"] (Dec. 2012) and Committee on Payments and Market Infrastructures and Board of the International Organization of Securities Commissions, *Public quantitative disclosure standards for central counterparties* [hereafter, "*PQD*"] (Feb. 2015).

8 *See* CME Clearing's PFMI and PQD disclosures, available here: https://www.cmegroup.com/clearing/risk-management/files/cme-clearing-principles-for-financial-market-infrastructures-disclosure.pdf and https://www.cmegroup.com/clearing/cpmi-iosco-reporting.html, respectively.

9 *See* https://www.cmegroup.com/clearing/cme-clearing-knowledge-center.html.

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.

CME Group recognizes and appreciates the significant effort by policy-makers to analyze the performance of centrally and non-centrally cleared markets during the COVID-related volatility. While the Consultation provides a holistic view of practices employed by CCPs and accurately describes key market events in this regard (i.e., data on IM and VM), the Consultation lacks sufficient data to accurately describe and evaluate the performance of non-centrally cleared markets and the performance of intermediaries. However, CME Group disagrees with certain conclusions reached in the Consultation with respect to centrally cleared markets, which is addressed in CME Group's response to Q2. The Consultation lacks sufficient data in the following areas: i) the practices employed in non-centrally cleared markets, particularly with respect to the sizes of IM calls, driven by the Standard IM Model ("SIMM") or made on a discretionary basis; and ii) the practices employed by intermediaries, particularly with respect to the sizes and timelines for IM calls issued to clients, including the amount by which those calls exceeded the CCP required amounts.

i. Non-Centrally Cleared Markets

CME Group recognizes and appreciates that the Consultation endeavors to capture the market events that occurred in non-centrally cleared markets. However, the VM data for non-centrally cleared markets provided in Sections 2.1 and 2.2 relies primarily on the intermediaries survey and Acadia, which does not appear to capture all market participants or have sufficient granularity on the size of margin flows.[10] Thus, this does not provide a holistic view of what occurred from February to April 2020 in these markets. Generally, this lack of data highlights the reduced transparency of non-centrally cleared markets, particularly as compared to CCPs, which, in addition to what is covered in the Consultation, publish regular disclosures on VM, as well as IM.[11]

Moreover, the data provided in Section 2.2 for non-centrally cleared markets that is intended to cover IM is even more opaque, since not only does it rely on data primarily from only a sub-set of intermediaries and Acadia, but it does not properly attribute the timing or origins of a significant portion of the margin flows (i.e., "netted margin"). In particular, the Consultation refers to "netted margin calls" as "combined margin calls netted across discretionary "independent amounts" (economically similar to IM) and VM applicable to discretionary margin on the same day in the same currency."[12] While regulatory driven IM calls for non-centrally cleared markets (i.e., CME Group understands these are determined under SIMM) remained relatively stable from February 2020 to April 2020,[13] the inability to attribute the origins of netted margin is particularly troubling given that the size of the average daily collateral balance for netted margin rose from $232.9 billion in February 2020 to 320.0 billion in March 2020, far exceeding the size of regulatory driven IM.[14] Along these same lines, the non-centrally cleared margin rose from $1.6 trillion in February 2020 to $5.7 trillion in March 2020 and of this $4.1 trillion increase, $2.8 trillion can be attributed to VM calls, which still leaves over $1.3 trillion unattributable, though likely associated with increased netted margin calls.[15] The relative paucity of granular data on non-centrally cleared margin flows during the COVID-related volatility creates challenges for understanding the holistic

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[10] *Consultation* at pg. 45 (noting, "[i]n total 63 survey responses were received – 10 from firms headquartered in the Americas, 26 from firms based in the Asia-Pacific region and 27 from firms in Europe. It is estimated that the same included 18 globally systemically important banks.").

[11] *See e.g.*, *PQD* at disclosures 6.6.1, 6.7.1 and 6.8.1.

[12] *Consultation* at pg. 17.

[13] As described further in CME Group's response to Q9, even though regulatory driven IM calls were relatively stable, the appropriateness of those calls in adequately covering the market participants risk exposure should be evaluated, given the backtesting exceedances that were observed, as noted in Section 3.3 of the Consultation.

[14] *Consultation* at pg. 17.

[15] *Consultation* at pg. 18.

picture of non-centrally cleared markets performance and if, and to what extent, non-centrally cleared margins may have impacted broader financial stability.

ii. *Intermediaries*

Similar to CME Group's observations of the Consultation's discussions on non-centrally cleared markets, CME Group acknowledges that the Consultation endeavors to evaluate the impacts of the COVID-related market volatility on clients. In particular, CME Group values the information provided in Section 3 that highlights the factors that affected the size of margin received by intermediaries, which, based on the intermediaries survey, indicates that "change in model parameters" for centrally cleared derivatives was not even among the top five factors affecting margin received.[16] CME Group also appreciates the discussion in Section 5.2 on clients' preparedness in meeting VM and IM calls, based in part on the client survey. This information begins to paint a picture of the impacts to clients, however, is incomplete as it is based on surveys that only capture a sub-set of market participants and additionally, fails to provide quantitative data that captures the drivers of these margin flows to supplement the information.[17] For example, the Consultation does not capture the size of discretionary IM calls (i.e., calls that exceed the CCP required amounts) or the collateral requirements (e.g., cash or non-cash) that intermediaries imposed on their clients in centrally cleared markets. Further visibility into the practices of intermediaries, particularly with respect to discretionary IM calls for centrally cleared markets, will provide a more complete picture of the performance of centrally cleared markets, as well as a better understanding of the actual drivers of any stresses that clients may have experienced.

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.

CME Group agrees with the Consultation's recognition that "[a]n increase in IM requirements following an unprecedented shock is expected and, in many cases, is prudent risk management."[18] As outlined below, the Consultation, as well as other industry publications, provides various qualitative and quantitative information that supports the conclusion that IM calls were driven by the unprecedented volatility that was observed and that CCPs' management of such volatility was appropriately anti-procyclical and supported the stability of the markets they clear and the broader financial system. It would be appropriate to specifically note the successful anti-procyclical nature of CCPs' margining practices in the Consultation's conclusions consistent

[16] *Consultation* at pg. 22.

[17] *Consultation* at pg. 45 (noting, "[f]orty-eight clients responded to this survey. Just under two thirds of respondents were primarily located in Europe, 15% were primarily located in the Asia-Pacific and the remainder in the Americas. There were a mix of firm types amongst respondents, with just under a third being asset managers.").

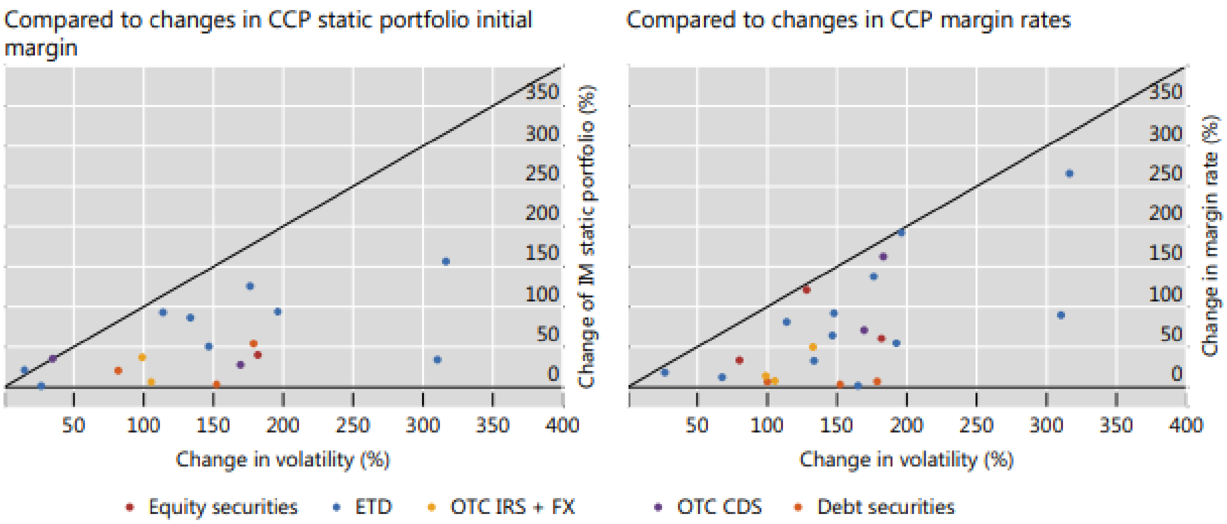
[18] *Consultation* at pg. 20.

with the data contained in the Consultation and produced elsewhere in CCPs' disclosures and industry publications.

There are numerous examples where the data from the Consultation supports this conclusion, including Figure 15 which demonstrates that on a relative basis, risk factor IM changes were lower across the board than changes in volatility.[19]

Asset price volatility

Figure 15



ETD = exchange traded derivatives; IM = initial margin; OTC CDS = over-the-counter credit default swaps; OTC IRS+ FX = over-the-counter interest rate swaps and foreign exchange.

Source: IOSCO Financial Stability Engagement Group's Data Working Group survey of CCPs.

Consistent with this finding, the Consultation also notes that intermediaries reported that out of the listed factors potentially affecting margin calls which they paid and received, market volatility was the most important factor for both centrally and non-centrally cleared markets.[20] They also noted that changes in margin parameters were not even among the top five factors affecting margin calls. The Consultation also broadly notes that "[i]ntermediaries reported being relatively unaffected by the increase in margin calls in March 2020."[21] These findings alone evidence CCPs' margining practices were appropriately anti-procyclical. This conclusion is further supported when looking at the actual percentage change in IM during the COVD-related period, as compared to the percentage change in VM and VIX, both of which are measures of the volatility the markets were experiencing. The Consultation finds, for centrally cleared markets, that VM calls far exceeded IM calls and that from February to mid-March VM calls increased by 460% and the VIX increased by 400%, whereas IM requirements modestly increased by 40%.[22]

The analysis outlined in the CME Group Paper leads to the same conclusion as the Consultation. CME Clearing responded to the unprecedented COVID-related volatility without implementing new risk management rules, policies, processes or procedures and its anti-procyclicality measures resulted in appropriately heightened levels of IM going into this period, resulting in

[19] *Consultation* at pg. 26.
[20] *Consultation* at pgs. 21-22 (noting, Tables 2 and 3).
[21] *Consultation* at pg. 31.
[22] *Consultation* at pgs. 11 and 13. *See also CFTC Report* at pgs. 13-14.

relatively modest IM increases when the volatility increased dramatically. For example, as set out in the CME Group Paper:

- **Changes in Actual IM Required**: The average and maximum one-day percentage changes in total IM required during March and April 2020 were the modest amounts of 1.0% and 6.5%, respectively.[23]

- **IM and Settlement Variation (i.e., VM in the Consultation) Comparison:** The modest changes in IM required are also observed when comparing those changes to changes in settlement variation flows. To yield a useful comparison of IM changes and settlement variation flows, the difference in calculating IM and settlement variation must be reconciled, since as required by the CFTC's regulatory regime, IM must be collected by DCOs on a gross basis for customers,[24] whereas settlement variation is exchanged on a net basis for customers. During March and April 2020, CME Clearing's largest aggregate settlement variation exchanged was $18.1 billion, three times the size of largest one-day increase in total IM required of $5.8 billion when applying a net margin standard for customers' futures and options portfolios.[25] Notably, the change in the theoretical net IM requirement is roughly one-half of the size of the largest one-day change in total IM required using a gross margin standard and less than one-third of the size of the largest settlement variation exchanged during the period.

  While the risk management benefits of customer gross margining are clear, it generally results in IM requirements that are at least twice as large as those under a customer net margin regime.[26] Thus, U.S. DCOs are inherently going to collect more IM than CCPs in the EU, UK, and elsewhere that can and do collect margin on a net basis. Thus, it is critical that the impacts collecting customer gross margin at the CCP-level had on IM requirements during March 2020 are considered.

- **Major Product-Level IM Changes and Volatility Analysis**: Portfolio-level changes in IM required are the most relevant for evaluating the performance of a CCP's margining practices during March 2020. However, evaluating margin changes for major products has been a focus of others and can contextualize the volatility observed. Evaluating the volatility for major products cleared by CME Clearing, using the 20-day rolling standard deviation as proxy, demonstrates the relative modest changes in IM. In all cases, the 20-day rolling standard deviation for these products was at least four times larger than the products' IM increases on a percentage basis.[27]

Further, CME Clearing's IM increases were implemented with at least 24-hours advance notice to market participants[28] and not a single *ad hoc* intraday settlement cycle for IM or settlement

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[23] *CME Group Paper* at pg. 8.

[24] The IM for a clearing member's customer account at CME Clearing is equal to the sum of the IM amount that would be required by CME Clearing for each individual customer within that account as if each individual customer were a direct clearing member of CME Clearing.

[25] *CME Group Paper* at pgs. 10-11 (noting, the size of this IM change would have been further reduced if customers' cleared swaps portfolios were also adjusted to reflect the impact of a net margin regime. Additionally, to put this into context, on this day, the total IM required, where a net margin standard is applied to customers' futures and options portfolios, would have been $84 billion as compared to $169 billion using a customer gross margin standard.).

[26] *See* Remarks of Chairman Timothy G. Massad before the European Union Parliament, Committee on Economics, Brussels, Belgium (May 6, 2015), *available at* https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/speechandtestimony/opamassad-20.pdf.

[27] *CME Group Paper* at pgs. 5-7.

[28] This approach is consistent with CME Clearing's standard practices and did not change as a result of the COVID-related market stress.

variation was run.[29] CME Clearing's IM practices during this volatile period also provided for margin coverage of over 99% on an *ex post* basis, without burdening market participants with undue liquidity stress, thus supporting the stability of the markets cleared by CME Clearing, and the financial system more broadly.[30]

a. Drivers of Margins Calls

CME Group finds it troubling that Section 3 that covers the drivers of IM calls makes conclusions that compare the experiences in centrally and non-centrally cleared markets, since there is insufficient data available on non-centrally cleared markets, in particular the impact of discretionary IM calls. These conclusions are inappropriate because, based on CME Group's understanding, the quantitative information for non-centrally cleared markets in the Consultation focuses on regulatory driven IM (i.e., CME Group understands these are determined under SIMM) and does not attribute the origins (e.g., discretionary IM) of netted margin flows. Notably, the size of netted margin appears to far exceed the size of regulatory driven IM.[31]

b. Transparency of Margin Practices for CCPs and Intermediaries

CME Group welcomes the perspective of market stakeholders on the transparency of margining practices included in the Consultation. CME Group is a strong proponent of transparency for all market stakeholders and has endeavored to be a leader in this area. Any conclusions reached by BCBS-CPMI-IOSCO on the transparency of CCPs' margining practices should clearly recognize the significant transparency already provided by CCPs, including the means by which they do so.[32] As detailed in CME Group's response to Q4, CCPs currently provide significantly more transparency than other market stakeholders.

Regarding the transparency of margining practices by intermediaries, please also refer to CME Group's response to Q1. As described in Q1, the lack of transparency into the margining practices of intermediaries, as evidenced by the lack of data in the Consultation, supports a conclusion that transparency should be enhanced in that area.

c. Preparedness of Intermediaries and Clients to Meet Margin Calls

CME Group agrees with the Consultation that overcollateralization in the form of excess margin and posting of cash collateral to a CCP during this stress period could be a potential indicator of the ability of market participants to source liquidity. This consistent overcollateralization also supports a conclusion that CCPs' margining practices did not result in undue liquidity constrains, as market participants could have also used this collateral, particularly cash, in other parts of the financial system. This was particularly true for exchange-traded derivatives, where CCPs held, at the peak in March 2020, over $150 billion in excess collateral.[33]

Even though CCPs typically do not require IM (or at least all IM) to be posted in cash, the proportion of collateral held as cash also increased across all asset classes, translating to an aggregate percentage increase of cash held from about 37% to 43% during the height of the COVID-19 volatility.[34] At CME Clearing, excess collateral for IM posted remained consistent while U.S. Dollar cash on deposit increased to 32.1% of total IM collateral held during March and April 2020, compared to, on average, 17.2% of total IM collateral held between January and February 2020, despite the lack of cash minimum requirements at CME Clearing.[35]

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[29] CME Clearing ran its routine settlement cycles, one at both intraday and end-of-day for futures and options and one at the end-of-day for cleared swaps, where IM is called and settlement variation is collected from and paid to Clearing Members.

[30] *CME Group Paper* at pg. 8.

[31] *Consultation* at pg. 17.

[32] *PFMI* and *PQD* (noting, Principle 6: Margin).

[33] *Consultation* at pg. 19 (noting, Figure 11).

[34] *Consultation* at pg. 20.

[35] *CME Group Paper* at pgs. 13-14.

d. Relationship Between Margin Demands and Other Liquidity Demands

Please refer to CME Group's remarks in the introduction to Q2.

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?

CME Group is staunch supporter of transparency, as demonstrated by the significant transparency it provides that is described in CME Group's response to Q4. However, the focus on further "work regarding good practices, metrics, and disclosures concerning CCP IM models" is misplaced. Thus, further work is unnecessary or, at a minimum, should not be the focus of the Consultation's conclusions. The desire for further work in this regard is misplaced because the data in the Consultation, as well as the CME Group Paper, clearly evidence that CCPs performed remarkably well under the unprecedented COVID-related volatility, partially due to the transparency provided by CCPs that allowed for market participant's liquidity planning and additionally, their appropriately anti-procyclical IM models. CME Group also disagrees with the Consultation's statement that there is "generally, low levels of transparency around [IM] modelling choices and governance practices" which ignores the significant transparency provided by CCPs on its IM models.[36] This statement is contradicted by the extent of the disclosures currently provided by CCPs and the results of the Consultation survey, which indicates that 85% of surveyed CCPs had public information on IM models and methodologies available and that 76% indicated that they make margin calculators or simulators available to their clearing members and in many cases clients.[37] CME Group notes that CME Clearing employs both of these practices and in fact, its margin calculator is available to all market participants.

Given the paucity of data on margining practices in non-centrally cleared markets and of intermediaries, further international work should instead focus on transparency of margining practices in non-centrally cleared markets and intermediaries margining practices with respect to their clients.

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?

CME Group remains available and willing to discuss enhancements to derivatives markets transparency. This is evidenced by the significant amount of work undertaken by CME Clearing to enhance its public disclosures via multiple different initiatives.[38] It's important to recognize that CCPs are already very transparent, as evidenced, in part, in the Consultation by the large amount of CCP data that is included. Other parts of the financial markets (e.g., intermediaries) do not provide this same level of transparency and disclosure. Considering all the work already done by CCPs, as detailed below, future work should focus on bridging this informational gap with enhanced public transparency for non-centrally cleared markets and by intermediaries.

[36] *Consultation* at pg.38.
[37] *Consultation* at pg. 28.
[38] *See* https://www.cmegroup.com/clearing/cme-clearing-knowledge-center.html

For background, CCPs, including CME Clearing, provide transparency to the public by publishing qualitative and quantitative disclosures in line with international standards[39] that cover among other practices, their margining (e.g., descriptions of the margin methodology, size of IM required, backtesting results, etc.).[40] These qualitative disclosures are updated at least every other year or following a material change to practices and quantitative disclosures are updated quarterly. Helpfully, CCPs' disclosures in line with international standards are also disclosed in a standardized format, which allows stakeholders to efficiently intake this information and to further support this standardization, CCP12[41] has adopted a disclosure template and FAQ guide for CCPs' quantitative disclosures.[42] In addition, CCPs provide various other public information, such as their rulebooks, advisories and rule filings, in addition to the transparency CCPs provide to market participants through risk committees, working groups, coordination through industry associations, and 1-on-1 discussions. As noted in the Consultation, many CCPs offer margin calculators, including CME Clearing which supports CME CORE. CME Core allows market participants to calculate and evaluate IM requirements for all products cleared by CME Clearing and conduct margin analysis on hypothetical portfolios.

CME Clearing has prioritized continually increasing its transparency in recent years, engaging in many discussions with market participants to identify what information would be most valuable to them. In response to the requests from market participants, CME Group created the CME Clearing Knowledge Center landing page on the CME Group website.[43] The CME Clearing Knowledge Center includes a variety of documents to educate and provide details on CME Clearing's risk management practices and provide varying levels of detail to account for the differing levels of expected knowledge of the reader. These documents include information on CME Clearing's margining, financial safeguards, collateral services, clearing membership, and governance, among other topics. Included on the CME Clearing Knowledge Center landing page are also "101 Documents" that give readers an introductory overview of various aspects of CME Clearing's risk management, described further in other public information. CME Clearing continuously works with clearing members and customers to provide them with appropriate levels of increased transparency and the landing page serves as an accessible tool to provide market participants with that information. In addition to the CME Clearing Knowledge Center, CME Clearing also began hosting public quarterly webinars to accompany the release of its quantitative disclosures, which are also archived on the CME Group website.[44] The webinar serves as a forum for the public to gain a better understanding of the data included in CME Clearing's quantitative disclosures and provides an opportunity for participants to ask questions to CME Clearing's subject matter experts.

The same level of public disclosure provided by CCPs, both voluntarily and as required by local regulation, is not replicated by market participants[45], including with respect to centrally and non-centrally cleared markets. By way of example, CCPs' public disclosures on the sizes of financial and liquidity resources and backtesting and stress testing results are not produced by

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[39] *PFMI* and *PQD*.

[40] *See* CME Clearing's PFMI and PQD disclosures, available here: https://www.cmegroup.com/clearing/risk-management/files/cme-clearing-principles-for-financial-market-infrastructures-disclosure.pdf and https://www.cmegroup.com/clearing/cpmi-iosco-reporting.html, respectively (noting, disclosures relating to Principle 6: Margin).

[41] CCP12 is a global association for CCPs, representing 41 members who operate more than 60 individual CCPs globally across the glove, *see also* https://ccp12.org/.

[42] *See* CCP12 quantitative disclosures resources, available here: https://ccp12.org/pqd/.

[43] *See* https://www.cmegroup.com/clearing/cme-clearing-knowledge-center.html.

[44] *See* CME Clearing's PQD webinar, available here: https://www.cmegroup.com/education/videos/archive-cme-clearing-quarterly-pqd-webinars.html.

[45] While we recognize the disclosures made by banks consistent with local regulations that implement BCBS' standards and other disclosures that made by some in accordance with other local regulations, these disclosures are not sufficient as they are not tailored to centrally cleared markets, nor do they provide a fulsome view of a market participants' risk profiles.

intermediaries. As a starting point to enhance the transparency of the boarder financial system, CME Group recommends that transparency of non-centrally cleared markets, as well as intermediaries more broadly, is prioritized. Annex I includes CME Group's recommendations for disclosures from intermediaries, as well as demonstrates where those are already provided by CCPs. In addition to benefiting the marketplace holistically, enhanced transparency of non-centrally cleared markets and intermediaries could have aided in conducting the analysis included in the Consultation.

In particular, the lack of sufficient data for non-centrally cleared markets prevents policy-makers from completing a comprehensive evidence-based performance analysis of these markets, and ultimately prevents a complete assessment of the causes of any liquidity stress that resulted in the wake of COVID-related volatility. Focusing on enhancing transparency in non-centrally cleared markets would also contribute to the enhanced management and monitoring of risk in more opaque parts of the financial system. Prioritizing disclosures from intermediaries would support this by providing a more holistic view of the risk within the financial system and the manner in which it is being managed across the entirety of their exposures (both centrally and non-centrally cleared), and allow other market participants, including their clients, to gain a more fulsome understanding of their specific intermediary's risk profile, thus better preparing them in times of stress.

It is highly beneficial for any disclosures from intermediaries to also cover their centrally cleared exposures, particularly the impacts intermediaries' practices had on clients from a liquidity perspective (e.g., size of discretionary IM calls above CCP required IM). This stands out as an area of need for further transparency based on the Consultation's finding that some clients noted "that intermediaries' actions may have contributed to margin unpredictability" and "[t]here were also comments that mismatches between the processes and their timing at different intermediaries could add to the need for clients to hold liquidity buffers."[46] Although CCPs have the necessary information to meaningfully evaluate their counterparties, disclosures that capture intermediaries centrally cleared exposures outside of the markets a given CCP clears and for non-centrally cleared markets would support CCPs' holistic view of the risks of their intermediaries. The importance of further visibility into the risk taking of intermediaries for all market stakeholders, not only CCPs, for non-centrally cleared markets has been reinforced by recent market events where significant losses arose.[47] These events create spillover risk into centrally cleared markets suggesting policy-makers and CCPs should have increased visibility into this risk taking.

Q5: Do you agree with the proposals for further international work to enhance liquidity preparedness in the NBFI 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 NBFI sector liquidity preparedness which should be included?

CME Group is supportive of further work to enhance liquidity preparedness in all sectors of the broader financial system. However, the data included in the Consultation, and as observed in CME Group's markets during the COVID-related volatility, does not suggest that CCPs were the

[46] *Consultation* at pg. 34.

[47] *See* Credit Suisse Group AG, Credit Suisse Group Special Committee of the Board of Directors Report on Archegos Capital Management, (July 2021) (noting, Credit Suisse incurred approximately $5.5 billion in losses following the March 2021 default of Archegos Capital Management, which "are the result of a fundamental failure of management and controls in CS's [("i.e., Credit Suisse's")] Investment Bank and, specifically, in its Prime Services business."), *available at* https://www.credit-suisse.com/media/assets/corporate/docs/about-us/investor-relations/financial-disclosures/results/csgspecial-committee-bod-report-archegos.pdf.

cause of any liquidity issues, as described in CME Group's responses to Q2 and Q8. In particular, the Consultation cites that the total margin (i.e., VM plus IM) outflows for centrally and non-centrally cleared markets as a percentage of total liquidity resources for the top third quartile of respondents most affected (relative to their liquidity resources) did not even exceed 2.5%.[48] CME Group recognizes that respondents include only a sub-set of banks and non-banks that completed the intermediaries survey and encompasses margin flows for IM and VM in both centrally and non-centrally cleared markets. However, this data point is still relevant to consider in the context of the drivers of the margin flows outlined in the Consultation. The Consultation found that VM flows for both centrally and non-centrally cleared markets far exceeded the size of these markets respective IM calls, which demonstrates that IM flows were likely only a modest contributor to the minor impact on intermediaries' liquidity resources outlined in the Consultation.[49] With that being said, to the extent that liquidity issues did arise in the non-bank financial intermediation sector, CME Group is supportive of further work to bolster liquidity preparedness in the future. CME Clearing, like many other CCPs, provides its market participants transparency into its margining practices (e.g., margin methodology and timing of margin calls) that are designed to support market participant's liquidity planning.

Q6: Do you agree with the proposals for further international work to evaluate data gaps in regulatory reporting by banks and non-banks? Are there particular data gaps you would identify as being of material importance? If so, please provide any supporting information and data to the extent feasible.

As elaborated on in CME Group's response to Q1, the Consultation demonstrates that there is a lack of data to conduct a comprehensive analysis with respect to non-centrally cleared markets and intermediaries margining practices for clients. At a minimum, increased transparency should be provided to relevant regulatory authorities to address these data gaps, but CME Group believes enhanced transparency to CCPs and the broader public would also be appropriate. The financial system would benefit from increased transparency from other market stakeholders, particularly intermediaries, that is consistent with the approach of CCPs.[50]

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?

With respect to centrally cleared markets, CME Group believes that each CCP should have the ability to design their VM processes to specifically cater to the markets they clear, including the market structure and the unique characteristics of the products they clear. However, where *ad hoc* calls may be issued, each CCP should consider the impacts on financial stability. To support financial stability, VM processes should ensure that they are not only collecting funds from clearing members that are losing, but also include paying out funds to clearing members that are gaining, allowing liquidity to continue to flow through the system.

CME Clearing's VM practices proved effective and efficient in risk managing the COVID-related volatility, while supporting the stability of its markets. CME Clearing ran its routine settlement cycles, one at both intraday and end-of-day for futures and options and one at the end-of-day for cleared swaps, where settlement variation (i.e., VM in this Consultation) is collected from and paid to Clearing Members. Though settlement variation flows were larger than average, due to volatility, CME Clearing did not utilize *ad hoc* settlement cycles. That is despite the fact that the

48 *Consultation* at pg. 33.
49 *Consultation* at pgs. 15-17.
50 Please refer to Annex I.

CME Group Exchange Rulebook, consistent with CFTC regulations and international standards,[51] gives CME Clearing (like other CCPs) the authority to execute *ad hoc* settlement cycles. The last time this authority was used was for its IRS products in response to the market reaction following the UK referendum vote in 2016 and only with respect to IM calls, not settlement variation. At this time, CME Clearing did everything practicable to prioritize the stability of its markets, and the financial system more broadly, including supporting market liquidity by allowing for IM to be paid to CME Clearing using non-cash assets consistent with its collateral acceptance policy.

In contrast, making multiple *ad hoc* VM calls a day can be extremely procyclical and can result in excessively large and unpredictable liquidity needs in times of stress. This is particularly true for *ad hoc* calls that are tied to hard thresholds that are a function of mark-to-market moves or credit ratings and/or where mark-to-market gains are not being paid out. This can undermine financial stability by putting further financial stress on clearing members, particularly since they typically cannot collect these additional funds from clients and if they do, such collection may place atypical liquidity strains on clients.[52] CME Group recommends that BCBS-CPMI-IOSCO consider the potential negative impacts of these types of *ad hoc* VM calls in any further work it undertakes.

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?

As detailed further in CME Group's response to Q2, the data included in the Consultation, as well as CME Group Paper, makes clear that CCPs performed very well during the COVID-related period, particularly when taking into consideration the uncertainty during the early days of the pandemic and the extreme volatility observed in financial markets as a result. Not only were IM calls made by CCPs during this period appropriate, as were they modest in size (e.g., CME Clearing's maximum one-day percentage change in total IM required was merely 6.5%), CCPs maintained appropriate margin coverage. There is also no evidence provided in the Consultation to suggest that IM calls at CCPs generated undue liquidity stress during this period. The Consultation found that VM flows for both centrally and non-centrally cleared markets far exceeded the size of these markets respective IM calls, which demonstrates that IM calls were likely only a modest contributor to the minor impact on intermediaries' liquidity resources.[53]

Therefore, the existing work completed by BCBS-CPMI-IOSCO on the responsiveness of CCPs' IM models is sufficient. While this data exercise was important and necessary to further understand the ways in which the market reacted to the COVID-related volatility, the work confirms that CCPs' IM models were appropriately anti-procyclical and that further international work is not required at this time.

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?

As elaborated on in CME Group's response to Q1, the lack of granular, detailed data about the performance of non-centrally cleared markets (e.g., data on netted margins) prevents a complete analysis of these markets and their response to the stress of the COVID-related volatility. As such,

[51] *PFMI* at Principle 6, Key Consideration 4.
[52] *Consultation* at pg. 34.
[53] *Consultation* at pgs. 15-17 and 33.

it is not possible to determine whether the IM practices for non-centrally cleared markets were appropriately anti-procyclical.

Additionally, the data that is provided appears to suggest that large discretionary IM calls were made to supplement the relatively unresponsive nature of SIMM and those calls could have had a negative impact on the liquidity preparedness in the market.[54] However, the relative scarcity of granular data on what is represented by the trillions of dollars in non-VM margin flows for non-centrally cleared markets during the COVID-related volatility creates challenges for any future evidence-based policy making.

Q10: Are there any other important aspects not covered by the report which should also be prioritized for further international work?

CME Group appreciates the extensive analysis included in the Consultation, but it is also important to consider this analysis in light of the differences between margin collection practices for centrally and non-centrally cleared markets. This will avoid potentially misleading conclusions on the performance of these markets during the COVID-related volatility.

We understand that, under the current uncleared margin rules, certain groups of clients do not exchange IM. While the ability to abstain from the payment of IM during times of high volatility may lessen the immediate threat of procyclicality on these firms, it is not a defensible risk management practice. This is particularly true where large market participants may design their participation in these markets to avoid exchanging IM. The fact that IM is not being exchanged does not mean that non-centrally markets were anti-procyclical, but rather that an essential risk management function was not being performed. Evidence demonstrates that inappropriate margining practices like this are problematic and could lead to increased risks of financial instability.[55]

We would be happy to further discuss our comments with BCBS-CPMI-IOSCO. If you have any comments or questions regarding this submission, please feel free to contact me at +1 312 634-1592 or Sunil.Cutinho@cmegroup.com. Alternatively, you may contact Sean Downey at +1 312 930-8167 or Sean.Downey@cmegroup.com.

Sincerely,

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[54] *Consultation* at pg. 17.
[55] *See* Credit Suisse Group AG, Credit Suisse Group Special Committee of the Board of Directors Report on Archegos Capital Management, (July 2021) (*available at* https://www.credit-suisse.com/media/assets/corporate/docs/about-us/investor-relations/financial-disclosures/results/csgspecial-committee-bod-report-archegos.pdf.

Annex I: Recommendations for Clearing Member PQDs (“CMPQD”)

Method and Frequency for Disclosures

I. CMPQD published at the legal entity level for the entity that is registered as a clearing member (i.e., market participant to avail direct clearing 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 members is connected to directly, including if it provides client clearing services;
CCP Equivalent - PQD Disclosure 18.1

II. For a clearing member’s own and client clearing activity, reported separately for client and own/house activity:
   a. Total IM required and deposited across all CCPs, split by collateral type;
   CCP Equivalent - PQD Disclosure 6.2
   b. Maximum and average aggregate IM call on any given business day at any given CCP and across all CCPs; and
   CCP Equivalent - PQD Disclosure 6.8.1
   c. Maximum and average total VM paid on any given business day at any given CCP and across all CCPs
   CCP Equivalent - PQD Disclosures 6.6.1 & 6.7.1

III. Total default fund required and deposited across all CCPs, split by collateral type;
CCP Equivalent - PQD Disclosure 4.1

IV. For clearing member’s client clearing activity:
   a. Total IM required from and deposited by clients, split by collateral type;
   CCP Equivalent - PQD Disclosure 6.2
   b. Number of client default(s) and the related amount of the loss caused as a result of default in excess of IM for each default;
   CCP Equivalent - PQD Disclosure 13.1
   c. Concentration—Percentage of open positions and IM required for the top 10 Clients and Top 5 Clients, as peak and average over the quarter
   CCP Equivalent - PQD Disclosures 18.2 & 18.3

V. Results of back testing and stress testing – e.g., actual peak and average margin breaches and achieved margin coverage level;
CCP Equivalent - PQD Disclosure 6.5

VI. Average daily notional for OTC and average daily volume for exchange-traded derivatives;
CCP Equivalent - PQD Disclosures 23.1 & 23.2

VII. Maximum and average daily security settlement payments (i.e., receive versus payment); and
CCP Equivalent - PQD Disclosures 6.6.1 & 6.7.1

VIII. Maximum and average daily FX settlement payments (i.e., payment versus payment), including Continuous Linked Settlement activity.

CCP Equivalent - PQD Disclosures 6.6.1 & 6.7.1

Disclosures for Non-Centrally Cleared Markets

I. Number of connections—e.g., number of master agreements and number of counterparties faced with:
   a. Two-way IM and VM;
   b. IM; and
   c. VM

CCP Equivalent - PQD Disclosure 18.1

II. Maximum and average IM paid and received across all counterparties and to any given counterparty;

CCP Equivalent - PQD Disclosure 6.8.1

III. Maximum and average VM paid and received across all counterparties and to any given counterparty;

CCP Equivalent - PQD Disclosures 6.6.1 & 6.7.1

IV. Maximum and average gross credit exposure and gross market value;

CCP Equivalent - PQD Disclosure 4.4.6

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;

CCP Equivalent - PQD Disclosure 6.5

VI. Average daily notional volume and notional outstanding by asset class;

CCP Equivalent - PQD Disclosures 23.1 & 23.2

VII. Maximum and average daily security settlement payments (i.e., receive versus payment); and

CCP Equivalent - PQD Disclosures 6.6.1 & 6.7.1

VIII. Maximum and average daily FX settlement payments (i.e., payment versus payment), including Continuous Linked Settlement activity.

CCP Equivalent - PQD Disclosures 6.6.1 & 6.7.1

Legal Entity Disclosures

I. Targeted and actual availability of core systems;

CCP Equivalent - PQD Disclosure 17.1

II. Sources of liquidity, including split by currency and regulatory ratios for liquidity, if applicable and maximum and average margin calls as a percentage of total liquid assets and percentage of total reserves at central banks; and

CCP Equivalent - PQD Disclosure 7.1

III. Annual financial statements.

CCP Equivalent - PQD Disclosure 15.1.1