

Via E-Mail (cpmi@bis.org and consultation-2016-01@iosco.org)

17 October 2016

The Committee on Payments and Market Infrastructures ("CPMI")
The International Organization of Securities Commissions ("IOSCO")
Bank for International Settlements
CH-4002 Basel, Switzerland

RE: Resilience and recovery of central counterparties (CCPs): Further guidance on the PFMI – Consultative Report

Dear Committee Members:

CCP12 is a global association of 35 major central counterparty ("CCP") organisations in Europe, Asia and the Americas. CCP12 was formed to share information, develop analyses and develop policy standards for common areas of concern. The CCP12 members work toward the common purpose of creating conditions in which a global CCP solution can emerge to meet the needs of the marketplace.

This letter represents our response to the Consultative Report ("the consultation") published by the CPMI-IOSCO regarding CCP resilience and recovery planning. CCP12 appreciates the active engagement of CPMI-IOSCO in on-going discussions on this topic and the hosting of the roundtable in September to gain further guidance on the Committees' concerns. We further appreciate the opportunity to provide these written comments and look forward to our continued collaboration.

Overview

As an overall comment, the CCPs represented in CCP12 would like to emphasise the benefits of principles-driven guidance regulatory directives set at a global level. A principles-based approach can strengthen all markets through local implementation that has the ability to take into consideration idiosyncrasies and nuances within the local markets as well as the local regulation of clearing participants which may impact their use of the CCP. This is in line with the original intent of the PFMIs and is a strategy that has already dramatically improved the resilience of CCPs across jurisdictions.

When regulations take an overly prescriptive approach, the industry is put in danger of falling victim to blind spots in risk management. No single model can be expected to foresee every potential risk facing the CCP under any given situation and an inability to adjust for local markets creates weaknesses for the global marketplace. If more restrictions and limitations are placed on CCP risk management, the solutions they are able to design will be less agile and innovative, unable to react to changing market forces and potentially exposed to unforeseen, unknowable risks.

We support the Committees' efforts to lift standards for CCPs and our membership is committed to meet regulatory requirements to minimise risk for our markets. We look forward to further engagement with the Committees to tackle these challenges in our shared interest of market stability.



Response to Specific Questions

Governance

Is the guidance provided on CCPs' governance sufficient and appropriate?

We believe that the existing principles regarding CCP governance provided sufficient and meaningful guidance for CCPs and their boards in designing and implementing risk management principles. Additionally, CCPs typically engage in common governance systems that were not considered in the consultation and will likely address the risks the consultation seeks to cure.

We assume that purpose of the consultation's clarification that the "board may delegate certain responsibilities to management" and further mention of the "board of directors or equivalent" is to ensure senior risk management and internal committees retain the authority defined in other regulatory guidelines. Many CCPs have developed their governance structure to include board members on the CCP's committees, including risk committees, to ensure the board has the appropriate oversight of the CCP's implementation of the board approved policies and procedures as well as the day-to-day operations. This ensures that those entities with the necessary expertise have the mandate to perform their responsibilities to their fullest extent in order to ensure the safety and security of their markets.

We further assume that the intent of the guidance is to ensure the board has accountability for the risk management framework and risk tolerance while directing material risk management decisions, but that the responsibility for the day-to-day risk management remains with the internal risk management of the CCP. Currently, the board of directors of a CCP acts as an independent party, separate from executive management, in driving the CCP's risk management strategy through review and approval of the CCP's risk management framework ("RMF") and the CCP's risk appetite on at least an annual basis or in the event of material changes as well as on-going review and maintenance of the CCP's financial resources. The RMF will also describes delegation provided to the Chief Risk Officer (or equivalent) and risk management staff. In its regular review and explicit approval, the board is demonstrating its agreement to ensure day-to-day risk management is handled by the appropriate staff.

Asking the board or risk committees to take on day-to-day risk management would be an inappropriate use of board time and would additionally undermine a CCP's ability to effectuate proactive, prudent risk management. No board could reasonably maintain the necessary expertise to undertake the day-to-day management of the CCP. Their role at the CCP requires a skill set that is unique to the skills needed from management; requiring boards to meet these requirements would prevent the board from fulfilling its crucial role as a check and balance to management, diminishing the value of the board's independence.

Under current governance systems, boards receive the necessary information to make informed decisions on matters that significantly impact risk profile of the clearing house. We believe that this meets the intentions of the use of the term "explicit responsibility" with regards to the board. For example, the removal of a historical stress scenario is too granular a decision to ask of the board unless it is determined by management to have a material impact on the CCP. Given the number

¹ See 2.2.5 of the consultation

and breadth of scenarios used by CCPs, it is unlikely that a single scenario would meet this criterion. This decision is more appropriately determined by the CCP management, in line with risk management framework and risk tolerance defined by the board.

Finally, we assume that all references to "board of directors" is interchangeable with an "equivalent" body consistent with the language in the beginning of the Governance section which states "board of directors or equivalent." Many CCPs utilise subcommittees served by or entrusted by the board members(s) in a transparent mechanism to manage the diverse responsibilities of the board, as is considered best practice to ensure that appropriate oversight is provided without inundating the board with information. Additionally, some jurisdictions support a tiered board, including supervisory and executive boards, which will have different roles and responsibilities in the management of the CCP. We assume that these boards will maintain unique responsibilities that are sufficient for the needs of the consultation.

On many topics, we believe the additional guidance provided in the consultation represents what is already considered best practice among CCPs. We ask that the Committees clarify where the assumptions we've laid out above are in line with the Committees' intentions; specifically, we believe the language around "explicit responsibility" needs to be clarified to ensure the precise meaning of the Committee is understood. Further, we suggest that CPMI-IOSCO include specific references to delegation of responsibilities to sub-committees and senior management to ensure broad understanding of the role of these important entities.

Disclosure

Is the current level of public disclosure by CCPs appropriate? In particular, is there a need for further disclosure related to margin and stress testing methodologies? If so, would the disclosure of the items included in the list (or a subset of the list) suggested by an industry group and attached as an Annex be appropriate and sufficient for disclosure and feedback purposes?

We believe that the current quantitative and qualitative disclosure requirements, as described in the CPMI-IOSCO *Public quantitative disclosure standards for central counterparties* and *Principles for Financial Market Infrastructures* respectively, are sufficient for market participants to understand and evaluate key components of their CCP's risk framework as well as their total obligation and potential liability to their CCPs.² CCP12 was instrumental in developing an industry template to achieve maximum harmonisation across the industry in reporting their results. Further, many CCP associations have dedicated pages on their public websites that list links to their members' quantitative disclosures, ensuring participants can find these disclosures easily.

Further to these public disclosures, CCPs also provide their members with regular reports including secure data that would be inappropriate for public disclosure, but will allow them to sufficiently evaluate their total exposure to the CCP. This reporting includes details regarding their required funding for the default fund and their unfunded assessments, so they can anticipate and prepare for their potential total liability. This allows firms to plan for how much they could be called for in a major default event at any given time. It is not necessary for clearing members to know the specific stress tests that lead to these results, since they are informed of their total requirements on a

² http://www.bis.org/cpmi/publ/d106.htm

regular basis and any time the values change. These member disclosures, in addition to margin methodology information that clearing members likely have access to, should be sufficient for clearing members to understand their current and potential obligation to the CCP, negating the need for an explicit due diligence by CCPs, as described in 2.2.13 of the consultation.

A balanced, transparent approach to disclosures has been achieved and a significant level of information is already provided through CCPs' CPMI-IOSCO Quantitative and Qualitative Disclosures. In general the level of disclosure made to market stakeholders must take into consideration the concerns and risks of disclosing information that can be used for commercial gain.

In particular, we ask that the Committees consider the level of granularity for disclosures related to stress testing proposed in the consultation against the risk that such disclosure could potentially undermine the risk management benefits of a prudent stress testing framework. There is a risk that the suggested level of detail could unintentionally lead to a "model monoculture" amongst CCPs, clearing members, and other market participants; these circumstances could result in market participants and risk managers becoming accustomed to a standard set of stress testing scenarios, inadvertently encouraging participants and risk managers to rely on the same models and inputs for risk management. This risk has been cited by leading regulators, including Ben Bernanke: ³

At the same time, it is reasonable to worry that, with increased disclosure of supervisory models, firms would see a declining benefit to maintaining independent risk-management systems and would just adopt supervisory models instead. Doing so would certainly make it easier to "pass" the stress tests. However, all models have their blind spots, and such an outcome risks a "model monoculture" that would be susceptible to a single, common failure. The differences in stress test results obtained by supervisors' and banks' own models can be informative, and we do not want inadvertently to destroy the healthy diversity or innovation of the models and other risk-management tools used in the banking industry.

Any further disclosure requirements must balance the benefits of transparency with the risk of unintentional weakening risk management standards.

Additionally, we would like to highlight that the stress test disclosure recommendations, as suggested in the Cover Note of the Consultative Report, was initially suggested by an industry group letter that was not representative of all market participants' views. The letter contained a footnote that explained:

A few Working Group members do not support this request for Guidance. Specifically, certain Working Group members (including one member of the buy-side) believe that CPMI-IOSCO should foster further debate regarding the Transparency suggestions, in case they result in (i) inadvertent disclosures of market participant positions or (ii) increases in clearing costs that are not commensurate to risk management benefits.⁴

³ Chmn. Ben S. Bernanke, *Stress Testing Banks: What Have We Learned?* (Apr. 8, 2013), available at https://www.federalreserve.gov/newsevents/speech/bernanke20130408a.htm.

⁴ See: https://www2.isda.org/attachment/NzcxNQ==/ISDA-Letter_to_CPMI-
IOSCO on CCP Stress Testing Transparency Governance and Best Practices-FINAL.pdf

This is far from the uniform view of the industry, and there are members of all market participant groups that have reasonable concerns with regards to the suggested disclosure.

It has been suggested that CCPs should be held to the same standards as banks who publically report on their stress exposures. However, as banks and CCPs are very different businesses, as acknowledged by numerous regulatory agencies and also in the recent ESMA CCP Stress Testing Report, the implications of such disclosure differ significantly between the two groups. When banks provide public disclosures of their stress results, they are disclosing information related to their own exposures, which they create and can control. If a CCP were held to the same standard, the CCP would be disclosing information related to exposures of their market participants, which they do not create and cannot control. Given this, it would be inappropriate for a CCP to make these disclosures, particularly considering that they could be used for commercial benefit by those taking the risks underlying those exposures.

Feedback Mechanism

CCP12 believes that a robust disclosure and feedback mechanism is invaluable to ensuring clearing members are fully aware of their obligations to the CCP, both financial and through participation in default drills and management. Currently, this feedback generally comes via the appropriate risk body (i.e. risk committee or risk working group), which includes clearing members and independent members, as well as supporting consultative processes – i.e. advisory groups, rule filings, industry forums, etc. – that allow CCPs to solicit views and provide necessary disclosure to market stakeholders when appropriate. These arrangements have been invaluable to CCPs in developing effective solutions and we welcome input from the industry through these venues.

However, any mechanism must be designed to balance the risk-based feedback and conflicts of interest of market participants. This is particularly important given the points that have been proposed for disclosure.

Specifically, we are concerned that soliciting the views of market participants on CCP contributions to losses could lead to commercially driven feedback from members overwhelming the risk-based feedback CCPs rely upon to manage their markets. CCP contributions (sometimes called "skin in the game" or "SITG") are meant to serve two functions: a) ensure the CCPs are incentivised in minimising losses to non-defaulting clearing members and b) further incentivise CCPs to maintain adequate risk models to ensure defaulter contributions are sufficient to cover their exposure. CCP SITG is not meant to subsidise the risk of the clearing members. Generally, SITG levels are publically reported on CCP websites and within the quantitative disclosures.

Giving clearing members significant input into CCP SITG could create perverse incentives that would ultimately result in CCP SITG that is inappropriate for the CCP and its risk model. We can reasonably assume that non-defaulters bidding on the defaulter portfolio will factor the CCP SITG into their bidding, resulting in inaccurate pricing and creating inefficiencies in the market if the SITG is sized improperly for the risk model. This distorts the purpose of CCP SITG. SITG is meant to demonstrate incentives for CCPs; if ineffectively sized, SITG will take on the role of loss absorption or risk

⁵ See section 3: https://www.esma.europa.eu/press-news/esma-news/esma-publishes-results-eu-central-counterparties-stress-test

subsidisation for market participants, who are the risk takers, creating moral hazard concerns. As currently drafted, the requirements related to CCP contribution to losses fail to take into account the significant incentive effect on clearing members and how these incentives will be skewed by an inappropriate SITG, as we will describe in the CCP Contribution section.

As a practical matter, we assume that it is intended that a CCP's appropriate risk entity (i.e. risk committee or risk working group) will continue to act as a forum to solicit views from market stakeholders, where members provide risk-based feedback to promote the stability of the financial system and the safety of the CCP. As these committees generally include members of the CCP board, the current structure ensures that the board is privy to this feedback. Requiring the board and the CCP to engage in a variety of other feedback mechanisms will take an undefinable and unreasonable amount of time, taking them away from their more crucial mandates without adding significantly to the insights obtained through existing processes.

Stress Testing

CCP12 agrees with the principles and goals of the guidance, and believe it is critical that exposures are sufficiently covered by financial and liquidity resources in order to protect centrally cleared markets and participants. However, we would caution against some industry calls for standard stress tests for all CCPs' risk management, as a one-size-fits-all approach does not account for important differences between CCPs and could lead to ineffective risk management practices. Additionally, we are concerned that some of the requirements described in the consultation may present procyclical risk and could result in obligations that make central clearing uneconomical, directly opposing the G-20 mandate.⁶

While we understand that there can exist rational, sound risk management purposes for increasing requirements, any increase must be considered on balance with the effectiveness of existing safeguards and the negative impact of continually increasing cost to clearing participants. Given the issues of bank capital requirements acknowledged by ESMA in their proposal to delay implementation of the clearing mandate due to increasing capital requirements for clearing members, where bankruptcy remote client collateral cannot be recognised to offset the risk of the portfolio, we know that clearing participants have already experienced significant increases in their costs without significant improvements to security. As these and other costs related to clearing have increased, we've seen a drop in the number of clearing members offering access to cleared markets, leading to increased concentration risk and creating unnecessary hurdles to firms trying to access the cleared markets. This will lead to difficulty during a default, with fewer entities available to participate in the auction of the defaulter portfolio or able to accept porting of clients.

We appreciate that the recommendations discussed in the consultation are designed to improve CCP resilience; however we believe that some of these suggestions do not meet the standard of extreme but plausible, pushing CCPs to consider scenarios that are objectively implausible.

⁶ http://www.g20.utoronto.ca/2009/2009communique0925.html

⁷ https://www.esma.europa.eu/sites/default/files/library/2016-

¹¹²⁵ cp on clearing obligation for financial counterparties.pdf

⁸ https://www.clarusft.com/fcm-rankings-q1-2016/

Client Payment and Porting

It is implausible to impose a standard that implies CCPs need to maintain resources to cover the exposure of all clients of a defaulted clearing member. This fundamentally requires that a CCP make two assumptions: a) that the CCP will be unable to port any client accounts of the defaulted clearing member; and b) it needs sufficient financial resources to cover the settlement variation payments of the entire customer pool of the defaulted clearing member.

At a minimum, any assumptions regarding porting should take into account the probability of porting a defaulted clearing member's customers, particularly where a jurisdiction's customer margining standards differ in a manner that may have a material impact on porting outcomes. This again highlights the difficulty of defining an overly prescriptive approach for CCPs, as the differences in jurisdictions will make a significant difference in the porting process.

This approach also discounts other arrangements that could facilitate clients' ability to pay into their CCP if their clearing member has defaulted. This will help ensure the settlement variation payments are met and improve the likelihood of porting for clients of a defaulter. There are historical examples of clearing member defaults where clients were able to continue meeting their financial obligations to the CCP. Additionally, we often see large clients supporting multiple banking and clearing relationships. This will allow them to make payments to the CCP even if their clearing member has defaulted to the CCP. Solutions designed to allow clearing members to settle their variation payments at the CCP should be considered in defining the assumptions for stress testing and demonstrate the difficulty of applying such broad assumptions to all CCPs.

Intraday Exposures

We appreciate the Committees' interest regarding intraday exposures, though we are concerned that the consultation's suggestions regarding the treatment of intraday exposures and intraday stress testing may result in an approach that is overly-prescriptive and does not meet the plausibility standard for defining CCP risk management.

In considering intraday exposures, we would like to emphasise current regulatory and best practices that require CCPs to monitor intraday positions and exposures throughout the day. CCPs' manage intraday risks using a collection of tools in addition to stress testing, including, but not limited to, initial margin, settlement variation, and participant monitoring. This ensures that the CCP is able to examine any potential build up of risk as positions are added and take risk mitigation steps between regularly scheduled variation margin calls, before the risk becomes unmanageable. These practices, in addition to on-going concentration and liquidity monitoring and margin, help control for potential intraday position spikes and must be considered in any stress testing framework to ensure the scenarios are both extreme and plausible.

In considering intraday price moves, we again ask the Committees to keep in mind the plausibility standard in defining stress testing frameworks. Use of the intra-period or peak price move indicates that the CCP would have to liquidate a defaulted clearing member at the exact bottom or exact top or a market move, potentially for every different instrument. Particularly when considering the lengthy lookback periods used by many CCPs, this suggests that we have to assume the largest clearing members default at the exact worst market from a 30+ year historical period. Given the



need to identify extreme but plausible scenarios for stress testing, we do not believe that this meets the requirement for plausibility.

Historical Scenarios

In considering the process by which a CCP could remove an historical scenario from its stress testing, the consultation asks that the CCP make its decision "based on clear and convincing analytical evidence that a historical level of market volatility cannot reoccur. "As it is currently worded, it appears that the Committees want the default for CCPs stress testing to include all historical scenarios going back as far as the data will allow. It also seems that the Committees want certainty that any given market condition can *never* repeat itself.

We believe that it is unrealistic to ask any risk manager to say with certainty whether or not any market condition can ever reoccur. This standard, along with the extremely long time series suggested for defining historical scenarios, does not allow for sufficient flexibility in defining the CCP's stress testing framework and will quickly lead to CCPs running unnecessary and gratuitous stress tests. We suggest that the Committees reword this section to allow for CCPs to set reasonable standards on the inclusion or exclusion of historical stress scenarios.

The consultation further limits the circumstances under which a CCP can remove historical stress scenarios, requiring that this can only be completed "on the basis that reoccurrence is implausible" subject to governance and analytical requirements. As noted above in the discussion on intraday exposures and client portability, the standard for plausibility has not been agreed to by the regulators. We further assume the Committee did not intend to create a requirement that the CCP seek broad regulatory approval of "plausibility" for every proposed change to historical stress testing.

We assume the consultation envisions the continuation of the current arrangements that allow the CCP's risk management team to define plausibility in its stress testing framework, in consultation with the appropriate risk entity (i.e. risk committee or risk working group) and subject to the Board's oversight. As the framework is also subject to regulatory review, the appropriate authorities have sufficient transparency into the definitions created. Clearly defining plausibility in their own stress testing framework allows the CCP to execute changes to its stress testing efficiently to ensure risk management standards can quickly and effectively respond to changing market fundamentals. We suggest the Committees add language to clearly allow the CCP, its supporting committees, and its supervisory regulator to determine the plausibility standard for their markets and maintain the right and obligation to set stress testing requirements to meet these standards.

Coverage

Is the guidance provided on coverage sufficient and appropriate?

Is the current two-tiered Cover 1/Cover 2 minimum standard still appropriate in relation to the guidance in the report?

⁹ See 3.2.32 in the consultation

CCP12 believes that the current guidance on coverage, requiring a minimum of cover 1 / cover 2, as defined in the PFMIs, is sufficient for liquidity and financial resources.

However, there are further considerations to include in assessing the adequacy of the coverage standards. For example, it is also important to consider the consultation's guidance in regards to liquidity resources. In particular, the definition of liquid resources to meet CCP liquidity needs can differ significantly between jurisdictions, creating different standards for similar activity depending on the local implementation of the PFMIs. Additionally, related regulations, such as Basel standards, can have a material impact on the outcome of liquidity standards and accessing traditional liquidity facilities. Setting liquidity standards without taking into account these related regulations can increase, rather than reduce, systemic risk.

Additionally, we've frequently seen that clearing members will deposit excess collateral at the CCP for operational ease rather than make independent deposits and withdrawals for every market move. Where the CCP places controls or delays on the withdrawal of this funding, it may be appropriate to consider this funding in judging the adequacy of its financial resources, as it is an accurate measure the resources that will be available for a minimum, fixed amount of time. To ensure that systemic risks are protected, CCPs utilising this approach should review the potential impact to total resources in response to requests by clearing members to withdrawal excess collateral.

Finally, it is important to consider the regulatory goal of covering "extreme but plausible" events in sizing these resources. Stressing for sequential, unsynchronised defaults does not meet the plausibility standard for many markets, where it would effectively model one historically large move in one direction followed immediately by the same historically large move in the other direction. The total shock of the stress would go well beyond anything seen in any markets and would exceed what could reasonably be considered a plausible scenario.

Payment Obligations

It is prudent risk management for CCPs to maintain sufficient financial resources to meet their potential payment obligations under a clearing member default scenarios, but in determining such payment obligations ex-ante information which addresses a CCP's payment obligations for the contracts for which it clears – i.e. those laid out in a CCP rulebook – must be considered.

Margin

Is the guidance provided on margin sufficient and appropriate?

Is the guidance provided on procyclicality appropriate and sufficient?

The PFMI do not explicitly address margin add-ons. Is the guidance provided on margin add-ons adequate to ensure sufficient coverage by the margin system and other prefunded financial resources in line with the PFMI?

CCP12 supports the overall effort to manage procyclicality in the course of prudent risk management. We agree that achieving sufficient margining with smooth margin levels that do not increase dramatically during stress periods is important for market stability and are committed to finding solutions that will meet these goals. However, we feel it is important to take a principles-based, outcomes focused approach to managing procyclicality, as recommended by a recent Bank of

England in a working paper.¹⁰ Additionally, there are jurisdictional considerations to include in any review of procyclicality, as some have already implemented tools to manage procyclicality.¹¹ The guidance as proposed contains significant prescription around the use of certain tools and model assumptions related to margin to reduce procyclicality. These tools may ultimately restrict a CCP's ability to appropriately manage risk and may not be appropriate for all margin methodologies, especially in times of high volatility or market stress.

In general, prescribing specific tools for risk management results in an overly constrictive risk framework; markets are better served by an approach that focus on outcomes through a principles-based approach defined by risk management in consultation with risk committees and the board. Particularly given the more sophisticated margin models available, such as VaR, prescriptiveness with regards to model assumptions and calibration is inappropriate. For example, the guidance suggests a volatility floor to ensure minimum amounts of margin, however we consider that the utilisation of ETL / Expected Shortfall models with stress scenarios or longer look back periods can similarly address the concern and achieve comparable outcomes.

We believe the market and risk management standards generally are better served by utilising an outcomes-based approach. We recommend that guidance consider outcomes of models, acknowledging that similarly effective outcomes can be achieved through different model assumptions. Given the unique markets and products for which CCPs provide clearing services, guidance around procyclicality that is driven by prescribing the use of specific tools may have a counterproductive impact on risk management and results.

Relying on an overly prescriptive solution to procyclicality will ultimately discount the expertise and skills of a CCP's risk management as well as the need for flexibility in the model to account for unprecedented market changes. It's worth noting that this expertise and flexibility has successfully demonstrated prudent judgment in designing reliable margin models and managing times of stress to ensure coverage and minimising procyclicality. Additionally, we must acknowledge that it is unlikely that a model could adequately account for all types of risk and market circumstances.

When markets inevitably encounter a scenario not considered by a strict, prescribed set of requirements, the undercoverages will be significantly higher than would otherwise be seen in a dynamic environment where human experts can react to changing circumstances. Particularly if these prescribed solutions are required across wide swaths of the market, it could result in several firms negatively impacted by the downturn, as following these model prescriptions will likely result in several models sharing the same blind spots. Over emphasis on model-driven approaches, without consideration for outcomes or appropriateness for a given market, could result in the creation of systemic risk, rather than reducing it, ultimately undermining sound risk management.

¹⁰ http://www.bankofengland.co.uk/research/Documents/workingpapers/2016/swp597.pdf

[&]quot;Our findings indicate that all of the tools are useful in mitigating procyclicality to some extent, but that the optimal calibration of each tool in a particular situation depends on the relative weights placed by the modeller on the objectives of minimizing procyclicality on the one hand and minimizing undesirable overmargining in periods of low volatility on the other. This suggests that it may be appropriate to consider moving from tools-based procyclicality regulation to one based on the desired outcomes."

https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2015-1252 - emir review report no.2 on procyclicality.pdf

It is also important to consider that other aspects of a CCP's practices can also create destabilising procyclicality effects if not properly managed. For example, setting automatic, hard thresholds for settlement variation calls could result in calls for additional funding requirements from clearing members during high volatility periods, without input from risk managers to limit the impact on participants. Additionally, implementing frequent changes to haircuts can create unexpected increases to financial obligations in response to asset prices during stress periods. ¹² Either of these examples could result in even greater procyclical risk in times of stress and likely cause more disruption than initial margin changes. These nuances to a CCP's risk framework highlight the difficulty of prescribing defined rules in any given aspect of the framework.

Finally, where appropriate, we believe intraday settlement cycles can be useful in allowing the CCP to actively manage exposures and remove risk from the system intraday. Many CCPs use scheduled intraday settlement to actively manage the risk in their markets intraday. In periods of market uncertainty or significant changes, it may be necessary to execute ad hoc cycles. We agree that such actions can be helpful to the system, but believe that it is inappropriate and potentially counterproductive to set prescriptive triggers in determining when to implement such ad hoc cycles. Defining hard thresholds to prompt an intraday cycles, rather than allowing risk managers to evaluate where such steps are appropriate and necessary, could exacerbate a stress scenario and create procyclical pressures for clearing members.

Portfolio Margining

In defining portfolio margining relationships, we agree with the original PFMI guidance that offsets must be supported by a significant and reliable correlation exists amongst products, under both stressed and business as usual market conditions. However, identifying a mathematical relationship should not be sufficient to defining portfolio margining connections; any offset should additionally demonstrate a clear economic rationale between the products. Where necessary, both the statistical and the economic relationship should be subject to regular review by risk management to ensure the offsets are in compliance with the board approved risk management framework and to ensure the model can appropriately account for changes in the correlation. Offsets are also included in regular stress and backtesting to ensure the offsets continue to meet risk coverage requirements.

The PFMI do not prescribe a minimum margin period of risk or closeout period. Is further guidance in this area needed?

We would not recommend defining a minimum margin period of risk ("MPOR") at the international level. MPOR is generally defined by local regulation as necessary to cover the unique risks of the products they are meant to cover. This approach rightly focuses on the outcomes of risk models and allows appropriate assessment of the markets served and risks faced by the CCPs in each jurisdiction. MPOR is only one aspect of the margin model and is too blunt a tool to independently ensure coverage of a portfolio. For example, defining MPOR for two jurisdictions with unique customer margining standards will still result in wildly different margin coverage and risk punitive

¹² See paragraph 42 https://www.esma.europa.eu/sites/default/files/library/2016-1415 - report on sfts procyclicality and leverage.pdf

¹³ See paragraph 3.6.12 of the PFMI

charges for some jurisdictions. As described in the PFMI,¹⁴ the MPOR "should be based on anticipated close-out times in stressed market conditions but may also take into account a CCP's ability to hedge effectively the defaulter's portfolio." These conditions inherently require a level of discretion by the CCP and local regulation to address their specific markets and tools. Applying a blanket MPOR at the international level would ignore jurisdictional and CCP-specific differences that will provide sufficient coverage during market stress and are necessary to address idiosyncrasies across markets and jurisdictions.

CCP Contributions

Is the guidance provided on a CCP's contributions to financial resources to cover losses sufficient and appropriate?

CCP Resources for Clearing Member Default

In considering the sizing of the CCP SITG, it is important to understand the purpose of this funding. As previously described, SITG serves two main purposes a) ensure the CCPs are incentivised in minimising losses to non-defaulting clearing members and b) further incentivise CCPs to maintain adequate risk models to ensure defaulter contributions are sufficient to cover their losses.

CCPs exist to manage and mitigate the risks of their clearing members, ensuring CCPs interests are inherently aligned with clearing members in protecting non-defaulters from defaulter losses. SITG is clear, quantifiable evidence of this alignment, further reassuring markets that the CCP is committed to acting in the best interests of its clearing members and all market participants. In a clearing member default situation, this alignment means the CCP will ensure the default can be managed within the resources of the defaulter. Since the CCP has its own funding in line immediately after the defaulter, there is a clear incentive for CCPs to manage the default appropriately and minimise losses. This will also limit the impact to both the non-defaulters, whose mutualised contributions will only be at risk if both the defaulter and CCP funds are insufficient to cover the exposure.

Additionally, CCP SITG acts to confirm the CCP's incentive to calculate accurate, prudent margin and default fund amounts from their members, to further limit the potential impact on non-defaulters. With their resources first in line if margin and default funds prove insufficient, the CCP has a significant interest in ensuring the defaulter's losses are covered by the defaulter's assets and collateral. In addition to compliance with prudent regulatory standards, SITG is a public demonstration of the CCP's risk incentives.

In the most recent financial crisis, the default of Lehman Brothers, CCPs were able to manage the default using only the defaulter's initial margin and restored a matched book and brought stability back to the market with no losses to the mutualised layer of the waterfall. If losses from a default extended beyond that layer, it would likely represent a significant failure of CCP risk management system and the CCP could suffer significant reputational damage as a result.

The sizing of the CCP SITG is meant to provide incentives to the CCP, but it could also act to distort the incentives of the clearing members during default management if not sized appropriately. Non-defaulting clearing members contribute skin in the game in their default fund contributions to the mutualised layer of the default waterfall. This ensures they will properly participate in the auction of

¹⁴ See paragraph 3.6.7 of the PFMI

the defaulter's portfolio, helping the CCP return to a matched book and stemming losses before their mutualised contribution is impacted. As the CCP's SITG increases, the risk to the clearing members' contributions decreases. If sized inappropriately, CCP SITG can dampen the clearing members' incentives to participate in the auction, creating inefficiencies in the market as the matched book and propagate beyond what is necessary. As clearing members are the main (and sometimes only) participants in the auction who can absorb the positions, their incentives are critical to a successful auction.

The amount of funding required from clearing members is based on the risk of their exposure. Likewise, the amount of funding required from CCPs should consider their risk neutral position, meaning their contributions serve a different purpose than the contributions of clearing members. If the risk neutral entity SITG supplies an inappropriate amount of SITG, it will effectively act to subsidise the risk of the risk-taking clearing members. By creating a buffer for losses, the clearing members will be able to price the CCP SITG into their auction bids to ensure they get a good price on the portfolio and that the losses created are covered by the CCP.

The exact sizing of this funding needs to balance the goal of ensuring proper risk management incentives for the CCP and ensuring proper default management incentives for the non-defaulting clearing members.

CCP Contribution for Custody and Investment Losses

We agree that CCPs should be responsible for funding losses due to certain non-default scenarios, in consideration of local regulatory requirements with regards to risk management and loss allocation. In determining how to allocate these losses, it is important to consider which party makes the decisions that create the exposure to these losses. Particularly in evaluating custody and investment loss, many of the decisions executed by the CCP may not ultimately have been made by the CCP itself. As with the other areas evaluated by the consultation, prescriptive, blanket solutions are not effective in apportioning the losses to the proper entity. It is important that this liability lie with the entity driving the decisions in order to create the right incentives to manage the risk created.

First, investment and custodial losses stem from very different activities. Investment losses, caused by market exposures, arise from potentially foreseeable market risk losses. Custody losses would only come from an idiosyncratic event, such as the failure of a custodian, which would most likely result in a temporary liquidity shortage, rather than an actual loss to the CCP.

As with CCP SITG, the risk of loss should lie with the entity that brings the risk. Where clearing members are able to dictate where the CCP invests their collateral, losses on those investments should be the responsibility of the clearing members who have defined where to invest. Additionally, allocation of investment losses must consider both the regulatory environment and particular jurisdiction in which the CCP operates; some local jurisdictions have implemented rules requiring CCPs to invest a significant portion of clearing member collateral, and some require that CCPs allocate investment losses to the clearing members. These differences will make it difficult to set a single international standard and must be taken into account when determining how to allocate investment losses.

In some cases, clearing members can direct the CCP which custodian they want to use. As with investment losses, where the CCP has little choice or when the clearing member makes this decision,

it is reasonable to allocate losses from issues from these custodians. However, we feel it is important to highlight a nuance of the custodial relationship that could impact any losses stemming from custodians: many custodians utilise the services of sub-custodians, and it is the responsibility of the custodian to ensure these sub-custodians perform as expected. Additionally, an event at a custodian is unlikely to lead to actual losses at the CCP; rather the assets will be temporarily unavailable, leading to a brief shortage in liquidity. It is difficult to imagine a scenario in which an issue at a custodian would push the CCP into recovery, but it is important that the responsibility of these events must lie with the entity that makes the decisions on the custodian relationships.

Where the CCP has driven the decisions that led to non-default losses, it is appropriate that the CCP and its shareholders maintain some responsibility to cover the losses. Where possible and considered necessary, CCPs should make arrangements to secure liquidity from a third party to cover such needs.

Raising Additional Capital

CCPs must not be bound to any one option to raise additional capital if necessary. CCPs must have the necessary flexibility to raise new capital in ways that are best suited to their structure and the market conditions under which they are raising new capital. Any requirement that a CCP commit itself to any specific option would impose unnecessary limitations on the CCP during a period of market stress and would contradict the objectives of the PFMIs to employ a principles-based approach to risk management. Additionally, it is important to note that it may take a CCP a period of time to raise additional SITG, and it is impractical to require frequent sizeable changes to this fund.

Recovery Planning

Is the guidance already provided on recovery planning in the Recovery Report sufficient and appropriate?

We appreciate that the consultation is largely in line with and primarily reiterates the guidance in CPMI-IOSCO's report on the *Recovery of financial market infrastructures* ("the Report"). Many CCPs have already developed or have begun developing their recovery plans in line with this original guidance and the PFMIs.

In particular, we agree with the Report's request that CCPs define recovery tools ex ante in their rulebook, but feel it is crucial to confirm the Report's focus on flexibility in application of those tools at the time of recovery. The scenarios considered by CCPs and regulatory authorities are, by definition, beyond extreme but plausible. The scenarios are unprecedented and would require a series of extraordinary losses to occur simultaneously. The market does not have experience with a situation this severe.

¹⁵ From the Report: "Even where an FMI has ex ante agreement that a tool may be used, a balance may need to be struck between its automatic application in a given situation (which increases transparency and predictability) and discretion by the FMI to use its judgment (which may enable a better decision to be taken about which tools are best given the specific circumstances and in which sequence they should be used). In addition, authorities should be kept informed of the decisions made by the FMI in its discretion to exercise judgment."

Further, in the years following the most recent financial crisis, CCPs and banks have all added significantly to their financial protections as well as their policies and procedures to monitor and manage potential market stress, making such an event even more unlikely and extreme. Given that the situations envisioned by the consultation are so far from the realm of any entity's experience, we feel it is appropriate to provide an amount of constrained flexibility to allow the CCP, in consultation with the regulators, to properly address this unforeseeable event as it unfolds.

As much as we believe that CCPs and the financial sector more broadly are better prepared to withstand a financial crisis, it may be useful to discuss the role of central banks in a potential CCP recovery situation to provide an additional layer of security. This may take the form of either an emergency liquidity provider or as a secure depository for the collateral CCPs must hold. These discussions are just beginning for many in the industry and we think CPMI-IOSCO is the appropriate body to lead the conversation.

Finally, where the CCP meets the obligations of the Report and has properly engaged with regulatory authorities, the CCP must be permitted to execute its recovery plan to completion. Unless and until the exercise of such tools would result in greater financial instability or the recovery of the CCP is no longer a plausible outcome, recovery must be allowed to run its course. Triggering resolution prematurely will destroy the incentives defined in the Report and the CCP's recovery plan. The market will interpret this to mean the CCP has failed, and participants will limit their contribution to the process as a result, exacerbating the stress conditions and unnecessarily delaying a return to market stability.

Allocation of losses not caused by a participant default

In general, CCP12 believes that the allocation of losses must always follow the principle that those who bring the risk bear the risk of loss. In terms of general business and operational risk, it is appropriate that this risk lie with the CCP, who is responsible for monitoring and managing such risks. In accordance with regulatory requirements, CCPs maintains a sufficient amount of capital to absorb general business loss as defined by local regulatory standards. This funding is approved by the board and is publically reported through the CMPI-IOSCO Quantitative Disclosures. Where these funds are insufficient, the recovery plans, as reviewed and approved by the board and regulators, generally account for the need to allocate losses under a variety of scenarios, including default and non-default losses.

Full allocation of uncovered credit losses and liquidity shortfalls following participant default

We believe that the tools described in the Report provide an excellent framework to allow CCPs to define a recovery plan to meet the needs of their markets. In general, the firms represented by CCP12 have used this guidance in defining the tools available in their own recovery plan, with an appropriate amount of flexibility. Two particular tools defined in the Report have been the subject of much debate in the industry –variation margin gains haircutting and partial tear-up – and CCP12 believes that it is crucial to continue to allow these tools in CCP recovery plans. These tools create proper incentives and minimise losses for non-defaulter participants. This will encourage recovery and limit the broader impact of the stress to the rest of the market.

¹⁶ See 15.1 in the CPMI-IOSCO – Public quantitative disclosure standards for central counterparties

Variation margin gains haircutting is an effective and comprehensive tool that CCPs should be permitted to include in their recovery plans. This tool can be used for a limited period of time to assist with the default management process, while the CCP continues to work to re-establish a matched book. As with all recovery tools, regulators and resolution authority will be informed prior to executing to ensure proper application of the tool to avoid market destabilisation. This approach could have many benefits, primarily increasing the likelihood of a success default management process and reducing the risk of CCP insolvency. This will further facilitate continuity of clearing service and operations, which we know would bring greater instability to the market. Variation margin gains haircutting also meets the regulatory obligation to define steps to allocate any uncovered losses and cover liquidity shortfalls. Under variation margin gains haircutting, losses are fully allocated across market participants to minimise the impact to any particular market participant. The market will have continued access to the critical clearing services and operations. Ultimately, variation margin gains haircuts allows for additional time to re-establish a matched book, minimising market uncertainty.

Speed of replenishment of financial resources

CCPs maintain public rulebooks that describe the requirements for clearing members to replenish their financial obligations and meet unfunded assessment payments, if it becomes necessary. This allows members to understand their potential liability to the CCP and plan accordingly to prepare for potential market stress. However, we are pleased to see the consultation acknowledge the need to avoid automatic triggers, as implementing such rigid standards would lead to procyclical increases in financial requirements and put unreasonable pressure on clearing members during a default scenario. We believe it is crucial to balance the benefits of timely replenishment with the risk of procyclical pressures and such decision should not be made using hard triggers.

Re-establishing a matched book

Partial tear up is a critical tool to ensure a return to a matched book where losses are isolated to a defined, specific set of toxic asset classes or product types. Where the CCP has identified, via multiple failed auctions, that the market is no longer liquid enough to support on-going clearing operations of these product types, partial tear up is an effective tool to allow the CCP to return to a matched book. Partial tear up will help a CCP avoid full tear up and protect the continuity of healthy aspects of the cleared market. Partial tear up provides clearing members with an interest in the market several opportunities to bid on the positions and avoid the tear up of the contracts. These auctions will determine if there are particular products threatening market stability and partial tear up is an appropriate tool to address this risk.

Testing of Recovery Plans

We support the principle of testing recovery plans in order to evaluate their effectiveness in the market. Additionally, most CCPs execute regular default drills with their clearing members to ensure all parties are prepared to manage the default of a clearing member, reducing the risk that the CCP will reach a recovery. Realising that many firms maintain memberships at multiple CCPs, several of the largest CCPs have begun leading joint default drills to coordinate across their memberships. This ensures clearing members are able to meet obligations at all of their CCPs without draining their

own resources, preserving the continuity of the markets at the exact time when it's most crucial to restoring market stability.

Conclusion

CCP12 appreciates CPMI-IOSCO's engagement with CCPs and the industry more broadly, both in publication of this consultation and the industry roundtable held in September. We look forward to continuing to work with the Committees and local regulatory bodies towards our shared goal of secure and efficient markets.

Sincerely,

Lee Betsill

Chairman, CCP12