# CCP RISK MANAGEMENT RECOVERY AND RESOLUTION – ALIGNING CCP AND MEMBER INCENTIVES

## INTRODUCTION

The 2008 financial crisis and the lack of regulatory visibility over bilateral counterparty risk which this episode exposed demonstrated to the G20 nations the systemic risk management benefits that CCPs provide. In response, G20 countries and other jurisdictions are now implementing derivative market reforms to encourage centralized clearing and greater pre-trade and post-trade transparency.

In anticipation of a resulting concentration of risk, some have suggested that CCPs could become the next "too big to fail"; also that they require a one-size-fits-all approach to CCP risk management. As a global organization representing the full spectrum of regulated exchanges and their affiliated CCPs, the WFE[1] embraces global standards such as CPMI-IOSCO's Principles for Financial Market Infrastructure (PFMIs), which were issued to assist FMIs in achieving public policy objectives of safety, efficiency and reducing systemic risk. We also place tremendous value on the specialized expertise and tools of each and every CCP in managing the risks that are unique to its markets; CCPs best know their local markets and the risk management tools most appropriate in each to manage systemic risk. As noted in the PFMIs, there are different ways of meeting risk management principles. Markets and memberships vary, and arrangements need to reflect this. An excessively uniform or prescriptive approach to regulation of CCP risk management frameworks and recovery and resolution scenarios would unnecessarily constrain the exercise and deployment of specific CCP risk-management procedures, systemic insight and institutional knowledge to the potential detriment of the overriding goals of financial stability and fair, efficient and orderly markets.

As operators of regulated exchanges and CCPs seeking to ensure efficient and safe financial markets for all market participants, we offer our perspective on the CCP-related topics of transparency and disclosures, emergency powers, voluntary clearing, the disadvantages of one-size-fits-all approaches to risk management, default management considerations, and liquidity provision.

### Appropriate CCP transparency and disclosures

Transparency into a CCP's rules, financial health and risk management methodologies permits regulators and clearing members to assess and mitigate potential risks in the financial system and respond appropriately. Regulations governing CCPs require them to disclose certain market and risk information to both the public and regulators. This serves as an important check and balance by providing mechanisms through which the CCP and its regulators develop a high degree of visibility into risks in their markets. We generally support transparency regarding CCP procedures, rules and risk methodologies, and disclosure of information that permits clearing members and customers to assess potential risks and mitigate their exposures. In fact, many CCPs will be providing extensive disclosures, based on the CPMI-IOSCO data disclosure framework, in the near-term. Our view is that such disclosures bolster the safety of the

[1] The World Federation of Exchanges ("WFE") is the global association representing the interests of 64 publicly regulated stock, futures, and options exchanges, as well as the CCPs that many of these exchanges operate. The member list of the WFE is available here

financial system and the smooth functioning of fair and orderly markets. However, transparency and disclosure is only appropriate to a point, and we caution against CCPs being obliged to provide excessively detailed information that could allow other actors to pursue their own commercial interests against those of the CCP and its clearing members, which would serve to disrupt the level the playing field, and is contrary to the best interests of stability and the marketplace as a whole.

Within that context, we support CPMI-IOSCO's attempts to formalize current market practices of making CCP rulebooks, websites and industry-standard disclosures fully transparent. This enables market participants to better assess their exposures, noting that CCPs tend to have a much more transparent and comprehensive view of exposures across participants than counterparties in an un-cleared environment. CCPs should, and in some cases do, make available tools that replicate initial margin requirements, allowing for market participants to better understand CCP initial margin requirements and assess their CCP exposures. Transparent margin information enables participants to view the level of risk they bring to the CCP and insight as to measures they could take to reduce their exposures. CCPs are in the best position to determine appropriate margin requirements in light of the distinct variables of each local market, the type of products cleared, and differing characteristics of asset classes that are cleared. We believe the appropriate governance already exists at the CCP and regulatory-levels. An industry-standard approach to such measures could be beneficial although would need careful consideration of installed minimum requirements within individual jurisdictions.

Further, in the event of a clearing member default, collaboration between market participants and CCPs is required to best protect the financial system and to ensure CCP and market participants' interests remain aligned. The clear articulation of a CCP's default management standards in its rules promotes clearing member participation in the default management process and CCP recovery efforts; however, rules and procedures that are too prescriptive may undermine a CCP's ability to respond effectively to defaults.

**Availability of CCP Emergency Powers**

Our view is that CCPs must establish and retain emergency powers in order to address unanticipated events that may arise in the unique circumstances of each clearing member default. Despite CCPs' best efforts to model their financial safeguards and default management standards to address permutations in clearing member defaults, it is unrealistic to assume any CCP can predict with sufficient certainty all default scenarios. CCP flexibility, robust tools and prudent risk management practices are the buffers against the reality that each default is unique and the challenges each presents cannot be known ex ante. Despite the necessity for CCPs to retain emergency powers for use in a default, we support certainty in regard to non-defaulting clearing member obligations during a clearing member default and limiting the use of emergency powers to situations where their deployment supports market stability.

Discussions concerning the availability of CCP emergency powers must recognize the critical difference between CCPs and their participants. CCPs are neutral risk managers whose primary public policy objective and interest is in broad market stability, whereas CCP participants create the risk in the market, including default risk. CCP emergency powers are in place to preserve financial stability in times of market stress, including instances of clearing member defaults, and to protect surviving market participants and the wider integrity of the market. CCP flexibility in managing a default is critical to the stability of the market ecosystem, the protection of non-defaulting clearing members, and the market as a whole. CCPs must have the necessary flexibility to protect non-defaulting clearing members and customers during the unique circumstances encountered in each clearing member default.

Emergency powers are especially critical in dynamic markets, where they ensure that CCP management is able to take action to address rapid changes in market conditions. A CCP being unable to take appropriate action to manage risk in fast-moving market conditions increases risks to non-defaulting clearing members, their customers and the financial system as a whole. Lastly, we note that having emergency powers available in case of a clearing member default supports the goal of CCP and market continuity.

**Voluntary CCP clearing of complex products**

As market-neutral risk managers, the CCP franchise is intrinsically tied to the smooth functioning of its markets and the robustness of its risk management tools. CCPs have the same incentive to manage risk whether they clear a single product or a wide range of instruments.

CCPs take input from management, risk committees, market participants and regulators both in establishing a risk management framework and prior to launching new services and products. These layers create a strong oversight structure and serve to align the interests of CCPs, regulators and market participants to ensure a CCP is capable of withstanding risks brought by new clearing participants and markets. In light of the commercial incentives of market participants and the risks they bring to CCPs, we believe that CCP flexibility in working with, and taking direction from, regulators to determine which products are appropriate for central clearing is critical to avoid undue influence by participants driven by commercial interests rather than risk management best practices. Continuity and safety are the cornerstones of a CCP's design and operation and serve as powerful incentives for CCPs to only clear products for which they have adequate risk management capabilities. Regulators have similarly strong incentives to ensure that central clearing be mandated in appropriate cases and that the CCPs they oversee do not clear products for which their risk management practices are not suited. These regulators have a high degree of visibility and input into CCP operations and safeguards and are able to ensure that CCPs only clear products they are appropriately equipped to clear. Generally, CCPs also utilize risk committees that include market participants, providing a forum for clearing members to raise risk-related issues in connection with the proposed clearing of additional products or alteration of risk management practices. The governance structure and layers of oversight serve to ensure the interests of CCPs, regulators and market participants are aligned toward market stability and that CCPs do not take on unsuitable risks.

**Avoiding one-size-fits-all approaches to risk management tools**

The wide range of members within WFE reflects a correspondingly wide range of regulations, clearing participants, product bases and local market structures. Due to the impracticality of harmonizing CCP rules and practices, especially given the variances between market structure, local law and regulation, we advocate for regulatory harmonization across jurisdictions with the use of a principles-based approach, which is supportive of a mutual recognition regime of comparable regulatory regimes on an outcome-determinative basis. Globally applicable principles, such as the PFMIs, facilitate a more integrated financial system while enabling regulators and CCPs to consider and respond to the unique nature of local markets. We again note that the expertise of local CCPs and regulators is critical to the proper functioning of markets. CCPs must retain the ability to exercise discretion in regard to CCP risk management tools and practices and regulators must retain the discretion necessary to apply locally relevant standards and oversight.

A. Standardized rules

CCPs around the globe have different participants, operate within different market structures, and face different regulatory obligations. CCPs must operate within local regulatory frameworks and address local market needs when designing their risk management practices. Consistent rulebook structures across global CCPs would be nearly impossible to achieve while retaining effective risk management practices that reflect the variety of markets, products and market structures within local frameworks. Further, disparate regulatory requirements, insolvency treatment and market structures undermine the viability of blunt, one-size-fits-all rules.

B. Standardized skin-in-the-game requirements

CCPs are fundamentally risk managers responsible for ensuring the overall safety and soundness of their markets. Whether commercial institutions or utilities, as principal to all cleared trades, CCPs have the incentive to protect themselves and their clearing members with suitable risk management standards. CCPs have the most expertise about their markets, participants and market structure, and must be tasked with sizing their contributed capital in a manner that reflects the alignment of clearing member and CCP incentives. The financial resources in a CCP's default waterfall, including margin, guaranty fund assets and CCP capital, have historically been an effective way to protect the mutual interests of clearing members and CCPs as counterparties to cleared trades. Inordinately large, standardized contributions by CCPs may serve to permit clearing members to take on additional risks effectively subsidized by others, separating risk creation from risk obligation, which would set wrong incentives for involved parties. We further note that CCPs structure and size their default management waterfalls differently, in accordance with the needs of the local market and their organizational design, and a standardized approach to contributions overlooks the interplay between sequencing and sizing of a CCP's skin-in-the-game and its utility within the overall waterfall.

C. Other risk management tools

A variety of risk management tools are available to CCPs to address specific aspects of the markets they clear, such as concentration margin add-ons, risk-based limits and collateral haircuts. These enable a CCP to address idiosyncratic risks brought by clearing members in their markets. CCPs have a high degree of visibility into clearing participant and customer positions and collateral holdings, which makes CCPs uniquely well-qualified to monitor and address concentration risks without needing to resort to potentially counter-productive standardized models.

In addition to that the fact that CCPs are the most knowledgeable with regards the unique aspects of their markets; collateral acceptance practices, haircuts and concentration limits are necessarily functions of collateral accessibility and liquidity, which in turn vary according to jurisdiction, markets and time zone. In order to be effective and ensure a CCP is able to access and liquidate collateral as necessary, CCPs must account for local variables when determining their collateral acceptance practices. These include: accessibility of types of collateral; the availability of markets for that collateral during the CCP's market hours; the composition of the CCP's clearing membership base and their collateral holdings; and the anticipated time it would take to liquidate such collateral in a default scenario. The balance of each of these factors differs between CCPs due to their geographic location, varying market structures and participant base. The liquidity profile of even a single collateral type may vary across jurisdictions, making it imperative that CCPs determine the appropriate levels rather than have general standards imposed.

Further, CCPs must have the ability to manage their counterparty risk profile via appropriate investment strategies, and through being able to accept a range of collateral to ensure that concentrated collateral holdings do not create liquidity pressure in a stressed market. Accepting a range of collateral reduces correlations across the overall collateral pool while providing operational flexibility to the CCP during market stress events. Narrowing the types of collateral accepted by CCPs to high quality assets helps to ensure that the default of a large clearing member does not result in further market dislocation or other unintended consequences.

**CCP and clearing member incentives in default management**

Risk management is the core market offering and franchise of CCPs, ensuring they have a strong motivation to establish default management resources at levels that support market confidence and service continuity, and are sized to minimize the potential for the utilization of non-defaulter resources in the waterfall. Likewise, clearing members have a strong incentive to manage risks due to their exposures to CCPs and the potential for loss mutualization in the event of a default, creating a natural alignment of the CCP and clearing member toward sound risk management. Below, we discuss certain measures that have been the subject of recent industry discussion, as well as our view on their impact on the alignment of incentives for risk management between CCPs and their clearing members.

A. Initial Margin and Default Fund Contributions

Initial margin requirements reflect the amount of risk in a portfolio, which creates incentives for clearing members to manage their risks and the risks of their customers by maintaining balanced portfolios. We view this as a powerful tool and strongly support CCP prioritization of 'defaulter pays' approaches to the extent that such approaches appropriately balance initial margin and default fund contributions that encourage clearing members to conduct sound risk management of customer and proprietary positions.

Similarly, we note that the exposure of default fund contributions to losses from clearing member defaults also offers risk management incentives to clearing members. Individual clearing member default fund requirements are sized based on the risk they bring to the CCP; requirements increase and decrease as clearing member risks increase and decrease. The clearing members' skin-in-the-game is therefore a powerful motivator for them to actively manage risks and participate in processes designed to mitigate systemic risk during a clearing member default.

B. Recovery and CCP Continuity

Continuity of a CCP's services (i.e. recovery) is almost always preferable to resolution given the systemic disruption and distress that would be caused by a wind-down of CCP services. CCPs should therefore be given appropriate flexibility and time to utilize recovery tools, while resolution authorities should ideally only step in after all recovery tools have been exhausted. Pre-emptive involvement by a resolution authority could introduce substantial uncertainty into the default management process and could prompt non-defaulting clearing members to expedite the resolution process rather than promote CCP recovery.

We recognize that regulators from different jurisdictions with different market profiles may benefit from having flexibility in the tools at their disposal to manage defaults. Given the extremely low likelihood of CCP recovery and resolution scenarios, we recommend that authorities do not restrict their options for powerful tools provided that their application is both equitable across the broad participants of the affected market, will not destabilize the affected market and continue to align incentives appropriately. To this end, we support the FSB appendix to the Key Attributes in addition to the existing tools included in the CPMI-IOSCO report on CCP recovery. Default management processes and recovery efforts must be structured to ensure the best outcome for the broader market by providing incentives for clearing members to bid aggressively in default management auctions and permitting the CCP to return as soon as possible to its natural, risk neutral position. Assessments may also be structured to provide a strong incentive for clearing members to work toward recovery rather than resolution.

In the highly unlikely case where a default loss is significant enough to deplete the entirety of a CCP's default management resources, we support partial tear-ups as the preferred, end-of-waterfall loss allocation tool. However, we disagree with the concept of compensating clearing members for all losses associated with variation margin gains haircutting. Any recoveries from a defaulting clearing member's estate should be credited back to the clearing members subject to a transparent, mutualized loss-sharing arrangement. Compensating members for losses beyond the amounts recovered from a defaulting clearing member's estate undermines the concept of risk absorption and loss mutualization among participants that is fundamental to central clearing. Clearing members enjoy certain rights in connection with CCP participation (e.g. the ability to charge for services and the right to mutualized protection), as well as obligations (e.g. mutualized payment obligations and meeting risk management requirements). Clearing members therefore should not receive special dispensation for performing their transparent, accepted and legally binding obligations under CCP rules.

**Liquidity provision and creation of liquidity needs**

CCPs provide infrastructure and services designed to mitigate and mutualize risks brought to the financial system by CCP participants. As such, we believe it is important for clearing members to play a role in covering the potential liquidity risk created by these CCP participants. Participation in a liquidity facility incentivizes clearing members to assist the CCP during a systemic event due to their own skin-in-the-game. We believe it is prudent for the market participants that create liquidity needs to work closely with CCPs to alleviate a liquidity strain on the CCP and its fellow market participants. Further, moral hazard exists where the creation of liquidity needs and the obligation to pay potential costs associated with such needs are decoupled.

We agree with the view that CCPs should have access to central bank liquidity and deposit facilities upon request given their critical importance for financial stability, but such access is not regularly available to all CCPs in all jurisdictions. As such, central bank access is not a viable solution for CCP liquidity or cash management requirements in all cases. We support voluntary access to central bank liquidity, where available, noting that market participants who currently have voluntary access to central bank liquidity or deposit facilities may also seek diversification of liquidity sourcing and deposits through commercial or other arrangements.

CCPs require flexibility and diversity in funding sources, as determined by the CCP in accordance with its unique liquidity needs. Our view is that obtaining liquidity from a diverse set of financial market participants is necessary, while noting that sourcing liquidity from clearing members and their affiliates creates a powerful incentive for those participants to make liquidity available to the CCP during a clearing member default due to their skin-in-the-game at the CCP in the form of initial margin and default fund contributions. Diverse liquidity sourcing that includes clearing members and their affiliates promotes market stability and CCP continuity while further aligning the incentives of the clearing members and CCPs.

**Conclusion**

Central clearing advances the G20 mandate to increase transparency and market stability for standardized, liquid products, in reaction to the opacity, volatility and defaults (and near defaults) in un-cleared OTC markets post-financial crisis. We believe that the expansion of clearing should be driven by the goal of financial stability and the necessity for improved risk management of an asset class. CCPs facilitate such expansion, advance risk management practices and contribute to the development of innovative risk management techniques for newly cleared products, especially in emerging markets with unique local needs and structures.

CCP risk management tools have been repeatedly tested in a range of significant market stress events including the 2008 global financial crisis and, more recently, in the global market volatility seen in August 2015. Despite their impressive track record through stressed market conditions, CCPs continue to refine and improve their resilience and ability to manage future market crises as the core function of their offering. Our view is that the CCPs themselves are the experts in managing the risks of their markets and, as stated by global risk management principles, CCPs should retain the flexibility to design and augment risk management tools to manage the risks brought by their participants. For this reason, many one-size-fits-all approaches to risk mitigation proposed by some industry participants would undermine CCPs' abilities to proactively manage risk and stabilize the financial markets they serve, which in turn frustrates the G20 commitment to central clearing. We further support measures that align the incentives of CCPs and clearing members by ensuring that clearing members pay for the exposures they bring and are incentivized to support policies that encourage diversification of risk across participants and greater financial stability. WFE remains eager to participate in ongoing discussions and policy development processes regarding CCP risk management, recovery and resolution to ensure the safety and soundness of markets.