WORLD FEDERATION OF EXCHANGES

Paper: Additional ('Alternative') Resources for Recovery, Resolution, and Non-Default Loss at CCPs

Background

Established in 1961, the World Federation of Exchanges (WFE) is the global industry association for exchanges and clearing houses (CCPs). Headquartered in London, it represents over 250 market infrastructure providers, including standalone CCPs that are not part of exchange groups. Of our members, 34% are in Asia-Pacific, 45% in EMEA, and 21% in the Americas.

WFE's 90 member CCPs and clearing services collectively ensure that risk takers post some $1.3 trillion (equivalent) of resources to back their positions, in the form of initial margin and default fund requirements. WFE exchanges, together with other exchanges feeding into our database, are home to over 50,000 listed companies, and the market capitalisation of these entities is over $100 trillion; around $140 trillion (EOB) in trading annually passes through WFE members (at end 2022).

The WFE is the definitive source for exchange-traded statistics, and publishes over 350 market data indicators. Its free statistics database stretches back more than 40 years and provides information and insight into developments on global exchanges. The WFE works with standard-setters, policy makers, regulators, and government organisations around the world to support and promote the development of fair, transparent, stable and efficient markets. The WFE shares regulatory authorities' goals of ensuring the safety and soundness of the global financial system.

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

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

Charlie Ryder, Regulatory Affairs Manager: cryder@world-exchanges.org
Richard Metcalfe, Head of Regulatory Affairs: rmetcalfe@world-exchanges.org
Nandini Sukumar, Chief Executive Officer: nsukumar@world-exchanges.org

Introduction

The World Federation of Exchanges (WFE) has previously publicly expressed support for initiatives that support financial stability led by international standard setters and local regulatory agencies, and has sought to proactively contribute to the discussion on these matters. In doing so, its members have contributed significantly to the strengthening of the broader financial system through engagement with stakeholders on the implementation of many post-crisis initiatives.

The WFE and its members actively promote efforts that are designed to ensure the safety and soundness of the global financial system, which is critical to enhancing investor and consumer confidence. Whilst the scenarios in which a CCP would need to be resolved are extreme and remote, we do appreciate any efforts to provide continuity of clearing services and support the stability of the broader financial system.

Following continued interest in the topic from international standard setting bodies (see FSB 2018[1] & 2022[2]), local policymakers, academics, and market practitioners, the WFE wishes to outline the implications of potential international standards or otherwise that would call for additional financial resources from CCPs and/or alternative resources as part of the default waterfall. In particular, it is of the utmost importance that the impacts these resources could have on risk management incentives are considered.

This paper outlines consequences of mechanisms such as bail-in bonds and other 'alternative', costly, and inefficient resources contemplated in recent publications, and highlights the need for CCPs to be able determine the appropriate design of their default waterfalls in order to continue to preserve incentives for market participants to effectively manage their risks, considering a CCP's unique ownership structure, products, and markets which they serve.

Furthermore, it is important to note that in markets where central clearing is not mandated, increasing resource requirements for central clearing may incentivise bilateral clearing, due to the potential of higher costs for participants. Therefore, international standard setters should carefully consider such measures which, although aimed at increasing robustness of the central clearing model, may in fact have the inverse impact of disincentivising contract continuity and reducing overall systemic risk protection.

Paper

In normal situations, a CCP maintains a matched book – it stands between counterparties with opposite positions – and does not engage in trading, lending or other types of market risk creating activities but rather acts as a risk manager and is responsible for managing the overall safety and soundness of its markets and supporting the broader financial system. However, this book can become unbalanced in the event of a clearing member default, and thus CCPs also hold pre-funded resources to absorb losses that arise in the process of restoring a matched book.

In addition, CCPs hold capital reserves (and sometimes arrangements such as insurance policies) to address losses that may arise not related to a clearing member default (i.e., non-default losses) and employ various proactive risk management practices that designed to mitigate the risk of these losses arising in the first place. Both a CCP and its clearing members typically contribute towards the pool of pre-funded resources for managing a clearing member default, comprising the default waterfall. Clearing members contribute financially in order to backstop the risk that they bestow upon the CCP, and while CCPs do not create the risk they manage, they do contribute resources to demonstrate their confidence in their risk management practices and to signal that the CCP's incentives are similarly aligned with their market participants. The default waterfall is ultimately designed to promote incentives for market participants to effectively manage their risks.

[1] Financial Stability Board, 'Financial resources to support CCP resolution and the treatment of CCP equity in resolution', 15 November 2018, https://www.fsb.org/2018/11/financial-resources-to-support-ccp-resolution-and-the-treatment-of-ccp-equity-in-resolution/, which advocates for CCP equity to be a consideration in resolution planning.

[2] Financial Stability Board, 'Central Counterparty Financial Resources for Recovery and Resolution', 10 March 2022, https://www.fsb.org/2022/03/central-counterparty-financial-resources-for-recovery-and-resolution/, which also advocates for the 'bail-in' conversion of unsecured liabilities into equity or other instruments of ownership of the CCP or of a successor entity.

If a member defaults, then the first 'defaulter-pays' component in the waterfall is initial margin posted by the defaulting clearing member to the CCP. As outlined in the Principles for Financial Market Infrastructures (PFMI) (April 2012), initial margin should be sufficient to 'cover potential changes in the value of each participant's position (that is, potential future exposure) over the appropriate close-out period in the event the participant defaults'[3]. This practice helps incentivise members to employ effective risk management practices. If losses still remain after applying the defaulting member's margin, the defaulting member's contribution to the pooled default (or "guarantee") fund (that is paid into by all CCP members) may be used. The possibility that the remainder of this fund (i.e., the contributions of non-defaulting members) could be used to absorb the losses for a member default (typically after a CCP's own contributions), encourages each clearing member to not only effectively manage their own risks, but also actively participate in the default management process, thereby actually reducing the likelihood of these pooled resources being used in the first place. If the defaulting clearing member's contribution to the default fund is insufficient, the CCP would then use their own dedicated capital reserves (a tranche called ''Skin-In-The-Game'', or ''SITG''), before eventually turning to the remaining default fund contributions of non-defaulting clearing members to cover the loss.

However, financial commitments from both sides are important in promoting an understanding of who has what incentives in relation to central clearing. A layer of SITG serves to advertise the fact that a CCP inherently has strong interests to manage risk effectively, to the benefit of members and other users, while a non-trivial level of financial commitment to the default waterfall encourages CCP members to a) establish their own effective risk management practices, and b) take over the positions of any defaulting members in times of stress, ensuring the continuity of trades, and ensuring that the mutualised layer(s) of the default waterfall is rarely used[4].

If a default is so severe that the above prefunded resources are exhausted, then other tools are available to the CCP to address the remaining uncovered credit losses, such as lines of insurance and credit or requests for additional resources from clearing members in a manner that limits the impact of losses on any one member. Participants agree to these terms when becoming a clearing member, as each CCP maintains a rulebook that sets-out its default waterfall in a prescribed sequence – this could require clearing members to contribute more resources, allow the CCP to haircut mark-to-market portfolio gains of market participants, allow the CCP 'tear up' (i.e., cancel) all or some of its contracts, or initiate other loss allocation processes.

Regarding larger CCP resources

The pre-funded financial contributions of the CCP and its clearing members across the aforementioned tranches of the default waterfall consist primarily of contributions from those who are creating the risks that the financial resources cover, i.e., a CCP's clearing members. A CCP's role is as a risk manager, whereas clearing members are risk-takers that accrue the risk management benefits of central clearing, and thus clearing members contribute to the default waterfall at several stages in both a 'defaulter-pays' and a 'survivor-pays' capacity. Therefore, unlike the default fund, SITG is not designed to be a significant loss absorption tool, but rather to demonstrate a CCP's confidence in its risk management practices. Recognising the purpose of a CCP's SITG, it is important to balance its size with promoting incentives for market participants to manage their risk, including actively participating in the default management process. As such, a CCP's SITG should be sized to a meaningful contribution so as to reinforce a sense of community between the CCP and its clearing members, but must not be so big that it disincentivises clearing members from effectively managing risk.

A CCP's SITG must be sized so as not to reduce the incentives for a CCP's clearing members to actively manage the risk they bring to the CCP. An overly large CCP SITG can create a disincentive for clearing members to efficiently participate in the default management process - in particular, it can incentivize them to undermine the outcomes of the auction of a defaulted member's portfolio by providing bids that could result in the use of the large amount of CCP SITG, thus reducing the likelihood of their own mutualisable resources being utilised. In a stress event, when a successful default management process is paramount, any undermining of risk management incentives is likely to have negative implications for financial stability.

With this in mind, it is clear that efforts to calibrate the size of SITG to that of clearing member contributions to the default fund would be misguided. If a CCP's SITG were subjected to a mandated higher level of CCP contributions, it could shift the balance of the

[3] International Organization of Securities Commissions (IOSCO), 'Principles for Financial Market Infrastructures (PFMI)', p 176, April 2012, https://www.bis.org/publ/cpss101a.pdf

[4] This is particularly true when the CCP practices subordination or 'juniorisation' in default auctions, where the CCP first uses the prefunded cash of members who submit the worst auction bids.

incentives away from motivating clearing members to manage the risks they bring to the CCP or to actively participate in default management auctions (especially if this level were greater than any single clearing member contribution to the default fund).

Regarding additional resources

CCPs can often wrongly be considered within the prism of financial regulation designed specifically for banks, which can include the ability to recapitalise an entity using equity or convertible debt such as bail in bonds. However, CCPs are markedly different from banks in recovery and resolution – notably, the objective of a CCP's recovery is to re-establish its matched book, restoring its position as a market risk neutral counterparty. As highlighted above, in the highly unlikely event the pre-funded resources at a CCP cannot absorb the losses associated with a member default, then the CCP is able to use its additional rules-based recovery tools available as set forth in the CCP's default waterfall to resolve the remaining uncovered credit losses. This may include calling for additional resources from its clearing members to absorb losses, and if that is insufficient, then, in the case of derivatives clearing, the CCP may also haircut mark-to-market portfolio gains of market participants, while also conducting a tear up process. This is a robust, orderly, and pre-agreed sequence that occurs outside of a CCP's orderly wind-down or insolvency that is designed to re-establish a matched book and fully address the losses associated with the defaults, meaning that CCPs have no realistic need for additional layers of financial resources.

Furthermore, a systemic crash would need 'to go much further into the tail of the probability distribution of very bad events to exhaust a CCP's prefunded resources against default than would be necessary to exhaust a bank's capital', as highlighted by the Bank of England's Jon Cunliffe in 2018[5]. This can be evidenced by the continuing ability of CCPs to absorb severe market shocks under various historical clearing member distress situations (such as Long-Term Capital Management in 1998, Lehman Brothers in 2008, and MF Global in 2011), and by the findings of the 2022 Financial Stability Board (FSB) report on Central Counterparty Financial Resources for Recovery and Resolution[6], which was intentionally structured to apply market scenarios significantly more severe than the 'extreme but plausible' standard set out in the PFMI[7]. Despite the implausible scenarios set out in the report, seven of the fifteen CCP service lines were able to fully address the extreme default losses with only their prefunded financial resources and of the eight CCP service lines that used recovery tools, six were able to address the losses by utilizing their recovery cash calls. No CCP had to enter resolution.

CCPs should not be seen as 'insurers for the financial industry', or public infrastructures providing a public service to provide contract continuity ad infinitum – they are a mechanism to enforce discipline in the market and instil risk management incentives in their market participants. This misjudgement can prompt some to argue in favour of compensation paid for losses incurred in these worst-case scenarios by way of instruments which give market participants claims to equity or the future income of the CCP. However, these tools merely distort the balance of incentives and could promote CCP resolution over recovery by disincentivising clearing members from actively bidding in defaulted portfolio auctions or engaging in recovery efforts which could be less rewarding than owning equity or a share of future earnings of the reconstituted entity. Broadly, best practice regarding compensation of market participants has been covered by the FSB guidance[8] on the 'No Creditor Worse Off' safeguard framework (see WFE responses from 2017[9] and 2020[10]). This should occur where a CCP deviates from its rulebook in the application of its recovery tools, and would be in addition to any recoveries made from the defaulter's estate.

Furthermore, beyond the negative impacts that additional CCP resources to address clearing member defaults can broadly have on market participants' risk management incentives, including their incentives to actively participate in the default management process, certain types of resources have unique draw backs. The requirement for CCPs to issue debt that they do not need or keep greater

[5] Sir John Cunliffe, 'Central Clearing and Resolution – learning some of the lessons of Lehmans', 5 June 2018, FIA International Derivatives Expo, London, https://www.bankofengland.co.uk/-/media/boe/files/speech/2018/central-clearing-and-resolution-learning-some-of-the-lessons-of-lehmans-speech-by-jon-cunliffe.pdf

[6] Financial Stability Board Resolution Steering Group (ReSG), 'Central Counterparty Financial Resources for Recovery and Resolution', 10 March 2022, https://www.fsb.org/2022/03/central-counterparty-financial-resources-for-recovery-and-resolution/.

[7] International Organization of Securities Commissions (IOSCO), 'Principles for Financial Market Infrastructures (PFMI)', p 1, April 2012, https://www.bis.org/publ/cpss101a.pdf

8 Financial Stability Board, 'Guidance on Central Counterparty Resolution and Resolution Planning', 2017, https://www.fsb.org/2017/07/guidance-on-central-counterparty-resolution-and-resolution-planning-2/

[9] World Federation of Exchanges, 'FSB Guidance on Central Counterparty Resolution and Resolution Planning', https://www.world-exchanges.org/storage/app/media/regulatory-affairs/Recent%20publications%202017/WFE%20FSB%20CCP%20Resolution%20and%20Resolution%20Planning%20-%2010%20March%202017.pdf

[10] World Federation of Exchanges, 'FSB consultation on treatment of CCP equity in resolution', https://www.world-exchanges.org/storage/app/media/WFE_FSB%20CCP%20equity-res%20200729.pdf

capital reserves to prevent against extreme and unlikely scenarios, including default and non-default loss scenarios, would likely have unintended negative effects on market participation by unnecessarily increasing the costs of central clearing. These increased (and uncertain) costs would be passed onto the end users of clearing services and could undermine their ability to effectively manage their business risks by preventing them from hedging their risks in the first place and/or forcing more participants into riskier, non-centrally cleared bilateral markets, where that is an available option.

As noted above, other tools such as 'bail-in' bonds are a bank resolution tool that are not suited for CCPs, which have fundamentally different business models and risk profiles to banks. Inappropriately applying the concept of 'bail-in' bonds to CCPs would likely add additional uncertainty regarding seniority[11] and the premium they would require (given that they would, in effect, be taking on the risks associated with a systemic meltdown). The practicality of this proposal is also questionable as not all CCPs are public companies, and thus, do not issue long-term debt securities. It is also questionable as to who would seek to own such bonds, given that non-defaulting members would already be exposed to the CCP and unlikely to want additional exposure, and supervisors would be unlikely to encourage members (particularly in the banking sector) to take on this extra risk.

Other tools, such as insurance for resolution, come with uncertainty over factors such as timing of payouts. Therefore, insurance against CCP losses is not common practice, and may constitute a potentially significant expense for an extremely unlikely event of a CCP entering into resolution.

Ownership models, jurisdictional considerations, and required flexibility

When considering the impact of potential guidance, it is also important to consider the full range of CCP ownership models, and how their unique loss-allocation processes serve to align the interests of members and the CCP. It is also important to consider the varied regulatory environments in which CCPs reside. CCPs in certain jurisdictions may already implement detailed regimes that enshrine various tools including the use, composition, and amount of resources for default and non-default loss. Without careful consideration of these realities, additional and prescriptive guidance on top of these regimes risks the creation of uneven regulatory environments. First and foremost, authorities should prioritise a flexible toolbox, and take into account the implications of any additional tool, with no prescribed order nor defined magnitude – the possible choices of tools should be left to a given jurisdiction's decision. As outlined in our 2017 position paper[12], CCPs must maintain appropriate flexibility to design their recovery tools in a manner that is appropriate for their unique offerings. Without this flexibility, recovery plans may become too prescriptive, imposing a set of tools on market participants which are not suitable to the precise market event in question, increasing the likelihood of failure and entrance into resolution.

Conclusion

While we appreciate the work of international policymakers to develop standards that support the stability of the broader financial system, we question the conclusion that further work and/or policy on the topic of CCP financial resources is needed. We believe that the ongoing robustness in centrally cleared markets despite recent shocks and volatility demonstrates the sufficiency of the existing resource structure, combined with the sound risk management practices employed at CCPs. Furthermore, the WFE wish to emphasise that there is no 'one-size-fits-all' solution to CCP resources. International standard setters should not mandate the use of any particular tools given that CCPs require flexibility to serve specific markets in different legal jurisdictions in consideration of their different structures.

We are encouraged by the efforts to better assess and understand the nature of CCP risk management, but call upon international standard setters to avoid undermining the risk management incentives that have characterised the central clearing model for so long by forcing CCPs to contribute higher amounts of financial resources to protect against member default losses. In particular, this would

[11] Issues regarding debt instrument seniority were seen during the write-down of additional tier-one (AT1) bonds by Swiss regulator FINMA as part of the Credit Suisse takeover by UBS in 2023. Standard resolution authority hierarchy requires equity investments to be written down first and classed as secondary to bonds. The European Central Bank and European Banking Authority outlined this divergence, stating that in the European Union, 'common equity instruments are the first ones to absorb losses, and only after their full use would Additional Tier 1 be required to be written down.'
Single Resolution Board, ' EU regulators distance themselves from Credit Suisse bond writedowns', 30 March 2023, https://www.srb.europa.eu/en/content/eu-regulators-distance-themselves-credit-suisse-bond-writedowns

[12] World Federation of Exchanges, 'The Interplay between Central Counterparty (CCP) Recovery and Resolution: A Global Perspective White Paper', https://www.world-exchanges.org/our-work/articles/wfe-ccp-recovery-and-resolution-white-paper

ultimately destroy the incentive for clearing members to properly manage the risk they bring to the CCP, which, at its core, is a risk manager. Undue emphasis on mechanisms to compensate market participants in a CCP recovery or resolution scenario also risks distorting the incentives that exist to support the default management process. This introduces moral hazard into the recovery process, and increases the likelihood that public intervention would be required. Any consideration for new international policy should be mindful of the CCP's ownership structure and regulatory environment, as well as the potential impacts on a CCP's risk management and recovery tools – any standards should be designed to ensure that they do not reduce the likelihood of successful CCP-led default management process and recovery. Guidance that provides incentives for market participants to see the CCP resolved rather than recover would be antithetical to supporting the stability of the broader financial system and inconsistent with the PFMI.

International standard setters should also be mindful that a call for additional CCP resources may increase the cost of clearing, potentially dissuading clients from centrally cleared services to bilateral markets.

One single resolution strategy cannot be effective for all potential scenarios, and therefore regulatory efforts should allow for nuances and specificities to be considered. Markets, CCPs, laws, and regulations all vary, and thus standards must reflect this reality. In this spirit, WFE and its members will continue to engage with local and international policymakers to work towards the shared objectives of achieving fair, robust, and resilient markets in which investors can have confidence.