

# Principles for CCP Recovery

## INTRODUCTION

The derivatives industry has made great progress over the past few years in implementing the public policy mandate to migrate most over-the-counter (OTC) derivatives trades to central counterparties (CCPs). Indeed, it is estimated that more than two-thirds of outstanding interest rate derivatives have been centrally cleared. As a result, the larger CCPs have become critical components of the financial markets infrastructure and are emerging as major hubs concentrating the vast majority of global OTC derivatives transaction flows and risk positions. Special focus must therefore be placed on minimizing the risks of CCPs reaching the point of non-viability (PONV)<sup>1</sup>, as well as contemplating the steps to be undertaken in the event the PONV should be reached, without resorting to public money.

Numerous opinions have been expressed as to how best to achieve this objective. ISDA's assessment, taking into account the views of the broad range of market participants that comprise its membership, is that certain issues warrant further discussion and remediation. These issues can be broken down into two basic themes:

- The adequacy and structure of a CCP's loss-absorbing resources; and
- Crisis management planning in the form of a clearly defined and transparent recovery and resolution framework (R&R) for CCPs when losses threaten to exceed their loss-absorbing resources.

This paper examines these issues, outlines some common principles and highlights key items for discussion.

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<sup>1</sup> The point of non-viability – PONV – is the point where the default management process has failed and recovery efforts to re-establish a matched book are no longer effective

## Key Principles

1. **Transparent risk management standards, practices and methodologies:** The practices, standards and methodologies used by CCPs to size their loss-absorbing resources, which include initial margin (IM), default-fund (DF) contributions and CCP 'skin in the game' (SITG), need to be transparent to market participants.
2. **Mandatory, standardized and transparent stress testing:** CCP risk management methodologies and frameworks should be regularly tested and assessed using regulatory driven standardized and transparent stress-test criteria to assure market participants they are adequate.
3. **Significant CCP SITG:** CCPs' contributions to the loss-absorbing resources pool should incentivize robust risk management, align CCP management incentives with those of the clearing members (CMs), and be fully funded, material and substantial.
4. **Clearly defined CCP recovery plans:** Ensuring the continuing operation and restoring the viability of a failed CCP is less disruptive and costly, and therefore preferable, to its liquidation or full contract tear-up. Toward this end, CCP recovery mechanisms should be clearly defined and transparent; they should be pursued as long as the CCP default management process (DMP) is effective. Where CCP rules provide for cash calls to CMs, they should be limited, capped and fully transparent<sup>2</sup>. Loss-allocation tools should only be considered if they are rules-based, clearly agreed upon and in place, and are economically viable for all categories of clearing participants.
5. **Clearing service termination or resolution:** Recovery efforts should only be undertaken as long as the DMP is effective and the clearing service is viable. If the DMP has failed and/or further recovery efforts to re-establish a matched book are either ineffective, unfeasible or create systemic instability, then the CCP is faced with the prospect of considering the closure of the clearing service. It is likely that, at this point, the resolution authorities will be evaluating which course of action is most effective.

## Adequacy of CCP Loss-absorbing Resources

The large volume of OTC derivatives now cleared by the major CCPs means it is vital that CCPs have enough loss-absorbing resources in place to cover losses caused by the failure of one or more CMs. Recognizing that, regulators have introduced numerous regulatory initiatives to address the adequacy and structure of CCPs' loss-absorbing resources, many of which are based on the *Principles for Financial Market Infrastructures* (PFMIs), developed by the Committee on Payment and Settlement Systems and the International Organization of Securities Commissions (IOSCO)<sup>3</sup>. These principles have been supplemented by another report by IOSCO and the Committee on Payments and Market Infrastructures (CPMI), entitled *Recovery of Financial Market Infrastructures*<sup>4</sup>.

<sup>2</sup> JP Morgan, Blackrock and PIMCO have each advocated that cash calls cannot be relied upon at the time of need and could, in fact, be pro-cyclical, thereby exacerbating systemic risk. JP Morgan suggests assessments should be eliminated, while Blackrock recommends assessments should be fully pre-funded

<sup>3</sup> See CPSS-IOSCO report, *Principles for Financial Market Infrastructures*, issued in April 2012, <http://www.bis.org/publ/cpss101a.pdf>. Also see ISDA's response, <http://www.bis.org/publ/cpss94/cacomments/isda.pdf>

<sup>4</sup> See CPMI-IOSCO report, *Recovery of Financial Market Infrastructure*, issued in October 2014, <http://www.bis.org/cpmi/publ/d121.pdf>

In addition, national regulatory agencies have issued several implementation reports related to these principles. CCPs have also established various standards in their respective rule books to ensure that CCPs and CMs are financially robust, maintain the requisite expertise to participate in the DMP – which refers to the process deployed when one or more CMs default – and have sufficient financial resources and operational capabilities to meet their obligations.

While these initiatives are important, questions remain on both the structure and adequacy of CCP loss-absorbing resources. There is also a strong desire by market participants for greater transparency and consistency over CCP standards, practices and capital contributions, as outlined below.

## CCP Recovery and Resolution

Even if there is full transparency and CCP loss-absorbing resources are optimally calibrated at a sufficient number of CM defaults (cover\*, where \* is typically two), it is still conceivable that these resources may be exhausted, simply because future market developments may lead to losses that exceed the amounts set by stress tests. As such, a framework for dealing with this possibility is necessary.

Recognizing the systemic importance of CCPs, regulators have called for an R&R regime for CCPs (and more broadly for FMIs) to ensure financial stability and continuity of critical CCP functions without exposing taxpayers to losses from solvency support<sup>5</sup>. The recent report by the CPMI and IOSCO has outlined a broad framework for recovery, and offers a choice of recovery tools.

ISDA fully supports the CPMI/IOSCO recommendations for more clarity as to: (a) what happens after all CCP loss-absorbing resources are exhausted; (b) the conditions under which additional steps need to be taken to replenish such resources – including the possibility of loss allocation and the method(s) chosen; and (c) the decision-making process (including who makes the decision) over whether to keep the clearing service open (recovery), close it (clearing service termination) or put the CCP in resolution. These are absolutely fundamental steps in order to provide market participants with the ability to calibrate and manage their clearing risks.

<sup>5</sup> See Financial Stability Board paper, *Application of the Key Attributes of Effective Resolution Regimes to Non-Bank Financial Institutions*, August 2013, and CPSS-IOSCO report *Recovery of Financial Market Infrastructures*, issued in August 2013, <http://www.bis.org/cpmi/publ/d109.pdf>

## Key Principles

### 1. Transparent Risk Management Standards, Practices and Methodologies

The transparency and consistency of CCP risk methodologies – specifically, the stress-test scenarios used to calibrate both IM and the DF contributions – are critical factors in assessing the adequacy of CCP resources. Enhanced transparency should, in fact, extend to all aspects of a CCP's financial health and its exposure to other sources of risk (eg, investment risks and business risks from other non-CCP related activities).

There is broad consensus among industry participants and ISDA members that there is currently a lack of transparency regarding such practices. ISDA and the industry have advocated and continue to advocate for more quantitative and qualitative disclosure<sup>6,7</sup>. ISDA supports further steps on the part of CCPs to disclose appropriate and relevant information so that market participants facing these clearing houses can adequately assess risks. These include:

- CCPs' IM methodologies and associated margin practices (ie, margin periods, stress scenarios used and assumptions made, and others);
- CCPs' methodologies regarding the sizing of DF contributions;
- Quantitative disclosures of significant CCP risks, such as concentrations to and exposures of individual CMs, as well as the size of loss-absorbing resources available to the CCP (ie, levels of IM, DF and SITG).

### 2. Mandatory, Standardized and Transparent Stress Testing

Consistency of risk practices among CCPs is another issue<sup>8</sup>. An initial review of CCP practices reveals a lack of homogeneity in the application of the PFMI by various CCPs, not only worldwide, but even within individual jurisdictions. Although different clearing services and product classes may merit their own considerations, greater consistency of practices would go a long way to helping market participants assess CCP risk and practices.

A case in point: the PFMI call for stress tests based on “extreme but plausible” scenarios, but the principles do not provide specific guidance, particularly on the scope of the stress tests. As a result, CCPs have developed their own methodologies and practices, leading to procedures that vary significantly (and they lack transparency, as noted above).

Recent papers<sup>9</sup> have called for mandatory standardized stress tests. Mandatory standardized stress tests (properly calibrated for specific asset classes) could provide a very useful data set and yardstick for market participants to assess CCP risks on a consistent basis, and the sufficiency/adequacy of a CCP's loss-absorbing resources to address such risks.

<sup>6</sup> See ISDA's responses, <http://www2.isda.org/attachment/NDQ4Mg==/GFMA-ISDA%20Response%20to%20CPSS-IOSCO%20Assessment%20methodology%20and%20Disclosure%20framework%20for%20PFMI.pdf>, issued in December 2012, and [http://www2.isda.org/attachment/NjE5NQ==/ISDA%20Response%20to%20CPSS114%20Quantitative%20Disclosures%20for%20CCPs%20\(18Dec13\).pdf](http://www2.isda.org/attachment/NjE5NQ==/ISDA%20Response%20to%20CPSS114%20Quantitative%20Disclosures%20for%20CCPs%20(18Dec13).pdf), issued in December 2013

<sup>7</sup> See paper by the Federal Reserve Bank of New York's Payments Risk Committee, entitled *Recommendations for Supporting Clearing Member Due Diligence of Central Counterparties*, issued in February 2013 ([http://www.newyorkfed.org/prc/files/report\\_130205.pdf](http://www.newyorkfed.org/prc/files/report_130205.pdf)). The working group included both banks and CCPs

<sup>8</sup> Credit extension in the form of meeting an IM requirement next day is an example of such practice that introduces additional risks

<sup>9</sup> See papers by Blackrock, entitled *Central Clearing Counterparties and Too Big to Fail*, dated 17 April, 2014; JP Morgan, entitled *What is the Resolution Plan for CCPs?*, dated September 2014; and PIMCO, entitled *Setting Global Standards for Central Clearinghouses*, dated October 2014

As such, ISDA strongly recommends that practices, standards and methodologies used by CCPs to size their loss-absorbing resources – which include IM, DF contributions and CCP SITG – are transparent, consistent and subject to standardized stress testing.

Transparency is a pre-condition for assessing the adequacy of loss-absorbing resources. One way of achieving consistency is by establishing mandatory, regulatory driven and transparent standardized stress-test frameworks, with scenarios and stress tests fully disclosed to CMs. Disclosure of this information would contribute significantly towards the current and very active debate over the adequacy of CCP loss-absorbing resources. ISDA supports such an initiative, and suggests regulators engage with market participants and CCPs in coming up with the design of such tests.

### 3. Significant CCP SITG

The size of the CCP SITG is another topic that has emerged as a major point of discussion among market participants. SITG serves two purposes: to supplement the pool of resources available to absorb losses; and to incentivize robust CCP risk management and default management practices. Pursuing these two objectives has resulted in a wide variation of views, both among regulators and CCPs. As a result, CCP practices currently vary significantly. Adding to the concern on the part of some market participants is the belief that the size of SITG relative to the contributions to the DF by CMs is not adequate.

The range of views with regards to SITG is wide. The regulatory stance stretches from the Commodity Futures Trading Commission, which has remained silent on the issue, to the European Banking Authority/European Securities and Markets Authority, which require CCPs to maintain SITG in the DF equal to a fixed percentage (25%) of their CCP EMIR regulatory capital requirements. The Monetary Authority of Singapore, meanwhile, requires CCPs to maintain a SITG equal to 25% of the DF.

Market participants have also expressed differing views on what the appropriate level of CCP SITG should be. Many of these proposals advocate that SITG should be sensitive and material to the size of the DF and would put the amount of CCP SITG at a fixed percentage of the DF (ranging from 5% to 12%); others, at an amount equal to those of a large CM (ranging from the largest to the third largest); or at some combination of these two metrics. Some argue that SITG should be material to CCP net worth, advocating a SITG equal to a number (say, three) of CCP annual earnings.

ISDA agrees that CCP SITG should be material and substantial. We believe that further quantitative analysis should be conducted to determine the optimal amount and structure of CCP loss-absorbing resources, including the level of CCP SITG.

We also offer a strong recommendation as to how SITG should be structured within a CCP's loss-absorbing resources. ISDA believes CCPs should maintain two SITG tranches: one that sits junior to mutualized default resources; and a second that is placed senior to mutualized default resources. In this way, a CCP's own financial resources would be tapped before those of CMs, thereby serving as an incentive to the CCP to avoid loosening its IM (junior) or DF (senior) standards. ISDA believes these two tranches, properly sized, would encourage CCPs to maintain robust risk management practices, while incentivizing CMs to prudently manage their own risks by not relying excessively on SITG.

As noted above with regards to the size of CCP SITG in general, determining the sum of the two tranches and the relative amount of each would require quantitative analysis that is beyond the scope of this paper. These questions remain for future research and the input of regulators, CCPs and market participants working together.

#### 4. Clearly Defined CCP Recovery Plans

Significant work has been conducted in this area by ISDA in conjunction with its members<sup>10</sup>. Broadly speaking, ISDA strongly supports viable CCP recovery plans – a view that is consistent with regulatory objectives. Central to these plans is the notion that CCP recovery and continuity is likely to be less disruptive and less costly to the financial system than closure.

ISDA proposes a recovery framework comprising a series of steps that are contingent on a robust DMP. In addition to adequate loss-absorbing resources, it would encompass: a) a portfolio auction of a defaulted CM's OTC derivatives portfolio; b) limited cash calls to solvent CMs<sup>11</sup>; and c) the use of loss-allocation tools, such as a pro-rata reduction in unpaid payment obligations of the CCP (referred to as PRO<sup>12</sup>). Assessment of the appropriateness of utilizing recovery measures is based primarily on the effectiveness of the DMP. ISDA believes CCP recovery should be pursued as long as the following conditions exist:

- a) The DMP is effective and the CCP clearing service<sup>13</sup> is assessed to be viable.
- b) All envisioned recovery steps and associated decision-making processes are fully transparent, clearly defined and stated upfront (rules-based).
- c) Loss-allocation and other envisioned mechanisms should be considered as a recovery tool only if (a) and (b) are in place, and with the guidance of an impartial authority.
- d) If loss-allocation mechanisms are deployed, affected participants should be compensated by receiving a pro-rata share in the CCP's claims against the estate(s) of the defaulting CM(s) and future CCP earnings.
- e) Other approaches (partial tear-up of positions) for re-establishing a matched book should be considered for inclusion in CCP rule books<sup>14</sup>.

ISDA<sup>15</sup> also believes that, where DF resources are not fully prefunded, additional calls to CMs should be pre-defined, limited, quantifiable and fully transparent. Without certainty regarding exposures, clearing as a business becomes problematic because CMs would be deprived of the ability to quantify their risk exposures.

<sup>10</sup> ISDA's Clearing Risk Working Group

<sup>11</sup> JP Morgan and Blackrock are not supportive of unfunded CM commitments

<sup>12</sup> The term *PRO* is a next generation loss-allocation tool that improves upon the previously proposed *VMGH* (variation margin gain haircut). For details, see ISDA paper *CCP Allocation at the end of the Waterfall*, issued on August 8, 2013, [http://www2.isda.org/attachment/NTc5Nw==/CCP\\_loss\\_allocation\\_waterfall\\_0807.pdf](http://www2.isda.org/attachment/NTc5Nw==/CCP_loss_allocation_waterfall_0807.pdf). *PRO* has advantages and disadvantages relative to other loss-allocation tools, but it has the benefit of preserving netting sets

<sup>13</sup> ISDA advocates that CCPs offer segregated clearing services (ie, limited recourse clearing services) to mitigate the potential for contagion to other existing clearing services

<sup>14</sup> Use of partial contract tear-up should be considered on the condition that the accounting treatment for netting and capital purposes is preserved, and commensurate compensation for affected participants is addressed

<sup>15</sup> See The Clearing House paper, entitled *Central Counterparties: Recommendations to Promote Financial Stability and Resilience*, December 2012

## 5. Clearing Service Termination or Resolution

Although it should be extremely unlikely, the DMP could fail. In this case, regardless of the amount of loss-absorbing resources utilized (or that remain available), the clearing service is likely to be deemed no longer viable. The primary indicator of a failed DMP is a failed auction (ie, an inability to establish a CCP matched book) precipitated by the failure or lack of market capacity to provide pre-auction risk-reducing hedges to the CCP.

If the DMP has failed, the recent CPMI-IOSCO report outlines two possible courses of action for re-establishing a matched book: (a) a forced allocation of contracts that could not be auctioned (problem contracts); or (b) contract termination (complete, partial and voluntary). Forced contract allocation (adding unwanted and unmanageable positions at a time of stress) could subject non-defaulting CMs to potentially even greater risks than contract termination, and there is strong consensus among market participants against its utilization. With regards to contract termination, and given the potential severity of a full-tear up of such contracts, a partial tear-up of problematic contracts may be preferable from a systemic and continuity point of view<sup>16</sup>. The inclusion of this option in CCP rule books is currently under active consideration by market participants.

If the DMP has failed and/or further recover efforts to re-establish a matched book are either ineffective, unfeasible or create systemic instability<sup>17</sup>, the CCP is faced with the prospect of considering the closure of the clearing service (ie, complete contract tear-up). It is likely that, at this point, the resolution authorities will be evaluating which course of action is most effective.

<sup>16</sup> See Footnote 14

<sup>17</sup> See Financial Stability Board report, entitled *Key Attributes for Effective Resolution Regimes for Financial Institutions*, issued in October 2014, [http://www.financialstabilityboard.org/wp-content/uploads/r\\_141015.pdf](http://www.financialstabilityboard.org/wp-content/uploads/r_141015.pdf)