

# Safeguarding Clearing: The Need for a Comprehensive CCP Recovery and Resolution Framework

Clearing has become a critical part of the derivatives landscape, with more than three quarters of interest rate derivatives notional outstanding now cleared through central counterparties (CCPs). Market participants have embraced the operational and cost efficiencies that clearing offers, and are now clearing more than what is required by regulatory mandates.

Despite this shift to clearing, work is still required to implement a robust framework for CCP resilience, recovery and resolution. Given the systemic importance of CCPs, ISDA urges regulators and policy-makers to continue working together to finalize unambiguous and predictable CCP recovery and resolution strategies. More politically driven topics – for instance, the debate over CCP location in the European Union and the change of administration in the US – should not distract from this important work.

This paper makes a number of recommendations for a comprehensive CCP recovery and resolution framework that would ensure CCPs can withstand severe market stress. In doing so, ISDA recognizes that these strategies will necessarily have to vary by jurisdiction and by CCP, based on different CCP structures and existing legal regimes.

Regulators and policy-makers have worked to develop CCP resilience, recovery and resolution mechanisms at the global level, but further work on implementation is necessary

## INTRODUCTION

The role and significance of CCPs has increased in recent years as over-the-counter (OTC) derivatives have moved to clearing. The Bank for International Settlements (BIS) estimates that 76% of the interest rate derivatives market and 44% of credit default swaps (CDS) were cleared at year-end 2016<sup>1</sup>.

Effective recovery and resolution mechanisms for CCPs are therefore more critical than ever to the efficient operation, stability and sustainability of global financial markets. While CCPs reduce systemic risks in the markets they serve, they also warehouse or concentrate risks that, if not properly managed in times of significant market volatility, could inflict major financial damage on clearing members, trading venues and other market participants.

For these reasons, regulators and policy-makers must continue to consider issues related to:

- CCP resilience during periods of market stress;
- The development of robust CCP recovery and risk management frameworks; and
- CCP resolution in the event a CCP recovery is unsuccessful or would jeopardize financial stability.

### ISDA Recommendations

- A resolution regime for CCPs should indicate a time at which resolution could commence, but should allow flexibility for recovery to continue beyond that time.
- Clearing participants should have maximum transparency regarding the key elements of, and triggers for, a CCP resolution.
- CCP assessments on clearing members must be capped in aggregate across recovery and resolution.
- Subject to safeguards, variation margin gains haircutting could be used to allocate losses at the end of a CCP's default waterfall.
- Initial margin haircutting should never be permitted.
- Subject to safeguards, partial tear-ups (PTUs) could be used to rebalance a CCP's book if an auction or similar voluntary mechanism fails to do so.
- Forced allocation of positions to non-defaulting clearing members should never be permitted.
- Clearing participants suffering losses beyond a certain point in a CCP recovery or resolution must receive claims that position them senior to existing CCP equity holders.
- It is appropriate for clearing participants to bear at least a portion of some non-default losses, but CCPs and their shareholders must bear the risk of non-default losses that are solely within their control.
- Access to liquidity from central banks on standard market terms is necessary to support CCP recovery and resolution.

<sup>1</sup> [http://www.bis.org/publ/otc\\_hy1705.htm](http://www.bis.org/publ/otc_hy1705.htm)

CCP recovery refers to measures that a CCP could take in accordance with its rules and arrangements to ensure its continued viability upon extreme distress. CCP resolution, on the other hand, refers to measures that a resolution authority would take in accordance with a statutory resolution regime to resolve a CCP in the event a recovery is not successful.

A CCP could experience distress either as a result of default losses or non-default losses. Default losses occur because one or more clearing members default on their obligations to the CCP. CCP rule books contain default waterfalls that set out how the CCP would use its own resources and the resources from its clearing participants<sup>2</sup> to cover default losses, including in ‘extreme but plausible’ circumstances. In order to address default losses that are beyond ‘extreme but plausible’, CCPs, clearing participants, CCP supervisors, resolution authorities and other policy-makers continue to consider additional tools that could apply at the end of a CCP’s default waterfall and/or in statutory resolution regimes for CCPs.

A wide variety of issues and events could result in non-default losses. These include custodial risks, settlement risks, investment risks, operational risks, non-default liquidity risks (eg, the risk that a liquidity provider defaults and the CCP experiences stresses that are unrelated to a clearing-member default), general business risks, legal risks, cyber risks and fraud (or other internal ‘bad acts’). Traditionally, CCP rules and arrangements have provided less clarity on how they would address non-default losses, but work is under way to strengthen plans for covering these potential losses and provide more transparency.

The Committee on Payments and Market Infrastructures (CPMI), the International Organization of Securities Commissions (IOSCO) and the Financial Stability Board (FSB) have led global efforts to establish effective recovery and resolution mechanisms for CCPs. CPMI-IOSCO published the *Principles for Financial Market Infrastructures* (PFMIs)<sup>3</sup> in 2012, while the FSB published an annex to its *Key Attributes of Effective Resolution Regimes for Financial Institutions* (Key Attributes) on *Resolution of Financial Market Infrastructures* (FMIs)<sup>4</sup> and *FMI Participants*<sup>5</sup> in 2014.

More recently, CPMI-IOSCO published a final report *Resilience of Central Counterparties* (CCPs): *Further Guidance on the PFMI* and an updated version of its *Recovery of Financial Market Infrastructures*<sup>6</sup>, while the FSB published *Guidance on Central Counterparty Resolution and Resolution Planning*<sup>7</sup>. Work is now under way to implement the CPMI-IOSCO and FSB guidance in individual jurisdictions and at individual CCPs. This work includes amendments to CCP rules and arrangements, the implementation of new regulatory measures and, in some cases, the enactment of statutory resolution regimes (or review of existing resolution regimes to determine how they could apply to CCPs).

<sup>2</sup> The term ‘clearing participants’ includes both clearing members and their clients in this paper

<sup>3</sup> Available at <http://www.bis.org/cpmi/publ/d101a.pdf>

<sup>4</sup> FMIs include CCPs

<sup>5</sup> Available at [http://www.fsb.org/wp-content/uploads/r\\_141015.pdf](http://www.fsb.org/wp-content/uploads/r_141015.pdf)

<sup>6</sup> Available at <http://www.bis.org/cpmi/publ/d163.pdf> and <http://www.bis.org/cpmi/publ/d162.pdf>

<sup>7</sup> Available at <http://www.fsb.org/wp-content/uploads/P050717-1.pdf>

ISDA has led industry efforts to establish CCP resilience, recovery and resolution strategies and to respond to CPMI-IOSCO and FSB consultations<sup>8</sup>. In addition to this work at the global level, ISDA has engaged with regulators and policy-makers in various jurisdictions as they consider CCP resilience, recovery and resolution.

We strongly encourage regulators and policy-makers to continue the success of CPMI-IOSCO and the FSB by pushing forward with full implementation of the recent guidance. While the largest banks and their affiliates (including clearing members) have become much more resilient since the financial crisis by increasing capital by an estimated \$1.5 trillion<sup>9</sup>, which reduces the likelihood of distress at a CCP, full implementation of the FSB and CPMI-IOSCO guidance on CCP resilience, recovery and resolution is still critical to enhance the stability and sustainability of the cleared derivatives market, as well as the overall financial system.

Regulators and policy-makers should not be distracted by more politically driven topics in various jurisdictions (eg, the debate over CCP supervision and location in the European Union, which has been driven in part by Brexit, and the change of administration in the US). Implementation of effective resilience, recovery and resolution strategies for CCPs is crucial to ensuring the continued safety and efficiency of the cleared derivatives markets and to establishing efficient and workable equivalence and recognition frameworks for CCPs operating in multiple jurisdictions. This should therefore be a top priority.

Work since the financial crisis to establish recovery and resolution strategies for banks and similar financial institutions is informative when thinking about CCP recovery and resolution. However, CCPs are different from banks in a number of important ways, including the role CCPs play in the market and their balance sheets. Effective recovery and resolution strategies for CCPs need to account for these differences.

Most importantly, successful CCP recovery or resolution must both: (1) allocate losses; and (2) rebalance the CCP's book. CCPs function in the market as the buyer to every seller and the seller to every buyer, and therefore cannot return to viability without a balanced book. Critically, tools to allocate losses and rebalance a CCP's book are not interchangeable. Loss-allocation tools source additional resources but cannot rebalance a CCP's book, while rebalancing (or position-allocation) tools return the CCP to a matched book but do not source any additional resources to cover losses.

This paper sets out the key points for CCPs, their supervisors, resolution authorities and other policy-makers to consider when implementing CCP recovery and resolution mechanisms to address both default losses and non-default losses<sup>10</sup>. We also reference several aspects of CCP resolution, including use of equity, recapitalization and application of a 'no-creditor-worse-off' (NCWO) safeguard, which require additional work.

<sup>8</sup> ISDA has published several papers on these topics, including: *CCP Default Management, Recovery and Continuity: A Proposed Recovery Framework* (January 2015), available at <http://www2.isda.org/functional-areas/risk-management/page/2>, and *The Clearing House Association (TCH) and ISDA Considerations for CCP Resolution* (May 2016), available at <http://www2.isda.org/functional-areas/risk-management/page/4>. Copies of the comment letters ISDA has submitted in response to the consultations include: FIA, The Global Financial Markets Association (GFMA), the Institute of International Finance (IIF), ISDA and TCH letter to CPMI-IOSCO regarding Consultative Report: *Resilience and recovery of central counterparties (CCPs): Further guidance on the PFMI*, dated October 18, 2016, available at <http://www2.isda.org/functional-areas/risk-management/>; FIA, GFMA, IIF, ISDA and TCH letter to the FSB regarding Discussion Note: *Essential Aspects of CCP Resolution Planning*, dated October 21, 2016, available at <http://www2.isda.org/functional-areas/risk-management/>; FIA, GFMA, IIF, ISDA letter to the FSB regarding Consultative Document: *Guidance on Central Counterparty Resolution and Resolution Planning*, dated March 13, 2017, available at <http://www2.isda.org/functional-areas/risk-management/>

<sup>9</sup> Bank of England Governor Mark Carney estimates that banks have raised over \$1.5 trillion of capital over recent years. Remarks at the Banking Standards Board Panel, *Worthy of trust? Law, ethics and culture in banking* (March 21, 2017), available at <http://www.bankofengland.co.uk/publications/Documents/speeches/2017/speech970.pdf>

<sup>10</sup> ISDA's focus is on CCPs that clear derivatives. However, many of our positions would apply to other CCPs as well

Clearing participants need maximum transparency to measure, manage and control their exposures to CCPs

## PROVIDING MAXIMUM TRANSPARENCY

It is imperative that clearing participants have transparent and predictable information about the expected recovery and resolution strategies for a CCP so they can measure, manage and control their potential exposure. At an absolute minimum, clearing participants must understand:

- Triggers for resolution and any separate level of regulatory intervention and/or coordination among regulators and resolution authorities (including whether triggers are discretionary or automatic);
- Resources available to the CCP in recovery and any additional resources available to the resolution authority in resolution;
- Tools that the CCP would utilize in recovery and any additional tools that the resolution authority would utilize in resolution;
- Any restrictions on the use of tools available in recovery or resolution;
- Situations in which a resolution authority intends to deviate from tools in the CCP's rule book that the CCP did not use prior to commencement of resolution; and
- Outcomes of regulatory assessments carried out to determine if a CCP is resolvable.

In addition to informing clearing participants, disclosure of key elements of CCP recovery and resolution strategies and, hopefully, consistency across these elements (to the extent appropriate given differences in legal frameworks and CCP structures) would mitigate opportunities for regulatory arbitrage across jurisdictions and CCPs.

## GOING FROM RECOVERY TO RESOLUTION

A resolution regime should provide clarity on timing but also allow flexibility for further recovery measures

A resolution regime for CCPs should indicate a time at which resolution *could commence* but should *allow flexibility* for recovery to continue beyond that time. Once a CCP's pre-funded resources (ie, initial margin of the defaulting clearing member(s), guaranty fund contributions and the CCP's skin in the game) have been exhausted, resolution authorities should, when determining whether to commence resolution, be required to consider factors generally related to the probability of a successful recovery and the impact of such a recovery on financial stability. Examples of factors to be considered include:

- Is the CCP's default management process functioning and proceeding in a timely manner (eg, are bids being received in an auction)?
- What is the quantum of losses that has been suffered already?
- Is there any indication of an erosion of confidence in the CCP and its default management process (eg, are clearing participants voluntarily withdrawing)?
- Are clearing participants transacting in the market in ways that impede the CCP's recovery?
- What will a resolution authority be able to do under the applicable resolution regime and legal framework, and what will it have to do (both on an expedited basis and in the longer term) upon commencement of resolution?

- Are clearing members able to make required contributions without jeopardizing their own viability? Are clearing members willing to make required contributions?
- Is the stress at the CCP affecting orderly trading in the market?
- Is the stress local to one CCP or widespread in the market?
- Is the CCP able to macro-hedge its exposure?
- What does it cost the CCP to hedge its exposure?
- Are regulators in foreign jurisdictions cooperating with the CCP's home-country supervisors and resolution authority?
- Is the CCP balance sheet insolvent?
- Is there a credible private-sector solution to resolution if recovery fails?
- What would be the impact of subsequent liquidation under applicable general insolvency laws?

The above considerations would ensure that resolution authorities have the flexibility to intervene when they deem necessary, while allowing effective CCP recoveries to continue. They also provide clearing participants and the broader market with adequate transparency and predictability over when resolution would commence.

## ALLOCATING LOSSES AFTER CLEARING MEMBER DEFAULT

Initial margin haircutting should not be permitted

**Capped Assessments:** As part of their default waterfall, CCPs typically have the ability to impose assessments<sup>11</sup> on clearing members. Assessment powers in the CCP's rule book should apply across recovery and resolution, without differentiation or duplication. Based on the CCPs' rule books, clearing members must at all times be able to calculate the maximum required contribution under any assessments within a cooling-off period (regardless of whether a single clearing member default or multiple clearing member defaults occur during such period)<sup>12</sup>. Multiple assessments could be permitted, provided the aggregate amount of these assessments does not exceed the cap.

Introducing additional contingent exposure in statutory resolution regimes would be hugely problematic from a risk-management perspective because clearing participants would not be able to accurately measure, manage and control their exposures to the CCP. Moreover, additional assessments in statutory resolution regimes would impose liquidity burdens on clearing members during a time of market stress and would therefore be procyclical and potentially destabilizing to the broader financial market<sup>13</sup>.

<sup>11</sup> Assessments are also sometimes referred to as 'cash calls'

<sup>12</sup> A 'cooling-off period' refers to the period of time after a clearing member default that results in the CCP calling for assessments before the cap on such assessments 'resets' and the CCP can call for additional assessments (up to the same cap). During the cooling-off period, the CCP cannot call for assessments in excess of the cap, regardless of whether additional clearing members default. Currently, CCP rule books are not consistent on use of assessments, caps on assessments and cooling-off periods

<sup>13</sup> In the event that assessments up to the relevant cap do not cover losses, CCP default waterfalls should provide for an additional tranche of CCP 'skin in the game' and/or recourse to other resources of the CCP or its parent. In the event these resources are insufficient, the CCP could apply VMGH to comprehensively allocate losses without requiring any use of taxpayer money

**Variation Margin Gains Haircutting (VMGH):** VMGH at the very end of the CCP's default waterfall is a comprehensive loss-allocation tool that would address losses at a CCP without requiring any use of taxpayer money<sup>14</sup>. VMGH is comprehensive because variation margin owed by a CCP during each settlement cycle (ie, the variation margin gains of clearing participants) equals variation margin owed to the CCP. Therefore, the amount of a CCP's losses from non-payment of variation margin by a defaulting clearing member (or defaulting clearing members) would never exceed the amount of variation margin gains that the CCP could haircut<sup>15</sup>.

In order to ensure VMGH is an effective and comprehensive loss-allocation tool, while at the same time minimizing losses to clearing participants, VMGH must:

- Be used over a minimal time period (ie, VMGH cannot be used indefinitely);
- Be used only if a finite quantum of losses has been established (ie, VMGH cannot be used to fund a CCP that is not also rebalancing its book and returning to viability);
- Apply to all clearing participants (as it would otherwise not be comprehensive); and
- Entitle clearing participants suffering losses as a result of its use to claims.

**Initial Margin Haircutting (IMH):** In no event should a CCP in recovery, or a resolution authority in resolution, be able to apply IMH to allocate losses. IMH would have knock-on effects in an already distressed market and could disincentivize participation in the CCP's default management process. That is because clearing members may not want to bid on positions that would increase their initial margin requirements if this initial margin could then be subject to a haircut. If IMH is permitted in some jurisdictions, it could drive clearing participants to clear only through CCPs in jurisdictions that either prohibit IMH or require initial margin to be held in a bankruptcy remote manner (so it is not subject to a haircut).

## REBALANCING A CCP'S BOOK

Partial tear-ups could work as a last resort, but forced allocation could destabilize the financial system

As the buyer to every seller and the seller to every buyer, CCPs must maintain a balanced (ie, 'flat') book. In order for the CCP to return to viability, either non-defaulting clearing members must take on the positions of the defaulted clearing member(s) through an auction (or similar voluntary mechanism), or the CCP must 'tear up' (ie, terminate) offsetting positions.

**Partial Tear-Ups (PTUs):** PTUs are an appropriate and comprehensive last resort tool to rebalance a CCP's book if an auction or similar mechanism fails. When exercising PTUs, a CCP (or a resolution authority in resolution) terminates pro rata contracts, offsetting those contracts of the defaulting clearing member(s) that could not be auctioned (or allocated pursuant to a similar voluntary mechanism). PTUs evenly distribute risk and exposure across affected clearing participants. They do not require any clearing participants to clear new positions and/or products they are not able to risk manage.

<sup>14</sup> Some ISDA members take different views on VMGH (primarily with respect to whether VMGH should apply in recovery or resolution or only in resolution and whether additional limitations should apply to VMGH)

<sup>15</sup> Other resources within its default waterfall (including initial margin of the defaulting clearing member(s), guaranty fund contributions and the CCP's skin in the game) would have been available to cover risk any risk premiums that the CCP had to pay in an auction or similar mechanism

In order to ensure that PTUs return a CCP to a balanced book while minimizing the burdens on clearing participants that have positions torn up, PTUs must:

- Apply to the smallest portion of illiquid contracts possible. Any decisions regarding the scope of contracts to be torn up should be subject to strict governance procedures that are established and disclosed to clearing participants on an ex ante basis, and account for the views of clearing participants that could have positions torn up. For cleared OTC derivatives, PTUs should never apply only to the contracts that the defaulting clearing member entered into at inception. Such a scenario would affect only those non-defaulting clearing members that were the original counterparties to the relevant contracts, and would therefore mean these clearing members ultimately remain exposed to bilateral counterparty risk towards another clearing member instead of the CCP.
- Be priced as close as possible to the fair market value of the torn-up contracts in order to minimize losses to clearing participants and ensure PTUs do not violate hedge accounting standards. The most important issues to consider when establishing pricing for PTUs include: (1) liquidity in the market for the contracts to be torn up; (2) the potential to hedge exposure on the open positions; and (3) the time elapsed since the most recent margin call or settlement price valuation, and market movements since that time. In no event should the CCP's available resources influence pricing for PTUs (ie, if the CCP does not have resources to pay fair market value for the torn-up contracts, it must use loss-allocation tools to source additional resources instead of reducing the amount it pays for such contracts).
- Entitle clearing participants suffering losses as a result of their use to claims.

**Forced Allocation:** In no event should a CCP in recovery, or a resolution authority in resolution, be able to apply forced allocation of positions to non-defaulting clearing members. Unlike PTUs, whereby clearing participants would 'lose' their existing positions, forced allocation would require clearing members to take on positions they may not be suited to risk manage in extreme market conditions (eg, positions in products that such clearing participants intentionally do not transact), and could therefore have a negative impact on financial stability. Moreover, any application of forced allocation that attempts to allocate positions to those clearing members that could 'bear them' would be completely inequitable. Any decision about which clearing members could 'bear' positions would be arbitrary at best and, at worst, could be made in a way that intentionally favors certain classes of clearing participants over others.

## CLAIMS FOR CLEARING PARTICIPANTS

Clearing participants bearing losses should retain claims on the CCP's future profitability

Clearing participants should retain claims for the amount of their total losses resulting from the use of: (A) any loss-allocation tools beyond the CCP's funded default fund contributions and clearing member assessments up to the applicable cap (eg, VMGH); and/or (B) any involuntary position allocation or tear-up tools (eg, PTUs) (in the case of both (A) and (B), irrespective of whether the tools are in relevant CCP rule books or statutory resolution regimes).

These tools were originally designed to effectuate a CCP's recovery by preventing insolvency. As implemented, however, they benefit CCP equity to the detriment of affected clearing participants by preventing the CCP from defaulting to clearing participants and therefore preventing clearing participants from having any remedies or claims against a CCP in recovery or resolution. Conversely, counterparties of non-CCP financial institutions that fail to make a payments would have recourse against the financial institution both prior to and in a resolution scenario.



In order to ensure that clearing participants are not effectively subordinated to CCP equity in either recovery or resolution without creating any disincentives for clearing participants to contribute to the CCP's default management process, claims should:

- Be senior to existing CCP equity in the creditor hierarchy (both in an insolvency and in a resolution);
- Not be extinguishable prior to satisfaction or conversion into an instrument of equivalent value; and
- Entitle claimholders to future CCP accumulated earnings or returns in excess of regulatory capital requirements (ie, future CCP profits or something of economically equivalent value) until they are paid in full. During that time, strict limitations should apply to any dividend payments by both the CCP and its parent, and dividends to any pre-existing equity should be subject to strict limitations<sup>16</sup>.

Given that claims would only be paid if and when the CCP returns to profitability, this not only creates additional incentives for clearing participants to contribute to the CCP's default management process<sup>17</sup>, but also encourages clearing participants to continue clearing at the CCP. Continued participation in the CCP would, in turn, preserve the CCP's value and help attract new investors.

## COVERING NON-DEFAULT LOSSES

CCPs and their shareholders must bear at least some non-default losses

The guiding principles for allocating non-default losses should be: (1) who manages the risk; and (2) who benefits from related gains? In line with these principles:

- So they are properly incentivized to exercise prudent risk management, CCPs and their shareholders must bear at least some or almost all non-default losses, and must bear the entire risk of non-default losses that are exclusively within their control. That is, CCPs should bear all non-default losses related to: operational risks; non-default liquidity risks (eg, the risk that a liquidity provider defaults and the CCP experiences stresses that are unrelated to a clearing member default); general business risks; legal risks; cyber risks and fraud (or other internal 'bad acts').
- In some instances, clearing participants should bear at least a portion of non-default losses related to custodial risks, settlement bank risks and investment risks.

For non-default losses that a CCP bears itself, the CCP's parent company and/or equity holders should bear the remaining losses in the event that CCP capital or other dedicated funding is insufficient<sup>18</sup>. Consistent with this, CCP rule books should unambiguously indicate that default waterfalls (including CCP skin in the game) do not apply to non-default losses as these resources are sized to cover default losses exclusively.

<sup>16</sup> ISDA's CCP members take different views on claims. In particular, some CCPs believe that any arrangements regarding future profits and dividends should be subject to commercial agreements between the CCP and its clearing participants

<sup>17</sup> It is always in the best interest of clearing participants for a CCP to return to viability, and therefore clearing members are always incentivized to participate in the CCP's default management process. Moreover, clearing members' default fund contributions and any paid-in assessments could be used during the default management process, therefore exposing them to potential losses. The only way for clearing members to minimize such losses would be for them to actively participate in the default management process

<sup>18</sup> ISDA's CCP members take different views regarding whether parent guarantees are appropriate. We also note that recent financial industry practices have been to move away from parent guarantees for other types of financial institutions

Any mutualization of non-default losses born by clearing participants should be outside of the CCP's default waterfall, equitable and considered separately for each type of non-default loss. For example, it would be necessary to mutualize non-default losses across clearing members using the same defaulted custodian or settlement bank, or across clearing participants that have assets in the same investment. However, such mutualization may not be appropriate across other clearing participants.

More work is necessary to ensure that CCPs have (or have access to) resources necessary to cover non-default losses. As a first step, it is crucial for CCPs and their supervisors to consider and stress-test each potential non-default loss scenario.

## ENSURING ADEQUATE LIQUIDITY

Access to central bank liquidity is necessary to support CCP recovery and resolution

Access to liquidity from central banks on standard market terms (including the requirement for high-quality liquid collateral that is central-bank eligible) is necessary to support CCP recovery and resolution. CCPs should be required to hold sufficient high-quality liquid, central-bank-eligible collateral to ensure they are able to access liquidity from central banks on such terms. Requirements for the provision of such collateral would mitigate any concerns about central bank access for liquidity in recovery or resolution.

If CCPs do not have direct access to central bank liquidity in recovery and resolution, they would have to access liquidity through clearing members or other financial institutions with central bank access. Requiring this intermediation by clearing members and other financial institutions in a time of market stress would be procyclical, as these institutions may be under liquidity strains as well.

## OTHER KEY ISSUES IN CCP RESOLUTION

Further work is needed on recapitalization

In order to implement effective CCP resolution regimes, additional work is necessary on several key issues. These issues include:

- Application of the NCWO safeguard;
- Use of equity in a CCP resolution (including the mechanics of writing down CCP equity)
- Recapitalization of a resolved CCP; and
- How to practically implement claims on CCPs.

We strongly support continued work of the FSB and national authorities on these topics. ISDA will also work to develop industry positions.

***No-Creditor-Worse-Off Protections:*** So-called NCWO protections are statutory protections included in resolution regimes to protect creditors that are treated differently from similarly situated creditors. It applies if the differently treated creditors incur losses as a result of the resolution that they would not have incurred if resolution had not commenced<sup>19</sup>. Such losses may occur, for example, because the resolution authority's statutory powers permit it to treat similarly situated creditors differently if the resolution authority determines that doing so would promote overall financial stability, maximize the value of the assets of the entity in resolution, and/or minimize the amount of any loss realized upon the disposition of the entity's assets. The scenario in which resolution had not commenced and similarly situated creditors were therefore treated similarly is referred to as the NCWO counterfactual.

An appropriate NCWO counterfactual should be: (A) based on the reality of what would actually have occurred if resolution had not commenced (and all similarly situated creditors had been treated equally); and (B) a scenario in which hypothetical losses to creditors could be calculated with a high degree of certainty. Additional work is required to determine how to implement these criteria in a CCP resolution resulting from default losses, non-default losses or both default and non-default losses.

***Use of Equity in CCP Resolution and Recapitalization:*** Work on how equity of a CCP and/or its parent should be used in a CCP resolution and the recapitalization of a resolved CCP is at a very early stage. At this point, some of the key questions to consider include:

- Should resolution authorities for CCPs borrow from bank resolution strategies such as the use of a bridge or bail in (although there is the question of what would be bailed in for CCPs), or should they apply completely different strategies?
- What does it mean to write down equity in a CCP resolution? The answer likely depends on the resolution strategy to be pursued.
- What does it mean to allocate losses to equity under the applicable resolution strategy? For example, does it mean using liquid assets of the CCP that are funded by equity?
- What effect would existing CCP structures and existing CCP non-recourse provisions<sup>20</sup> have on a resolution authority's ability to write down equity of a CCP or its parent?
- What are the appropriate statutory loss-allocation procedures applicable to creditors (including clearing participants to the extent they are creditors) and equity holders in a CCP resolution?
- Who will own the CCP immediately upon the write down of equity? Will such ownership facilitate a recapitalization of the CCP (ie, will it result in new funding)?
- If a CCP is not recapitalized in connection with the write down of equity, how would it be recapitalized?

<sup>19</sup> Note that for banks and other financial institutions, typically the NCWO protection is specifically based on the "incurrence of losses that would not have been incurred in a liquidation of the firm under the applicable insolvency regime". See Section 5.2 of the FSB *Key Attributes of Effective Resolution of Financial Institutions*. We refer to the more general "losses that would not have been incurred if resolution had not commenced", because the proper counterfactual for NCWO protections in a CCP resolution is the issue under discussion

<sup>20</sup> Under a number of CCPs' rule books, upon closure and liquidation of a segment, all positions would be terminated, any remaining assessments would be made, and the net amount owing to or owed by each clearing member would be calculated. If the CCP does not have sufficient resources to pay the net amounts owed to in-the-money clearing members, then non-recourse provisions would extinguish their deficiency claims and they would suffer a loss. Clearing members cannot recover from excess capital or any CCP resources other than skin in the game in the waterfall. Moreover, the CCP's shareholders would receive the value of any excess resources after clearing members were closed out, even in the event that clearing members suffered losses prior to, or as part of, the liquidation process

Delivering robust CCP resilient, recovery and resolution frameworks is critical to financial market stability

## CONCLUSION

Large volumes of OTC derivatives are now cleared at CCPs, making these entities systemically important. While progress has been made in developing principles for CCP resilience, recovery and resolution, further work is needed to fully implement these recommendations across the globe. In doing so, more consideration needs to be given to important issues relating to loss allocation and the balancing of CCPs' books.

Regulators should not be distracted from the importance of effective resilience, recovery and resolution mechanisms for CCPs. This is critical to ensuring the continued safety and efficiency of the cleared derivatives market.

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## ABOUT ISDA

Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient.

Today, ISDA has over 875 member institutions from 68 countries. These members comprise a broad range of derivatives market participants, including corporations, investment

managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and

repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: [www.isda.org](http://www.isda.org).

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