

# Recovery and Resolution of Central Counterparties

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The increasing importance of central counterparties (CCPs) to financial stability has prompted regulators to take steps to ensure that critical CCP services can continue in circumstances of financial distress. These steps include ensuring that CCPs have robust plans for recovery to return them to viability, and that authorities have the ability to resolve a CCP if required. This article discusses the key components that are expected to form part of CCPs' recovery plans, including the power of a CCP to apply 'haircuts' to variation margin payments. The article also notes the potential elements that may form part of a resolution regime for CCPs.

## Introduction

CCPs play a key role in managing post-trade risks in financial markets. A CCP stands between the counterparties to a financial market trade and performs the obligations that each has to the other under the terms of that trade. This means that participants in markets that are centrally cleared by a CCP do not have credit or liquidity exposures to other participants in those markets; instead, participants are exposed to the CCP alone. Since all trades are against a common counterparty, long and short positions may be offset, reducing participants' gross exposures and economising on associated collateral needs (Jackson and Manning 2007; Duffie and Zhu 2011). Further, as counterparty to both sides of each transaction, the CCP maintains a 'matched book' that minimises its exposure to market risk, and by maintaining a specialist risk management function it may be better able to manage and control exposures to individual market participants. Finally, given its central position, the CCP is able to coordinate actions in the event of a participant default.<sup>1</sup>

The benefits of central clearing in reducing counterparty risk and interconnectedness between financial institutions are well recognised by policymakers (FSB 2010). In response to the global financial crisis, G20 leaders committed to expanding the use of CCPs in over-the-counter (OTC) derivatives trades and many jurisdictions, including Australia, have passed legislation that provides for mandatory central clearing of certain derivatives products.<sup>2</sup> However, widespread central clearing of OTC derivatives will increase market participants' dependence on CCPs and further increase both CCPs' importance to the stability of the financial system and regulators' interest in their capacity to withstand financial stress. Furthermore, where the use of CCPs is mandatory, rather than a private choice, the official sector has a responsibility to clarify how it would deal with a situation of CCP distress. Although robust risk management standards significantly reduce the likelihood of a CCP failure, the possibility of such a

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1 The benefits of central clearing are discussed further in Rehlon and Nixon (2013).

2 The Leaders' Statement at the 2009 Pittsburgh Summit of the G20 committed that all '... standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest' (G20 2009). While this time line has not been met, significant progress has been made in the clearing of OTC derivatives and this continues to be a priority for regulators internationally.

failure cannot be eliminated entirely.<sup>3</sup> Regulators and international standard-setting bodies are therefore taking steps to ensure that CCPs can continue to provide their critical services to participants in circumstances of financial distress. The alternative would see failed CCPs enter into general insolvency, thereby posing a risk to financial stability.

This article focuses on the recovery plans of CCPs that are seen as central to the continuity of critical CCP services in circumstances of extreme stress. Recovery planning is the process by which CCPs prepare for potential threats to their viability, and establish tools and powers within the rules that govern their operations. Although recovery plans should be comprehensive and robust to very extreme circumstances, authorities internationally are also developing special 'resolution' arrangements for CCPs and other financial market infrastructures (FMI)s outside of the general insolvency regime. These arrangements will involve empowering a resolution authority to intervene directly should circumstances prevent a CCP from carrying out its recovery plans satisfactorily. Such intervention would be likely to be most effective and least disruptive if the resolution authority could simply complete the actions contemplated in the CCP's own recovery plan. Therefore, while recovery planning is primarily the responsibility of the CCP, such plans also need to be consistent with the framework for resolution.

## International Standards

CCPs and other FMIs performed well during the global financial crisis, which has in part led international regulators and the G20 to encourage the central clearing of OTC derivatives. Since this policy stance implies greater dependence on CCPs, new international standards have been introduced

to enhance the resilience and robustness of CCPs (and other FMIs) and ensure that, should a CCP face financial difficulties, critical clearing services can continue to be provided to market participants. Two developments are particularly relevant:

- In April 2012, the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) published a comprehensive set of updated standards that cover the risk management and recovery arrangements of a broad range of FMIs. Among other things, the CPSS-IOSCO *Principles for Financial Market Infrastructures* (the Principles; CPSS-IOSCO 2012) require that CCPs establish risk controls and default management plans to enable them to deal effectively with the default of one or more participants. These risk controls include the exchange of variation margin to regularly mark participants' positions to market, and the collection of initial margin to cover potential future adverse price moves.<sup>4</sup> CCPs are also required to maintain a prefunded buffer of pooled financial resources to cover additional losses that could arise if a large participant were to default in stressed market conditions.<sup>5</sup>
- In November 2011, the Financial Stability Board (FSB) published the *Key Attributes of Effective Resolution Regimes for Financial Institutions* (Key Attributes; FSB 2011). The Key Attributes set out the legal and institutional arrangements a jurisdiction should put in place to deal with a distressed financial institution. The scope of the Key Attributes extends to all systemically important financial institutions. While the primary focus to date has been on how to deal with a bank failure, the FSB recently released for consultation a

3 Fortunately, CCP failures are extremely rare. There are, however, examples of such failures in the 1970s and 1980s, including in France and Malaysia, as well as some reported 'near misses' (Hills, Rule and Parkinson 1999; Pirrong 2011). The most recent failure, and the most widely cited, was in Hong Kong in October 1987, when sharp declines in the Hang Seng index futures contract threatened large-scale participant defaults and losses in excess of the resources of the CCP. This prompted a joint government and private sector rescue. Ultimately, a new CCP was established with significant enhancements to its operating and risk management framework.

4 Variation margin payments are exchanged between CCPs and their participants on a regular basis to manage their current credit exposures to one another. In addition, CCPs collect initial margin from participants to cover potential losses on a participant's portfolio during the time it would take to liquidate the participant's portfolio if the participant were to default.

5 Under the Principles, all CCPs must hold sufficient financial resources to cover the joint default of any one participant and its affiliates in extreme but plausible market conditions. CCPs that are systemically important in multiple jurisdictions or that clear complex products such as credit default swaps must hold additional financial resources to cover the default of any two participants (plus their affiliates).

set of draft Annexes to the Key Attributes covering specific features of resolution arrangements for systemically important non-banks, including FMIs (FSB 2013). While the Annex that addresses FMIs applies generically to all FMI types, many aspects are most relevant to the resolution of a CCP, and in particular how a CCP might allocate losses arising from the default of a participant and replenish its financial resources.

Prefunded financial resource requirements under the Principles should ensure that a CCP could withstand even an extreme financial shock. However, given the potentially severe disruption that the insolvency of a CCP could have on the financial system, the Principles also require that CCPs maintain comprehensive and robust plans to recover from a threat to solvency that could not be managed solely using prefunded financial resources. Following the release of the Principles, CPSS and IOSCO have consulted on draft guidance on recovery planning for CCPs and other FMIs, discussing possible recovery tools that an FMI might consider (CPSS-IOSCO 2013).

In the Australian context, in December 2012 the Reserve Bank determined new Financial Stability Standards (FSS) for Australian licensed CCPs (RBA 2012a), aligned with requirements under the Principles.<sup>6</sup> In recognition of the ongoing CPSS-IOSCO work on recovery planning, CCPs were granted transitional relief from recovery-related requirements of the FSS until 31 March 2014. In parallel, the government is considering its response to a Council of Financial Regulators (CFR) recommendation to the Treasurer in February 2012 that the Australian Securities and Investments Commission and the Reserve Bank be given the power to appoint a statutory manager to a troubled FMI (CFR 2012). In its recommendation, the CFR further noted that 'the absence of a specialised resolution regime for FMIs represents a gap in the current regulatory framework' (CFR 2012, p 5). The Key Attributes, including the adaptations for FMIs set out in the draft Annex, provide a template for how such a regime could be developed.

6 Similar standards were also determined for facilities responsible for the settlement of securities transactions (RBA 2012b).

## Recovery Planning

The risk management standards required of CCPs under the FSS are designed to ensure that CCPs have prefunded financial resources sufficient to withstand a participant default, even in extreme but plausible circumstances. Nevertheless, CCPs will be required to articulate how they would deal with any losses that exceeded the level of prefunded resources (unfunded losses), and also how they would then replenish their prefunded resources. In addition, CCPs must plan for losses that are not related to a participant default, including general business losses.

A comprehensive and robust CCP recovery plan will be expected to contain the following elements (CPSS-IOSCO 2013):

- Identification of critical services offered by the CCP. These are services that are critical to ensure financial stability or the smooth functioning of markets. The recovery plan should address how the continuity of critical services can be maintained, and identify how any non-critical services can be wound down in an orderly manner.
- Identification of stress scenarios that may threaten the continued provision of the CCP's critical services. These may include credit losses or shortfalls of liquidity caused by a participant default, or the realisation of non-default losses. The recovery plan should also define criteria that would trigger the implementation of recovery actions.
- A range of tools to fully and effectively address threats to the CCP's viability. These include tools to address losses associated with the default of a participant (discussed in more detail below), tools to address other losses, and tools to address structural weaknesses in governance or risk management that may have contributed to the losses suffered by the CCP.<sup>7</sup>

7 While CCPs are required to hold capital against non-default losses, the magnitude of these losses may in practice be difficult to predict in advance. This article does not examine the tools that a CCP may use to allocate non-default losses and replenish related capital holdings, but the development of such tools remains an important element of ongoing work on recovery planning for CCPs, both in Australia and internationally.

## Recovery Tools

The tools that a CCP could use to recover from financial stress arising from a participant default fall into three categories: tools used to allocate unfunded losses; the termination of contracts; and tools used to re-establish financial resources.

### Tools to allocate unfunded losses

A CCP will need to invoke its recovery plans to deal with unfunded losses only if the default of a participant has given rise to a loss in excess of available prefunded financial resources. These resources comprise the defaulted participant's initial margin and contributions to the CCP's prefunded pooled financial resources, as well as the remainder of these pooled resources.

In normal circumstances, a CCP maintains a matched book of positions by taking on both buy and sell sides of each transaction that it clears. This means that any losses on one side of a transaction cleared by the CCP are fully offset by gains on the other side of the transaction. A CCP typically marks positions to market at least daily and collects variation margin payments from its 'losing' counterparties that are then paid out to 'winning' counterparties. In the example shown in the left panel of Figure 1, the CCP collects variation margin to cover mark-to-market losses by participants C and D, and uses these funds to pay variation margin to participants A and B.

In the event of a participant default, the CCP would no longer have a matched book, yet it would have to continue to meet its obligations to non-defaulting participants on the other side of the defaulted participant's positions. In the example shown in the right panel of Figure 1, the default of participant D would mean that the CCP would receive variation margin of only 5 units, while its variation margin payment obligations remained at 15 units. For as long as it had an unmatched book, the CCP would be required to meet any variation margin payment obligations on the defaulted participant's portfolio out of available prefunded financial resources. Through its default management process, the CCP

would attempt to eliminate this market risk by closing out its unmatched positions, generally via on-market trades or, for less liquid or OTC products, via auction to surviving participants.

However, there remain several scenarios in which a CCP may be unable to re-establish a matched book using only its prefunded financial resources (ISDA 2013):

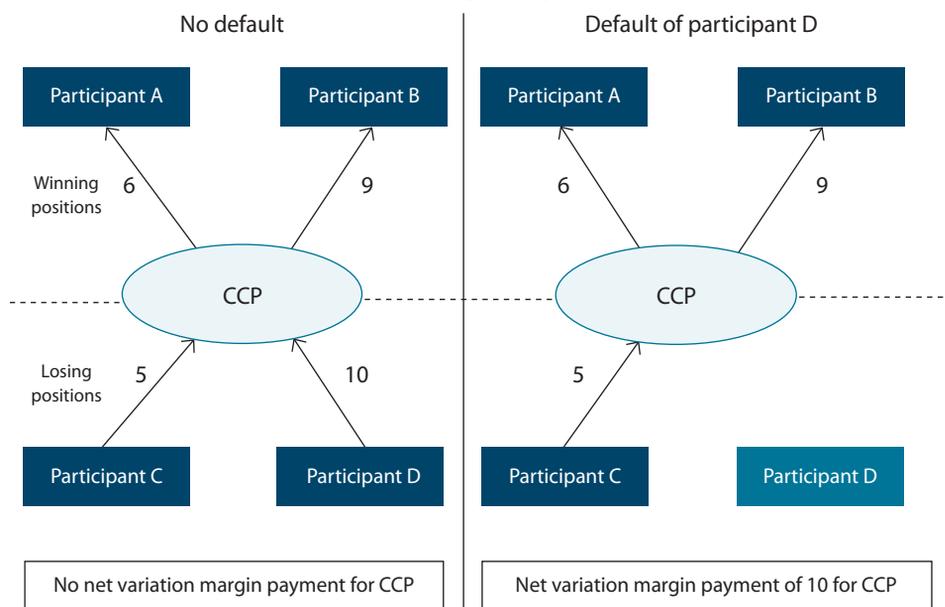
1. If mark-to-market losses on the defaulted participant's portfolio, and therefore the CCP's corresponding variation margin obligations, exceeded the financial resources available to the CCP before unmatched positions could be closed out. This could occur, for instance, in situations where it took some time to arrange an auction for these positions.
2. If the defaulted participant's portfolio could only be closed out at a price that crystallised losses for the CCP in excess of its remaining financial resources.
3. If the CCP could not close out the defaulted participant's portfolio, due to a loss of market liquidity or the failure of a participant auction to determine a market-clearing price.

In scenarios (1) and (2), the CCP would be left with insufficient financial resources to meet its variation margin obligations to non-defaulting participants in full. Scenario (3) could also lead to this situation given that the CCP would remain exposed to market risk on its unmatched book.

Assuming that the CCP had no other creditors, and without a mechanism to allocate its unfunded losses to participants, the CCP would enter insolvency and each non-defaulting participant would receive a claim on the CCP's estate proportional to any variation margin it was owed by the CCP<sup>8</sup>. After receiving distributions from the CCP's estate, participants that were still owed variation margin at the point of insolvency would suffer losses in proportion to their mark-to-market gains at that

<sup>8</sup> This discussion also assumes that initial margin was not exposed to insolvency losses, and that the CCP would not be governed by a special insolvency or resolution regime that managed the CCP's insolvency in a non-standard manner.

**Figure 1**  
**Variation Margin Payments**



Source: RBA

point. Participants that had suffered mark-to-market losses would be obliged to pay variation margin to the CCP. As a result, they would not have a claim on the CCP's estate that could be exposed to additional losses through the insolvency process.

Some CCPs already have some provisions in their rules to address unfunded losses. Most commonly, these take the form of a power to call for additional contributions from participants: a so-called assessment power. To the extent that potential assessments are pre-agreed, participants may be better able to plan in advance and understand their contingent liabilities. Indeed, in many cases prudential regulators of CCP participants will require that assessment powers be subject to caps.<sup>9</sup> However, an obvious limitation of capped assessments is that the capped amount could prove insufficient. In addition, since assessment powers rely on participants transferring funds to the CCP in circumstances in which they may have lost confidence in the CCP, they may have an incentive to 'walk away' rather than fulfil their contractual

obligation when due.<sup>10</sup> A CCP's recovery plans may therefore have to supplement assessment powers with other tools, some of which, while unpalatable, may need to be available in the most severe circumstances. Nevertheless, even a capped assessment power would reduce the likelihood that such tools needed to be utilised.

Consistent with resolution principles for banks, international work on the resolution of CCPs has sought to ensure that creditors of a CCP would be no worse off than in a general insolvency (FSB 2011, 2013). Since consistency with resolution regimes is an important consideration in the development of CCP recovery plans, this 'insolvency counterfactual' is relevant for analysing the implications of alternative recovery tools (CPSS-IOSCO 2013). 'Variation margin gains haircutting' (VMGH) is one such tool that has received particular attention in international industry

<sup>9</sup> This is not the case in all jurisdictions. For example, some CCPs in Japan have uncapped assessment powers.

<sup>10</sup> While a participant could not walk away from its contractual obligations as such, it could refuse to meet these obligations on a timely basis. The failure of a participant to meet an assessment call when due would be likely to constitute an event of default under the CCP's rules. However, it is unlikely that legal action by the CCP could succeed in recovering such funds within the time frame necessary to deal with an unfunded loss.

and regulatory discussions of recovery planning, and mirrors the outcomes under general insolvency (CPSS-IOSCO 2013; Elliott 2013; ISDA 2013).<sup>11</sup> This tool has already been adopted by a number of overseas CCPs (see 'Foreign examples of recovery tools' below).

### *Variation margin gains haircutting*

Where a CCP regularly marks participants' positions to market, VMGH has been identified as a practical method for allocating unfunded losses to the creditors of the CCP in a manner similar to loss allocation under general insolvency. VMGH involves the CCP applying a haircut to its variation margin payments to participants with mark-to-market gains, while requiring that participants with mark-to-market losses continue to pay variation margin to the CCP in full. This outcome is equivalent to that which would be expected in insolvency, provided that the participants were the major creditors of the CCP and initial margin was not exposed to insolvency losses. It does, however, avoid the costs and delays associated with insolvency proceedings.

Figure 2 compares the outcomes under insolvency (left panel) and VMGH (right panel) for the numerical example discussed earlier, assuming that all other prefunded resources of the CCP and any (capped) assessments had already been exhausted. In this example, the default of participant D leaves the CCP with incoming variation margin of 5 units to meet outgoing variation margin obligations of 15 units. A VMGH of two-thirds would replicate the pro rata distribution of incoming variation margin to participants A and B in proportion to their hypothetical claims on the CCP's estate.

In addition to the conceptual appeal of VMGH in replicating insolvency outcomes, VMGH would,

where available, generally be expected to be a comprehensive and effective means of allocating unfunded losses to participants. VMGH would directly address the variation margin obligations that arose from the mark-to-market losses sustained on a CCP's unmatched book. If there were no limits on a CCP's ability to haircut variation margin payments to participants, it should always be able to reduce its variation margin obligations to a level that could be met from incoming variation margin payments.

There are, however, some practical limitations to relying solely on VMGH for allocating unfunded losses. These include:

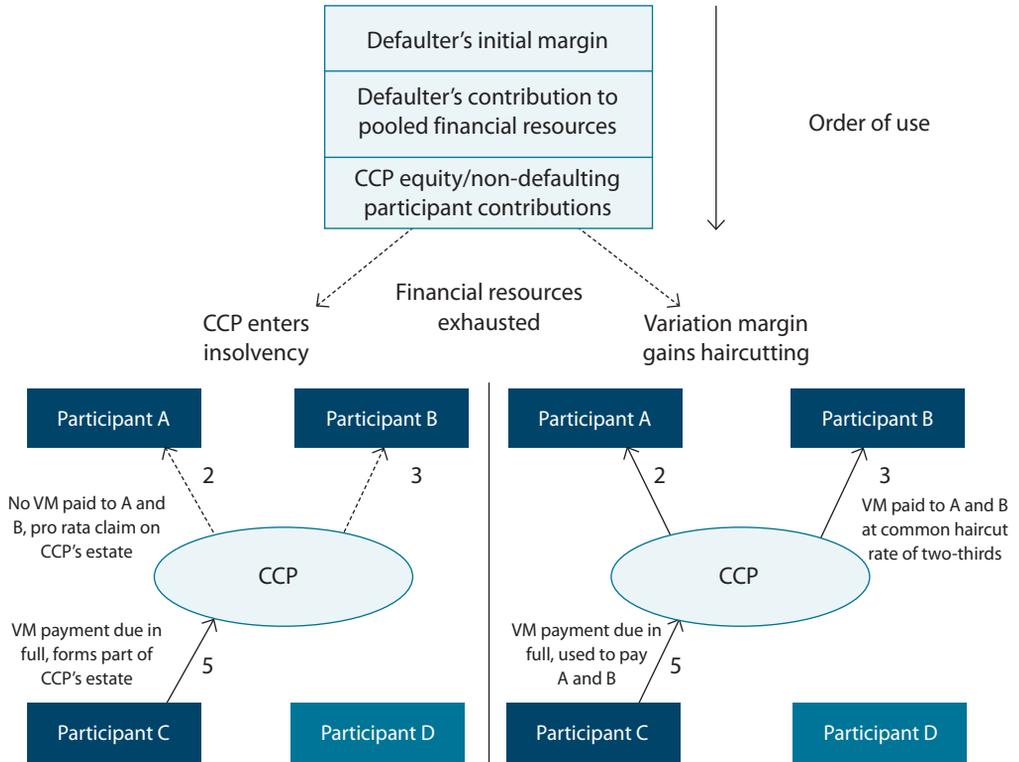
- While VMGH would be expected to be effective on the day of a default, continued reliance on this tool to meet future obligations could create uncertainty for participants. This could in turn create an incentive to exit the CCP in favour of alternative clearing arrangements, including bilateral arrangements.
- In some exceptional circumstances, VMGH may not be adequate to deal with unfunded losses. If the source of a loss was a mark-to-market price move, then VMGH would by definition always be adequate to cover the loss. However, if the loss arose in closing out the defaulted participant's portfolio it might exceed the amount that could be addressed through VMGH. This could occur, for example, if participants were only willing to take on the defaulted participant's positions at a significant price discount. Other tools, such as a (further) round of assessments on participants or, in the extreme, the termination of contracts, would therefore be required (see below).

In developing rules to support VMGH, a CCP will need to consider how the tool would be used in practice. In this regard, the international debate has highlighted the potential for the cost of VMGH to fall disproportionately on users of CCPs that hold unbalanced (or 'directional') portfolios.<sup>12</sup> While

<sup>11</sup> The haircutting of initial margin held by the CCP is another possible tool for allocating losses. However, this is a particularly undesirable measure for a number of reasons. For instance, since participants currently expect their initial margin to be protected from the insolvency of the CCP, mutualisation of initial margin could ultimately reduce the incentive to clear centrally. Use of initial margin in this way would also leave the CCP temporarily under-collateralised on exposures to its remaining participants. A less drastic measure may be to use initial margin as a source of temporary liquidity until other resources (such as assessment calls) become available.

<sup>12</sup> The question of how or whether participants that share in losses through VMGH should be compensated has also been raised in international debate. One possibility could be for these participants to become creditors of the CCP, to be repaid from the CCP's future revenue stream should the CCP recover successfully. Another could be for these participants to be given an equity stake, although there may be legal or regulatory obstacles to some participants accepting such a stake.

**Figure 2**  
**Correspondence between Variation Margin Gains Haircutting and Insolvency**



Source: RBA

most dealer firms and some buy-side firms typically attempt to minimise unintended directional positions, other buy-side firms may hold highly directional open positions with a CCP.<sup>13</sup> These may reflect the hedging of exposures held outside of the CCP. As a result, such firms may be more likely to experience significant variation margin gains and losses. Buy-side firms do not typically access CCPs directly; instead they become clients of direct participants. Although VMGH would only directly affect the latter, direct participants could elect to pass through any haircuts on variation margin imposed by the CCP on their buy-side clients' positions.

**Termination of contracts**

Circumstances may be so extreme that a CCP cannot fully close out or auction a defaulted participant's portfolio, or cannot do so without incurring a loss that exceeds its remaining financial resources (e.g. the case of an auction clearing price that is at a significant discount to the mark-to-market price). The CCP may therefore have no option but to terminate (tear up) open contracts in order to restore a matched book. A CCP may choose to reserve a portion of its power to make assessment calls to fund such a shortfall. If this proved inadequate, and if it had the power to do so, the CCP would have to forcibly allocate positions to surviving participants. In many cases, however, forced allocation may be unacceptable to CCP participants or their regulators due to the unpredictable impact that the use of this power may have on their exposures. The debate

<sup>13</sup> Broadly speaking, buy-side firms are those that invest to meet an underlying demand for a portfolio with particular characteristics (e.g. a fund manager or superannuation fund).

among both regulators and industry participants has therefore settled on the termination or tearing up of open contracts as a ‘last resort’ tool (CPSS-IOSCO 2013; Elliott 2013; ISDA 2013).

This tearing up of open contracts may be either ‘complete’ or ‘partial’:

- A complete tearing up would involve termination of all open contracts covered by the clearing service, across all participants, essentially closing the service. This would clearly be an extreme measure, obliging market participants to re-establish all of their positions under alternative or restructured clearing arrangements, and assume any losses associated with establishing such replacements. Nevertheless, a complete termination of contracts would mirror what would otherwise occur under general insolvency. Given the severe consequences of complete termination, the threat of such action in the event of a failed auction could prove sufficient to encourage competitive bidding at auction or the voluntary partial termination of positions (see below).
- A partial tearing up would involve the termination of only the defaulted participant’s contracts. However, as in the case of forced allocation, a partial termination could have a significant and unpredictable impact on the net exposures of individual participants (ISDA 2013). These concerns could be addressed by allowing participants to nominate positions to be terminated voluntarily, or to carefully select sets of contracts for termination that avoid disturbing netting arrangements. However, there is no guarantee that the number of contracts that could be identified for tearing up would be sufficient to ensure that the CCP’s matched book could be re-established. This suggests that CCPs may nevertheless need to have the power to effect a complete termination to ensure that they would be able to re-establish a matched book in all circumstances.

### Tools to re-establish financial resources

Loss allocation tools and tearing up contracts would be used only where a CCP’s prefunded financial resources had been fully depleted. However, for a CCP’s participants and its regulators to be confident that the CCP remains ‘fit for purpose’, it must have the capacity to replenish its financial resources rapidly and to a level sufficient to be able to withstand any future participant default.<sup>14</sup>

Other things being equal, the replenishment of a CCP’s financial resources should seek to restore the coverage levels in place prior to the default, but should take into account changes in circumstances following the default. One possible mechanism to replenish participant contributions to pooled resources is an assessment power (see above). The CCP would also need to have arrangements in place to raise additional funds as needed to restore its own contribution to pooled financial resources.

In the event that a CCP experienced a shock so severe that it fully depleted both the defaulted participant’s initial margin and the CCP’s entire pool of prefunded financial resources, there would be a significant risk that participants would lose their confidence in that CCP. This would be revealed when participants were called upon to replenish financial resources: some participants may not be prepared to commit further funds to the CCP without significant changes to its ownership or governance structure; some may contemplate exiting the CCP altogether. If the CCP’s services were considered critical to financial system stability, the CCP or its regulators would need to take steps to address participants’ concerns rapidly, so as to ensure that the CCP could continue to operate as a going concern.

### Foreign examples of recovery tools

As international thinking on recovery planning for CCPs has evolved, CCPs in several jurisdictions have taken steps to introduce some of these recovery tools. The Japan Securities Clearing Corporation

<sup>14</sup> Rapid replenishment would be required even where a CCP had drawn on, but not completely exhausted, its prefunded financial resources.

(JSCC), the UK-based LCH.Clearnet Ltd (LCH.C Ltd) and CME Clearing Europe, and the French-based LCH.Clearnet SA (LCH.C SA) each have rules allowing for VMGH and the complete tearing up of open contracts where prefunded financial resources have been exhausted by the default of a participant.<sup>15</sup>

In the case of LCH.C Ltd's clearing services for interest rate swaps and non-deliverable foreign exchange forwards, the haircut that may be applied to variation margin payments is capped. The applicable haircut is capped at the higher of 100 per cent of that participant's contribution to prefunded financial resources, or a fixed amount of either £100 million (for interest rate swaps) or US\$100 million (for foreign exchange forwards). LCH.C Ltd would apply VMGH only after prefunded financial resources and participant assessments had been exhausted. If remaining losses could not be addressed fully through VMGH, and participants did not unanimously agree to extend VMGH beyond the level of the cap, LCH.C Ltd would proceed to tear up contracts and close the relevant clearing service. LCH.C SA applies a similar approach to LCH.C Ltd in respect of its clearing service for credit default swaps, but neither JSCC nor CME Clearing Europe apply caps to the level of VMGH allowed under their rules.

## Resolution

Even well-crafted recovery plans could prove difficult to implement effectively in practice. For example, the management of a CCP might be reluctant to take extreme recovery actions such as to completely tear up contracts. Alternatively, participants could choose to 'walk away' from the CCP rather than fulfil their financial obligations in loss allocation or replenishment when due. Although authorities could take actions, such as the issuance of directions, to support recovery measures, there could be circumstances in which the CCP failed to recover nevertheless.

In such circumstances, it would be desirable for a resolution authority to have appropriate powers

to enforce the rules-based recovery measures that the CCP was itself unable to complete. The intention would be that actions taken by the resolution authority in accordance with the plan restored critical services to viability, while allowing any non-critical services to be wound down in an orderly manner. The power to implement recovery measures should be supported by ancillary powers that provide flexibility to pursue alternative means of maintaining continuity of service (such as via a transfer of operations), or to effect a change in governance where necessary to restore the confidence of participants in a CCP.

Consistent with this, the Key Attributes and the recommendations of the CFR's 2011–2012 review of FMI regulation suggest that the main elements of a resolution regime for CCPs should include:

- the designation of an appropriate resolution authority for CCPs
- a description of the conditions governing the entry of a CCP into resolution
- statutory objectives for resolution, which are focused on financial stability and the continuity of critical services
- the power to appoint a statutory manager to administer a distressed CCP
- the power to facilitate the transfer of the operations of a distressed CCP to a third party or bridge institution
- enhanced powers of direction over a CCP, including to support recovery and resolution.

## Next Steps

In March 2014, the requirements of the FSS relevant to recovery planning will come into force, and Australian licensed CCPs will be required to develop and maintain comprehensive and effective recovery plans. The most direct impact of these requirements will be on the two ASX-operated CCPs for which the Bank is the regulator responsible for matters related to financial stability: ASX Clear, which clears ASX-listed equities and equity derivatives; and ASX

<sup>15</sup> These rules do not necessarily apply to all product classes cleared by these CCPs; see Elliott (2013) for a breakdown of recovery measures by product type.

Clear (Futures), which clears derivatives traded on the ASX 24 market and OTC interest rate swaps.<sup>16</sup>

The Bank's *2012/13 Assessment of ASX Clearing and Settlement Facilities* set out the steps that it expects ASX Clear and ASX Clear (Futures) to take in order to meet the new recovery planning requirements (RBA 2013). Each ASX CCP will need to prepare an appropriate recovery plan addressing very extreme scenarios under which the CCP's financial resources were insufficient to cover credit losses and/or payment obligations following a participant default. The plan would be expected to include the use of a selection of the tools discussed in this article and should be consistent with CPSS-IOSCO guidance on recovery planning (CPSS-IOSCO 2013). ❧

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<sup>16</sup> As noted above, the only other CCP currently licensed in Australia, LCH.C Ltd, has already introduced VMGH in a limited form. The Bank will be liaising with LCH.C Ltd's home jurisdiction regulator, the Bank of England, in assessing the compliance of LCH.C Ltd with the recovery planning requirements of the FSS.