One of the most significant reforms that emerged from the global financial crisis was the requirement that OTC derivatives be centrally cleared. Central clearing counterparties (CCPs) were created to reduce systemic risk by requiring central clearing of swaps and mandating collateralized transactions while increasing transparency and investor protection. The idea, promoted by the G-20 beginning at their September 2009 Pittsburgh Summit is good in concept, as it increases transparency for regulators and market participants, and eliminates many of the counterparty risks inherent in bilateral OTC transactions. However, in this process, risk has been concentrated in CCPs by moving these bilateral risks into a handful of central clearing counterparties, and this risk needs to be addressed.1 As policy makers increase their focus more on the concentration risk created by central clearing, a number of questions have been raised. Do CCPs present a new systemic risk? Are CCPs “too big to fail”? Or should a CCP be allowed to fail? What protections should be put in place to protect the system and investors from a potential failure? In the event a CCP experiences distress, what resources should be applied to absorb losses to resolve the situation and in what order of priority?2

BLACKROCK KEY RECOMMENDATIONS

1. Systemic risks presented by CCPs need to be addressed and end investors should be protected from the failure of a CCP.
2. CCPs should be subject to rigorous uniform stress testing to be overseen by regulators.
3. Transparency of CCP risk management practices should be increased, including the margin setting decisions of their risk committee, the results of stress tests, and the totality of resources available for loss absorbency in the event of default, so as to provide market participants sufficient information to permit independent analysis as to the risk of clearing with a particular CCP. Risk management practices should be harmonized across all CCPs.
4. Mandatory clearing should not be required unless and until two CCPs offer clearing in the same swap.
5. The default waterfall needs to be strengthened by increasing the CCP’s risk-based contribution to the guaranty fund and by requiring clearing member assessments fund to be pre-funded.
6. CCPs should be allowed to fail and should have resolution plans that include public ex ante liquidation procedures to provide reasonable certainty to participants as to risk exposures.

1 The US Financial Stability Oversight Council (FSOC) designated six clearing agencies as systemically important in 2012. In doing so, either the SEC or CFTC (depending on the CCP) became the supervisory agency for these CCPs under Title VIII of the Dodd-Frank Act.

The opinions expressed are as of April 2014 and may change as subsequent conditions vary.
Some market participants have argued for the “recovery” of a failing CCP; others are advocating for a clearer approach to “resolution”. BlackRock is supportive of central clearing and believes it is crucial to implement measures that mitigate the risk of a potential CCP failure. Financial stability is best served by a regime where any entity, including a CCP, has a recovery and resolution plan that will prevent its failure from impacting market stability. In order to protect against systemic risk, we believe policy makers should address the need to strengthen the defenses of a CCP in the event of a default by one or more of their clearing members (“CMs”).

This approach starts with requiring CCPs to both maintain adequate capital and to employ a rigorous approach to risk management with each of its counterparties. In the event of the financial distress of the CCP, the “default waterfall” which specifies the resources available to a CCP for recovery or resolution and the order in which they are used, would start with the defaulted counterparty’s margin and guaranty fund contributions, supplemented by the capital of the CCP and the CCP guaranty fund before tapping the funds of any non-defaulting clearing member customer.

All market participants, including CCPs, should be allowed to fail while ensuring protections are in place to avoid systemic risk and to protect end-investors. A resolution plan that focuses on a rapid and complete wind down of the failing CCP’s positions, along with a timely and orderly repayment of margin monies is preferable from our point of view to a recovery plan that uses customer margin to extend the state of a failed or failing CCP. A rapid liquidation and return of margin would minimize end-user losses and would allow CMs and their clients the option to establish replacement positions in the most efficient manner. In order to affect this result, we recommend that a product not be subject to mandatory clearing until at least two CCPs can offer clearing for that product.

By definition, the failure of a CCP reflects a flawed risk management process which in turn will impact customer confidence in the abilities of the CCP on a forward-looking basis. As such, BlackRock believes customers would prefer a rapid liquidation of positions to close-out the clearing business very quickly and to return margin provided by non-defaulting CMs and non-defaulting clients with minimum market loss. The resolution plan could be followed by a timely recapitalization of the CCP if authorities deem that service continuity is desirable.³

Recovery versus Resolution

There are many actions prudential regulators have taken to eliminate “too big to fail” (TBTF) for large banks. One action has been increased capital to enhance the resiliency of these institutions, and another has been a required stress testing exercise using extreme but plausible scenarios. Importantly, there has been recognition that banks can and do fail—that the cumulative purpose for these new standards is to assure that the failure will have little contagion impact on the financial system.

Yet as regulators have sought to implement the central clearing mandate globally, their attention seems to be focused primarily on assuring that a CCP can be “recovered” – that continuity of its services is paramount. We do not believe that maintaining the continuity of services by any one CCP is critical to avoiding the next financial crisis. In fact, we are concerned that this approach will accelerate participants’ actions to close positions if a CCP is at risk of failing. We do believe that the asymmetry in regulatory approach between CCPs and large significant financial institutions needs to be addressed. If these large banking institutions are required to increase capital, undergo rigorous stress tests administered by regulators, and be capable of being wound-down without systemic impact, why not use the same regulatory framework for CCPs where a large amount of risk will now be concentrated?

In order to assure that a failed or failing CCP can be resolved with little impact on the financial system, the CCPs need to strengthen their defenses so that events, such as the default of one or more CMs, can be buffered by sufficient resources. This means strengthening the “default waterfall”—defined as the totality of loss-absorbing resources available to a CCP, as well as specifying the relative contributions of CCP stakeholders (CCP and its CMs) and the order in which these resources would be expended. The CCP contribution to loss absorbency should be risk-based – as is the guaranty fund contribution of its CMs.

In addition we recommend that a standard stress test framework be mandated by regulators for all CCPs, and these results be utilized to calibrate the total amount of loss-absorbing resources needed by each CCP. Prudential regulators should establish harmonized risk capital standards across CCPs. CCPs should be required to have a resolution plan. These plans should also include ex ante liquidation procedures to minimize losses and provide reasonable certainty to participants as to their risk exposure. Resolution plans should also be periodically reviewed and updated to assure that the plan takes into account changes (if any) in relevant insolvency regimes and current market practices to minimize operational risk in resolution implementation.

Finally, BlackRock believes increased transparency by CCPs—as to margin setting decisions of their risk committee, the results of stress tests, and the totality of resources available for loss absorbency in the event of default, will provide market participants sufficient information to permit independent analysis as to the risk of clearing with a particular CCP. Risk management practices should be

³ To be effective, a recapitalization would need to be “next business day” which then as a necessity requires a pre-funding of the capital needed to re-establish CCP operations and replenish the guaranty fund.
harmonized across all CCPs. This will bring additional market discipline to CCPs. However, for this objective to be effective it will also require that clearing for a particular class of swaps only be mandated if at least two CCPs provide this service.

Given the evolution in the structure of a CCP, we believe the CCP should be required to contribute more than a minimal amount that is risk-based and measured by the lower of either a fixed percentage of the fund or the largest single CM contribution. We estimate that the contribution by the CCP would likely be in the range of 8% to 12% of the fund. This risk-based contribution will also indirectly benefit the CCPs ability to maintain a broader and diverse clearing member group and manage concentrated exposure to a single clearing member. Having more skin in the game will incentivize the CCPs to at all times have robust risk management and would align incentives between the CCP, clearing members and market participants. As for-profit institutions, the CCP can issue equity, debt or a combination thereof to fund its cash/cash equivalent contribution to the guaranty fund.

**Common Default Waterfall Today**

<table>
<thead>
<tr>
<th>Defaulting clients VM &amp; IM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defaulting clients CM guaranty fund contribution</td>
</tr>
<tr>
<td>CCP contribution to guaranty fund (minimal skin in the game)</td>
</tr>
<tr>
<td>Non defaulting CM guaranty fund contributions</td>
</tr>
<tr>
<td>Assessment Powers: Non defaulting CMs replenish guaranty fund</td>
</tr>
</tbody>
</table>

Source: BlackRock

**Default Risk Management through Margin**

The mechanism of initial margin (IM) and variation margin (VM) is used by CCPs to manage participant default risk. VM is used to receive and pay/settle unrealized gains and losses at regular intervals (not less than daily). IM is posted in order to have a payment source for unsettled gains and losses if a participant defaults. A defaulting participant’s VM and IM are thus first in the waterfall, and adequate and efficient margining is critical to minimizing losses to others. At all times the CCP risk management is aimed to be in an overall risk neutral position.

**CCP Contribution to Loss Absorption**

Originally CCPs were member-owned “utilities” designed to mutualize the risk of clearing by relying on the resources of their clearing participants, in particular those firms that are CMs. These resources include both the risk management capabilities of CMs, as well as financial resources in the form of contributions to the CCP guaranty fund.

Today, CCPs are often commercially-owned, for-profit independent institutions, yet they largely maintain their historical risk allocation. A CCP’s mutualized guaranty fund is typically the primary line of defense against losses incurred in a CM default in excess of the defaulting member’s guaranty fund contribution. While some CCPs do contribute capital to their guaranty fund, CCP exposure is generally minimal and limited to the funded or dedicated amount.4


**Clearing Member Contribution**

Currently, in addition to their guaranty fund contributions, CMs may also be called upon to contribute additional monies in the event needed by a financially distressed CCP, often referred to as an “assessment”. The assessment funds would usually be expected to be called upon when all resources in the default fund are exhausted. Concerns have been raised whether during a time of substantial market turmoil, the CCP will in fact be able to collect on these unfunded liabilities. Even in an idiosyncratic event as recently occurred with the Korean Exchange (KRX) with a CM default due to a large trading error, these assessments can be difficult to collect—the call on CMs for additional contributions was mostly paid by January 20 but was extended until March 31 for full payment. We recommend that CM assessments be pre-funded and held in escrow accounts or a special purpose trust vehicle so as to be readily available if needed as part of loss absorbency resources.

We recognize that CMs for one CCP may also be CMs for other or multiple CCPs. Guaranty fund contributions are funded by CMs, but are a charge that is borne by all CCP participants indirectly through fees charged by the CMs. Pre-funding of assessments may incrementally increase capital costs to CMs and indirectly to other participants, although prudent risk management should assume that clearing members currently have available capital set aside. Thus, a balance must be struck between the relative size of the guaranty fund and pre-funded assessment amounts as needed to protect the CCP, and the cost of clearing. To the extent the CCP itself contributes more to the guaranty fund (which is indirectly paid for by CCP investors), the funding pressures on CMs can be mitigated, and increases in the costs of clearing contained. Given that the CCPs receive a benefit from the clearing mandate, requiring more CCP resources in order to maintain a robust clearing system and retain as many CMs as possible is a trade-off worth further discussion.
Further Loss Allocation

Regulators and market participants are currently debating whether and from what source should loss allocations be made if existing loss absorbency resources in the CCP guaranty fund waterfall prove insufficient, and the CCP were to be at the point of non-viability. The use of customer margin—usually VM but sometimes also IM—has been suggested by some as a source for recovery.

This debate assumes recovery (the ability of the CCP to continue to provide services) is not only desirable but achievable. First, recovery proponents have in general failed to take into account the likely behavior of end-user market participants when faced with a failing CCP. Subject to available liquidity, they will likely want to close out positions and move their business away from that CCP thereby reducing their exposure to a failing entity. In other words, they would rather close out and have margin returned—to be “money good”, than maintain open positions with the CCP—to be “position good”. When a CCP is at brink of failure, participants will find it difficult to exit out of positions, and in order to avoid this situation will more than likely begin unwinding positions at the early signs of CCP distress which can have a pro-cyclical impact. Further, given that the CCP’s business is risk management, its failure is a failure of risk management of such proportion that market participants, especially those that are fiduciaries, are unlikely to put new risk positions on that would be cleared through a CCP attempting to recover, especially if their margin is at risk. We question therefore whether recovery is achievable.

The assumption that recovery is desirable is based on three assumptions: (i) that participants would prefer to be “position good” even if it means the potential loss of margin as part of the recovery process, (ii) that the failure of a CCP would be damaging to the financial system and (iii) that it would be necessary to continue the services of any particular CCP.

We believe that the majority of investors prefer to be “money good” rather than “position good”. This preference for being “money good” over “position good” is driven in part by the knowledge that positions held in a CCP which is using margin haircutting in an attempt to recover, would be completely unprotected against further defaults. A CCP which is using collateral haircutting will already have used the entire guaranty fund plus any reassessment powers it has to recapitalize the guaranty fund. Any further defaults then will result in the full loss incurred being absorbed by non-defaulting end users. It is possible that a CCP may recover to the point where CMs are willing to replenish the guaranty fund, but the return of confidence required for this step is unlikely in the short to medium term. In the meantime, end users would be trapped in a CCP which is ‘running on empty’ in volatile market conditions where the likelihood of further defaults is increased.

Suggestions that a VM “haircut” be used to restore the CCP will simply discourage market participants from using risk mitigating financial instruments that are subject to mandatory clearing requirements and the potential that IM could also be used for recovery is even more troubling. VM haircutting may also force end users to periodically realize profits from in-the-money swaps in order to reduce VM exposure to the CCP, increasing transaction costs. A possible solution for those investors who want to be “position good” is to have the ability to port/transfer or re-establish their position using another CCP which would require that no clearing mandate be put in place unless there are at least two CCPs available to clear that particular swap. The fungibility of contracts between CCPs should allow for smooth transfer of positions. Furthermore, we do not believe that maintaining the continuity of services by any one CCP is critical to avoiding the next financial crisis. We believe financial stability is best served by a regime that focuses on a rapid and complete winding down of the failing CCP’s positions and a timely and orderly repayment of margin monies rather than trying to recover a failed or failing CCP. This will allow all market participants to have optionality to re-establish positions at a viable CCP, use other instruments to hedge risk or in some cases remain neutral if the credit exposure to CCPs is viewed higher than the market exposure that is being hedged.

CCP Resolution

As supporters of CCP resolution, we have a number of recommendations to mitigate the risks arising in resolution implementation. First, we note that immediately after a default where a CCP does not have the financial resources to sustain itself, the CCP will have a matched book, and almost risk neutral with the exception of a finite number of defaulted positions. A parallel process of tearing up matched positions, which is likely the majority of the portfolio, and holding an auction for defaulted positions should be implemented at that time. The “tear up” price must be established immediately as delay will increase volatility and participant losses. The initial margin for the defaulted positions should be sufficient if the auction takes place in a timely manner, thus minimizing any loss allocation to non-defaulting participants.

The purpose of the rapid liquidation of positions would be to close-out the clearing business quickly and to return margin provided by non-defaulting clearing members and non-defaulting clients with minimum market loss. A rapid liquidation and return of margin would minimize end-user losses and would allow clearing members and their clients the option to establish replacement risk exposure positions in the most efficient manner which may include instruments other than mandated swaps. In this process, we recognize that either net VM or VM from the point of default may need to be used to facilitate an orderly resolution. That said, initial margin of non-defaulting customers should be sacrosanct.
Auction participants should be expanded beyond clearing members as well as to other market participants who are judged able to honor their bids. A larger number and diversity in auction participants and open participation would result in a more transparent process and result in a more fair and accurate market price. As mentioned above, it is important that liquidation be swift and orderly with ex ante defined procedures to minimize the size of loss and provide reasonable certainty to participants of their risk exposure.

CCPs should be required to maintain information systems and controls that can promptly produce, both in normal times and during resolution, the relevant data and information needed to evaluate the state of recovery (the rate at which the loss absorbency resources are being used) and to facilitate the implementation of resolution measures. As soon as it becomes apparent that the guaranty fund is more likely than not to be depleted, resolution should be invoked by the relevant authority.

CCP resolution can contain a prefunded recapitalization plan if authorities believe it is prudent to re-start the services of the CCP in a timely manner. Under a new management structure and fully recapitalized default fund, there is a higher probability that market participants will return to use the new CCP facility relative to one that has been recovered with participants experiencing loss of margin. This may also contain the cost of re-establishing positions. A further incentive to utilizing a recapitalized CCP is that most participants are operationally or legally restricted in their ability to face each other so any bilateral conversion of positions would not be practical and even if possible, would require time to establish.

Conclusion

All market participants, including CCPs, should be allowed to fail while ensuring protections are in place to avoid systemic risk and to protect end-investors. The default waterfall needs to be strengthened by increasing the CCP’s risk-based contribution to the guaranty fund. A resolution plan that focuses on a rapid and complete wind down of the failing CCP's positions, along with a timely and orderly repayment of margin monies is preferable to a recovery plan that uses customer margin to extend the state of a failed or failing CCP. In order to affect this result, we recommend that a product not be subject to mandatory clearing until at least two CCPs can offer clearing for that product. The resolution plan could contain a timely recapitalization of the CCP if authorities deem that desirable.

RELATED CONTENT

- Key Attributes of Effective Resolution Regimes to Non-Bank Financial Institutions - FSB - October 2013
- ViewPoint - Start the Countdown: Implementation of Swaps Clearing in the US - September 2012

For access to our full collection of public policy commentaries, including the ViewPoint series and comment letters to regulators, please visit http://www.blackrock.com/corporate/en-us/news-and-insights/public-policy

This paper is part of a series of BlackRock public policy ViewPoints and is not intended to be relied upon as a forecast, research or investment advice, and is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. The opinions expressed are as of April 2014 and may change as subsequent conditions vary. The information and opinions contained in this paper are derived from proprietary and nonproprietary sources deemed by BlackRock to be reliable, are not necessarily all-inclusive and are not guaranteed as to accuracy. As such, no warranty of accuracy or reliability is given and no responsibility arising in any other way for errors and omissions (including responsibility to any person by reason of negligence) is accepted by BlackRock, its officers, employees or agents.

This paper may contain ‘forward-looking’ information that is not purely historical in nature. Such information may include, among other things, projections and forecasts. There is no guarantee that any forecasts made will come to pass. Reliance upon information in this paper is at the sole discretion of the reader.

In the EU issued by BlackRock Investment Management (UK) Limited (authorised and regulated by the Financial Conduct Authority). Registered office: 12 Throgmorton Avenue, London, EC2N 2DL. Registered in England No. 2020394. Tel: 020 7743 3000. For your protection, telephone calls are usually recorded. BlackRock is a trading name of BlackRock Investment Management (UK) Limited, issued in Australia by BlackRock Investment Management (Australia) Limited ABN 13 007 557 539 AFSL 230523. This document contains general information only and does not take into account an individual’s financial circumstances. An assessment should be made as to whether the information is appropriate in individual circumstances and consideration should be given to talking to a financial or other professional adviser before making an investment decision. In New Zealand, this information is provided for registered financial service providers only. To the extent the provision of this information represents the provision of a financial adviser service, it is provided for wholesale clients only. In Singapore, this is issued by BlackRock (Singapore) Limited (Co. registration no. 200601143S). In Hong Kong, this document is issued by BlackRock Asset Management North Asia Limited and has not been reviewed by the Securities and Futures Commission of Hong Kong. Not approved for distribution in Taiwan or Japan. In Canada, this material is intended for permitted clients only. In Latin America this piece is intended for use with Institutional and Professional Investors only. This material is solely for educational purposes and does not constitute investment advice, or an offer or a solicitation to sell or a solicitation of an offer to buy any shares of any funds (nor shall any such shares be offered or sold to any person) in any jurisdiction within Latin America in which such an offer, solicitation, purchase or sale would be unlawful under the securities laws of that jurisdiction. If any funds are mentioned or inferred to in this material, it is possible that some or all of the funds have not been registered with the securities regulator of Brazil, Chile, Colombia, Mexico, Peru or any other securities regulator in any Latin American country, and thus, might not be publicly offered within any such country. The securities regulators of such countries have not confirmed the accuracy of any information contained herein.

FOR MORE INFORMATION: WWW.BLACKROCK.COM

BlackRock® is a registered trademark of BlackRock, Inc. All other trademarks are the property of their respective owners.

© 2014 BlackRock, Inc. All rights reserved.

BLK-1522