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Central counterparty risk management: Beyond default risk

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On October 17, 2017, the Federal Reserve Bank of Chicago held its fourth annual Central Counterparty (CCP) Risk Management Conference: Beyond Default Risk. Attendees included representatives from regulators, CCPs, clearing members, and end-user market participants from across North America, Europe, and Asia. Panelists and keynote speakers discussed the challenges for CCPs and market participants that arise from stresses other than a clearing member default.[1]

Throughout the conference, speakers focused on four main topics: liquidity risk, regulatory risk, concentration risk, and the allocation of nondefault losses. To encourage free and frank discussion, the conference was held under the Chatham House Rule. In accordance with the rule, no speakers, other than those giving the opening and keynote speeches, are identified by name.

Opening and keynote

Charles Evans, president and CEO of the Federal Reserve Bank of Chicago, opened the conference. He emphasized the need for CCPs to manage and control nondefault risks as well as the importance of having loss-sharing arrangements in place in case a loss does materialize. Evans was followed by keynote speaker Brian Quintenz, a commissioner at the U.S. Commodity Futures Trading Commission (CFTC). Quintenz discussed the examination of systemically important CCPs, for which the CFTC is responsible, with the Federal Reserve as the backup supervisor. He noted that successful examinations require a productive and healthy relationship between the CFTC and the Fed. He expressed his appreciation for the Fed staff's deference to the CFTC's expertise and leadership.

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Liquidity risk

Speakers identified liquidity risk as a major concern. While several acknowledged that CCPs have extensive private sector liquidity arrangements in place, they worried that these facilities will be unavailable in a severe crisis. One speaker noted that, at present, liquidity stress tests assume that repo markets will continue to function after the failure of two major clearing members. The speaker wondered whether this was a reasonable assumption, especially given the lack of resilience in the repo market during the 2007–08 financial crisis.

Some argued that liquidity risk could be mitigated by allowing CCPs access to central bank accounts and central bank liquidity. Central bank accounts provide a safe place for CCPs to store the cash they collect as margin, ensuring they have access to it in a crisis. Central bank liquidity provision would ensure that CCPs have sufficient liquidity in a crisis, even if private liquidity arrangements fail, by allowing CCPs to borrow cash from the central bank against high-quality collateral, such as Treasury securities. Currently, U.S. CCPs that are designated as systemically important have access to Federal Reserve Bank accounts. Several speakers expressed support for expanding account access to all CCPs.[2]

One speaker argued that commercial bank interests may be harmed by allowing CCPs access to central bank accounts. The speaker wondered why a bank would provide settlement services to CCPs if all of a CCP's money were held at the Fed. A CCP representative argued that Fed accounts should offer security and commercial bank accounts should offer returns, so that clearing members could choose between the two options based on their preferences.

Some speakers suggested ways to mitigate intraday liquidity needs. In response to large market movements, CCPs sometimes issue ad hoc intraday margin calls. Speakers pointed out that since extraordinary intraday calls are primarily intended to cover risk rather than settle payments, CCPs can accept collateral rather than cash. It is only when CCPs need to make variation margin payments to those clearing members whose net positions increased in value that they must collect cash from clearing members whose net positions lost value.

One speaker noted that there is an operational component to liquidity risk. CCPs and clearing members not only need to have the collateral or cash required, but also must be able to ensure that it is in the right place at the right time. Another speaker argued that technological innovation is necessary to improve the movement of collateral throughout the financial system. Others noted that there is a multicurrency dimension to liquidity needs, with CCPs that clear products in multiple currencies needing liquidity in each currency they clear.

Regulation and regulatory risk

Several speakers argued that opacity and uncertainty can create risks. One pointed to the 2007–08 financial crisis as a case where a lack of knowledge about counterparty positions created toxic market conditions. This speaker argued that the regulatory mandate to clear most over-the-counter (OTC) derivatives has increased transparency in the market, in addition to ensuring that positions are collateralized and encouraging trade standardization. The speaker noted that most regulatory interventions following the crisis took the form of incentives to engage in desirable behavior rather than in outright prohibitions on less desirable actions.

Others suggested that cooperation among the relevant regulators can enhance predictability during a crisis. However, some noted that flexibility is required to effectively address a crisis. They argued that, while predictability is important, regulators and CCPs cannot be locked into a plan that may prove insufficient once an actual crisis occurs. Another speaker stated that in the aftermath of a clearing member default, flexibility in the enforcement of "know your customer" requirements is especially important; at times a temporary waiver may be called for to facilitate the transfer of a defaulter's customer positions.

One speaker stated that there has been a significant amount of rulemaking in the aftermath of the financial crisis. Noting that many regulations interact, the speaker argued that now is a good time to examine them together to analyze their cumulative effects. A key question to ask, the speaker suggested, is whether the new regulations are creating proportionate and appropriate burdens for the institutions regulated. Several speakers warned of emerging regulatory risks, arguing that regulations are becoming too granular, limiting CCPs' ability to tailor their policies to the specific markets they serve. Others argued that granularity can create problems for CCPs that operate in multiple jurisdictions; where different jurisdictions impose different rules, it can be difficult or impossible for a market infrastructure or participant to comply with all of them.

One particular regulatory mandate singled out for criticism was the supplemental leverage ratio (SLR)—a requirement applied to banks and bank holding companies operating in the U.S.[3] Many of these firms have subsidiaries that act as CCP clearing members. One speaker noted that the SLR treats customer margin as risk-increasing and fails to recognize risk reductions from netting. As a result, the speaker stated, the SLR reduces clearing members' profit margins, leading many to leave the business or shed clients. Those who remain as clearing members, others argued, will have little incentive to accept new clients after a clearing member default, making default management and recovery less likely to succeed. To fix the problem, one speaker suggested, SLR calculations should exclude customer cash margin.

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One speaker argued that the SLR should be analyzed to determine how to achieve consistency between the policy objectives of the SLR and the clearing mandate agreed to by the G20 following the 2007–08 financial crisis. The speaker stated that if a legitimate supervisory objective makes a business less profitable, then that is simply too bad for that business.

Concentration risk

A third major theme discussed at the conference was concentration risk. One speaker noted that CCPs do not eliminate risk; rather, they diversify it among their clearing membership. For this diversification of risk to reduce risk in the overall financial system, CCPs must have a broad and diverse clearing membership. Several speakers noted that concentration among clearing members is increasing, with many firms exiting the business and few new entrants. Others noted that concentration is increasing not only among clearing members, but also among settlement banks and custodians.

Nondefault loss allocation

All agreed that addressing nondefault risks is and should be a major focus of CCPs. Most agreed that the costs of nondefault losses should be assigned to those whose decisions led to the loss. There was some disagreement on how, exactly, to implement this principle. Speakers were generally in agreement that losses arising from business failures should be borne by a CCP, since it is the CCP's responsibility to prevent them. According to one speaker, some business risks, such as the risk of a cyberattack, require constant monitoring and evolution to manage.

A CCP representative argued that investment risks are well managed and that CCPs invest to securitize cash rather than to chase yield. As a result, this speaker contended, clearing members should share in investment losses. Many agreed that where an investment was directed by a clearing member, the clearing member should bear the loss and where the investment was directed by a CCP, the CCP should bear it.

There was the least agreement on the allocation of custodial losses. CCP representatives argued that while CCPs mitigate systemic risk, they are not systemic risk managers. Therefore, they argued, CCPs should not have to insure the financial system by covering custodial losses. They also pointed out that custodians generally exclude liability for subcustodial losses. Clearing member representatives argued that CCPs should share in custodial losses, since CCPs play a role in determining where a clearing member's margin is held. There was little discussion of how to share mutualized nondefault losses between clearing members and their clients, though participants agreed that this topic deserves further attention.

Resilience

While the focus of the conference was on nondefault risks, discussion did briefly turn to CCP resilience. According to one speaker, a large threat to CCP resilience could come in the form of simultaneous default and nondefault losses. Currently, CCPs test and plan for single stress events, but do not do so for multiple events at one time, so how such a scenario would play out is unknown.

Conclusion

At the Federal Reserve Bank of Chicago's fourth annual CCP Risk Management Conference, attendees gathered to discuss the major nondefault issues facing CCPs. There was general agreement that liquidity risk is one of the greatest risks facing CCPs today. Most participants argued that access to central bank accounts and central bank liquidity could greatly reduce this risk. Many also brought up regulatory risk, citing the increased granularity of international guidance as a particular cause for concern. A third major topic addressed was the concentration risk arising from increased exits by major clearing members and a lack of new entrants. Speakers discussed the allocation of nondefault losses, a topic that all agreed deserves further attention. By the end of the day of speeches and panel discussions, participants had indeed made headway in moving the CCP policy discussion beyond default risk.

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[1] For summaries of our previous conferences on CCP risk management, see Rebecca Lewis and Ning Yu, 2017, "Symposium on OTC Derivatives—A conference summary," *Chicago Fed Letter*, Federal Reserve Bank of Chicago, No. 385, available online, https://www.chicagofed.org/publications/chicago-fed-letter/2017/385, and Rebecca Lewis, 2016, "Taking a deep dive into margins for cleared derivatives," *Chicago Fed Letter*, Federal Reserve Bank of Chicago, No. 371, available online, https://www.chicagofed.org/publications/chicago-fed-letter/2016/371.

[2] The Dodd–Frank Wall Street Reform and Consumer Protection Act authorizes the Financial Stability Oversight Council to designate as systemically important financial market utilities (FMUs) whose failure or disruption could "threaten the stability of the U.S. financial system." Dodd–Frank authorizes the Board of Governors of the Federal Reserve System to consult on regulatory examinations of designated FMUs and Federal Reserve Banks to provide accounts and services to designated FMUs. FMUs that are not designated as systemically significant do not have access to Federal Reserve accounts. See the Dodd–Frank Act, title VIII, https://www.federalreserve.gov/paymentsystems/title-viii-dfa.htm. Under Dodd–Frank, the Federal Reserve Board can authorize a Federal Reserve Bank to provide liquidity to a designated FMU in "unusual or exigent circumstances" upon a majority vote of the Board and after consultation with the Secretary of the Treasury. See section 806(b) of the Dodd–Frank Act, available online, https://www.gpo.gov/fdsys/pkg/PLAW-111publ203/pdf/PLAW-111publ203.pdf.

[3] The SLR is a component of the U.S. implementation of the Basel III leverage ratio framework and disclosure requirements. The Basel framework is available online, https://www.bis.org/publ/bcbs270.htm.

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