



Chicago Fed Insights, November 2025

Crosscurrents in the Centrally Cleared Ecosystem

By Cindy Hull

Financial Economics

The Financial Markets Group (FMG) has been part of the Economic Research Department at the Federal Reserve Bank of Chicago for decades. We're unique within the department because we are not a team of economists. Rather, we are a team of former markets and legal practitioners who conduct research focused on promoting financial stability in the U.S. We do this by working toward advancing financial policy and robust market practices.

Our team dedicates most of its time to understanding central clearing across both derivatives and securities markets.¹ To improve our understanding, we conduct research that we publish as articles on the Chicago Fed website and in external journals. We also produce internal policy work and organize external engagement efforts like this conference. The reason our research team is located here in Chicago is because so many people in this city work in clearing and related industries and focus on similar financial market issues.

As our team thought about this year's conference theme, we first reflected on those from prior years. Let's take a quick walk down memory lane: Last year we spent an entire day talking about the U.S. Treasury clearing mandate. You told us then you wanted more time for implementation, more than one option for a central counterparty (CCP) that clears Treasury securities, and more clarity on done-away trading.² In 2023, in the wake of Silicon Valley Bank collapse, we spent a lot of time discussing financial stability issues as they related to clearing. Two key topics that came up—and that FMG has since done research on—were 1) clearing member capital requirements and capacity and 2) systemic vulnerabilities stemming from industry concentration. Finally, if you can remember all the way back to 2022, our event focused on digital asset innovations. A clear message then was the need for regulatory action in this space.

Today, all those previous themes remain on the table. It's like 2025 decided to throw the last three years into a blender, hit "puree," and ask us to consume it all at once. What do I mean? Market participants continue to prepare for the implementation of the Treasury clearing mandate. The tokenized financial system is rapidly expanding, supported by regulatory clarity for stablecoins and updated guidance on crypto-assets from several U.S. agencies. Meanwhile, in April financial markets experienced moments of unprecedented volatility. Those memories are still fresh, so I for one remain on alert for sudden changes in financial conditions.

With that context in mind, we've set the theme for this year's FMG Fall Conference as *Crosscurrents in Centrally Cleared Markets: The Evolving Technology, Digital Asset, and Regulatory Landscape*. Crosscurrents emerge where, say, two rivers meet. Navigating through crosscurrents can be manageable, if you stay calm and know what to do, or dangerous, if you don't.

Right now, every pathway for the future of the financial system seems possible. Everyone and everything is future focused. From talking to many of you in the financial markets industry, we sense that you are trying to navigate through several issues at once and that the solutions for each are often in conflict. In FMG, our job as both researchers and central bankers is to learn as much as we can about all this change so that we can understand both its potential promises and perils. That means looking at things from multiple perspectives; collecting insights from both data and discussions with those in the industry, policy circles, and academia; and then sharing what we learn with the public.

To facilitate further discussion, I wanted to share my thoughts on four crosscurrents that we at FMG have identified.

The first crosscurrent is about clearing needs versus clearing capacity. Earlier this year, my FMG colleague Ketan Patel—along with his co-author, Shengwu Du, of the Federal Reserve Board of Governors—published an [article](#) that documented the steady ten-year decline in excess net capital capacity at futures commission merchants—firms that are clearing members of derivatives central counterparties based in the U.S. (see figure 1).³ At the same time, clearing members of securities CCPs will likely be expected to take on more clearing activity and require more capital with the implementation of the Securities and Exchange Commission’s Treasury clearing mandate, which will start to take effect in 2026. The number of clearing members at the [Fixed Income Clearing Corporation’s Government Securities Division](#) (FICC-GSD)—the sole current provider of clearing services in the Treasury securities market—has increased over the last year. This is a welcome development from a capacity perspective. However, it is likely the case that those with the largest capacity to absorb new clearing needs are the large firms that are also prominent in derivatives markets. Will adding more clearing members lead to materially more capacity for clearing? If the clearing business at large bank-based clearing members grows to accommodate the mandate, will other activities be crowded out?

1. Ratios related to net capital and customer funds for client clearing for the top six FCM subsidiaries of U.S. G-SIBs, 2008–24



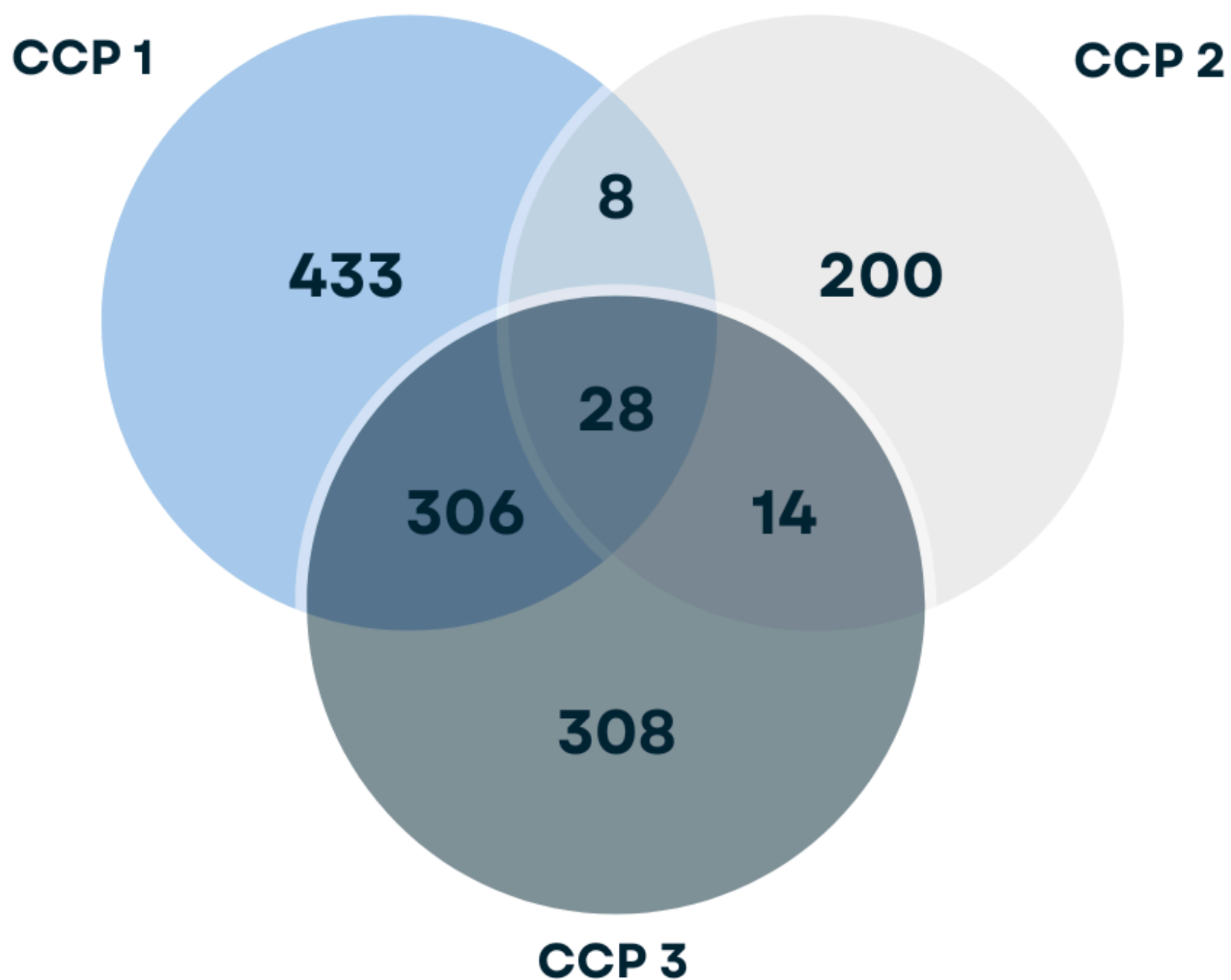
Notes: This figure is from [Du and Patel \(2025\)](#). The top six futures commission merchants (FCMs) of U.S. global systemically important banks (G-SIBs) are determined according to the client assets these FCMs held in March 2024. The U.S. G-SIB parents of the top six FCMs are Bank of America, Morgan Stanley, Citigroup, Goldman Sachs, J.P. Morgan, and Wells Fargo. The FCM net capital data and FCM customer fund (client asset) data are both monthly (May 2008–March 2024).

Source: Du and Patel’s calculations based on data from the Commodity Futures Trading Commission.

The second crosscurrent is about concentration and interconnectedness amid increases in both clearing activity and technology innovation. Implementation of the U.S. Treasury securities clearing mandate is expected to move more trading activity into central clearing. This is intended to reduce counterparty risk, expand broker-dealer balance sheet capacity, and increase the transparency of trading activity. However, this change will further concentrate operational and liquidity risk at CCPs. Many of you have told us that increasing from one to three CCPs that can clear Treasury securities should lower this risk. At the same time, CCPs are reliant on third-party service providers that are a source of operational risk, and CCPs may rely on the same sets of firms for third-party services. An operational outage at a single third-party provider—think ION or CrowdStrike—could impact multiple CCPs at once. During a major risk event, this could limit the benefits of having multiple CCPs that clear Treasury securities.

Using data from a commercial data provider, FMG staff have done some preliminary research to identify common third-party providers at the three CCPs vying for the Treasury securities clearing business. So, yes, we have used a third-party service provider to analyze third-party service providers. While there are many layers to this work, I want to just show you this Venn diagram (figure 2) to illustrate the overlap in providers. Across all three CCPs, there are almost 1,300 third-party providers. Among all those providers, 28 are used by all three CCPs, with another 300 or so used by at least two CCPs. Not all third-party providers are equally critical to smooth operations, but we can say that the provider types in the middle of the diagram are critical, and they include firms in the cloud services, security tools, and operating systems computing languages and software categories.

2. Number of common third-party service providers at three CCPs likely to clear U.S. Treasury securities

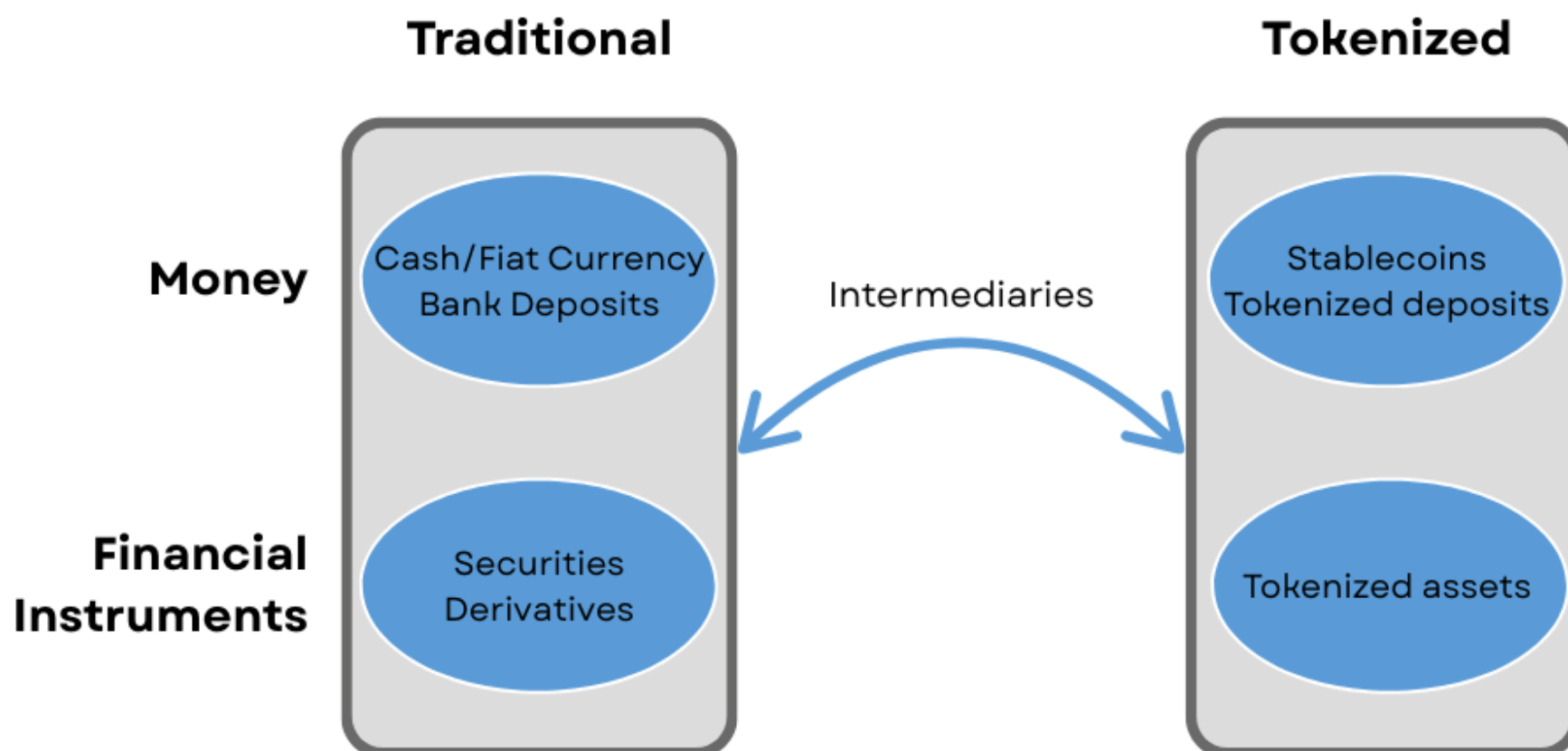


Notes: This figure is a Venn diagram of the number of common third-party service providers for three U.S. central counterparties (CCPs) that currently offer or have plans to offer U.S. Treasury securities clearing services. The names of the central counterparties have been anonymized and are called CCP 1, CCP 2, and CCP 3. The center of the Venn diagram indicates that there are 28 service providers common to all three CCPs. There are eight service providers common to both CCP 1 and CCP 2; 306 common to both CCP 1 and CCP 3; and 14 common to both CCP 2 and CCP 3. Regarding service providers solely for a single CCP, there are 433 for CCP 1; 200 for CCP 2; and 308 for CCP 3.
Source: Author’s calculations based on data from CyberCube.

The third crosscurrent is about risk management in the age of digital asset innovation. The push to 24/7 trading may draw in new market participants. However, it may also create new post-trade risk-management needs that could be costly to maintain. At the same time, recent regulatory clarity through the GENIUS Act has fast-tracked private sector efforts to potentially use stablecoins as margin collateral at CCPs.⁴ Will firms flock to stablecoins to meet CCP margin requirements? Can firms do so under existing regulations? Is it economical to do so if stablecoins don’t bear interest?

And the fourth crosscurrent concerns the potential for fragilities identified in the traditional financial system to transform as tokenization in financial services takes hold. As someone who studies financial stability issues, I am currently focused on this particular crosscurrent. When I think about a future state of more tokenized assets, I see at first a way to diversify market participants’ exposure to systemic risk through new instruments, trading platforms, and settlement mechanisms. At the same time, I also see that over the near term, there are likely to be firms that perform services that create bridges between the traditional system and the tokenized system (see figure 3).

3. Select components of the traditional and tokenized financial systems



Notes: This figure is a stylized visual representation of select components of the traditional and tokenized financial systems: forms of money and financial instruments. The panel on the left side lists parts of the traditional financial system—i.e., traditional forms of money, such as cash and fiat currency and bank deposits, as well as traditional financial instruments, such as securities and derivatives. The panel on the right side lists parts of the tokenized financial system—i.e., relatively newer forms of money, such like stablecoins and tokenized deposits, as well as newer financial instruments, such as tokenized assets. The figure connects these two panels with a two-sided arrow labeled “Intermediaries,” which represents the firms that serve as bridges connecting the traditional and tokenized financial systems.

Source: Author’s analysis.

Stablecoin issuers supply a type of bridge. They provide a means for fiat currency to cross over into the crypto world and back. However, there are likely others, whether technology-based firms or financial firms or both, that will also build bridges between traditional and tokenized assets and forms of money. Are the bridges being built today sturdy enough for the demands of tomorrow’s financial system? As with physical bridges, financial market bridges can be novel and beautiful, but their real value over the long run is their safety and reliability.

So, we’ve got some new “rules of the road” from the GENIUS Act and an acceleration in the adoption of a wide range of technology innovations, including tokenization. And we sense that financial system vulnerabilities may be shifting but in ways that we can’t yet observe.

The FMG team wants to hear about how you are navigating the crosscurrents we have identified. Perhaps together we will start to see where things are headed for the centrally cleared ecosystem.

Cindy Hull is the head of the Federal Reserve Bank of Chicago’s Financial Markets Group. This article is adapted from the opening remarks she gave at the Chicago Fed’s 2025 Financial Markets Group Fall Conference, held on November 19, 2025.

Notes

¹ See [Steigerwald \(2013\)](#) for a primer on central clearing, which covers central counterparties (CCPs) and their clearing members.

² Under a done-with model, an intermediary executes a trade with a client and also clears the trade for the client at the CCP. Under a done-away model, clients can execute a trade with one counterparty and clear with another counterparty.

³ [Du and Patel \(2025\)](#) note that the two ratios in figure 1 (or figure 5 in their original) “imply that while the U.S. G-SIBs [global systemically important banks] maintain excess net capital in their FCM [futures commission merchant] subsidiaries, these banks are less willing or able to keep excess net capital in their FCMs in recent years—i.e., FCMs’ capacity to grow client clearing is constrained by their available net capital.”

⁴ The definitions for margin (initial and variation) and several other key terms related to central counterparty clearing are [available online](#) from the Basel Committee on Banking Supervision.

Opinions expressed in this article are those of the author(s) and do not necessarily reflect the views of the Federal Reserve Bank of Chicago or the Federal Reserve System.