Developments in Central Clearing in the U.S. Treasury Market February 2025

Developments in Central Clearing: In December 2023, the SEC adopted rules intended to expand central clearing of Treasury security and repo transactions. Please comment on developments in the process for implementing these rules. How do you expect the sponsored access and agent clearing models outlined by FICC to be used by indirect participants? Do you expect clearinghouse members to continue posting margin on behalf of some clients? What are the prospects for clearinghouse members to clear trades that clients execute with other counterparties (i.e., "done away")? To what extent may market participants decide to become clearinghouse members (rather than indirect participants)? Several firms have announced intentions to launch new Treasury securities clearinghouses. What are the potential benefits and costs of multiple clearinghouses? What lessons can be learned from other markets, some of which have several competing clearinghouses and others of which have only one?

Executive Summary

- The SEC's central clearing rule—"Standards for Covered Clearing Agencies for U.S. Treasury Securities and Application of the Broker-Dealer Customer Protection Rule with Respect to U.S. Treasury Securities" (Rule)—adopted in December 2023 represents the most significant change to the structure of the Treasury market in decades.
 - The Rule may require as much as \$4TN in additional daily transactions to be centrally cleared.
- Implementing the rule is highly complex, necessitating significant legal, operational and systems changes to set up clearing arrangements, contribute margin and restructure trading and settlement systems.
- The Rule will likely make the market more resilient by reducing counterparty credit and financial stability risks, and by reducing balance sheet costs, but it is likely to introduce additional liquidity, capital, legal, and operational costs associated with central counterparty (CCP) clearing and risk management, including margin.
- There are several scoping issues where the industry is seeking clarification from the SEC, including around mixed collateral in triparty repo and interaffiliate transactions.
 - SIFMA and other industry associations have requested that the implementation dates, including December 2025 for cash market trades and June 2026 for repo trades, be pushed back by a minimum of 12 months in order to allow time to address scoping and implementation issues.
- CCPs continue to develop new access models and solutions for clearing that will play an important role in improving the scalability of clearing. These models, including "done-away" clearing models, may help address market concerns around the additional costs imposed by clearing but require time to develop effectively.
- The entrance of additional CCPs could spur competition in access models and lower costs, but it could also raise a number of risks including the fragmentation of liquidity, and an inability to obtain balance sheet netting and net margin across CCPs absent cross margining arrangements.
- Given the changes in market structure, centrally clearing the Federal Reserve's Standing Repo Facility (SRF) could enhance its effectiveness and support market liquidity by enabling netting and further reducing balance sheet costs for SRF counterparties.

Agenda

- 1. Background on the Rule
- 2. Impact on the Market
- 3. Implementation of the Rule
- 4. Open Scoping Questions
- 5. Expansion of CCP Access & Membership
 - a) Direct vs. Indirect Membership
 - b) FICC Sponsored vs Agent Clearing Models
 - c) Development of Done-Away Clearing
 - d) Cash Market Trading on Interdealer Broker Platforms
- 6. Expansion to Multiple Clearinghouses
 - a) New Entrants
 - b) Considerations for Multiple CCPs
- 7. Margin Practices
 - a) Current Practices & Impact of Central Clearing
 - b) CCP Margin Efficiencies
- 8. Related Considerations
 - a) Central Clearing of Federal Reserve Operations

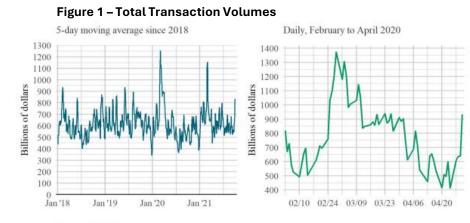
1. Background on the Rule

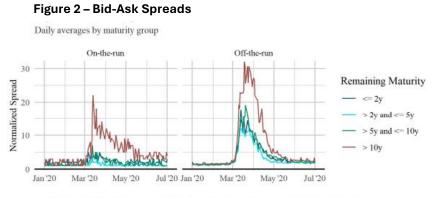
Treasury Market Resiliency Efforts

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- In the wake of several episodes of abrupt deterioration in the functioning of the U.S. Treasury market, including the pandemic "dash for cash," repo funding pressures in 2019, and the 2014 "flash rally," both the **public and private sectors have pursued enhancements in the resiliency of the market**, including the exploration of expanding central clearing.
 - Following the "flash rally" in 2014, the Inter-Agency Working Group for Treasury Market Surveillance (IAWG), comprised of staff from across the public sector, recommended the review of risk management practices associated with clearing and settlement risks.
 - The Treasury Market Practices Group (TMPG), a group of senior Treasury market professionals sponsored by the New York Fed, published best practices for the clearing and settlement of Treasuries in 2019.
 - The Office of Financial Research (OFR) conducted a data collection pilot for non-centrally cleared bilateral repo starting in 2015 and finalized rules requiring data reporting in 2024.
- **Resiliency efforts accelerated following dysfunction in the pandemic** "dash for cash," with the IAWG in 2021 proposing five broad workstreams to strengthen the market, including evaluating expanded central clearing.
 - Figure 1 shows <u>cash</u> transaction volumes reached a record of more than \$1.3TN in February 2020.
 - Figure 2 shows deterioration in market functioning with bid-ask spreads for on and off the run Treasuries widening significantly.
 - In 2021, The Group of 30 (G30), an independent global body comprised of economic and financial leaders from the public and private sectors and academia also recommended an expansion of central clearing, among other efforts.

• The SEC adopted the Rule to expand central clearing in December 2023.





Note: Spread normalized by dividing by the 5th percentile (reference) spread observed Jan. 1 - Feb. 15, 2020. Reference spreads calculated by tenor and separately for on-the-run and first, second, third, and fourth or more off-the-run securities. Source: Bloomberg

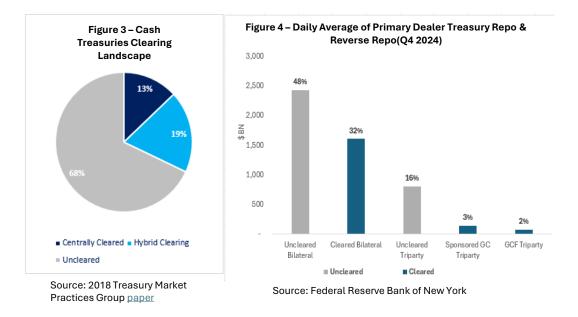
Source: TRACE Source: 2021 IAWG Staff Progress Report

Source: 2021 IAWG Staff Progress Report

Background on the Rule

- Because the U.S. Treasury market plays a crucial role in the global economy, confidence and resilience in the U.S. Treasury market and its ability to function effectively is vital to the stability of the global financial system.
- The SEC highlighted inconsistent and opaque risk management practices associated with non-centrally cleared trades that could threaten market functioning by posing the **risk of contagion** to the CCP and the financial system in the event of a default.
- As seen in Figure 3, based on estimates from the TMPG, only 13% of cash trading is fully centrally cleared, with an additional 19% of the cash market being "hybrid" cleared on interdealer platforms, whereby one leg of the trade clears and settles through a CCP and the other leg is bilaterally cleared.
- Based on New York Fed Data, Figure 4 shows that only 37% of dealer repo & reverse repo is centrally cleared across repo markets.
- The SEC highlighted several areas where central clearing would strengthen the market:
 - **Decrease in Counterparty Credit Risk** A CCP would be the counterparty to each transaction, subjecting transactions to the CCP's risk and default management processes.
 - Better Manage Defaults Defaults would be subject to CCP default management processes, completing settlement of the transactions and mutualizing losses from the default when losses exceed the defaulter's own financial resources at the CCP.
 - **Decrease Operational & Liquidity Risk** Netting could reduce gross settlement volumes and balance sheet costs, enhancing dealer capacity to make markets.
 - Unlock Further Improvements in Market Structure Clearing could support other market structure improvements by reducing risk and improving efficiency; for example, by narrowing intermediation spreads or encouraging the movement to all-to-all trading.
 - Enhance Regulatory Visibility Clearing should increase the transparency of settlement risk and allow CCPs to identify concentrated positions and crowded trades.
- The Rule applies to Covered Clearing Agencies (CCAs), requiring them to adopt policies and procedures for their members to centrally clear certain cash and repo transactions.

"This use of both centrally cleared and not centrally cleared transactions introduces risk into the market, because bilateral clearing involves varying risk management practices that are less uniform and less transparent to the broader market and may be less efficient with regard to netting exposures and use of collateral as compared to central clearing." – SEC Final Rule



Overview of the Rule

Securities and Exchange Commission Rule:

- Requires covered clearing agencies to have clearing members submit "eligible" secondary market U.S. Treasury trades for clearing.
- Includes requirements for CCPs to be able to separate client and house activity and margin and facilitate indirect access.

ELIGIBLE TRANSACTIONS IN SCOPE	TRANSACTIONS NOT IN SCOPE
Cash Market – December 2025:	Cash and Repo Market Exclusions
 All purchases and sales of U.S. Treasury securities for direct participants, if the direct participant brings together multiple buyers and sellers using a 	 Transactions that do not meet the definition of an eligible transaction need not be cleared.
trading facility and is a counterparty to both the buyer and seller in two separate transactions.	 Transactions involving a central bank, a sovereign entity, an international financial institution or a natural person.
 All purchases and sales of U.S. Treasury securities between a direct participant and a registered broker-dealer, government securities dealer or government securities broker. 	 Transactions that are not currently eligible for clearing by FICC, for example open transactions, evergreen repos, and trades with maturities greater than two years.
Repo Market – June 2026:	Additional Repo Exclusions
 All repo and reverse repo agreements collateralized by U.S. Treasury securities to which a direct participant is a counterparty. 	 State and local government repo transactions. This exclusion does not apply to state retirement and pension funds.
	 Inter-affiliate repo transactions conditionally excluded, provided that the affiliated counterparty submits all other Treasury repos to which it is a party.

Current Implementation Timeline



FICC Treasury Clearing Client Impact Roadmap

2. Impact on the Market

Scale of the Markets

Scope of Cash and Repo Markets:

- U.S. Treasury cash and repo markets have **more than \$6TN** in daily activity, the majority of which is not centrally cleared.
- According to a recent industry survey by FICC, daily Treasury clearing activity is expected to increase by approximately \$4TN each day.

CASH – PURCHASE & SALE	
TRANSACTION TYPE	DAILY AVG (BN)
ATS and Interdealer Broker	\$483
Dealer to Customer	\$443
TOTAL	\$926

Prepared by member reflecting FINRA TRACE's Daily Aggregate Treasury Statistics for 4th Quarter, 2024.

Market segments with uncleared activity that may require central clearing under Rule

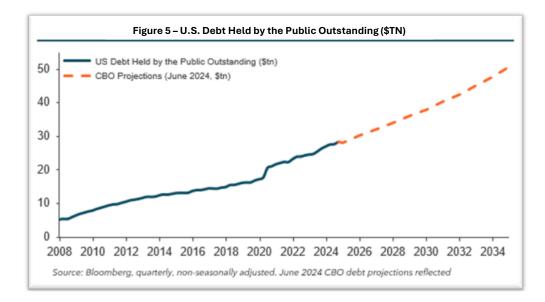
FINANCING – REPO & REVERSE REPO*		
TRANSACTION TYPE	DAILY AVG (BN)	
Uncleared Bilateral	\$2,429	
Cleared Bilateral	\$1,616	
Uncleared Triparty	\$805	
GCF Triparty	\$80	
Sponsored GC Triparty	146	
TOTAL	\$5,076	

Prepared by member reflecting New York Fed's Primary Dealer Statistics for 4th Quarter 2024. Primary dealers do not typically participate in the ON RRP and are therefore not reflected.

Implications for the Market

In a large and growing Treasury market, the Rule may have a series of important implications:

- Counterparty & Systemic Risk
 - Risk of counterparty default and fire sales should be lower, making markets less likely to pull back in times of stress.
- Balance Sheet Capacity & Settlement Efficiency
 - Netting could benefit balance sheets and capacity. A <u>NY Fed study</u> found reduction in gross settlements by as much as 70%.
- Transaction, Capital, and Liquidity Costs
 - Possibly introduces additional CCP clearing and risk management costs.
 - Margin costs may increase and will vary depending on collateral, with larger impacts for longer dated and less liquid securities.
- Spreads & Liquidity
 - Low-margin / high-volume trades and leverage likely to become more costly, widening spreads, such as the cash-futures basis.

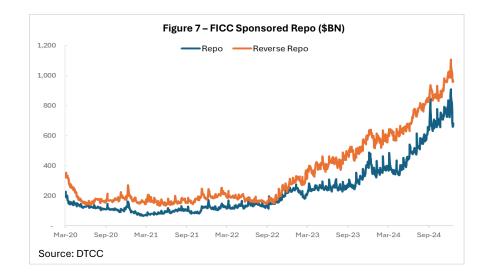




3. Implementation of the Rule

Current Status of Industry Preparedness

- Market participants are at varying stages of readiness, with many supportive of an extension in the compliance dates.
- FICC has done outreach and provided regular industry updates, including the publication of a report on the implications of central clearing in July 2024, 'The U.S. Treasury Clearing Mandate: An Industry Pulse Check."
 - FICC Sponsored Repo volumes have grown over 75% since the final Rule was approved in December 2023.
- Currently, FICC is the only Treasury market CCP. Other entities, including Chicago Mercantile Exchange (CME) and Intercontinental Exchange (ICE), have either applied or announced their intention to apply to become Treasury CCPs.
- SIFMA and other industry workgroups are engaged:
 - SIFMA is currently working on standardized documentation due to concerns about the time required to negotiate bilateral clearing agreements.
 - SIFMA and EY recently published a report on Industry Considerations to prepare for compliance with the Rule.
 - A range of other industry working groups have been formed to address open implementation issues.
 - Industry groups, including SIFMA, FIA, MFA, and ISDA, have raised scoping and implementation challenges and in January 2025 requested an extension to the compliance dates of at least 12 months.



Industry Working Groups	
SIFMA Legal, Operations, and Capital Working Groups	
FIA Treasury Clearing Working Group	
TMPG NCCBR Working Group	
FICC Advisory Council	
ISDA U.S. Clearing Group & Clearing Member Committee	

Steps to Implementation

As market participants prepare for central clearing, a variety of changes to business processes and operational infrastructure are likely needed, including:

	Implementation Steps	Open Issues
Assess Eligibility of Treasury Transactions	 Market participants will need to review their U.S. Treasury transactions to determine which of their cash and repo transactions are in scope as part of the mandate. 	• There are a several open scoping questions , see section 4, page 16.
Obtain or Expand Access to Clearing	 Market participants will need to assess the available access models and determine the one best suited to their needs. Direct participants will need to determine what model to offer to their customers. Contracts will be needed before the compliance dates to establish relationships. 	 Issues affecting the expansion of access to clearing include the expansion of direct CCP membership, expansion of indirect access, development of "done-away" clearing, and cash market trading on interdealer broker platforms. See section 5, page 18-25.
Make Infrastructure and Operational Changes	 Direct members will need to make infrastructure changes to support CCP membership and client activity, potentially including multiple access models and CCPs. Indirect participants may require operational enhancements to meet various CCP and clearing member requirements. 	 Changes will be required to accommodate the expansion to multiple clearinghouses, see section 6, page 27-28.
Determine Approach to Margining	 Direct participants will need to determine what approach they will utilize for margining customer activity. Indirect participants will need to review current liquidity management processes in anticipation of increased margin. 	 There are open questions regarding margin practices, see section 7, page 30- 31.

4. Open Scoping Questions

Open Scoping Questions

The Industry has highlighted several areas of the Rule still requiring clarification:

- Inter-affiliate Requirements
 - Inter-affiliate repos play an important role in allowing firms to manage their liquidity and risk efficiently.
 - The Rule requires inter-affiliate repos to be centrally cleared to avoid evasion, bringing into scope a substantial amount of non-client driven transactions.
 - Although certain inter-affiliate transactions can be excluded under an exemption in the Rule, the requirement that the affiliate submits all other client repos to clearing is broad.
- Mixed Collateral Triparty Repo
 - Based on current language in the mandate, all repo collateralized by Treasuries at the "outset" needs to be submitted for central clearing.
 - Many triparty repo transactions meant to finance non-Treasury securities contain USTs as an acceptable collateral type to fill any shortfalls in less liquid collateral.
 - Mixed collateral, i.e., U.S. Treasuries in triparty repo, could pull in as much as \$1TN in Agency MBS and affect mortgage market pricing.
- Bank Branch Activity
 - Under FICC rules, branches of a bank are considered the same legal entity as the parent, requiring the parent entity to clear eligible transactions with clients, sometimes in foreign jurisdictions, which can be complex.
- Cross-Border and Jurisdictional Application
 - Questions remain regarding the implication of the Rule for trades conducted in non-U.S. jurisdictions and regulations.

5. Expansion of CCP Access & Membership

- a) Direct vs Indirect Membership
- b) FICC Sponsored Member and Agent Clearing Services
- c) Development of "Done-Away" Clearing
- d) Cash Market Trading on Interdealer Broker Platforms

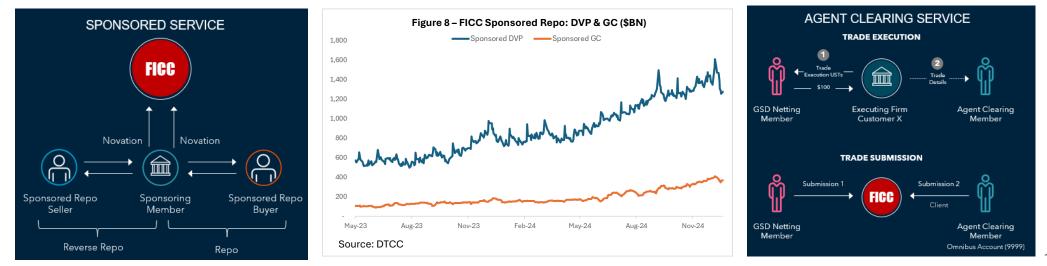
Direct vs Indirect Membership

Direct Membership with a CCP

- Market participants need to decide how they will access central clearing, either through a direct or indirect membership with a CCP.
- A direct membership with a CCP is typically available to regulated entities, such as banks, broker-dealers, and FCMs.
- Given the requirements of membership, **most direct members are market intermediaries** with a scale of activity that makes direct membership economical. Some non-intermediaries that operate in size also consider direct membership.
- With a direct membership, a market participant:
 - Can self-clear and becomes no longer dependent on a clearing member for access.
 - No longer needs to pay a direct member to clear transactions.
 - May have access to additional sources of funding and liquidity, including brokered funding markets.
- Requirements of membership:
 - The operational and logistical setup required for a direct membership with a CCP is more costly and complex than indirect membership, and it requires considerable start-up time.
 - Potentially includes establishment of a separate legal entity, program compliance, staffing and reporting.
 - Likely introduces additional regulatory requirements.
 - Involves additional financial and capital requirements.
 - Could expose the member to mutualized losses in the event of the CCP's default.

FICC Sponsored Member vs Agent Clearing Service Overview of Current FICC Clearing Models

- Direct members of FICC can currently submit client activity to clearing through the **sponsored** and **agent clearing services**. The most prevalent model today is the sponsored service.
- In the **sponsored model**, intermediaries facilitate the submission of their client trading activity to FICC under two offerings:
 - Sponsored Delivery-vs-Payment (DVP): offers eligible clients the ability to lend cash or eligible collateral via FICC-cleared DVP repo transactions in U.S. Treasury and Agency Securities on an overnight and term basis, as well as outright purchases and sales of such securities, to be settled on a Delivery-vs-Payment basis.
 - Sponsored General Collateral (GC): offers eligible clients the ability to execute general collateral repo transactions with each other and settle such repo transactions on the triparty repo platform of BNY.
- The agent clearing model
 - Provides indirect access to executing firm customers through agent clearing members. Agent clearing members are fully liable for the performance obligations of the trades they clear on behalf of clients.
 - The agent clearing model is similar to a futures commission merchant (FCM) model, in which clients can trade with multiple dealers and not be required to clear through the firm with which they execute.



FICC Sponsored Member vs Agent Clearing Service

Access Model Considerations

	Sponsored Service	Agent Clearing Service
Current Use	 Over \$1.2TN in average daily volumes for 2024. Widely used for range of market transactions including levered funds and money market funds. 	 Model is new and predecessor model is not in widespread use; accounting and capital treatment is not yet resolved. Higher probability of use for cash market transactions and clients trading across markets, like cash and futures.
Execution Style	 Can be executed both DVP and via triparty. Supports "done-with" and "done-away" clearing. 	 Can be executed DVP, triparty forthcoming. Supports "done-with" and "done-away" clearing but lends itself towards "done-away."
Cost	 May provide potential balance sheet netting and capital efficiency (GSIB). Margin is gross per client. 	 Ability to net down margin across clients in non-segregated model. Potential for clients to margin between CME and FICC products, if approved, if trades are done with the same clearing broker.
FICC Connectivity	 Client has indirect relationship with FICC, which may be preferable for some client types. 	• Client has no relationship with FICC, so faces the agent.
Time-to-Market	 Model is already being used widely so infrastructure enhancements and documentation changes are for scalability, not initial product development. 	• Although similar to the FCM model, open questions remain on accounting, capital, middleware, pre-trade credit checks, and operational/settlement flows.
Future State	 Potential for additional margin efficiencies with the expected introduction of Sponsored GC Collateral in Lieu model, which reduces the margin and guarantee requirements for many cash provider clients. 	 Availability in triparty could increase flexibility of product.

Development of "Done-Away" Clearing

Scalability and Capacity of Clearing

- Currently, nearly all centrally-cleared transactions in the Treasury market are executed on a "done-with" basis, where the intermediary both executes the trade and serves as the clearing agent.
 - Unlike certain derivatives markets, there is no requirement to separate execution and clearing services under the Rule.
- There are questions around whether the "done-with" clearing model has sufficient scalability to implement the Rule without the availability of third-party clearing agents, known as "done-away" clearing.
 - "Done-away" separates clearing from execution, with a third-party agent submitting the client's trade to the CCP.
 - The "done-away" model would be similar to the "give-up" model in derivatives markets.
- "Done-away" could help addresses some of the efficiency, capacity, and scalability challenges of the Rule, specifically around the costs.
 - The use of a "done-away" clearing agent could result in greater margin efficiency and provide broader access to the market.

"The emergence of increased "done-away" clearing in the Treasury market could provide a clearer sense of execution costs and greater competition in trade execution and trade clearing provision, which should support improved market capacity and liquidity." – Michelle Neal, Former Head of the Markets Group at the New York Fed¹

Development of "Done-Away" Clearing

"Done-with" vs "Done-away" clearing

	"Done-with"	"Done-away"
What it is	• Direct member both executes a trade with its client and acts as the client's clearing agent.	• Executing broker would conduct a trade with a client, but a separate clearing broker would act as the client's clearing agent.
Documentation & Administration	 Each dealer must become a Sponsor and execute legal agreements with each client. Street wide legal capacity limited. Contracts are complex, typically with 3 to 12-month negotiation. May be difficult for clients to maintain counterparty diversity. 	 Single access solution, clients executing legal agreements only with "done-away" agent. Clients can choose who to transact with and notify "done-away" agent to clear the trade.
Economics	 Clearing costs typically embedded in spread. Cross product margining limited to dealer-client pairs. 	 Fee-based service. Greater potential to reduce margin costs through netting or cross-product margining by clearing through single clearing agent.
Operational Scalability	• Operational build-out for dealers and clients, including infrastructure and messaging, is costly and time consuming on a bilateral basis.	• "Done-away" agent, not the executing dealer, is responsible for operational build out and costs.

Development of "Done-Away" Clearing Costs of Clearing

- "Done-away" could distribute some of the additional costs of central clearing across market participants, shifting costs from intermediaries that are capital or liquidity constrained to other participants that are less so.
- Incremental costs associated with CCP operations and risk management include:
 - **Transaction costs**, including clearing and settlement fees for the CCP, clearing members or settlement agents.
 - Capital costs, including those associated with the CCP guarantee, margin & default fund, and liquidity commitments.
 - **Funding costs**, associated with posting margin and holding additional liquidity for relevant commitments.

Additional Costs Associated with Cleared Transactions		
Transaction Costs	Capital Costs	Funding Costs
 CCP Transaction Costs Clearing Agent & Settlement Fees 	 CCP Guarantee Margin & Default Fund Liquidity Commitments Trade Exposure 	 Margin & Default Fund Liquidity Commitment Reserves

Development of "Done-Away" Clearing

Open Issues

Industrywide documentation standards

- Standardized documentation templates for "done-away" clearing will be critical in streamlining negotiations. SIFMA is working to address this via an industry working group.
- Pre-trade limit check
 - Because the "done-away" agent is not a party to the executed trade, "done-away" clearing agents may need to build limit checking systems, either on a pre- or post-trade basis.
 - Additionally, counterparties will need documentation that governs what happens if the "done-away" agent does not agree to clear the transaction.
- Need for a middleware solution
 - Middleware allows counterparties to compare and affirm trade terms and route matched trades to the clearinghouse. While it is a critical part of the derivatives clearing workflow, it does not exist for the repo market and needs to be developed.
- Close out of legal and accounting opinions
 - Market participants will need to review the capital treatment for some "done-away" clearing services; the legal and accounting treatment for FICC's agent clearing model is yet to be finalized.
- Porting of positions
 - Under FICC rules, clients are currently unable to port positions between clearing members; this is an important risk management tool in the cleared derivatives ecosystem and the adoption of a similar structure would make "done-away" clearing more likely.
 - FICC has indicated that it intends to pursue porting in a future rule filing.
- Fee structure
 - "Done-away" is likely to be structured as a fee-based service that could be paid by executing dealers or clients.

Cash Market Trading on Interdealer Broker Platforms

Interdealer Broker Platforms and "Done-Away" Clearing

- "Done-away" clearing will be particularly important for interdealer broker (IDB) platforms in the cash market.
- Interdealer broker platforms are typically utilized by dealers as hedging mechanism for transactions with clients. About 50% of the activity on IDB platform is conducted by Principal Trading Firms (PTF), most of whom are not FICC members¹.
 - o In these transactions, the IDB acts as an intermediary between the buyer and seller and is the counterparty on both sides of the trade.
 - In the case where one side is an FICC member and the other a non-FICC member, today the IDB submits the transaction on behalf of the non-FICC member.
 - When the two counterparties are not FICC members, the two transactions are matched, netted, and settled by the IDB platform itself with no central clearing.
- In the future, to support their trading activity under the Rule, non-FICC members that trade through an IDB will need to find direct participants to clear transactions to which they are not a counterparty, i.e., "done-away."
 - Access to central clearing for non-CCP members on interdealer platforms requires a scalable "done-away" clearing model; even with that, the costs of clearing for non-CCP member transactions is likely to rise and could affect IDB liquidity.
- The successful development of a "done-away" clearing model is important for the cash market as over 50% of cash purchase and sales are conducted via IDB platforms and are in scope for central clearing.

6.Expansion to Multiple Clearinghouses

- a) New Entrants
- b) Considerations for Multiple CCPs

Expansion to Multiple Clearinghouses New Entrants

- Some organizations have indicated they plan to or are exploring entering the Treasury market as a CCP.
- Currently FICC is the only U.S. Treasury CCP, however additional entities, including CME and ICE, have announced their intention to enter. Entrance will likely require numerous regulatory approvals.
- Delays in the CCP approval process could impact the ability of market participants to successfully onboard and make the necessary infrastructure changes for new CCPs under the current implementation timeline.

CME	ICE
 Announced intention in March 2024 and filed application with SEC in January 2025. Plan to leverage expertise in derivatives and cash markets. Indicated support for both "done-with" and "done-away." Intends to provide cross margin opportunities across cash, repo, futures, options, and swaps. Flexible execution style allows for the configuration of positions for margin optimization with select contracts. 	 Announced intention in June 2024. Plan to leverage infrastructure of ICE's credit default swap clearinghouse, ICE Clear Credit (ICC). Indicated support for both "done-with" and "done-away." Offering that all customer activity will be fully segregated. Open access to trade execution and post-trade processing platforms. Have developed a variety of indirect access models.

Expansion to Multiple Clearinghouses Considerations for Multiple CCPs

Market participants may choose to connect to one or more CCPs, once launched, to support their activity. Infrastructure requirements may vary across CCPs. Domestic and global markets across the derivatives space operate with multiple CCPs, though typically there tends to be concentration in one CCP.

Considerations for a Market with Multiple CCPs

- **Increased competition:** Multiple CCPs can lead to a more competitive market, potentially resulting in lower costs and better services for market participants.
- Innovation and specialization: Different CCPs may focus on specific aspects of treasury clearing (e.g., different clearing models), leading to innovation and tailored services for various market participants.
- **Increased access:** Different CCPs may offer different modes of access for indirect participants, leading to further expansion and pathways for clearing.
- **Risk diversification:** Having multiple CCPs can help distribute risk among different entities, reducing the impact of a potential failure of a single CCP or systemic counterparty.

- **Complexity**: Managing relationships with multiple CCPs can increase complexity for market participants, requiring more resources and expertise to navigate the system.
- **Interoperability challenges**: Building seamless interaction between different CCPs can be challenging, potentially leading to operational risks and inefficiencies.
- Netting & settlement complexity: Multiple CCPs may reduce balance sheet netting and settlement efficiency and increase margin costs.
- **Potential for fragmentation**: Multiple CCPs could lead to a fragmented market, with different rules, standards, and practices (implicit race to the bottom).

7. Margin Practices

- a) Current Practices & Impact of Central Clearing
- b) CCP Margin Efficiencies

Margin Practices

Current Practices and Impact of Central Clearing

- FICC surveys suggest that margin will increase in proportion to the additional volume of cleared activity. The latest survey suggests that **aggregate margin could increase by approximately \$58.4BN**¹.
- Under the FICC rules, the clearing member is required to pay margin. Margin is not required to be paid by the customer. Client **margining practices are bilaterally negotiated** between clearing members and their clients.
- According to the Office of Financial Research (OFR), over 70% of bilateral Treasury repo is transacted with zero haircut². This may not reflect portfolio margining.
- Absent a change in current market practice, the cost of intermediation could rise as intermediaries fund client margin. Intermediaries could also face **funding capacity limits**, limiting their ability to support client clearing, especially in periods of volatility.

Open Issues

- Consistency of Client Margining Practices
 - In a report on the cash-futures basis trade, the Market Risk Advisory Committee (MRAC) of the CFTC recently recommended practices to effectively manage the counterparty credit risk of Treasury transactions through appropriate collateralization of repos.
 - The TMPG is examining best practices for managing the risks of Treasury repo transactions. Primary Dealers are expected to implement industry best practices.
 - FINRA rules require the collection of margin on agency MBS transactions by broker dealers; no similar requirement exists for Treasury transactions.
- Double Margining
 - Under SEC rules, most money market funds require a dealer to overcollateralize transactions with typically 102% of the value of the cash provided. In a centrally cleared trade, the dealer must separately post margin to the clearing house, potentially making the transaction "double margined."
- Interpretation of 15c3-3 for the Collection of Margin
 - Questions remain regarding the collection of margin and how it pertains to 15c3-3 requirements.

^{1. &}quot;The U.S. Treasury Clearing Mandate: An Industry Pulse Check," – DTCC

^{2. &}quot;Why Is So Much Repo Not Centrally Cleared?" - Hempel, Kahn, Mann, Paddrik

Margin Practices CCP Margin Efficiencies

- Agent Clearing Model
 - FICC's Agent Clearing Model allows the Agent Clearing Member to calculate margin for their omnibus account on either a net or gross basis.
- Sponsored GC "Collateral in Lieu" Service
 - FICC is working to develop a new form of its Sponsored GC access model that would allow it to take a targeted lien over the Treasury collateral in an investor's triparty account. The new model is not yet approved.
 - The lien could obviate the need to collect margin with respect to the Cash Investor's side of the trade in most circumstances.
 - It may also obviate the need for the Sponsoring Member to guarantee the performance of the Cash Investor to FICC.
- Margin Efficient Solutions being introduced by other CCPs
 - Other CCPs entering the Treasury space, including ICE and CME, are working to introduce access models that provide more margin efficiency.
 - Cross-margining is being advanced by FICC and CME for Treasury futures and cash transactions.

"Counterparty credit risk should be effectively managed. For example, trades should be appropriately collateralized to protect against the risk of losses due to counterparty default. The risk associated with each component of the basis trade should be considered, as should the risk of that trade in the context of a broader portfolio of positions. When managing risk on a portfolio basis, market participants should assess and manage the risk that the correlation between positions in the portfolio could change rapidly." - CFTC Market Risk Advisory Committee¹

8. Related Considerations

a) Central Clearing of Federal Reserve Operations

Related Considerations

Central Clearing of Federal Reserve Repo Operations

- The Rule includes an exemption for central banks, including the Federal Reserve.
- However, some Federal Reserve officials have suggested that voluntary participation in central clearing for certain transactions could be considered because it could reduce frictions in the transmission of monetary policy operations.
 - The SRF serves as a backstop in markets to support the effective implementation and transmission of monetary policy and smooth market functioning, lending cash against eligible collateral.
 - Centrally clearing the SRF operations could allow dealers to net down the transactions they conduct with the Federal Reserve against onward transactions with their clients under accounting rules, since both transactions would face the same counterparty.
 - Absent central clearing, engaging in SRF transactions could introduce significant balance sheet costs, widening the spread between transactions conducted with the Fed and onward lending done with clients.

"As the market moves toward broader clearing, I think the FOMC should also consider the benefits of central clearing of the Federal Reserve's own Treasury market operations. The SEC regulation exempts central banks, but in my view, it's typically most efficient and effective for us to operate in the same way as the main market participants. And, as I've discussed previously, central clearing of the SRF could make the facility more effective in providing backstop liquidity to the broad market." – Lorie K. Logan, President and CEO of the Dallas Fed¹

Appendix

Direct vs Indirect Membership

Example: FICC Direct Membership Requirements

Membership Eligibility Requirements

- Financial Responsibility must have sufficient funds to make anticipated required deposits to the Clearing Fund and Funds-Only Settlement Amounts and to meet all of its other obligations to FICC in a timely manner.
- Operational Capability must complete network and connectivity testing at FICC standards and fulfill testing and related reporting requirements.

Capital Requirements

- U.S. Bank or Trust Company CET1 Capital of at least \$500MN and must be well capitalized
- Non-U.S. Bank or Trust Company CET1 Capital of at least \$500MN, and must comply with the minimum capital requirements and capital ratios
 required by its home country regulator, or, if greater, with such minimum capital requirements or capital ratios standards promulgated by the Basel
 Committee on Banking Supervision and provide an attestation for itself, its parent bank and its parent bank holding company detailing the minimum
 capital requirements and capital ratios required by their home country regulator.
- Dealer, Futures Commission Merchant or Inter-Dealer Broker Net worth of at least \$25MN and must have an excess net capital of at least \$10MN.
- Foreign Person applicant must satisfy the minimum financial requirements of its home country's regulator and if it is a broker-dealer or bank or trust company, the requirements laid out above.
- Government Securities Issuer Equity capital of at least \$100MN.
- Registered Investment Company Minimum net assets of \$100MN.

Margin Requirements

• Must post an initial clearing fund deposit bason on anticipated volume and nature of activity prior to going live. Once live, the member must meet the required clearing fund amount based on their unsettled positions and the market risk associated with them. This is calculated twice daily.

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