

Treasury Market Practices Group

Clearing and Settlement Practices for Treasury Secured Financing Transactions Working Group Update

Complimentary to its work on [clearing and settlement of purchases and sales of U.S. Treasuries in the secondary market](#), the TMPG in [November 2020](#), tasked a working group with undertaking a review of post-trade processes for common securities financing transaction types for Treasuries – repurchase and securities lending agreements (collectively referred to as Secured Financing Transactions or SFTs). These financing transactions are critically important because they are a main source of secured funding and liquidity for fixed income securities. Despite their importance, the clearing and settlement processes for SFTs, and the inherent liquidity and credit risks may not be well understood across all market participants.

Developing a common understanding of these processes and related risks is important for all market participants. Although these post-trade processes usually work smoothly, in times of crisis they can be disrupted and result in additional stress to the marketplace. Given the importance of SFTs to the U.S. financial market, such a disruption would likely impact overall financial stability. This review is also timely in that it captures recent evolutions in the clearing and settlement of repos, such as the reforms to the tri-party repo settlement platforms (see [Tri-Party Repo Infrastructure Reforms \(2010\)](#)) and innovations by the Fixed Income Clearing Corporation to its [Sponsored Repo Service](#).

A working group of the TMPG is conducting the review of clearing and settlement Practices for Treasury SFTs. The working group, composed of TMPG members and subject matter specialists from TMPG member and non-member firms, was tasked with¹:

- mapping the current structure of clearing and settlement,
- identifying potential risk and resiliency issues, and
- facilitating a public discussion of SFT clearing and settlement processes and best practices.

To date, the workgroup has completed the first task of documenting current processes with a series of draft maps. These detailed maps illustrate current clearing and settlement processes for SFTs under different scenarios and across different segments of the market. These include repos conducted on a bilateral basis, repos conducted on the tri-party repo settlement platform, repos conducted with a central counterparty (CCP), and securities lending transactions.

Although still on-going, the work has revealed some preliminary findings. As indicated by the number of maps presented, there are a large number of clearing and settlement processes for SFTs, reflecting various demands of market participants. In contrast to the Treasury cash market, central clearing appears to be growing organically, partly as a result of the CCP developing and refining services that have widened the set of SFT trades that are eligible for central clearing. Nevertheless, SFT activity that is bilaterally cleared and settled remains substantial.

Similar to the Treasury cash market, the bilateral clearing and settlement processes are not uniform across market participants and are less transparent than central clearing. The varying risk management practices behind these more bespoke processes may reflect differences in the level of understanding

¹ Working group member firms include: Annaly, Arcola, Blackrock, Bank of New York Mellon, DTCC, Loop Capital, Federated, Morgan Stanley, NatWest Markets, State Street, Tudor, and Vanguard.

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among market participants of the inherent risks of SFT clearing and settlement. As the TMPG's work on the above areas remains underway the group welcomes any feedback on the completeness or accuracy of the working draft of the maps.

Detailed Clearing and Settlement Cases

In the [accompanying document](#), a number of illustrative clearing and settlement cases are presented using stylized maps. These maps have a similar structure to the clearing and settlement maps published in the TMPG's [White Paper on Clearing and Settlement in the Secondary Market for U.S. Treasury Securities](#). The main segments of each trade's life cycle are included, from execution to clearing to the settlement of the on- and off-legs.

In addition to illustrating the clearing and settlement processes, the maps also highlight the participants in the settlement chain and which of them hold counterparty credit risk, liquidity risk, and credit extension risk throughout the clearing process.

Some of the common features across the clearing maps include:

- Entity type: included as individual rows in the process - for instance, a clearing bank, CCP, IDB, etc. (Note that the number of entity types and hence rows differs across the various maps.)
- Timeline: For the maps which do not involve a CCP, the day of execution and the settlement of the on-leg are shown on one map, followed by the settlement of the off-leg in a separate map. For those maps involving a CCP, the full life cycle of the trade is shown on a single map.
- Information flows and movements of cash or securities designations:
 - Information flows (gray dashed arrows): Two-way information flows include trade messaging, confirmation, and matching processes. One-way information flows include delivering or receiving instructions and settlement confirmations.
 - Movements of securities (solid black arrows): This includes movements across the Fedwire Securities Service or as a transfer on the books of a bank.²
 - Movements of cash (solid black lines with squares).
- Identification of credit and liquidity risks:
 - Counterparty credit risk (solid red outline): Risk of counterparty non-performance and the associated market risk from liquidating or covering positions.
 - Centrally cleared credit risk (solid green outline): Risk that the CCP assumes in becoming principal to a trade.
 - CCP counterparty risk (dashed green outline): Buyer's/seller's risk of CCP non-performance and the associated market risk from liquidating or covering positions.
 - Credit extension risk (solid orange outline): Risk assumed by parties advancing cash upon receipt of securities on behalf of the underlying Buyer secured by such securities. In the event of the Buyer's default, the party providing the cash advance may liquidate the Treasuries and absorb credit and market risk.

² "Fedwire" is a registered service mark of the Federal Reserve Banks.

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A number of different entities may play a role in the clearing and settlement of STFs, depending on the parties to the trade. The different entities highlighted in the stylized clearing and settlement maps are as follows:

- Buyers/Sellers:
 - Buy-side Firms: Clear and settle bilaterally (not CCP members) or clear and settle with CCP as sponsored members.
 - Dealers (CCP members): Clear and settle on a bilateral basis with CCP non-members, and clear and settle via the CCP when trading with other CCP members or when sponsoring trades with CCP non-members.
 - Dealers (CCP non-members): Clear and settle bilaterally as they are not CCP members or clear and settle with CCP as sponsored members.
- Clearing/Custody Banks: Clear and settle on behalf of clients with respect to both CCP and non-CCP trades.
- Central Counterparty (CCP): Clearing house that centrally clears for its members, including member's own activity and member's sponsored activity.
- Interdealer Brokers (IDB): Dealers that operate electronic and voice platforms that allow participants to trade anonymously.

Ordering of clearing and settlement maps

1. Clearing and settlement on a bilateral basis
 - a. Bilateral repo flow (on leg) overnight
 - b. Bilateral repo flow (on leg) term trades
 - c. Bilateral repo flow (off leg): overnight and term trades
2. Clearing and settlement on the tri-party repo settlement platform
 - a. Tri-Party repo flow same day
 - b. Tri-Party repo flow overnight
3. Clearing and settlement with a CCP
 - a. Non-sponsored flows
 - i. GCF overnight repo
 - ii. GCF term repo
 - iii. DVP overnight repo
 - iv. DVP overnight repo with IDB
 - v. DVP forward start overnight repo
 - vi. DVP term repo
 - b. Sponsored Delivery-versus-Payment (DVP)
 - i. DVP repo sourced securities
 - ii. Sponsored member sourced securities
 - c. Sponsored GC
 - i. DVP repo sourced securities
 - ii. GCF repo sourced securities
 - iii. Sponsored GC term repo: GCF repo sourced securities
 - iv. Sponsored GC term repo: Sponsored member sourced securities
4. Clearing and settlement of securities lending transactions

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- a. Tri-party Flow – Stock Loan Transaction DVP vs DVP
- b. Tri-party Flow – Stock Loan Transaction Free-of-Payment (FOP) vs FOP
- c. Bilateral Flow – Stock Loan Transaction FOP vs FOP