

**Progress Report
December 22, 2009**

**Task Force on Tri-Party Repo Infrastructure
Payments Risk Committee**

Introduction

The Task Force on Tri-Party Repo Infrastructure (“Task Force”) was formed in September 2009 under the auspices of the Payments Risk Committee (“PRC”), a private sector body sponsored by the Federal Reserve Bank of New York. The PRC oversees the functioning of the Task Force to ensure that the process is inclusive and that work adheres to its analytical standards, but it will not opine on the specific content of the Task Force’s work.

The Task Force’s objective is to develop a set of recommendations for improving and mitigating risks related to tri-party repo transactions, given the important role such transactions play in supporting the liquidity and efficiency of U.S. securities markets and in the implementation of monetary policy. The primary areas of focus for this effort are clearance and settlement arrangements, credit and liquidity risk management practices and tools, and arrangements for facilitating the orderly disposition of collateral in stress scenarios.

Through its recommendations, the Task Force seeks solutions intended to assure the Federal Reserve and other key stakeholders that tri-party repo arrangements will not amplify systemic credit and liquidity risks during potential future market disruptions. The Task Force notes the success of prior public and private sector efforts to strengthen a wide range of clearance and settlement arrangements, contributing to the overall effective performance of such arrangements during the recent crisis.

The Task Force is confident that a similar strengthening of tri-party repo arrangements will be achieved and that these arrangements will continue to contribute importantly to the liquidity of U.S. government and other securities markets.

The Task Force membership includes representatives from the two tri-party clearing banks, collateral providers including banks and securities dealers (including the broker-dealer affiliates of global banking firms), cash investors that are counterparties to collateral providers (including custodians/asset managers, hedge funds, and money market mutual funds), DTCC, and industry associations (SIFMA, ICI, MFA). Federal Reserve and SEC staff participate in meetings of the Task Force as observers and technical advisors.

The Federal Reserve has made clear its expectation that the Task Force will work quickly to develop comprehensive recommendations to address weaknesses identified in the tri-party repo infrastructure.

This report summarizes the progress of the Task Force as of mid December, 2009. In the interest of transparency, this progress report is being made public [website]. The Task Force intends to continue developing its recommendations and will also sponsor a broader forum in early 2010 to reach out to representatives of firms not represented directly on the Task Force and provide a basis for wider industry discussion.

The Task Force expects to complete its work during the first quarter of 2010. The Federal Reserve has indicated that it plans to incorporate the Task Force’s report and recommendations into a white paper that it will issue for public comment to enable all interested stakeholders to review and comment on the work.

Background

The U.S. tri-party repo market is an important mechanism for financing the securities inventories held by the banks and dealer firms that make markets and contribute to the liquidity of those securities markets. U.S. Treasury and Federal Agency-issued collateral continue to dominate the tri-party market. Additional collateral types, including corporate debt and asset-backed securities (“ABS”) as well as equity securities, have shrunk as a share of the overall tri-party market in the wake of the crisis.

At peak levels in 2008, over US\$ 2.8 trillion in securities were being financed through tri-party repo transactions, many with very short maturities, and involving the daily transfer of nearly the full amount of associated cash and securities on the accounts of one or the other of the two tri-party “clearing banks”: Bank of New York Mellon (BNY) and JPMorgan Chase (JPM).

Individual repo sellers (borrowers) routinely financed more than US\$ 100 bn in securities via the tri-party mechanism. The largest single firm exposure peaked at more than US\$ 400 bn. Tri-party repo arrangements were at the center of the liquidity pressures faced by securities firms at the height of the financial crisis, especially as the pricing transparency and liquidity of some forms of tri-party collateral deteriorated at the same time that counterparty credit concerns were escalating.

Cash investors in the tri-party market include money market mutual funds (2a-7 funds), securities lending agents (typically major custodian banks), and other institutional investors or fund managers (including commercial banks and corporate treasurers) who seek to invest cash short-term. The repo trades can be overnight trades, term trades with some fixed future maturity date, or open trades which remain in place until one or the other parties elects not to renew the trade.

It is important to highlight at the outset that many of the issues that arose in the context of the tri-party repo market are not necessarily unique to that mechanism, but are inherent in secured financing, especially short-term secured financing arrangements. The Task Force believes it is important to consider issues relevant to tri-party repo arrangements in the context of overall secured financing and liquidity risk management practices.

Analysis

At its heart, the tri-party repo market matches a large demand on the part of cash investors for safe, flexible, short-term investments with the desire for banks and securities dealers to finance their securities inventories on a more efficient and reliable basis than they can borrow on an unsecured basis. The treatment of repurchase transactions in bankruptcy, the use of securities as collateral (including daily margining and haircuts), and the custodian services of the clearing banks provide protections to repo cash investors that do not exist for unsecured creditors.

This mechanism for financing dealer securities inventories grew during the last decade to become a substantial portion of total dealer balance sheet liabilities. For reference, the daily volume of tri-party transactions is a multiple of the entire financial commercial paper market. Dealers collectively believed that this method of financing would be more stable than unsecured financing in the event of market or firm-specific stress events given the protections described above, in particular the fact that the repo cash investor is collateralized.

With hindsight, several important lessons emerge with regard to secured funding generally.

- Dealer liquidity contingency plans in many cases did not adequately consider the potential for a broad pull-back in repo financing or an abrupt change in the terms of that financing. The aggregate scale of the associated liquidity risk in systemic terms was not sufficiently appreciated by the public or private sectors in advance of the recent crisis.
 - Cash investors in repo transactions have to consider both counterparty credit quality considerations and collateral quality considerations; in practice, different investors weight these factors differently. Money market mutual funds and other cash investors that operate under similar mandates focus on the creditworthiness of the counterparty -- rather than the quality of the collateral and the level of margin -- to determine if they continue to feel comfortable doing business with the counterparty. For cash investors that place primary emphasis on counterparty considerations, the decision to cease extensions of credit to particular counterparties can occur simultaneously with respect to both unsecured and secured transactions. Some market participants did not fully appreciate this and as a result did not correctly assess how rapidly some cash investors might pull away in the event of a weakening credit profile.
- Cash investors might have had difficulty managing the risks associated with a dealer default in which they needed to liquidate large portfolios of repo collateral simultaneously. At a minimum, they would have been challenged by the operational demands of managing or liquidating such a large amount of collateral. The potential for immediate liquidation of large amounts of illiquid collateral has the potential to introduce a significant amount of destabilizing negative feedback during a stress event.
- Margin levels received by repo cash investors in certain asset classes became inadequate in the sense that the margins did not account sufficiently for differences in the true close-out risk of the securities (i.e., they did not fully anticipate market conditions in the event of a large dealer default).
- Market participants did not sufficiently anticipate the potential for some types of repo collateral to lose price transparency and liquidity for extended periods of time. In some cases, participants were too aggressive in using repo transactions to finance collateral with limited price transparency and liquidity in the first place.

With regard to the tri-party repo infrastructure specifically, the crisis also highlighted weaknesses.

- Current market trade capture practices do not uniformly and clearly differentiate between term, overnight, and open transactions and therefore, clearing banks do not receive such information uniformly from their clients within a reasonable time frame post-execution. As a result, the clearing banks normally treat all tri-party transactions similarly from an operational perspective.
- The bulk of the entire secured exposure passes from the cash investors to the clearing banks intra-day to provide operational efficiency. The bulk of tri-party repo transactions currently are “unwound” vs. cash on the clearing banks’ books each day (normally around 8 am) , with new allocations effected on the books of the clearing banks beginning in the afternoon.
 - The amount of secured credit and market risk exposure borne by the two clearing banks in the normal course of business is extreme.
 - From the clearing banks’ perspective, the large intraday secured credit exposures to individual dealer firms that existed for the purpose of operational convenience became difficult to manage when the prospect of dealer firm defaults became more than a theoretical possibility.

- From the dealers' perspective, it is undesirable to become critically reliant on continued extensions of credit by a single creditor, especially one that has the right to refuse or change the terms of that extension of credit on a daily basis.
 - From the cash investors' perspective, the structure results in their bearing substantial deposit risk via cash accounts at the clearing banks during daylight hours.
- While the clearing banks have the right not to extend such intraday credit, nevertheless many segments of the market assumed that the clearing banks would continue to extend such credit.
 - There was not a detailed description within repo and tri-party documentation regarding the circumstances in which the clearing banks would exercise their right to refuse to engage in the morning unwind process (thereby leaving the dealer credit exposure with repo investors) or when clearing banks would require dealers to post more collateral to the clearing bank itself.

Draft Recommendations

The Task Force has discussed a wide range of potential improvements and policy recommendations. Further analysis and discussion of these options is continuing and will benefit from additional discussion with a wider range of market participants and other stakeholders early in 2010.

On a number of aspects, a broad consensus is emerging. These include the following.

- Implement multiple operational improvements to substantially reduce the size of the daily unwind and therefore the size of the intraday secured exposures taken on by the clearing banks. The Task Force is already moving ahead to assess the operational implications and develop project plans, subject to dialogue with other market participants. If the following enhancements are successful, it is further possible to contemplate a situation in which tri-party repo transactions begin immediately following the morning unwind process, reducing clearing bank intraday exposure even further. ***It should be cautioned however that these concepts require further analysis with respect to their implications for intraday liquidity and operational and legal feasibility, including their interactions with other market mechanisms for completing repo transactions.***
 - Develop a mechanism for all three parties to match executed trades promptly after execution and that enables all three parties to a transaction to clearly identify overnight, term, and open trade maturities in their books and records.
 - Remove non-maturing term trades from the clearing bank daily unwind process.
 - Deploy robust automated intra-day capabilities for securities-for-securities substitution in and out of repo agreements through final maturity.
 - Building on this capability where supported by a thorough analysis of the implications, implement changes to the timing of daily repo processing at the clearing banks.
- Strengthen collateral margining practices.
 - There is broad agreement on the need for collateral margins and haircuts to reflect differences in close-out risks across collateral asset classes and to provide greater coverage against changes in the liquidity and/or price volatility of the underlying assets.
 - To the extent that margins build in stronger cushions against increases in volatility or reductions in liquidity and price transparency, greater stability in the margin arrangements should be possible (i.e., longer notice periods before margins are changed).

- It would be beneficial for all market participants to have publicly available reference points for margin levels, for example through the publication of regular industry survey results on levels of margin associated with different collateral types.
 - Cash investors and borrowers, clearing banks, and regulators all have a strong interest in ensuring that robust margin levels can be adopted and maintained in the face of competitive pressures. It is also desirable for margin levels to better reflect instances where particular dealers have built up a collateral concentration across their aggregate repo portfolio that could have material price impact if liquidated into the market.
 - The Task Force intends to discuss further how these objectives can best be achieved. A key challenge is that placing the bulk of responsibility for determining margin levels on any single party (including regulators) can blunt the incentives for other stakeholders to take appropriate responsibility for monitoring margin levels in light of changing market developments.
- Enhance liquidity risk management practices.
 - Both securities dealers and cash investors need to fully incorporate the previously described lessons of the recent crisis with respect to secured financing transactions into their liquidity risk management practices and associated contingency planning.
 - Accordingly, the Task Force supports the emphasis that regulatory authorities and firms are now placing on improvements in liquidity risk management.
- Identify sound practices for contingency planning by tri-party repo cash investors for a possible dealer default.
 - This work will highlight the operational challenges that may be involved in taking possession of a large collateral portfolio, including the elements and capabilities that need to be considered and planned for in advance.
 - It will be important for this work to incorporate an analysis of how these sound practices may be contingent on collateral characteristics.
 - In particular, it will be important to distinguish those cases where immediate liquidations would be required from those where greater flexibility in managing the collateral portfolio is possible.
- Improve the transparency of the tri-party repo market.
 - This should include both public disclosures (e.g., measures of aggregate size by collateral type) and improved supervisory reporting and monitoring.
 - Valuation and price transparency is an area where the Task Force believes that more could be done to enhance knowledge of actual securities collateral prices and to discourage the formation of large differentials in fair value estimates for the same or similar collateral during future stress episodes.

Implementation of some or all of these draft recommendations, subject to appropriate caveats given the additional “due diligence” required to fully analyze all implications, has the potential to go a long way toward addressing the weaknesses outlined above and thus in reducing the potential for systemic risk associated with the tri-party repo market and the secured financing markets more generally. These improvements will require resources and some of them could increase the cost of tri-party transactions.

Nevertheless, it is not certain that these improvements alone could fully achieve the objective of ensuring that tri-party repo arrangements do not amplify the systemic consequences of the failure of a large securities dealer,

either with respect to the impact on the clearing banks or the broader market. To underscore the importance of this objective, the Federal Reserve has requested that the Task Force fully “stress test” its recommendations with respect to such an event.

Concepts for Further Review

A number of additional ideas have been proposed and discussed within the Task Force with the intention to improve the market’s ability to deal with the default of one or more tri-party repo borrowers. The Task Force believes it is imperative that it fully consider all possibilities raised for discussion and consideration, even those with relatively modest support among Task Force members. Otherwise, the Task Force may be faulted for not conducting a sufficiently comprehensive analysis.

However, the specific concepts below must still be viewed very much as ideas under consideration, and not as possible draft recommendations. The inherent complexity of several of the ideas implies the need for significant additional analysis to properly assess the relevant strengths and weaknesses. The different ideas are not necessarily mutually exclusive.

- Consider limits on the scope of securities eligible for inclusion within the tri-party mechanism.
- Consider requiring pre-appointed liquidation agent(s) to be responsible for liquidating the collateral underlying a failed dealer’s tri-party repo portfolio.
- Consider establishing an industry-sponsored utility with the ability to finance the securities portfolio of a faltering or defaulted dealer and limit the associated stress on the market while their portfolio is liquidated.
- Consider establishing an industry-sponsored entity that could provide a backstop against the most extreme loss outcomes associated with a collateral portfolio liquidation, making it more likely that such a portfolio could continue to be financed during the liquidation process.
- Consider encouraging the piloting and development of alternative “utility like” mechanisms (e.g., through FICC or a similar entity) that could offer a higher level of safety for certain transaction segments now conducted via the current tri-party arrangements.

Next Steps

The Task Force has established multiple work streams to examine the operational and other requirements associated with steps to reduce reliance on intraday credit provided by clearing banks, with the intention to move forward as promptly as possible on these initiatives, subject to the need for appropriate review and feedback by affected market participants.

The Task Force will seek to “stress test” each of the ideas being considered to assess how they might have improved the situation had they been in place during the recent crisis and how they might hold up in future stress

scenarios. This analysis will pay particular attention to how proposed changes would affect the incentives facing different market participants in these situations.

The Task Force, in conjunction with the Federal Reserve, will sponsor an outreach workshop with a broad set of market participants beyond those directly involved with the Task Force in early 2010.

Given the urgency of its mission, the Task Force intends to conclude its work and issue its report and recommendations by the end of Q1 2010. The Federal Reserve is expected to incorporate the results in a white paper that will be issued for public comment.

**Tri-party Repo Infrastructure Reform Task Force
Participating Firms**

Bank of America Securities LLC
The Bank of New York Mellon
Barclays Capital
Citadel Investment Group LLC
Citigroup Global Markets Inc.
Credit Suisse Securities (USA) LLC
The Depository Trust & Clearing Corporation (DTCC)
Deutsche Bank Securities Inc.
Federated Investors, Inc.
Fidelity Management & Research Company
Goldman, Sachs & Co.
Investment Company Institute (ICI)
Invesco Ltd.
J.P. Morgan Chase & Co.
Managed Funds Association (MFA)
Morgan Stanley & Co.
Securities Industry and Financial Markets Association (SIFMA)
State Street Global Advisors
UBS Investment Bank