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# THE TRI-PARTY REPO MARKET: REMAINING CHALLENGES

## **HEARING**

BEFORE THE

SUBCOMMITTEE ON SECURITIES, INSURANCE, AND INVESTMENT OF THE

# COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED TWELFTH CONGRESS

SECOND SESSION

ON

EXAMINING THE TRI-PARTY REPO MARKET

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#### THE TRI-PARTY REPO MARKET: REMAINING **CHALLENGES**

#### THURSDAY, AUGUST 2, 2012

U.S. SENATE, SUBCOMMITTEE ON SECURITIES, INSURANCE, AND INVESTMENT, COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS, Washington, DC.

The Subcommittee met at 9:01 a.m., in room SD-538, Dirksen Senate Office Building, Hon. Jack Reed, Chairman of the Subcommittee, presiding.

#### OPENING STATEMENT OF SENATOR JACK REED

Chairman REED. Let me call the hearing to order. I first want to thank my colleague the Ranking Member, Senator Crapo, and his staff for participating, and particularly at this early hour. I have another hearing on Appropriations later, so we had to move

I want to thank the panel for being here, for your excellent testi-

mony, and also for cooperating with our time shift.

Today our hearing is entitled "The Tri-Party Repo Market: Remaining Challenges". Last week, Secretary Geithner presented the Financial Stability Oversight Council's second annual report to Congress. The Council is responsible for providing us with a comprehensive, coherent overview of the health of our financial system, a direct result of the Dodd-Frank Act in terms of trying to alert Congress and the Nation to potential systemic problems, giving us time to respond, not at the last moment when we are in crisis mode.

The Council report identified structural vulnerabilities in the short-term funding markets, particularly the tri-party repurchase, or repo, market, as a continuing area of concern. The report states that "limited progress has been made in substantially reducing the reliance of this market on intraday credits or improving risk-management and collateral practices to avoid fire sales in the event of a large dealer default.

The Council also stated that the industry's suggestion that it will take several more years to eliminate the intraday credit associated with tri-party settlements was, in their words, unacceptable and called for greater Government involvement. And that is one of the reasons why we are convening this hearing and asking experts to

comment upon where do we go from here.

In general, a repo or repurchase agreement is the sale of a portfolio of securities with an agreement to repurchase that portfolio at a later date; the economics of repos are similar to that of shortterm loans collateralized by long-term assets. Tri-party repos are typically used by large securities firms and bank holding companies with broker-dealer operations to raise short-term financing from cash investors, such as money market mutual funds. The dealer and the investor typically use one of two clearing banks to settle their transactions.

This market is very large. Tri-party repos peaked at \$2.8 trillion at the height of the crisis in 2008 and today are roughly \$1.8 trillion.

Three major weaknesses of the tri-party market were highlighted by the 2008 financial crisis: the market's reliance on intraday credit from the clearing banks, the procyclicality of risk management practices, and the lack of effective plans to support the orderly liquidation of a defaulted dealer's collateral.

Motivated by these risks, in 2009 the Federal Reserve Bank of New York formed an industry-led task force to address the problems highlighted by the financial crisis. Although this task force disbanded in early 2012, its work led to a number of important changes, including: moving the daily unwind of some tri-party repo transactions from 8:30 a.m. to 3:30 p.m. which shortens the period of intraday credit exposure; implementing a mandatory three-way trade confirmation between dealers, cash investors, and the clearing banks, marking the first time this \$1.8 trillion market has had an established confirmation process; publishing of a monthly report regarding activity in the tri-party repo market, which includes the size of the market, collateral breakdowns, dealer concentrations, and margin levels. This report enhances the ability of supervisors and market participants to assess trends and call attention to emerging issues before they become systemic.

However, as I indicated before, in its 2012 report, the FSOC found that limited progress has been made in substantially reducing the reliance of this market on intraday credits or improving risk management and collateral practices to avoid fire sales in the event of a large dealer default. The Council also stated that that the industry's suggestion that it will take several more years to eliminate the intraday credit associated with tri-party settlements

was unacceptable.

Because FSOC has sounded an alarm about the tri-party repo market and stated the need to move quickly in implementing further reforms, we have convened this morning's hearing to discuss the report, better understand the changes to this market already

in place, and explore what more needs to be done.

Improving the tri-party repo market will make it safer, to the benefit of all market participants. And I also want to indicate, too, since mutual funds are a large part of this market, to the extent that we can improve the quality of this market, I think we will help in other areas as we all know those serious discussions from SEC and others about further changes to the money market fund market. But these are interrelated issues, and a strong repo market will, in fact, I think, help immensely with respect to the profitability and to the stability of money market funds.

With that, let me introduce my Ranking Member for his comments. Thank you.

Senator CRAPO. Thank you very much, Senator Reed. I appreciate your holding this oversight hearing, and I have a prepared opening statement, but you just made all the points that I had in my opening statement, so rather than repeat them-

Chairman REED. Not as well, but-

[Laughter.]

Senator Crapo. Rather than repeat them, maybe I will submit my statement for the record and we can proceed.

Chairman REED. Without objection.

Senator CRAPO. I note that we have an outstanding panel today. and I expect that we will be able to make some serious and helpful progress on this issue, so I look forward to the witnesses' testi-

Thank you.

Chairman Reed. Thank you very much. Senator Crapo.

Let me introduce the panel and then recognize them. Our first panelist is Mr. Matthew Eichner. Mr. Eichner is currently Deputy Director of the Division of Research and Statistics at the Federal Reserve Board, where he focuses on issues related to securities markets and dealers in securities and derivatives. Prior to joining the Board staff, Mr. Eichner was an Assistant Director in the Division of Trading and Markets at the Securities and Exchange Commission. Thank you.

Ms. Karen Peetz is the vice chairman with responsibility for the Financial Markets and Treasury Services Group within BNY Mellon. Ms. Peetz is a member of BNY Mellon's Executive Committee, the organization's most senior management body which oversees day-to-day operations. Before joining BNY Mellon, you spent 16 years with JPMorgan Chase. Thank you.

Mr. Steven Meier is an executive vice president of State Street Global Advisors and is the global cash chief investment officer. He has more than 28 years of experience in the global cash and fixedincome markets. He held senior positions in trading and investment banking while working for Merrill Lynch and Credit Suisse

First Boston for nearly 12 years. Thank you, Mr. Meier.

Mr. Tom Wipf is managing director and global head of bank resource management for Morgan Stanley. He is responsible for the firm's secured funding, securities lending, collateral management, and counterparty portfolio management activities. Tom has been with Morgan Stanley since 1986. He served as a member of the Tri-Party Repo Infrastructure Reform Task Force Committee, the private sector body sponsored by the Federal Reserve Bank of New York to address reforms in the tri-party repo market.

Thank you all. Your testimony will be made part of the record. Not only feel free but please limit your comments to roughly 5 min-

utes so we can proceed to questions.

Mr. Eichner, please.

#### STATEMENT OF MATTHEW J. EICHNER, DEPUTY DIRECTOR, DIVISION OF RESEARCH AND STATISTICS, BOARD OF GOV-ERNORS OF THE FEDERAL RESERVE SYSTEM

Mr. EICHNER. Thank you. Chairman Reed, Ranking Member Crapo, and Members of the Subcommittee, thank you very much for inviting me to appear before you today to discuss the tri-party

repo market. The Federal Reserve has a strong interest in the smooth functioning and resiliency of this market for several reasons:

First, the market serves as a tool for cash and liquidity management as well as short-term borrowing for a wide range of financial intermediaries, including money market funds, insurance companies, banks, and securities dealers, all of which play an important role in supporting the savings and investment programs of households, small businesses, and nonfinancial corporations.

Second, a number of entities subject to direct prudential supervision by the Federal Reserve are significant participants, including the holding companies of the two clearing banks—JPMorgan Chase and BNY Mellon—as well as many other bank holding com-

panies.

Finally, tri-party funding materially supports the depth and liquidity of a number of critical markets, including those for U.S. Government securities in which U.S. monetary policy is executed.

In light of the critical importance of the tri-party repo market, the Federal Reserve has been and is committed to working with market participants and other supervisory and regulatory organizations to enhance the market's resiliency. During the crisis, it became apparent that the design of the market's infrastructure to settle transactions had fundamental flaws that could lead to serious instability during periods of market stress.

A particular weakness was the reliance on large amounts of discretionary intraday credit extended by the clearing banks which could create incentives for both clearing banks and lenders, such as money market funds, to rapidly withdraw from the market. In fact, such run dynamics were visible around the time of the near failure of Bear Stearns in March 2008 and again during the worsening of the crisis in mid-September of that year after the bankruptcy of Lehman Brothers.

Some significant progress has been made subsequently to address this vulnerability, but not as much—or as quickly—as we believe that the seriousness of the situation warrants. Clear vulnerabilities remain, even now that the tri-party market is smaller than at its precrisis peak and, in general, funds higher-quality

collateral than was the case prior to the crisis.

The Federal Reserve, therefore, continues to be fully engaged on a number of fronts to promote further measures that will more completely mitigate the risks. We are also working with the Securities and Exchange Commission, which plays a key role as the primary regulator of major participants in the tri-party repo market, including broker-dealers and many cash lenders, notably money market funds.

Following the financial crisis, an industry-led Tri-Party Repo Infrastructure Reform Task Force was formed in 2009 as an initiative of the Payments Risk Committee, a private sector body convened by the Federal Reserve Bank of New York. The task force included representatives of market participants, such as cash lenders, dealers, clearing banks, and other service providers, as well as industry groups representing both dealers and investors.

In its May 2010 interim report, the task force dealt directly with the issue of reliance on intraday credit extension, creating a detailed plan for its practical elimination by mid-2011. In fact, participants achieved some important prerequisites to this goal last year. However, it became clear last year that more fundamental changes to systems at both clearing banks and on the part of other market participants as well as associated adjustments to market

practices would take significantly longer to implement.

The Federal Reserve responded on several fronts to meaningfully address the tri-party market's continued heavy reliance on discretionary credit in 2011. Notably, the Federal Reserve has used supervisory tools to encourage market participants, over which it has direct authority, a group which includes but is not limited to the clearing banks, to implement the task force recommendations in a

timely fashion.

While eliminating the daily unwind and reducing reliance on intraday credit will materially reduce the potential for a recurrence of many of the problems evident during the financial crisis, other vulnerabilities will remain. A particular concern of the Federal Reserve and also reflected in the Financial Stability Oversight Council's most recent annual report involves the challenge of managing the collateral of a defaulting securities dealer in an orderly manner. A solution to this so-called fire sale problem likely requires a market-wide collateral liquidation mechanism, but the challenges in designing and creating a robust mechanism are appreciable and most surely need to be the focus of much additional study.

Given the importance of the tri-party repo market and the potential consequences of its vulnerabilities, enhancing the market's resiliency and its settlement system remains an important regulatory and financial stability priority. Building on the work of the task force, we believe that supervisory efforts will yield substantial progress in eliminating the reliance of the tri-party market on intraday credit, although not perhaps as quickly as many of us had hoped, and in improving risk management practices across a range

of market participants.

A significant remaining challenge, however, is the development of a process to liquidate in an orderly fashion the collateral of a defaulting dealer that would operate reliably in the context of the settlement system organized around clearing banks.

Thank you once again for the invitation to appear before you today to share the perspectives of the Federal Reserve on these important issues. I would be pleased to answer any questions you may have.

Chairman REED. Thank you very much.

Ms. Peetz, please.

#### STATEMENT OF KAREN B. PEETZ, VICE CHAIRMAN, THE BANK OF NEW YORK MELLON

Ms. PEETZ. Chairman Reed, Ranking Member Crapo, and Members of the Subcommittee, my name is Karen Peetz, and I am vice chairman of The Bank of New York Mellon and CEO of the company's Financial Markets and Treasury Services businesses. I appreciate the opportunity to appear before you today to discuss the tri-party repurchase, or repo, market in the United States.

I would like to begin by briefly describing the history and operations of BNY Mellon as our business model is very distinct from traditional retail or investment banks.

In contrast to most global banking organizations, our business model does not focus on the broad retail market: We do not offer credit cards, traditional mortgages, auto loans, or similar products to retail consumers. Rather, we are a provider of services that help major financial institutions access funding and support the operational infrastructure of the global capital markets.

Before I address the topic of today's meeting, let me begin by stressing BNY Mellon's support for recent U.S. and international regulatory reforms that have strengthened our financial system, including the Dodd-Frank Act. We have heartily endorsed meaningful reforms that will strengthen the banking sector, guard against future systemic shocks, and encourage economic expansion.

For the purposes of my testimony today, I will focus on three issues: first, how the tri-party repo market operates; second, BNY Mellon's role supporting the tri-party repo market; and, third, on-

going reform efforts aimed at reducing risk.

Tri-party repo transactions are a type of repurchase agreement involving a third party, the tri-party agent—the function plaintiff BNY Mellon. The tri-party agent facilitates settlement between dealers—or cash borrowers—and investors—or cash lenders. The tri-party agent maintains custody of the collateral securities, processes payment and delivery between the dealer and the investor, and provides other services, including settlement of cash and securities, valuation of collateral, and optimization tools to allocate collateral.

According to the Financial Stability Oversight Council's 2012 Annual Report the current value of the tri-party repo market is \$1.8 trillion. BNY Mellon is a substantial tri-party agent, with an approximately 80-percent market share. Our involvement in a transaction commences after a broker-dealer and a cash investor agree to a tri-party repo trade and send instructions to BNY Mellon. These instructions represent the parties' agreement concerning the tenor of the transaction, the amount of cash lent, the value and type of collateral returned, and the repo rate.

To facilitate the tri-party repo market, we extend secured intraday credit to dealers to repay their investors from the prior day's trades. If a dealer becomes distressed, we could refuse to extend such credit and investors could withdraw from the market. Both of these actions could lead to destabilization in the economy. Once a tri-party trade settles, BNY Mellon is no longer exposed to direct risk of the dealer or the underlying securities. Thereafter, the ultimate risks associated with a defaulting dealer who has

pledged collateral are with its cash investors.

After the financial crisis, the Federal Reserve asked clearing banks, primary dealers, and investors to consider policy options to address problems with tri-party repo infrastructure that were revealed during the financial crisis, which led to the creation of the Tri-Party Repo Infrastructure Reform Task Force—in which BNY Mellon participated. The task force published its final report in February of 2012 summarizing the current state of reform efforts.

With respect to reducing intraday credit provided by BNY Mellon to facilitate the tri-party repo market, we are implementing recommendations made by the task force. We have moved to a later day unwind for most maturing tri-party repos, reducing the intraday risk exposure window from 10 to approximately 3 hours. We have instituted an "auto substitution" process to allow dealers to replace needed, pledged collateral by first overcollateralizing with cash. Additionally, BNY Mellon introduced a three-way trade confirmation process known as automated deal matching for dealers, agents, and investors. The trade matching enhancements allow BNY Mellon, as the clearing bank, to receive both the dealer and cash investor's trade instructions separately and match the required information fields systematically. These measures have already significantly reduced intraday credit exposure.

BNY Mellon is identifying asset classes eligible for intraday credit associated with tri-party repo transactions, and we are working with our clients to eliminate intraday credit associated with less liquid forms of collateral. We expect these measures to reduce intraday exposures by \$230 billion by early next year. Moreover, we are developing the technology for a systematic approach for reforming the entire unwind process that will practically eliminate exposures by the end of 2014. As we develop and implement these measures, we are working closely with our clients and the Federal Reserve to ensure that these changes are adopted in a manner and

on a timetable that does not unduly disrupt the market.

Specific to the pace of reforms, I would note that the measures we have already implemented have materially reduced intraday credit exposures.

Again, I thank you for the opportunity to testify before you today and look forward to any questions you may have.

Chairman Reed. Thank you very much.

Mr. Meier, please.

#### STATEMENT OF STEVEN R. MEIER, EXECUTIVE VICE PRESI-DENT, CHIEF INVESTMENT OFFICER, STATE STREET GLOB-AL ADVISORS

Mr. Meier. Chairman Reed and Senator Crapo, thank you for the opportunity to appear before you today. My name is Steven Meier, and I am the chief investment officer of global cash management at State Street Global Advisors, the investment management business of State Street Corporation. The Committee has asked me to provide an investor's perspective on the tri-party repurchase market settlement mechanism, with a specific focus on the systemic risk reducing initiatives recommended by the Federal Reserve Bank of New York's Tri-Party Repo Infrastructure Reform Task Force.

State Street had the privilege of participating in this task force and agrees with the initiatives put forward. We are prepared to further adjust our operating model in order to address the remaining systemic risk concerns. I hope my testimony today will assist the Committee in its important work.

Let me begin with a brief description of my background and experience. I have over 28 years' experience in financial services, with a focus on money markets, bonds, global cash, and financing.

Today I am an executive vice president of State Street and chief investment officer of the cash asset class. I am a member of SSgA's Senior Management Group and Investment Committee and manage a team of 40 investment professionals dedicated to cash and short-term asset strategies around the world. Our clients include State and local governments, private pension funds, corporations,

endowments, and charitable trusts, among others.

State Street is one of the world's leading providers of financial services to institutional investors with nearly \$22 trillion in assets under custody and administration and almost \$2 trillion of assets under management. SSgA manages global cash and short-term assets of approximately \$400 billion, of which over \$300 billion is denominated in U.S. dollars. Our investment activities in the U.S. span a range of asset types, including U.S. Treasury and Government agency debt, municipal debt, unsecured bank and corporate obligations, asset-backed securities, and other similar instruments including repurchase agreements, which are a key focus and core competency at our firm.

On behalf of our clients, SSgA is an investor and provider of funding in these repurchase agreement transactions. Our average total U.S. dollar repurchase transaction volume outstanding consistently exceeds \$100 billion, most of which settle and are collateralized through the tri-party mechanism. Collateralization provides diversification away from unsecured credit exposure and a generally favorable risk/return dynamic. The tri-party mechanism provides significant operational efficiencies, settlement risk reduction, and collateral diversification, delivering transaction scale and investment capacity. Without these benefits, our repurchase agreement investment activities would be a fraction of what

they are today.

Tri-party repurchase transactions provide asset managers an excellent alternative for maintaining core portfolio liquidity as well as an instrument to enhance returns through transactions involving a broader range of collateral. Core portfolio liquidity is typically maintained through repurchase transactions collateralized with traditional forms of collateral, including U.S. Treasury bills, bonds, and notes, Government agency obligations, and Government agency mortgage-backed securities. Core liquidity trades are executed for tenors of 1 to 7 days.

In comparison, portfolio yield enhancement is often achieved through repurchase transactions collateralized with nontraditional or alternative forms of collateral, including investment grade corporate bonds, money market instruments, municipal obligations, asset-backed securities, high-yield bonds, and equities. Yield enhancement trades are typically executed for periods ranging from 1 week to 1 year.

SSgA has considerable resources committed to the ongoing support of these transactions and managing the risks associated with them, including dedicated senior portfolio managers, specialized technology infrastructure, collateral analysts, legal expertise, and senior management oversight. We actively review, assess, and manage repurchase agreement collateral daily.

Implementation of the task force recommendations has resulted in considerable progress toward reducing the system risk associated with these transactions. Through altering trade processing timelines and protocols, the industry has achieved real progress. However, there is still work to be done to eliminate these risks. Additional systems enhancements and trade processing efficiencies

are required to reach this objective and are in process.

It should be noted, however, the industry has made significant progress in transaction risk mitigation through ongoing task force discussions and findings. Specifically, participants are now more aware of the need for counterparty default contingency planning, the requirement of knowing both your counterparty and your collateral, the benefits of maturity extension, the required analysis and judgment concerning collateral suitability, and the benefits of dynamic margining.

SSgA has a strong interest in ensuring that these important money market investment arrangements and supporting settlement mechanism continue to be viable aspects of the U.S. market.

Thank you for the opportunity to be here today to speak on this subject. I would be pleased to answer the Committee's questions.

Chairman REED. Thank you very much.

Mr. Wipf, please.

#### STATEMENT OF THOMAS G. WIPF, MANAGING DIRECTOR AND GLOBAL HEAD OF BANK RESOURCE MANAGEMENT, MOR-**GAN STANLEY**

Mr. WIPF. Thank you. Chairman Reed, Ranking Member Crapo, and Members of the Subcommittee, thank you for inviting me to appear before you today. My name is Thomas Wipf, and I am a managing director at Morgan Stanley, responsible for the firm's bank resource management. Thank you again for the opportunity to discuss this very important issue in the markets for secured funding.

As an active member participant in the work of the Tri-Party Reform Committee, Morgan Stanley remains fully committed to accomplishing the goals laid out by the committee within a timeline that is ambitious and acceptable to all stakeholders. Our firm views this work as a top priority and a critical path in our own funding and liquidity strategy. As the committee's recommendations continue to be processed, we have seen meaningful benefits and risk reduction on a market-wide basis. Morgan Stanley agrees with the Financial Stability Oversight Council that more needs to be done and the delay in soundly eliminating intraday credit risks is unacceptable.

Secured funding is an important funding source and a foundational component of our centralized liability management strategy. We are committed to and have taken significant steps to put all the recommendations into practice at our firm. We have heard clearly from the secured funding investor community that the collateral management services provided by the clearing banks are an important element of their collateral valuation and risk management process.

The significant stability issues that appeared in 2008 provided the committee, our regulators, and all tri-party market participants—bank dealers, cash investors, and the two clearing banks with a road map for reform. Many long-held assumptions around durability, settlement, credit exposure, agent versus principal relationships, and contingency planning were proven wrong or overly optimistic during a period of significant stress in the broad funding markets. The major factors for the instability were the short tenor of funding, particularly for less liquid assets; lack of transparency regarding collateral for investors; insufficient overcollateralization on less liquid assets; and uncertainty regarding credit counterparties during the period between trade maturity and settlement. Additionally, a heightened market-wide aversion to counterparty risk

contributed to the instability of the platform.

We believe that the Tri-Party Reform Committee identified all of these weaknesses and defined the issues requiring remediation. In implementing these recommendations, we see the remaining strategic issues falling into three categories: complete clarity on the terms and limits for credit extension between the clearing banks and the bank dealers by asset class; full implementation of a transparent settlement process with a clear timeline that enables all market participants to understand and manage their settlement risk; and, third, further building investor confidence and reducing intraday credit risk by a meaningful and systematic reduction of collateral turnover between trade execution and maturity.

Many of the challenges faced by the committee were a result of mixing these issues. Credit extension, collateral management, and settlements are separate and distinct issues that all impact the triparty funding market. The extension of intraday credit is a major focus issue for the bank dealers and the two clearing banks. While our investors are focused on the collateral management services provided by the clearing banks, the operational issues are relevant

to all three parties to the transaction.

Part of the challenge faced by the committee was to separate these issues, and although there are certain codependencies among them, we believe that the work ahead will only be successful if the

issues are treated individually going forward.

At Morgan Stanley, we have taken a number of steps to meaningfully reduce our daily settlement exposures ahead of the committee's deadlines, most notably in the area of prudent liability and collateral management. Our firm has taken proactive steps to extend the maturity of our secured funding liabilities in a rules-based governance process that requires minimum term of maturities consistent with the fundability characteristics of our assets. We additionally have imposed investor diversification and maturity limits to reduce our maturities with any given investor in a period and an overall limit on maturities during any given period.

Our investors have focused on transparency of collateral, a reduction in collateral turnover during the period of the transaction, and clarity on their credit exposure through execution, settlement, and maturity. We have seen through these changes a firsthand and marked increase in pretrade collateral due diligence by secured

funding investors.

We fully acknowledge that there is considerable work remaining for the industry that requires senior leadership focus, commitment, and investment by all participants in the market. We are committed to continuing to collaborate with investors, the two clearing

banks, and our regulators to complete the remaining work streams and to advocate for a timeline that is acceptable to all stakeholders.

Morgan Stanley's overarching goal in tri-party repo reform is investor confidence. The meaningful reduction in intraday credit extension, transparency in collateral and advance rates, combined with a more sound and durable operational platform are all positive steps toward this goal. We have prioritized our resource commitments in the context of the tri-party reform committee's agenda on initiatives designed to retain the confidence of our secured funding investors, the cash providers.

With lessons learned following the crisis, Morgan Stanley has

With lessons learned following the crisis, Morgan Stanley has worked over the past several years to add significant risk management enhancements to our secured funding program. As mentioned above, we have added significant term to the maturities in our secured funding liabilities, and since a large portion of those liabilities come from investors who utilize the tri-party repo platform, our pro forma and actual intraday credit from our clearing banks

has been meaningfully reduced.

We have extended the weighted average maturity of our secured funding book from less than 30 days to now well in excess of 120 days. This is now a disclosure metric in our public filings. Extending the maturity and limiting rollover risk are the most powerful tactical steps that can be taken by bank dealers immediately to reduce the intraday extension of credit. Since the credit extension takes place at the maturity of the trade, creating a longer and stag-

gered maturity profile can yield significant risk reduction.

The Tri-Party Reform Committee has worked to identify the issues and put forth recommendations for the remediation of the gaps that became apparent in 2008. Many of those recommendations are now in practice or in scope on a clear timeline. Many of the enhancements to the settlement and confirmation processes have created increased stability and added clarity. It is clear, however, that the main and most important goal of reducing intraday credit extension has not vet been achieved. It is also clear, however, that the responsibility for this cannot be solely assigned to the two clearing banks. We in the bank dealer community have to take the immediate and incremental steps available through our liability management practices to become a much bigger part of the solution. There is no single operational solution or systems development that can solve this issue completely. What is required is collaboration between the bank dealers and the two clearing banks to provide a set of strategic steps to begin a tactical but meaningful reduction of intraday credit extension in parallel to building operational and system enhancements. We believe that the status quo is unacceptable, and by beginning this reduction through prudent liability management, we can reduce risk during the proposed buildout by the clearing banks.

At Morgan Stanley, we have seen considerable results achieved by working directly with our clearing banks to take these tactical steps. Morgan Stanley is committed to taking the steps necessary to build investor confidence in this important funding channel. The markets' liquidity is provided by investors who seek to have transparency to their collateral, a clear understanding of the settlement process, and the information they need in real time to make appropriate risk decisions and to effectively manage their collateral and

counterparty exposures.

We have worked with the Tri-Party Committee and other industry groups to move this reform forward. Morgan Stanley is committed to achieving the entirety of goals laid out in the committee's report and has invested and executed on changes to our processes well in advance of the scheduled timelines with the goal of meeting the needs of our investors. This work is a top priority of our firm, and we will continue to work at both an industry and a firm level along with our regulators to add stability and durability to this funding platform.

Again, we are appreciative of the opportunity to discuss these important issues and look forward to providing this Committee with any level of detail and information that will be helpful as you delib-

erate on the path forward.

Chairman REED. Well, thank you very much for your excellent testimony, and we will do 7-minute rounds, and I will yield at the end of my time to Senator Crapo, and I suspect we have the luxury

of going back and forth a bit after that, too.

First, again, thank you, and let me recognize that there has been progress made by the clearing banks, by the broker-dealers, by the investors in terms of prudent steps to improve the process. But the FSOC's—and it echoes something that Mr. Wipf said, that the continued intraday trading activities is still a severe problem; and, second, FSOC talked about the need for increased Government involvement. This task force, as I understood it, was the principal private actor with the technical assistance of the Federal Reserve Bank of New York, and that leads me to a question, and this is sort of echoing from our discussion about the LIBOR, which is a question of who was really in charge.

So with respect to this issue, does the New York Fed Bank have the responsibility or authority to step in and be the involved Government party? Or is it the Board of Governors or is it the SEC or is it lots of people, and leading to the conclusion everybody has

a role but no one is in charge? Mr. Eichner.

Mr. EICHNER. Thank you, Senator Reed. Let me begin by emphasizing I am here today speaking for the Federal Reserve Board, but obviously the Federal Reserve Bank of New York and the Federal Reserve Board have worked closely and collaboratively on this triparty issue.

In the wake of the most acute phase of the crisis, there was a broad agreement that some steps needed to be taken and that the risks that had become evidence during the crisis needed to be ad-

dressed.

At that time we were not entirely clear as to what exactly the

right way would be to address those vulnerabilities.

One thing that was clear was that the tri-party market is unusually large and unusually complex. It does not just have broker-dealers, cash lenders, clearing banks, but all of the above involved fundamentally in a daily settlement process that is fairly complicated and has to be accomplished in a reasonably tight timeframe.

We started out hoping that we could find an industry solution, and as you suggested that involved bringing people together in

2009.

As all of us in various ways have reflected in our testimony, substantial progress was made through that process. People have mentioned some of the specifics, but everybody also has fundamentally recognized what I would like to emphasize today, which is that we did not get to the end of that road. This task force process did not get to the end of the road. Despite the fact, for example, that the daily unwind now occurs later in the day than it did several years ago, essentially all of the \$1.8 trillion tri-party market is still

unwound every day.

What we want to emphasize is that we began with an industry process. We thought that the industry was best positioned to think about what the right solution would be, but that we were absolutely committed to progress being achieved here. And to that point, when it became clear in the middle part of 2011 that the Tri-Party Task Force was not going to meet its public commitment from 2010, despite significant progress having been made, to practically eliminate intraday credit by the end of 2011, the Federal Reserve increased our involvement in the process, and in particular brought supervisory tools to bear in a very direct way. The details of that are described, for example, in our July 18th press release.

Chairman REED. I think this is an important point. Who is in charge? If the FSOC is calling for greater Government involvement to try to shepherd this private sector initiative, which has been very productive to date, to a timely conclusion, which several of the panelists have said must be done, who is in charge? Who is the person who has got the mission to do this, to get this done? Is it Mr. Dudley or is it Chairman Bernanke or is it Chairman

Schapiro? Or is it—who knows? Do you have an answer?

Mr. EICHNER. Yes, I think there are two answers. One is sort of all of the above, right? There are authorities that each of those individuals has that bring to bear on specific participants in the market. That having been said, the 2010 Dodd-Frank Act did also create a Financial Stability Oversight Council which does have a clear statutory responsibility to deal with situations where things threaten, as you suggest might be the case here

Chairman Reed. I appreciate your comments, but I think this is something that, as a result of this hearing, we need a specific answer, because we do not want to be in a situation again where everybody is involved but no one is responsible, if, in fact, the FSOC, as you point out, has called for greater Government involvement.

Let me move quickly, and I appreciate your response, but, Ms. Peetz, what has been the stumbling block to prevent dealing with the intraday trading issue? Mr. Wipf has been quite specific. That is still a huge problem. Second, Mr. Eichner just pointed out that even though the settlement date has been moved back to 3:30, there is still—basically it is every day you are rolling the dice in some respects. Can you elaborate?

Ms. PEETZ. Yes, and I would absolutely reiterate what Mr. Eichner said about the fact that we all need to work in concert, and I believe actually that the Fed has provided great leadership for

Our part of it that has provided a stumbling block is we really are responsible to get a technology platform to enable simultaneous settlement between new and expiring trades, and we are working on that right now. So we can provide a platform so that this all happens much more efficiently.

Chairman REED. Would it be helpful if you were—well, helpful at least to justify the funding, if you were sort of required at a time

certain to do it? Is that an issue?

Ms. Peetz. We have actually reduced the time already. We were originally projecting to finish this at the end of 2016. We have reduced that time, through a lot of extra investment in technology, to 2014.

Chairman REED. The tenor of some of the comments from the panel but also from FSOC is even that 2014 deadline still exposes

the system to risks that should be mitigated.

Just a final point because my time has expired, and I will recognize Senator Crapo. One of the aspects of the progress you have made is the automatic substitution of collateral. Previously I understood that individual broker-dealers could come in and sort of rearrange their collateral at the end of the day or during the day, causing delays and confusion, et cetera. Is that still possible and is that still prevalent?

Ms. Peetz. No, actually, the addition of automated deal matching plus that cash substitution for automatic substitution has actually

improved that significantly.

Chairman REED. Thank you. And, again, that is a testament and a tribute to what you all have done. I appreciate it.

Ms. PEETZ. Thank you.

Chairman REED. Thank you.

Senator CRAPO. Thank you very much, Mr. Chairman.

I would like to understand the objective we are trying to achieve here a little better. As I understand it, the entire tri-party repo market is unwound every day still, if I understand you correctly, Mr. Eichner. And, Ms. Peetz, you indicated that simultaneous settlement is the ultimate objective, if I understand it correctly. Explain to me, if you would, Ms. Peetz—and others, I would welcome your putting your input in here, too—how would it ideally work? How would the market ideally work if we can achieve the objectives that the task force is seeking to achieve?

Ms. PEETZ. There would be several changes. This technology would enable just the trades that are actually maturing to be rolled, if you will, and so you would not have the intraday required for the whole book. It would be just for that activity that is changing. So that would reduce the amount of intraday significantly.

You also would have higher-quality collateral, is another aspect that we are working on, and asking dealers to prefund that collateral that is not as high quality. And, also, increasing the duration of tri-party transactions, so what we call "terming the book" will be another concrete move toward getting the risk out of the equation.

Senator CRAPO. Thank you.

Anybody else? Mr. Eichner, did you want to——

Mr. EICHNER. Yes, I would just say taking a more 10,000-foot approach here that the critical problem in the market that became evident during the crisis was that the locus of certain risks was not fully understood in a consistent way by all market participants. So when you say what is the key goal here, the key goal here is to

make sure that it is very clear who bears risk at every single moment and that those risks then can be priced into people's decisions.

Senator CRAPO. Mr. Meier.

Mr. Meier. Senator, I would say from an investor's perspective, we certainly support the elimination of the process of unwinding trades every day, particularly term trades. It certainly helps us to have more of a static pool of assets, and as I said, we actively manage and stress-test those assets daily. The fact that they do not change over and are recollateralized after the close of the market certainly is a benefit for investors.

Senator CRAPO. Thank you.

Mr. Wipf.

Mr. WIPF. Yes, we would agree with that, and we think that where some of these interests are very much aligned is bank dealers funding their less liquid assets for the longer term obviously makes sense, combined with the fact that reducing this optimization that occurs every day on trades that are much longer to maturity allows our investors to have a more stable pool of collateral that they can risk manage on a much more real-time basis. So by changing that collateral more frequently, that presents a lot more revaluation and the like.

So to the extent that the intraday credit is drawn at the point either at maturity or at these substitution points, reducing that, stabilizing the pool is actually beneficial to both investors and to

the reduction of intraday credit risk.

Senator CRAPO. Explain that a little better to me. One of the points you made in your testimony was that the issue or the risk related to collateral management or the turnover of collateral is one of the big problems that we are trying to deal with here. I do not quite understand how the collateral turnover issue plays out. Could you explain that?

Mr. WIPF. Yes, it plays out in two forms. First, just at the maturity of a trade, there is a credit extension, so it was a trade that has been put on, it is now come due, it is due and payable, at that point the collateral is coming back through the clearing bank to the

bank dealer who now has to take intraday credit.

To the extent that those books have been moved out considerably and that those maturities are staggered, the amount of actual credit that is going to be extended can be reduced. So, simply stated, if the entire book rolls over every day and the liabilities are 1 day in nature, the amount of credit is considerably higher than if the book has been put out for 6 months or a year, additionally with the less liquid assets, which present more risk, and we have seen, in working with our clearing banks, the meaningful outcome of pushing those maturities out has really benefited significantly in the reduction of intraday credit.

Secondarily to that is this optimization or the substitution of collateral at dealers need collateral back and want to re-optimize that book. The frequency of that also creates some intraday credit exposure as well. So when we think about investor confidence, having a more stable pool of collateral with our investors, giving up some of that ability to optimize plays out both from an investor con-

fidence perspective and from a creditor perspective.

Senator CRAPO. All right. Thank you.

The Basel III framework, as I understand it, includes two new minimum standards for funding liquidity: one, the liquidity coverage ratio, or LCR, which is intended to promote short-term resilience to potential liquidity disruptions; and the other, the net stable funding ratio, or NSFR, which is intended to address liquidity mismatches and provide incentives for banks to use stable sources to fund their activities.

To what extent will the new Basel liquidity standards affect the tri-party repo market? I guess that question is for any of you. Mr.

Eichner.

Mr. EICHNER. I will be happy to start. I think that gets to really a very important point. We have talked here about sort of three basic vulnerabilities. Senator Reed began by reiterating those. One involves the funding profile of dealers. Mr. Wipf has talked about that extensively as well.

The Basel III LCR and net stable funding ratio requirements are

The Basel III LCR and net stable funding ratio requirements are surely going to provide additional impetus to dealers to more effectively manage that risk. So it certainly directly addresses that one

vulnerability.

The second vulnerability is the one that we spent most of the time talking about, namely, the settlement process and its reliance on intraday credit, which remains, as we have emphasized, still quite a concern.

The third vulnerability involves the liquidation of collateral of a

deal that faces distress or default.

The LCR and the NSFR are really focused on the first question: dealer liquidity risk management and providing additional incentives for that to be improved and strengthened.

Senator CRAPO. All right. Thank you, Mr. Chairman.

Chairman REED. Thank you very much.

Senator Merkley, questions, please.

Senator Merkley. Thank you very much, Mr. Chair, and thank you all for testifying on this. The piece of this that I am trying to get my hands around is the domino effect—that is, when one firm is in trouble and has to sell a lot of assets quickly, it creates a fire-sale price that drives down the securities that have been used in other repo sections or deals, immediately causing trouble in other institutions. And do we feel like we are in any better position in regards to this right now than we were, say, in 2008?

Ms. Peetz. Do you want to say anything?

Mr. EICHNER. Sure. As emphasized in the FSOC report, and as we have emphasized in various other fora as well, this remains a very real concern. So we would certainly recognize the tremendous progress that has been made and will continue to be made on the intraday settlement issue. The collateral liquidation issue, Senator Merkley, which you referred to, that remains a task ahead of everybody sitting on this panel. We are hopeful at the Federal Reserve that, like the intraday credit issue, this will be something for which over time the industry develops a consensus and then that consensus can be a route to a solution, possibly with regulators urging along the way. But in reality, this is something that remains yet to be done.

Ms. PEETZ. I was just going to add that we are getting increased transparency also among the players so that we will be able to monitor and, in fact, the Fed is interested in monitoring not only dealer-specific activity and investors, but then collectively the market, and we are getting better and better information for that.

Senator MERKLEY. As we get that better information, I assume that the reason that repo plays such a large role is it is some of the cheapest ways to borrow, and you obviously want to borrow at the cheapest available cost. But at some point, how much of kind of the source of credit can that be before it becomes a huge systemic risk to significant institutions?

Ms. PEETZ. I would say that that is another aspect that all of us are looking at, which is should dealers have limits on the amount that they can actually extend during the day. And that is another thing that we are working in concert with the industry as well as with the Fed to develop plans for that.

Senator MERKLEY. In terms of the limits on the dealers or actually the limits on the amount of funds that a particular institution

can raise through repo transactions?

Ms. PEETZ. It is a bit of both because you would analyze the name and what they could withstand. And, of course, that changes as the market changes, so we are building tools to do that.

Senator Merkley. OK. Other insights on that?

Mr. WIPF. Yes, we would see this—again, getting back to this liability, the topic of liability management, to the extent that less liquid assets are funded for short periods, that does present risk both to dealers and systemically.

To the extent that those are funded for longer periods of time, we have seen several developments from the work of the Committee. First, investor due diligence has gone up considerably with the transparency that has come out. The overcollateralization levels are significantly higher. But the real risk happens to the extent that these books are maturing too quickly, particularly in less liquid assets.

So as dealers are funding for longer periods of time because the reduction of intraday credit is taking place, it does require that the books are termed and staggered, with a focus on less liquid assets. That provides a valuable commodity of time that these adjustments can take place, not in a short period of time but over periods of time that move to 3, 6, 9, 12 months as opposed to 7 days. And I think that is a very big change, and I think the discussions about the liquidity coverage ratio and the reduction of intraday credit extension will force those issues. And, again, the benefit that we see to investors is at that point the collateral becomes more stable, the ability to value and to make choices and to do the due diligence that Mr. Meier has laid out becomes a much easier task over time.

Senator Merkley. Let me ask a little bit of a different track question, and that is because your bank has been involved in the arrangements made on the spot market to supply crude to certain refineries and to buy refined products. And that has struck me as some form of systemic risk given the volatility that can occur in natural resource markets.

Does that play an interplay at all in terms of the financing through repo?

Mr. WIPF. That is not an active asset in the repo market.

Senator MERKLEY. All right. Thank you. Chairman REED. Thank you very much.

Mr. Wipf, one of the points that Mr. Eichner made in his prepared testimony—and I believe it is true—is that it is still discretionary with the bank to extend credit on an intraday arrangement.

Is that correct?

Mr. WIPF. Yes, and I think at this point we have gone through several work streams with our clearing bank to begin to reduce the credit extended, particularly with a focus on less liquid assets. So I think that there is a major work stream underway at BNY Mellon with all the dealers. We can only speak from our perspective on this, but there are some pretty clear deadlines out there in terms of what that extension will be, which will certainly move to a very direct asset-based model very shortly.

Chairman REED. But the clearing bank, for reasons—any reason, hopefully a prudent research, could essentially say we are not extending credit to the broker-dealer, which would force you, for a broker-dealer like Morgan to somehow—how would you deal with

that?

Mr. WIPF. Reducing the amount of intraday credit extension certainly can—as we mentioned, there is no operational solution that will eliminate all of that. Ultimately there are a few ways to pay for that. One is, if the books are funded too short, you have to post up liquidity at maturity. So to the extent that the bank will not extend it, the dealer would have to replace that liquidity, or to reduce the activity that matures; and, again, getting back to this terming and staggering and reducing the amount that comes due on any given day, particularly with a focus on less liquid assets. So those two things—so terming out the book, there is a cost to that, of course, because you are paying for a longer-duration liability, and/or posting cash liquidity during the period of that unwind between that, and I think that is the—that is how it would be replaced, and we think that by taking the actions that we have laid out, that can be reduced very dramatically as well.

Chairman REED. We are still in a position of sort of the cascade effect that Senator Merkley referred to, whereas, if a bank for their own prudent reasons decides not to extend the credit, the dealer is now forced to take some—basically come up with cash. If they do not have the cash, they are in a very awkward position. That leads typically to a downward spiral with respect to the whole system.

Mr. WIPF. Yes, and——

Chairman REED. There is still that potential, but less so today. Mr. WIPF. We think it has been somewhat mitigated, but at the point that that actually occurs, the bank, as we see it, with a lot of the confirmation and the transparency around the collateral and the term, will have a much clearer view of that will have lots more early warning signals well in advance of an event.

Chairman REED. Ms. Peetz, with respect to this issue, Morgan has taken these steps. Do you have the contractual authority to require every one of your broker-dealers to sort of step up to what you think is the appropriate standard in terms of the way they operate, the way they—the tenor of their arrangements, all these dif-

ferent aspects?

Ms. PEETZ. Yes. How we facilitate that is through different agreements, and the near-term activity that we are pushing on at the moment is prefunding of DTCC collateral, and so there is a separate agreement that each of the broker-dealers will now sign with us to acknowledge that they understand how that has changed. And so as this kind of continues to change, we will amend

those agreements, giving us that power.

Chairman REED. Mr. Meier, you represent the investors side, basically the people putting the cash up. And there has been a report by Fitch Ratings that there is a higher amount of structured finance paper pledged in these repo transactions, which is not—let me assume not as liquid as some of the other forms of paper that you have. And particularly in the case of money market funds with the new rules, the 2a-7 rule about what they can hold and what they cannot hold, is there a potential problem here where they get the collateral back but it is collateral that they cannot hold or they have to dispose of immediately so it is basically we have to give it away almost because—is that a dilemma that you face?

Mr. MEIER. I think it is a real risk, Senator. I also read the Fitch report yesterday, and I was disturbed, and I mentioned it to Mr. Wipf, who had read it as well, that there still is a lack of, I would say, proper diligence on the part of investors really to really look

at the types of collateral, the suitability.

So, for example, in a money market fund, you know, our position is the traditional collateral, treasuries, agencies, mortgage-backed securities, are appropriate and suitable forms of collateral. We do not go down in credit quality. We do not take credit spread bonds, et cetera, into the money funds. And I do think—I was actually encouraged. We had a meeting last week with someone from the Federal Reserve Bank of New York and the SEC asking all the right questions about, you know, our activities as an investor, do we have default contingency plans in place and what our thoughts are around suitability of collateral, particularly from money market funds. Those questions were asked by the SEC. So I think the right questions are being asked.

What I would like to see is the Federal Reserve start to audit default contingency plans and actually make sure that people have a thoughtful process in terms of what they are accepting as collateral and are they actually looking at it. We can rely on the tri-party custodian banks to do that for us. We do not. We do not feel that is appropriate. And we are very thoughtful in terms of the process we go through when we determine what are acceptable forms of collateral, even down to CUSIP-specific levels with various counter-

narties

Chairman REED. But there still exists the possibility that, either wittingly or unwittingly, a money market fund could have the collateral in that transaction that the dealer put up is something that would be very difficult for them to liquidate if that became their only mechanism to pay back?

Mr. Meier. That is a real risk, Senator, yes.

Chairman REED. Let me ask a final question before I recognize Senator Crapo. There is an alternate, at least one other alternate mode to this market, that is, to designate—rather than having clearing banks, to have what would be known technically as a financial market utility. Briefly, could you all comment upon whether that has been looked at, the efficacy of that, et cetera? And very briefly. Mr. Eichner.

Mr. EICHNER. Sure. I would start right where Mr. Meier left off in saying that we remain very concerned about this collateral liquidation problem that you are discussing. Obviously the largest concern is with respect to less liquid collateral, but it is a concern even with more liquid collateral in a market that is as large as the

tri-party market is.

We feel that even once the intraday credit issue has been addressed by reaching the target state, as Ms. Peetz and others have described, there is still more work to be done around collateral liquidation. There are a number of models that might work there. We think it can be done in the context of a clearing bank system, although there are certain challenges there because collateral liquidation systems in general rely on a membership structure, in general rely on the ability to mutualize risk, in general rely on the ability to assess capital contributions. But we think that could work in the context, nonetheless, of a clearing bank system.

We also think, though, that a utility is another possibility and is going to be something that will have to be looked at seriously and considered, as we move to this next phase, once the target state with regard to the settlement process has been reached.

Chairman REED. Ms. Peetz, you have to have a chance to answer

this one.

Ms. PEETZ. Thank you. No, I would agree with everything that was said, that we have been discussing the topic, that there are some significant obstacles regarding capitalization and the sharing of risk. And we think that as we move toward our 2014 state that we will not necessarily need a utility, which is, I think, what you are getting at.

Chairman REED. Mr. Meier, from your perspective, and then Mr.

Wipf.

Mr. Meier. Sure. Thank you, Senator. From my perspective, I do not really support a utility, and I do believe in terms of liquidating collateral, that is the job of the investment manager. I do think you run the risk of rewarding those that are less diligent and less

thoughtful around the collateral process.

From our firm's specific interest, we are both long and short collateral, and that gives us a competitive advantage in the market-place in order to be able to provide funding against credit product out the curve, and that we lend securities to, say, Morgan Stanley and we take in securities from Morgan Stanley in repurchase agreements. If there is a problem in the marketplace, we go through a liquidation process. We net down those exposures, and we actually feed or optimize those buy-ins and liquidations into the marketplace. So we do think that is one of the key risk drivers, risk mitigants that we have as an organization that benefits our clients.

Chairman REED. Mr. Wipf, just quickly.

Mr. WIPF. From a dealer perspective, our view on this is that we are—our overarching goal is investor confidence, and what we have heard from our investors clearly is that the collateral management

services provide by the clearing banks are an extremely important part of their risk management.

As we view this, what we want is a safe and sound platform that accomplishes that, but, you know, the overriding vote we are going to get here is what do our investors need to see in terms of collateral management, and whoever can provide that, we obviously need to be agnostic to that. And then in terms of how we think of this, you know, we have to work on the intraday credit work with our clearing banks. So we see these, again, as two issues with the overarching goal being heightened investor confidence. Chairman REED. Thank you.

Senator Crapo.

Senator CRAPO. Thank you, Mr. Chairman. I do not have any further questions. I do want to thank the panel for not only their oral presentations here but their written testimony. I found it very helpful, and I am encouraged by what I hear about the fact that we may be able to make some good progress in resolving this.

You and I may need to sit down and talk about the first question you asked about who is in charge and what the Federal response

Chairman REED. I think that is a very critical question, particu-

larly given the last several months of our experience here.

Let me just, if I may for just a moment, you know, we are looking at sort of the potential triggering event for market behavior, which is dysfunctional, that a dealer fails, et cetera. We have got huge issues in Europe with respect to the stability of their banks, et cetera. And it raises a question, frankly: Is 2014 too long? We have given ourselves apparently sort of this timetable. I know you have pulled it back from 2016. But if there was a financial crisis even greater than the present one in Europe, putting pressure on, would it result in undue pressure so that you would have to in certain cases, you know, not-you know, it is discretionary not sort of to extend credit, forcing dealers to come up with the credit in a market that is just chaotic? All of this goes to the point of do we have until 2014. I do not know if you have a comment or anyone has a comment.

Mr. EICHNER. As Chairman Bernanke and other policy makers at the Federal Reserve have pointed out, this remains a real concern here. That having been said, we also recognize the importance here of moving in a deliberate fashion, recognizing that this is a really complicated market that has real implications across the economy. We want to move in a way and see the industry move in a way that gets to the target state but does not do so in an unnecessarily

or even a necessarily disruptive way.

We would be uncomfortable with 2014 if this were just 2014, and, you know, we will tell you when we are there. One of the things that the Federal Reserve has done since the task force process bogged down a bit in 2011 and by bringing some supervisory tools to bear is we have asked the market participants, including the clearing banks but others as well over which the Federal Reserve has direct supervisory authority, for very detailed timelines with milestones along the way.

We do not want to be told, yes, we will get this done in 2014, trust us. What we want to see is a very clear path to getting all of this done by 2014, but with many intermediate steps and pieces of risk reduction that occur along the way, and that is the way that we get comfortable with 2014 in light of the environment that we are now operating in.

Chairman REED. Anyone else, any other comments?

Mr. WIPF. What we would say from our perspective at Morgan Stanley is that, to the extent that this flows through where investors have real clarity on what they have and we have real clarity as bank dealers with our clearing banks on what our clearing bank will do during normal and stressed market environments in terms of whatever the intraday lending is and against what assets they are at a very specific level, the accountability then, again, falls back to the bank dealer about prudent liability management.

So, you know, as it works through to the due diligence around the collateral from an investor perspective, clarity between the clearing bank and the bank dealers in terms of what everyone can expect during times of stress in normal operating environments and then prudent liability management resting clearly with the dealers we think is the best outcome. And on the way to that, that

is how we think that we can get to 2014.

Chairman REED. Well, I want to thank you all. Again, just echoing the comment Senator Crapo made, I do think we need to get a much more definitive, clarifying sort of notion of who is in charge here from the Federal perspective. That is one of the lessons we have learned over the last couple of years. When everyone is in charge, no one is in charge. So we would like to see—we will follow up, but I thank you for excellent testimony, both your written testimony and your oral testimony, and I thank Senator Crapo and my colleagues.

If there are no further questions, we will, in fact, keep the record open because there could be some of my colleagues who have additional questions. We would ask my colleagues to submit those questions no later than next Thursday, August 9th, and then we would ask you to respond as quickly as possible to the questions if you

are given some.

Thank you very much. With that, the hearing is adjourned. [Whereupon, at 10:09 a.m., the hearing was adjourned.] [Prepared statements, responses to written questions, and addi-

tional material supplied for the record follow:

#### PREPARED STATEMENT OF CHAIRMAN JACK REED

I want to welcome everyone to our hearing this morning entitled "The Tri-Party Repo Market: Remaining Challenges".

Last week, Secretary Geithner presented the Financial Stability Oversight Council's second annual report to Congress. The Council is responsible for providing us with a comprehensive, coherent overview of the health of our financial system.

The Council's report identified structural vulnerabilities in the short-term funding markets, particularly the tri-party repurchase (repo) market, as a continuing area of concern. The report states that: "limited progress has been made in substantially reducing the reliance of this market on intraday credits or improving risk-management and collateral practices to avoid fire sales in the event of a large dealer default." The Council also stated that the industry's suggestion that it will take several more years to eliminate the intraday credit associated with tri-party settlements was "unacceptable" and called for greater Government involvement.

In general, a repo or repurchase agreement is the sale of a portfolio of securities with an agreement to repurchase that portfolio at a later date: the economics of repos are similar to that of short-term loans collateralized by long-term assets. Triparty repos are typically used by large securities firms and bank holding companies with broker-dealer operations to raise short-term financing from cash investors, such as money market mutual funds. The dealer and the investor typically use one of two clearing banks to settle the transaction.

This market is very large. Tri-party repos peaked at \$2.8 trillion at the height of the crisis in 2008 and are \$1.7 trillion today.

Three major weaknesses of the tri-party market were highlighted by the 2008 financial crisis:

- · the market's reliance on intraday credit from the clearing banks,
- · the procyclicality of risk management practices, and
- the lack of effective plans to support the orderly liquidation of a defaulted dealer's collateral.

Motivated by these risks, in 2009 the Federal Reserve Bank of New York formed an industry-led Task Force to address the problems highlighted by the financial crisis. Although this Task Force disbanded in early 2012, its work led to a number of important changes, including:

- moving the daily unwind of some tri-party repo transactions from 8:30 a.m. to 3:30 p.m., which shortens the period of intraday credit exposure;
- implementing a mandatory three-way trade confirmation between dealers, cash investors and the clearing banks, marking the first time this \$1.7 trillion market has had an established confirmation process;
- publishing of a monthly report regarding activity in the tri-party repo market, which includes the size of the market, collateral breakdowns, dealer concentrations, and margin levels. This report enhances the ability of supervisors and market participants to assess trends and call attention to emerging issues before they become systemic.

However, in its 2012 Report, the FSOC found that "limited progress has been made in substantially reducing the reliance of this market on intraday credits or improving risk-management and collateral practices to avoid fire sales in the event of a large dealer default." The Council also stated that that the industry's suggestion that it will take several more years to eliminate the intraday credit associated with tri-party settlements was "unacceptable."

Because FSOC has sounded an alarm about the tri-party repo market and stated the need to more quickly implement additional reforms, we have convened this morning's hearing to discuss the report, better understand the changes to this market already in place, and explore what more needs to be done.

Improving the tri-party repo market will make it safer, to the benefit of all market participants. I look forward to hearing from all our witnesses on this important part of our financial markets.

#### PREPARED STATEMENT OF MATTHEW J. EICHNER

DEPUTY DIRECTOR, DIVISION OF RESEARCH AND STATISTICS, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

#### August 2, 2012

Chairman Reed, Ranking Member Crapo, and Members of the Subcommittee, thank you for inviting me to appear before you today to discuss the tri-party repur-

chase agreement (repo) market.

The Federal Reserve has a strong interest in the smooth functioning and resiliency of this market for several reasons. First, the market serves as a tool for cash and liquidity management as well as for short-term borrowing for a wide range of financial intermediaries, including money market funds, insurance companies, banks, and securities dealers, all of which play an important role in supporting the savings and investment programs of households, small businesses, and nonfinancial corporations. Second, a number of entities subject to direct prudential supervision by the Federal Reserve are significant participants, including the holding companies of the two clearing banks, JPMorgan Chase and BNY Mellon, as well as many other bank holding companies. Finally, tri-party funding materially supports the depth and liquidity of a number of critical markets, including those for U.S. Government securities in which U.S. monetary policy is executed.

In light of the importance of the tri-party repo market, the Federal Reserve has

In light of the importance of the tri-party repo market, the Federal Reserve has been and is committed to working with market participants and other supervisory and regulatory organizations to enhance the market's resiliency. During the crisis, it became apparent that the design of the market's infrastructure to settle transactions, in particular, had fundamental flaws that could lead to serious instability during periods of market stress. Some significant progress has been made subsequently by market participants to address these shortcomings. The tri-party repo market is now smaller than its peak and in general funds higher-quality collateral than it did prior to the crisis. However, not as much progress has been made—or made as quickly—as we believe is warranted given the seriousness of the situation, and certain clear vulnerabilities remain. The Federal Reserve continues to be fully engaged on a number of fronts to promote measures that will further mitigate these

risks

I would now like to describe in greater detail the underlying vulnerabilities in the tri-party repo market, the risk mitigation accomplished since the financial crisis, and the significant work that still remains. In offering this perspective, I think it will become clear that the very importance of the tri-party repo market—which is currently the locus of funding for some \$1.8 trillion in securities held by securities dealers, down from \$2.7 trillion in 2007—complicates the task of enhancing its resiliency. As in the case of a busy highway that must be rebuilt while traffic continues to flow, fundamental changes to the tri-party infrastructure must be accomplished in a manner that allows the market to continue to function without introducing new risks as market participants adjust. Further complexities are introduced by the diversity of participants in this market, which connects institutional investors of many types that have surplus cash with dealers who need funding for their securities portfolios. These different classes of entities, although tied together through the tri-party infrastructure, have very distinct institutional priorities, operational needs, and regulatory requirements.

#### Tri-Party Repos and the Financial Crisis

A tri-party repo, like other repurchase agreements, is a form of secured borrowing in which one party effectively lends cash against the securities collateral of the other party. As the name suggests, a tri-party repo is distinguished by the involvement of a third party, a clearing bank that provides custody and settlement services related to the transaction. Of particular importance, the triparty repo settlement process in the United States evolved over time to rely on the extension of very substantial amounts of intraday credit by the clearing banks. While securities are funded each evening with cash provided by the lenders in the tri-party repo market, each day almost all trades are "unwound," with cash being returned to the accounts held by lenders at their clearing bank. The clearing bank, protected by a lien on the securities, provides funding for the collateral during part of the day. This unwind, which is reversed at the end of each trading day with a "rewind," permits borrowers in the tri-party repo market—generally securities dealers—to have full and unimpeded access to their securities inventory for routine operational purposes, notably delivering and receiving securities, while ensuring that tri-party lenders at all times hold either cash in their accounts at the clearing bank or a perfected security interest in specific collateral. Under this settlement process, almost all trades are unwound each day whether the trades are maturing or have remaining terms. Thus,

almost the entire value of this market is funded each day through the extension of intraday credit by a clearing bank. Further, these extensions of intraday credit by the clearing banks are not contractually committed, but rather wholly discretionary. In short, a clearing bank can decide at any time to stop providing intraday credit to a securities dealer.

The reliance on discretionary intraday credit in the tri-party settlement process poses difficult dilemmas for cash lenders, borrowers, and clearing banks during periods of market stress. As a result, securities dealers may experience a sudden and acute loss of funding. A clearing bank may be reluctant to unwind the tri-party trades of a securities dealer and extend credit if the bank perceives a material risk to the financial viability of the dealer, or even if market sentiment regarding the dealer is merely deteriorating in a way that could deter cash lenders from providing sufficient new funding to support a rewind at the end of the day. On the one hand, such a decision by a clearing bank not to unwind would likely push the securities dealer into immediate default and would certainly impair its ability to operate normally. On the other hand, the clearing bank unwinding the tri-party trades of an apparently weakened securities dealer has potentially serious implications as well. If the securities dealer subsequently fails to attract sufficient new cash from lenders to fully finance its securities inventory, the clearing bank faces a material, albeit secured, credit exposure to that dealer. This situation could call the clearing bank's own viability into question, impair its ability to settle transactions for other dealers, and potentially spread distress across broader markets.

In essence, a clearing bank is inclined to provide intraday credit to a dealer only when it is confident that sufficient incremental funding from cash lenders will materialize to make the rewind possible. And cash lenders will only enter new trades that provide incremental funding to a dealer if they are confident that their transactions will be unwound at maturity by the clearing bank. So, if concerns rise markedly about the financial condition of one or more securities dealers, the instantaneous transfer of the risk of a default that occurs twice each trading day—the first time through the unwind to the clearing bank and the second time through the rewind to the cash lenders—creates incentives for both the clearing bank and cash lenders to "get out first," leaving the tri-party repo market highly vulnerable to runs.

The fundamental susceptibility to runs stemming from this settlement process was exacerbated during the financial crisis by other compounding factors, which included weaknesses in the risk-management practices of many market participants. Some dealers were heavily reliant on triparty financing with very short tenor—which entailed significant potential rollover risk—on the assumption that this funding would be durable during a stress event. And some cash lenders were apparently not fully aware of the discretionary nature of intraday credit or of the consequences of a decision by a clearing bank to decline to provide such funding. In particular, in the event that a clearing bank declined to provide intraday credit to support the unwind of a securities dealer's tri-party trades, no mechanism existed then or now to orchestrate an orderly liquidation of the collateral to repay the lender. The absence of such a process raised the specter of a "fire sale" of securities by cash lenders who could find themselves taking possession of collateral they had limited operational capacity to manage or that might place them in violation of their portfolio composition guidelines. Concerned that other firms similarly situated would quickly liquidate large volumes of collateral and cause market dislocations, each cash investor would, quite rationally, try to sell first with predictable, but possibly dire, consequences. These compounding factors—the weaknesses in risk management and the absence of a mechanism to assist with the orderly liquidation of tri-party collateral—further increased the vulnerability of the tri-party repo market to runs.

In fact, runs did occur, and they played out with surprising speed around the time of the near failure of Bear Stearns in March 2008 and again during the worsening of the crisis in mid-September of that year after the bankruptcy of Lehman Brothers. Indeed, the Federal Reserve implemented the Primary Dealer Credit Facility in March 2008, and expanded its scope in September 2008, in part to stabilize the tri-party repo market in the face of rapid erosion of investor and clearing bank confidence. While this facility proved to be a critical crisis-management tool, the fact that it was necessary underscored the need for fundamental changes to market conventions and practices.

#### The Task Force

Following broad recognition of the vulnerabilities associated with discretionary intraday credit, an industry-led Tri-party Repo Infrastructure Reform Task Force was formed in 2009 as an initiative of the Payments Risk Committee, a private-sec-

tor body convened by the Federal Reserve Bank of New York. 1 The task force included representatives of market participants, such as cash lenders, dealers, clearing banks, and other service providers, as well as industry groups representing both dealers and investors. The Federal Reserve and agencies with regulatory authority over other market participants served in an advisory capacity. Not surprisingly, a key focus of the task force's efforts was the reduction in reliance on intraday credit in the settlement process. But the group also considered some related vulnerabilities, including the risk-management practices of both securities dealers

In its May 2010 interim report, the task force dealt directly with the issue of reliance on intraday credit extension, creating a detailed plan for its "practical elimination" by mid-2011. In fact, participants achieved some important prerequisites to this goal last year. Clearing banks developed tools that will allow automated substitution of collateral, and hence access to securities for routine operational purposes without requiring a daily unwind of a dealer's entire tri-party book. A process was implemented to support the three-way confirmation of trades, ensuring that nonmaturing trades could be readily identified as such by the clearing bank, and eventually not unwound on a daily basis. Further, the unwind, while still very much a part of the settlement process, was moved from early morning to mid-afternoon, allowing clearing banks more time to make an informed decision regarding the extension of intraday credit. While not directly related to the reduction of reliance on intraday credit, the task force also played an important role in improving the transparency of the tri-party repo market for market participants and the public, working with staff at the Federal Reserve Bank of New York in a process that culminated in the publication, beginning in June 2010, of key monthly statistics on the types of collateral funded and applicable terms.<sup>3</sup>

These significant achievements notwithstanding, it became clear last year that more-fundamental changes to systems at both clearing banks and on the part of other market participants, as well as associated adjustments to market practices, would take significantly longer to implement. The task force, in its final report issued in early 2012, acknowledged that the work had entered a new phase and described in greater detail the "target state," a safer and more robust settlement process for the tri-party repo market that would not rely on significant discretionary

intraday credit.

#### Federal Reserve Use of Supervisory Authorities

The Federal Reserve, while acknowledging the contributions and achievements of the task force, responded on several fronts to the inability of the industry to meet its commitment to meaningfully address the tri-party repo market's heavy reliance on discretionary intraday credit in 2011. Notably, the Federal Reserve has used supervisory tools to encourage market participants over which it has direct authority to implement the task force recommendations in a timely fashion. If adopted uniformly across the market, these recommendations should materially reduce reliance on discretionary intraday credit. While a great deal of focus is appropriately on the clearing banks, given their pivotal role in the settlement process, the active engagement of all market participants is critical to reaching the goal of material risk reduction. To this end, the largest securities dealers affiliated with bank holding companies have recently been asked to submit to the Federal Reserve detailed execution plans and timelines for the necessary changes to systems and processes. At the same time, the Federal Reserve is pressing them to work with lenders to achieve more-timely and more-accurate trade confirmations, which are critical to ensuring that the coming process changes are effective in reducing the use of intraday credit, and thus risk.

eral Reserve Bank of New York's Web site at <a href="https://www.newyorkfed.org/tri-partyrepo">www.newyorkfed.org/tri-partyrepo</a>.

<sup>2</sup> See, Federal Reserve Bank of New York (2010), "Tri-Party Repo Infrastructure Reform", white paper (New York: FRBNY, May), <a href="https://www.newyorkfed.org/banking/nyfrb\_tri-">www.newyorkfed.org/banking/nyfrb\_tri-</a>

<sup>5</sup>See, Federal Reserve Bank of New York (2012), "Update on Tri-Party Repo Infrastructure Reform", statement, July 18, www.newyorkfed.org/newsevents/statements/2012/0718\_2012.html.

<sup>&</sup>lt;sup>1</sup> Information on the Tri-Party Repo Infrastructure Reform Task Force is available on the Fed-

<sup>&</sup>quot;all party whitepaper.pdf.

Information on the Tri-Party Repo Margin and GCF Repo Statistics is available on the Federal Reserve Bank of New York's Web site at <a href="https://www.newyorkfed.org/tri-partyrepo/mar-rule.com/">www.newyorkfed.org/tri-partyrepo/mar-rule.com/</a> data.html.

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4See, Tri-Party Repo Infrastructure Reform Task Force (2012), "Tri-Party Repo Infrastructure Reform Task Force Releases Final Report", press release, February 15, www.newyorkfed.org/tri-partyrepo/pdf/PR\_l20215.pdf; the report is also available directly at www.newyorkfed.org/tri-partyrepo/pdf/report\_120215.pdf.

On another front, the Federal Reserve is working with regulators of other important market participants. As I described earlier, there are a wide range of participants in the tri-party repo market, only some of whom are subject to direct Federal Reserve oversight. A particular strength of the task force process was the involvement of essentially all important classes of market participants and their regulators. With that process now concluded, the Federal Reserve is committed to finding other ways to continue and expand these interactions. Such an inclusive approach is essential if key changes to the settlement process that require adjustments in the behavior of all market participants are to be effectively implemented. Not only securities dealers affiliated with bank holding companies but also other broker-dealers as well as cash lenders, such as money market funds, must modify systems and protocols consistent with the requirements of the target state. To this end, engagement with the Securities and Exchange Commission has been and will continue to be particularly important given its role as the primary regulator of broker-dealers and many cash lenders, notably money market funds.

Given the broad interest in the tri-party repo market and the complexities in-

volved in reaching the target-state settlement system, the Federal Reserve considers it critical that the general public have the opportunity to follow progress, including by tracking relevant metrics of risk reduction associated with the gradual decline in reliance on intraday credit. In addition, the Federal Reserve is committed to providing information on its initiatives related to the tri-party repo market. With these aims in mind, the Federal Reserve Bank of New York recently launched a Web site that will serve as a portal for a range of information related to the tri-party repo market.  $^6$ 

#### The Problem of Fire Sales

While eliminating the daily unwind and reducing reliance on intraday credit will materially reduce the potential for a recurrence of many of the problems evident during the financial crisis, other vulnerabilities will remain. A particular concern of the Federal Reserve, and also reflected in the Financial Stability Oversight Council's most recent annual report, involves the challenge of managing the collateral of a defaulting securities dealer in an orderly manner. Targer dealers finance portfolios of securities that can easily exceed \$100 billion and would be difficult to liquidate even under favorable market conditions without causing dislocations. As I noted earlier, the situation could be further complicated by the fact that many cash lenders are highly risk averse, subject by regulation or prospectus to stringent limitations on their portfolio holdings, and may have limited operational capacity to manage collateral. As a result, they would likely be inclined to quickly liquidate securities that they had obtained from a failed dealer, creating the potential for a fire sale that could destabilize markets and propagate shocks across the financial sys-

A solution to this fire sale problem likely requires a marketwide collateral liquidation mechanism. The challenges in designing and creating a robust mechanism—which would almost certainly need the capacity to fund a significant volume of collateral for some period of time—are appreciable, and include assuring adequate liquidity resources even under adverse market conditions and developing rules for the allocation of any eventual losses across market participants. Such capabilities typically exist today in the context of clearing organizations that have a formal membership structure, which allows for capital assessments and the sharing, or "mutualization," of potential losses. How this model might be adapted to a market more loosely organized around clearing banks, particularly in which certain less-liquid collateral types continue to be funded, remains unclear and will surely need to be the focus of much additional study.

Given the importance of the tri-party repo market and the vulnerabilities that were so evident during the financial crisis, enhancing the market's resiliency and its settlement system is an important regulatory and financial stability priority. Building on the work of the task force, we believe that supervisory efforts will yield substantial progress in eliminating the reliance of the tri-party repo market on intraday credit, although perhaps not as quickly as many of us had hoped, and in improving risk-management practices across a range of market participants. A significant remaining challenge, however, is the development of a process to liquidate

Bank of New York's Web site at www.newyorkfed.org/banking/tpr\_infr\_reform.html.

7See, Financial Stability Oversight Council (2012), 2012 Annual Report (Washington: FSOC), www.treasury.gov/initiatives/fsoc/Pages/annual-report.aspx.

<sup>&</sup>lt;sup>6</sup>Information on Tri-Party Repo Infrastructure Reform is available on the Federal Reserve

in an orderly fashion the collateral of a defaulting dealer that would operate reliably in the context of a settlement system organized around clearing banks.

Thank you once again for the invitation to appear before you today to share the perspectives of the Federal Reserve on these important issues. I would be pleased to answer any questions you may have.

#### PREPARED STATEMENT OF KAREN B. PEETZ

VICE CHAIRMAN, THE BANK OF NEW YORK MELLON

August 2, 2012

Chairman Reed, Ranking Member Crapo, and Members of the Subcommittee, my name is Karen Peetz, and I am Vice Chairman of The Bank of New York Mellon and CEO of the company's Financial Markets and Treasury Services businesses. I appreciate the opportunity to appear before you today to discuss the tri-party repurchase—or "repo"—market in the United States.

I would like to begin by briefly describing the history and operations of BNY Mellon, as our business model is very distinct from traditional retail or investment banks. BNY Mellon was formed in 2007 as a result of the merger between The Bank of New York and Mellon Financial Corporation. The company has a rich and distinguished history that is inextricably woven into the broader history of the United States. The Bank of New York was founded in 1784 by Alexander Hamilton, and with its predecessors, BNY Mellon has been in business for 228 years, making it one of the oldest continuously operating financial institutions in the world.

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In contrast to most global banking organizations, our business model does not focus on the broad retail market—we do not offer credit cards, traditional mortgages, auto loans or similar products to retail consumers. Rather, we are a provider of services that help major financial institutions access funding and support the operational infrastructure of the global capital markets. BNY Mellon operates two primary businesses: investment servicing and traditional asset management. Through our various clearance, advisory, global markets, treasury services and asset management platforms, we facilitate the trading, settlement and distribution of client assets around the world.

Before I address the topic of today's hearing, let me begin by stressing BNY Mellon's support for recent U.S. and international regulatory reforms that have strengthened our financial system, including the Dodd-Frank Wall Street Reform and Consumer Protection Act. BNY Mellon has a long history of working with the Government to help steady financial markets, often providing the benefit of the expertise we have developed from our unique role in the markets to the Government regarding the structure of support facilities.

In addition, the nature of our business allowed us to see first-hand how insufficient capital and liquidity at some institutions contributed to the financial crisis. Since the Dodd-Frank Act was enacted, we have worked with our global and domestic prudential supervisors to provide meaningful feedback on regulatory proposals and explain how proposed rules may affect critical aspects of the financial system. We have heartily endorsed meaningful reforms—including enhancing the quality and quantity of bank capital—that will strengthen the banking sector, guard against future systemic shocks, and encourage economic expansion.

For the purposes of my testimony today, I will focus on three issues:

- How the tri-party repo market operates;
- · BNY Mellon's role supporting the tri-party repo market; and
- The performance of the tri-party repo market during the financial crisis and ongoing reform efforts.

Before addressing the intricacies of the tri-party repo market, I would like to start with a general explanation of the repurchase market and why it exists. A "repo" is a sale of securities by a dealer to an investor, accompanied by a contract to repurchase the securities for an agreed upon price at a later date. These arrangements are entered into by dealers who have liquidity needs and investors looking to put cash holdings to good use (often investment managers for endowments, pension funds, and municipalities, money market mutual funds, custodial banks investing cash collateral on behalf of their securities lending clients, and other asset managers). The repo market is a major source of funding for the financial institutions that drive business and finance globally and is an integral part of ensuring that the financial system is able to work for downstream customers.

Functionally and economically, repos operate like secured loans. On any given day, a cash investor (the lender) extends funds to a dealer (the borrower) at an

agreed rate—the "repo rate"—and the dealer provides the investor with securities as collateral. As the Federal Reserve Bank of New York (the "FRBNY") has explained, "[t]he proceeds of the initial securities sale can be thought of as the principal amount of the loan, and the excess paid by the cash borrower to repurchase the securities corresponds to the interest paid on the loan, also known as the repo

#### **Tri-Party Repo and BNY Mellon Operations**

Tri-party repo transactions are a type of repurchase agreement involving a third party, the tri-party agent—the function BNY Mellon serves—who facilitates settlement between dealers (cash borrowers) and investors (cash lenders). The tri-party agent maintains custody of the collateral securities, processes payment and delivery between the dealer and the investor and provides other services, including settlement of cash and securities, valuation of collateral, and optimization tools to allocate

The tri-party repo market has grown and evolved over the years, in response to market and economic factors that made the structure a more attractive mechanism for meeting the market's funding needs. The use of a tri-party agent has enabled the market to operate more efficiently by reducing settlement risk and related costs, allowing for collateral recall, providing independent collateral verification and monitoring and standardizing transaction agreements. According to the Financial Stability Oversight Council's (the "FSOC") 2012 Annual Report the current value of the tri-party repo market is \$1.8 trillion.

BNY Mellon is a substantial tri-party agent, with an approximately 80 percent market share. Our involvement in a transaction commences after a broker-dealer and a cash investor agree to a tri-party repo trade and send instructions to BNY Mellon. These instructions represent the parties' agreement concerning the tenor of the transaction, the amount of cash lent, the value and type of collateral returned,

and the repo rate.

To facilitate the tri-party repo market we extend secured intraday credit to dealers to repay their investors from the prior day's trades. If a dealer becomes distressed we could refuse to extend such credit and investors could withdraw from the market. Both of these actions could lead to destabilizations in the economy. Once a tri-party trade settles, BNY Mellon is no longer exposed to direct risk of the dealer or the underlying securities. Thereafter, the ultimate risks associated with a defaulting dealer who has pledged collateral are with its cash investors.

#### Tri-Party Repo Reform and the Financial Crisis

Few parts of the United States financial system were untouched by the global financial meltdown from 2007-2009; therefore, it is unsurprising that the tri-party repo market experienced strain. The crisis revealed that the market could experience systemic problems: dealer defaults could leave investor counterparties or the tri-party agent holding collateral that was increasingly illiquid, leading to a seizing up of the financial markets.

In light of our role as tri-party agent, we are uniquely positioned to work with the Federal Reserve to identify ways to take risk out of the way this market operates. We have been in continual discussions with supervisors and clients regarding measures to reduce and eventually eliminate our exposure to intraday credit risk, as well as to help address broader structural concerns with the tri-party repo mar-

After the financial crisis, the Federal Reserve asked clearing banks, primary dealers, and investors to consider policy options to address problems with tri-party repo infrastructure that were revealed during the financial crisis, which led to the creation of the Tri-Party Repo Infrastructure Reform Task Force 2—in which BNY Mellon participated. The Task Force published its final report in February 2012 summarizing the current state of reform efforts. In addition to identifying the measures I describe below as important steps, the Task Force noted other achievements that increased transparency, enhanced data reporting and strengthened cash investor stress testing practices. The report recognized that additional measures to further reduce intraday credit to broker-dealers would be necessary.

In addition to our work on the Task Force, BNY Mellon has been working with

our regulators and our clients to address practices within the market that require

<sup>&</sup>lt;sup>1</sup> "Tri-Party Repo Infrastructure Reform", The Federal Reserve Bank of New York, p. 5 (2010). <sup>2</sup>The Task Force on Tri-Party Repo Infrastructure Reform was formed by the Payments Risk Committee, a private sector body sponsored by the FRBNY. The Task Force included representatives from a diverse group of market participants. Federal Reserve and SEC staff participated in meetings of the Task Force as observers and technical advisors. Task Force on Tri-Party Repo Infrastructure, Payments Risk Committee, p. 1 (2010).

strengthening. We have focused our own internal reform efforts on reducing the provision of intraday credit and influencing collateral standards.

With respect to reducing intraday credit provided by BNY Mellon to facilitate the tri-party repo market, we are implementing recommendations made by the Task Force. We have moved to a later day unwind for most maturing tri-party repos, reducing the intraday risk exposure window from 10 to approximately 3 hours. We have instituted an "auto substitution" process to allow dealers to replace needed, pledged collateral by first over-collateralizing with cash. Additionally, BNY Mellon introduced a three-way trade confirmation process known as automated deal matching for dealers, agents and investors. The trade matching enhancements allow BNY Mellon, as the clearing bank, to receive both the dealer and cash investor's trade instructions separately and match the required information fields systematically. This automated matching process provides dealers and investors with an efficient and consolidated view of trade instructions, terms and modifications to ensure accuracy and transparency.

BNY Mellon is also identifying asset classes eligible for intraday credit associated with tri-party repo transactions and we are working with our clients to eliminate intraday credit associated with less liquid forms of collateral. We expect these measures to reduce intraday exposures by \$230 billion by early next year. Moreover, we are developing the technology for a systematic approach to reforming the entire unwind process that will practically eliminate exposures by the end of 2014. As we develop and implement these measures, we are working closely with our clients and the Federal Reserve to ensure that these changes are adopted in a manner and on

a timetable that does not unduly disrupt the market.

Last, I would note that on July 18, The Federal Reserve Bank of New York released a statement acknowledging its efforts to use the supervisory process to effect reductions in intraday credit and implement other risk management reforms detailed in the Task Force's recommendations. A day earlier, the FSOC issued its annual report, which sounded similar themes. The report raised the intraday credit concern I have described and stated that reforms should proceed expeditiously. I can assure you that we are partnering with the Federal Reserve on these efforts and are committed to enhancing tri-party operations to reduce systemic risk. Specific to the pace of reforms, I would note that the measures we have already implemented are materially reducing intraday credit exposures.

BNY Mellon strongly believes that the tri-party repo market is a crucial component of the global financial system's infrastructure. We are committed to continuing to develop meaningful reforms that limit systemic risk and enable market participants to efficiently and effectively fund their operations.

Again, I thank you for the opportunity to testify before you today and look forward to any questions you may have.

#### PREPARED STATEMENT OF STEVEN R. MEIER

EXECUTIVE VICE PRESIDENT, CHIEF INVESTMENT OFFICER, STATE STREET GLOBAL Advisors

#### August 2, 2012

Chairman Reed and Members of the Subcommittee on Securities, Insurance, and Investment: Thank you for the opportunity to appear before you today. My name is Steven Meier and I am the Chief Investment Officer, Global Cash Management, for State Street Global Advisors (SSgA), the investment management business of State Street Corporation (State Street).

The Committee has asked me to provide an investor's perspective on the tri-party repurchase market settlement mechanism, with a specific focus on the systemic risk reducing initiatives recommended by the Federal Reserve Bank of New York's Tri-Party Repo Infrastructure Reform Task Force. I hope my testimony will assist the Committee with its important work.

State Street had the privilege of participating in this Task Force to provide investor insight into the functioning of these arrangements and the benefits of such transactions for our clients. State Street agrees with the risk reducing initiatives put forward by the Task Force and is prepared to adjust our operating model in order to address the concerns raised by the Federal Reserve Bank of New York and others, including the Financial Stability Oversight Council in its most recent report.

#### **Background and Experience**

Let me begin with a brief description of my background and experience. I have more than 28 years' experience in financial services, with a focus on traditional money markets, fixed income, global cash, and financing. Today, I am an Executive Vice President of State Street and Chief Investment Officer of the cash asset. I am a member of SSgA's Senior Management Group and Investment Committee. I have the responsibility of managing a team of nearly 40 investment professionals dedicated to cash and short-term asset strategies across seven currencies located in six investment sites around the world. Our clients include State and local governments, private pension funds, corporations, endowments, charitable trusts, foreign central banks, and sovereign wealth funds.

State Street is one of the world's leading providers of financial services to institutional investors with nearly \$22 trillion in assets under custody and administration, and almost \$2 trillion of assets under management. As of the end of June 2012, SSgA managed global cash and short-term assets and strategies of approximately \$400 billion, of which over \$300 billion is denominated in U.S. dollars. Our cash and short-term investment activities in the U.S. span a range of asset types, including U.S. Treasury and Government agency debt, municipal debt, unsecured bank and corporate obligations, asset-backed securities, and other similar instruments including repurchase agreements. In accordance with our client risk tolerance and return objectives, repurchase agreements are a key area of focus and a core competency at

#### Repurchase Agreement Transactions

In a typical repurchase transaction, an investor transacts directly with a bank or broker-dealer that is looking to borrow short-term funding collateralized with assets to secure the trade. In a tri-party repurchase transaction, a third party acts as an agent to facilitate trade settlement and collateralization. On behalf of the client assets that it manages, SSgA is an investor and provider of funding in a repurchase agreement transaction. SSgA's average total U.S. dollar repurchase transaction volume outstanding consistently exceeds \$100 billion, most of which settle and are collateralized through the tri-party mechanism. While these transactions involve counterparty credit risk, the collateralization of the trades provides diversification away from unsecured credit obligations and a generally favorable risk/return dynamic. The tri-party mechanism provides significant operational efficiencies and settlement risk reduction, while also delivering transaction scale and investment capacity. Without these benefits of scale and efficiency provided by this important settlement mechanism, our repurchase transaction investment activities would be a fraction of what they are today. A diminished capacity in this core money market asset would likely cause investors to raise their holdings of unsecured debt, with increased exposure to potential credit loss and asset price volatility.

Tri-party repurchase transactions provide asset managers an excellent alternative for maintaining core, low-risk daily portfolio liquidity, as well as an instrument to enhance returns through term repurchase transactions involving a broad range of collateral. Core portfolio liquidity is typically maintained through repurchase transactions collateralized with "traditional" forms of collateral including U.S. Treasury Bills, Notes and Bonds, Government agency obligations, and Government agency mortgage-backed securities. These core liquidity trades typically are executed for tenors of 1 to 7 days. In comparison, portfolio yield enhancement is often achieved through repurchase transactions that are collateralized with "nontraditional" or "alternative" forms of collateral, including investment grade corporate bonds, money market instruments, municipal obligations, asset-backed securities, high yield bonds and equities. These yield enhancement trades are typically executed for periods ranging from one week to one year. SSgA has considerable resources committed to ongoing support of these transactions and managing the risks associated with them, including dedicated senior portfolio managers, specialized technology infrastructure, operational personnel, designated collateral analysts, legal expertise, risk managers, and senior management oversight. We actively review, assess, stress test, and manage repurchase transaction collateral daily.

#### **Task Force Recommendations**

The ongoing implementation of the Task Force recommendations has resulted in considerable progress toward reducing the system risk associated with these transactions. Through altering transaction processing timelines and protocols, the industry has been able to achieve real progress. However, there is still work to be done to eliminate these risks. Additional systems enhancements and trade processing efficiencies and timing disciplines are required to reach this objective and are in-process.

It should be noted, however, the industry has made significant progress in transaction risk mitigation through ongoing Task Force discussions and findings, Specifically, participants are now more aware of the need for counterparty default contingency planning, the requirement of knowing both your counterparty and your collateral, the benefits of maturity extension, required analysis and judgment concerning collateral suitability, the need for focus on detailed repurchase transaction collateral schedules and the benefits of dynamic margining. Enhanced awareness and transparency of these issues all contribute toward an informed marketplace and a consistent source of funding and investment returns. SSgA, on behalf of its clients, has a strong interest in ensuring that these important money market investment arrangements and supporting tri-party settlement mechanism continue to be a viable and vibrant aspect of the money and capital markets. I look forward to further industry progress on improving the efficient functioning of this key market mechanism.

Thank you again for the opportunity to be here today to speak on this subject. I would be pleased to answer the Committee's questions.

#### PREPARED STATEMENT OF THOMAS G. WIPF

Managing Director and Global Head of Bank Resource Management, Morgan Stanley

August 2, 2012

Chairman Reed, Ranking Member Crapo, and Members of the Subcommittee, thank you for inviting me to appear before you today. My name is Thomas Wipf and I am a Managing Director at Morgan Stanley and responsible for the firm's Bank Resource Management including Secured Funding, Securities Lending, and Counterparty Portfolio Management. Thank you again for the opportunity to discuss this very important issue in the markets for secured funding.

As an active member participant in the work of the Tri-Party Reform Committee

As an active member participant in the work of the Tri-Party Reform Committee (Committee), Morgan Stanley remains fully committed to accomplishing the goals laid out by the Committee within a timeline that is ambitious and acceptable to all stakeholders. Our firm views this work as a top priority and critical path in our own funding and liquidity strategy. As the Committee's recommendations continue to be processed, we have seen meaningful benefits and risk reduction on a market wide basis. Morgan Stanley agrees with the Financial Stability Oversight Council that more needs to be done and the delay in soundly eliminating intraday credit risks is "unacceptable."

Secured funding is an important funding source and a foundational component of

Secured funding is an important funding source and a foundational component of our centralized liability management strategy. We are committed to and have taken significant steps to put all the recommendations into practice at our firm. We have heard clearly from the secured funding investor community that the collateral management services provided by the clearing banks are an important element of their collateral valuation and risk management process.

The significant stability issues that appeared in 2008 provided the Committee, our regulators and all market participants (bank dealers, cash investors, and the two clearing banks) with a road map for reform. Many long held assumptions around durability, settlement, credit exposure, agent versus principal relationships and contingency planning were proven wrong or overly optimistic during a period of significant stress in the broad funding markets. The major factors for the instability were the short tenor of funding particularly for less liquid assets; lack of transparency regarding collateral for investors; insufficient overcollateralization on less liquid assets; and uncertainty regarding credit counterparties during the period between trade maturity and settlement. Additionally, the overall reduction of counterparty risk as well as a heightened market wide aversion to counterparty risk contributed to the instability of the platform. We believe the Tri-Party Reform Committee identified these weaknesses and defined the issues requiring remediation. In implementing these recommendations, we see the remaining strategic issues falling into three categories:

- Complete clarity on the terms and limits for credit extension between the clearing banks and the bank dealers by asset class
- Full implementation of a transparent settlement process with a clear timeline that enables all market participants to understand and manage their settlement risk and

· Further building investor confidence and reducing intraday risk by a meaningful and systematic reduction of collateral turnover between trade execution and

Many of the challenges faced by the Committee were a result of mixing the issues. Credit extension, collateral management and settlements are separate and distinct issues that all impact the Tri-Party funding market. The extension of intraday credit is a major focus issue for the bank dealers and the two clearing banks. While our investors are focused on the collateral management services provided by the clearing banks, the operational issues are relevant to all three parties to the transaction. Part of the challenge faced by the Committee was to separate these issues although there are certain codependencies among them. We believe that the work ahead will

only be successful if the issues are treated individually going forward.

At Morgan Stanley, we have taken a number of steps to meaningfully reduce our daily settlement exposures ahead of the Committee's deadlines, most notably in the area of prudent liability and collateral management. Our firm has taken proactive steps to extend the maturity of our secured funding liabilities in a rules based governance process that requires minimum term of maturities consistent with the fundability characteristics of our assets. We additionally have imposed investor diversification and maturity limits to reduce our maturities with any investor in a given period and an overall limit on maturities during any given period. Our investors have focused on transparency of collateral, a reduction in collateral turnover during the period of the transaction and clarity on their credit exposure through execution, settlement and maturity. We have seen firsthand a marked increase in pretrade collateral due diligence by secured funding investors.

We fully acknowledge there is considerable work remaining for the industry that

requires senior leadership focus, commitment and investment by all participants in this market. We are committed to continuing to collaborate with investors, the two clearing banks and our regulators to complete the remaining workstreams and to advocate for a timeline that is acceptable to all stakeholders. Morgan Stanley's overarching goal in Tri-Party reform is investor confidence. The meaningful reduction in intraday credit extension, transparency in collateral and advance rates combined with a more sound and durable operational platform are all positive steps toward this goal. Nevertheless, from our firm's perspective, we have prioritized our resource commitments in the context of the Tri-Party reform committee's agenda on initiatives designed to retain the confidence of our secured funding investors, the cash

With lessons learned following the crisis, Morgan Stanley has worked over the past several years to add significant risk management enhancements to our secured funding model. As mentioned above, we have added significant term to the maturities in our secured funding liabilities and since a large portion of those liabilities come from investors who utilize the Tri-Party repo platform, our pro forma and actual intraday credit from our clearing banks has been meaningfully reduced. Since 2008 we have extended the weighted average maturity of our secured funding book from less than 30 days in 2008 to now well in excess of 120 days. This is now a disclosure metric in our public filings. Extending the maturity and limiting rollover risk are the most powerful tactical steps that can be taken by bank dealers immediately to reduce the intraday extension of credit. Since the credit extension takes place at the unwind of the trade, creating a longer and staggered maturity profile

can yield significant risk reduction.

The Tri-Party Reform Committee has worked to identify the issues and put forth recommendations for the remediation of the gaps that became apparent in 2008. Many of those recommendations are now in practice or in scope on a clear timeline. Many of the enhancements to the settlement and confirmation processes have created increased stability and added clarity. It is clear, however, that the main and most important goal of reducing intraday credit extension has not yet been achieved. It is also clear, however, that the responsibility for this cannot be solely assigned to the two clearing banks. We in the bank dealer community have to take the immediate and incremental steps available through our liability management practices to become a bigger part of the solution. There is no single operational solution or system development that can solve this issue completely. What is required is collaboration between the bank dealers and the two clearing banks to provide a set of strategic steps to begin a tactical but meaningful reduction of intraday credit extension in parallel to building operational and system enhancements. We believe that the status quo is unacceptable and by beginning this reduction through prudent liability management, we can reduce risk during the proposed build out by the clearing banks. At Morgan Stanley, we have seen considerable results achieved by working

directly with our clearing banks to take significant tactical steps to reduce our reli-

ance on intraday credit.

Morgan Stanley is committed to taking the steps necessary to build investor confidence in this important funding channel. The markets' liquidity is provided by investors who seek to have transparency to their collateral, a clear understanding of the settlement process and the information they need in real time, to make appropriate risk decisions and to effectively manage their collateral and counterparty ex-

We have worked with the Tri-party Committee and other industry groups to move this reform forward. Morgan Stanley is committed to achieving the entirety of goals laid out in the Committee's report and has invested and executed on changes to our processes well in advance of the scheduled timelines with the goal of meeting the needs of our investors. This work is a top priority of our firm and we will continue to work at both an industry and a firm level along with our regulators to add sta-

More at both an industry and a first level along with our regulators to add stability and durability to this funding platform.

Again, we are appreciative of the opportunity to discuss these important issues and look forward to providing this Committee with any level of detail and information that will be helpful as you deliberate on the path forward.

## RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN REED FROM MATTHEW J. EICHNER

**Q.1.** We heard testimony from the witnesses about some broker-dealers' continued reliance on tri-party repo financing for less liquid collateral and the challenges such collateral would present for risk-averse investors such as money market funds in the event of a large dealer default. In discussing the need for counterparty default contingency planning, Mr. Steven Meier, who represented State Street Global Advisers at the hearing, recommended that the Federal Reserve audit the contingency plans of all the market participants to make sure they have addressed the requirement of collateral suitability. What steps is the Federal Reserve taking to monitor the actions of market participants around collateral liquidation plans? Should the Federal Reserve do more?

**A.1.** The Federal Reserve continues to be very concerned about the possibility that a default by a dealer of significant size would lead to a rapid and potentially disorderly liquidation of collateral, including but not limited to less-liquid securities, by risk-averse triparty cash investors. In fact, we have continued to highlight both in our public communications and in our supervisory conversations with bank-affiliated participants in this market that, even after the current program aimed at materially reducing reliance of the triparty market on large amounts of discretionary intraday credit from the clearing banks is fully implemented, this "fire sale" problem will remain an issue to be addressed.

While we are monitoring the default contingency plans of those firms we supervise, robust firm-specific plans do not fully guard against this risk. We continue to believe that successfully addressing the fire sale problem will require development of some type of market-wide mechanism or process to ensure a coordinated, orderly liquidation of collateral by investors in the wake of a dealer's default. The challenges in designing and implementing a robust mechanism are appreciable. One key challenge is to establish adequate capacity for market participants to hold and finance collateral for a time even under adverse market conditions. Another is the need to develop prespecified rules to govern how any losses on the assets would be allocated among market participants in the event that these occur. Of course these issues have been successfully addressed in other contexts. Backup liquidity sources and loss

allocation have long been features of a number of financial market utilities that govern other payment and settlement processes.

Our view is that the best way forward would be for market participants to join together to develop a process or mechanism to ensure the orderly liquidation of collateral by creditors of a defaulted dealer, to eliminate the risk of fire sales. We are certainly open to models meeting these challenges that are constructed around the current market structure, with a key role in the settlement process played by the two clearing banks. But, in the event that a satisfactory model cannot be devised by the market, we believe other solutions should be considered, including those that would involve the establishment of a single marketwide platform to manage the collateral of a defaulting dealer. Any solution is likely to be a very challenging undertaking, in light of the formidable substantive issues and the diverse group of market participants that would

need to be involved. We think it is important for market participants to begin working on such a mechanism now, as a solution may take considerable time to design and implement. In the interim, the Federal Reserve is very actively monitoring the operational and risk management capacities of institutions subject to its supervision that would be relevant in the event of a dealer's default on its tri-party repo obligations, notably the holding companies of the two clearing banks. Note that the Federal Reserve does not have direct supervisory authority over some of the largest cash lenders or broker-dealers in this market.

- **Q.2.** If a large bank offering tri-party repo clearing were to suddenly fail for some reason unrelated to repo markets, is there a plan for how to keep the tri-party repo market from freezing up and allow it to continue operating? Why or why not?
- **A.2.** In the event that either of the two tri-party clearing banks was to suddenly fail, the options for avoiding significant short-term disruptions would be limited. This remains the case even after the inclusion in the Dodd-Frank Act of provisions that provide some potentially important additional tools to facilitate the orderly liquidation of certain financial institutions affiliated with banks, including their ultimate holding companies. The critical role of the clearing banks in the tri-party settlement process could probably not be immediately assumed by other institutions. For this reason, the Federal Reserve, along with other relevant supervisors, focuses continuously on both the financial and operational condition of such firms. Concerns about the centrality of these institutions to the orderly functioning of financial markets also motivated the enactment in 2010 of statutory requirements that these firms be subject to enhanced prudential standards, including risk-based capital, liquidity, and leverage requirements. The Federal Reserve is now in the process of developing and implementing these standards.
- **Q.3.** As the primary regulator of broker-dealers and many cash lenders, notably money market funds, how can the SEC use its supervisory powers to help improve the resiliency and stability of the tri-party repo platform?
- **A.3.** The most important single step that the SEC can take to enhance resiliency in the tri-party repo market is to move forward expeditiously with meaningful reforms that would reduce the vulnerability of money market funds, which currently provide about one-third of all tri-party financing, to destabilizing runs. Rapid redemptions from money market funds by highly risk-averse investors responding to the first mover advantage conferred by the use of a rounding mechanism to maintain a stable share price can quickly create stress in the tri-party market and in the financial system as a whole, as was observed during the financial crisis. The importance of effectively addressing the susceptibility of money market funds to runs cannot be overstated, and the SEC is, by virtue of its longstanding experience with regulating investment companies and existing statutory authority with respect to money market funds, uniquely well-positioned to take action.

In addition, the SEC has been helpful in encouraging brokerdealers, the borrowers in the tri-party market, to actively manage their funding risk, for example using longer-dated transactions to finance less-liquid positions and by avoiding large volumes of transactions all maturing simultaneously. Recent proposed rules issued by the SEC for comment that would, inter alia, impose liquidity requirements on large broker-dealers that, if finalized, would represent a significant step in the right direction.

#### STATEMENT SUBMITTED BY THE INVESTMENT COMPANY INSTITUTE

The Investment Company Institute <sup>1</sup> is pleased to provide this written statement in connection with the Subcommittee's hearing on the tri-party repo market.

Registered investment companies—including mutual funds, ETFs, closed-end funds, and UITs (collectively, "registered funds")—have a significant interest in the subject of this hearing. Tri-party repo is a key source of short-term financing for a wide range of borrowers such as banks and brokerage firms. <sup>2</sup> The Federal Reserve Bank of New York (the "FRBNY") reports that as of June 2012, borrowers financed \$1.8 trillion through this market. Likewise, cash investors such as corporations, State and local governments, financial institutions, and registered funds use this market to invest short-term cash. Among registered funds, money market funds have the largest presence in this market with \$519 billion invested in repos in June 2012, while stock and bond funds invested an additional \$96 billion. Most of these repos are tri-party repo.

The ICI and several representatives from ICI member firms participated on a special Task Force on Tri-Party Repo Infrastructure (the "Task Force"), which was formed in September 2009 under the auspices of the Payments Risk Committee, a private sector body sponsored by the FRBNY. The Task Force recently concluded its work, highlighting a number of areas in which significant progress was made to meaningfully reduce both the potential for systemic risk and the magnitude of the risk associated with the tri-party repo infrastructure.

These reforms include increased transparency, significant reduction in the extension of intraday credit by the clearing banks, improved collateral substitution and management practices, and best practices for cash investors for disposing of securities in the event of a failure of a tri-party repo counterparty. Each of these reforms is described briefly below.

Increasing Market Data for Repos. Beginning in May 2010, the FRBNY began publishing market data on the tri-party repo market on its web site. <sup>5</sup> This data highlights the overall size of the market, collateral, concentrations, and margin requirements that exist within the market. This reporting has provided greater transparency into the broader market, giving all market participants and regulators the ability to monitor repo exposures and highlight repo market trends.

In addition, in response to a Task Force recommendation, dealers, cash investors, and tri-party repo clearing banks are now fully implementing three-way trade confirmations. These added operational enhancements allow the tri-party clearing banks and regulators to monitor "real-time" credit exposures. It also provides the tri-party repo clearing banks an additional level of transparency within the repo market and reduces the risk of the occurrence of failed or intraday defaulted repo trades for all market participants. 6

<sup>&</sup>lt;sup>1</sup>The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advis-

standing, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of \$13.1 trillion and serve over 90 million shareholders.

<sup>2</sup>The Federal Reserve Bank of New York's white paper on tri-party repo provides a comprehensive description of the repo market. See, "Tri-Party Repo Infrastructure Reform" (May 17, 2010), available at <a href="http://www.newyorkfed.org/banking/nyfrb">http://www.newyorkfed.org/banking/nyfrb</a> tri-party whitepaper.pdf.

<sup>3</sup>See, "Tri-Party Repo Statistics as of 06/11/2012", available at <a href="http://www.newyorkfed.org/tri-partyrepo/pdf/jun12\_tpr\_stats.pdf">http://www.newyorkfed.org/tri-partyrepo/pdf/jun12\_tpr\_stats.pdf</a>.

<sup>4</sup>See, "Task Force on Tri-Party Repo Infrastructure Payments Risk Committee", Final Report (February 15, 2012), available at <a href="http://www.newyorkfed.org/tri-partyrepo/pdf/re-port\_120215.pdf">http://www.newyorkfed.org/tri-partyrepo/pdf/re-port\_120215.pdf</a>

February 15, 2012), available at <a href="http://www.newyorkfed.org/tri-partyrepo/pdf/re-port\_120215.pdf">http://www.newyorkfed.org/tri-partyrepo/pdf/re-port\_120215.pdf</a>.

See, <a href="http://www.newyorkfed.org/banking/tpr\_infr\_reform.html">http://www.newyorkfed.org/banking/tpr\_infr\_reform.html</a>.

In addition to the increased transparency in the tri-party repo market, registered funds are required to provide additional disclosure about their repo activities. This disclosure appears in the fund's prospectus and statement of additional information, both of which are available to inventors would the tribile. This course interest funds also promote funds also appears funds also appears for additional course. investors, regulators, and the public. Twice a year, registered funds also prepare financial statements that are filed with the Securities and Exchange Commission (SEC) and sent to shareholders. In addition to the semi-annual financials in these shareholder reports, registered funds also file Form N-Q after the first and third quarters, which include a detailed listing of the fund's portfolio.

Money market funds have additional disclosure requirements. They are required to post their portfolio holdings on their Web sites each month within five business days after month end. Money market funds also are required to file Form N-MFP with the SEC on a monthly basis. This provides details on the fund and its portfolio holdings (including detail on each security held as collateral), and has given regulators and the public significantly enhanced transparency with respect to money market funds' role in tri-party repos.

Delaying the "Unwind." Changes have recently been implemented to cause the daily "unwind" of most tri-party repo transactions to move from early morning to mid-afternoon, greatly reducing the duration of intraday credit extensions by the triparty repo clearing banks to the dealers. The delay in the unwind has been very significant, in that the tri-party banks now have much greater clarity into the ability of borrowers to finance their repo book. The situation was much more opaque with a morning unwind. Work on this front continues, with the ultimate goal of reducing credit extensions by the tri-party repo clearing banks to the dealers to no more than 10 percent of a dealer's notional tri-party book.

Improving Collateral Substitution/Collateral Management. Both tri-party repo clearing banks have recently implemented automated collateral substitution capabilities as a result of recommendations from the Task Force. The introduction of such automated systems has allowed cash investors and other industry participants to monitor and manage their intraday collateral positions and ensure that their repo exposures are adequately collateralized on a "real-time" basis. Industry participants continue to actively work with the tri-party repo clearing banks to build out the ca-pabilities of this technology and improve the transparency and the efficiency of this important monitoring system. The ability to efficiently substitute collateral helps to prevent disruptions to regular market activity as dealers have full access to their positions throughout the day.

SEC guidelines require that registered funds involved in a repo transaction receive at least 100 percent of the value of the cash invested. In practice, virtually all investors over-collateralize repos at levels ranging from 102 to 110 percent, demonstrated by the collateral haircut data published monthly by the FRBNY. The triparty clearing banks price the collateral on at least a daily basis using various independent pricing sources, which ensures centralized and consistent valuation across all market participants. The clearing banks continually review the pricing sources to ensure that the repo transactions are marked-to-market daily and are adjusted so that the obligations remain fully collateralized at all times.

Dealing With the Potential for Counterparty Defaults. Money market funds are distinct from other lenders in the repo market in that they are required to determine that counterparties present "minimal credit risk," assuring that the funds are only dealing with the highest quality counterparties. Nevertheless, money market funds and other registered funds share the common goal of minimizing counterparty risk in tri-party repo, and have strongly supported the Task Force's efforts in this

And as a result of the recommendations from the Task Force, the repo markets are better prepared to deal with potential dealer defaults. The tri-party clearing banks are working toward adopting "waterfall" recommendations of the Task Force that will mandate the priority of payments or distribution of assets in the event of a default. In addition, various industry groups continue to work with the tri-party repo clearing banks and industry participants to develop a process for the orderly liquidation of collateral. For example, in consultation with its members, the ICI published a checklist for cash investors in the event of the insolvency of a tri-party repo borrower. <sup>7</sup> This checklist includes preliminary steps that registered funds investing in tri-party repo should have in place as well as actions that would need to be taken in the event of a default, including guidelines on collateral valuation, board notification, and regulatory filings.

With the ongoing implementation of these and other Task Force recommendations, the tri-party repo markets are better prepared to deal with potential defaults. As the Task Force's final report noted, additional work is needed to put in place the infrastructure to meet the Task Force's goal of "the practical elimination of intraday credit associated with the settlement of tri-party repo transactions." ICI

and its members continue to support that important goal.

In any event, market participants and regulators have become much more attuned to the risks of overreliance on short-term financing. Cash investors and borrowers regularly engage in discussions about the degree to which borrowers are relying on the repo markets, and regulators are encouraging banks and other borrowers to extend the terms of their borrowing to reduce their reliance on short-term financing. These efforts have reduced the chances that a firm's inability to access

<sup>&</sup>lt;sup>7</sup>See, Investment Company Institute, "Checklist for Fund Investors of Repurchase Agreement in the Event of Dealer Insolvency", available at <a href="http://www.ici.org/policy/current\_issues/">http://www.ici.org/policy/current\_issues/</a>

<sup>11</sup> mmf repo checklist.

8 See, e.g., "FRBNY Update on Tri-Party Repo Infrastructure Reform" (July 18, 2012) ("Broker-dealers are expected to reduce their reliance on short-term tri-party repo financing, particularly for less liquid assets, to achieve the necessary reductions in the usage of intraday Continued

the short-term markets would lead to its immediate collapse, as was the case with Bear Stearns and Lehman Brothers.

We appreciate the opportunity to share our views with the Subcommittee on the tri-party repo market, and we look forward to working with Congress in addressing these important issues in a manner that benefits the millions of American investors who rely on registered funds to achieve their investing goals.

 $<sup>\</sup>frac{-}{\text{clearing bank credit."}}, \text{ available at } \frac{http://www.newyorkfed.org/newsevents/statements/2012/0718\_2012.html.}$