

Pre-recorded for release on delivery  
9:15 a.m. EDT  
October 20, 2015

The Evolving Structure of U.S. Treasury Markets

Remarks by

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at

The Federal Reserve Bank of New York

New York, N.Y.

October 20, 2015

I am pleased to be here with this distinguished group of market participants, academics, government officials, and many others who are vitally interested in the issues before us today.<sup>1</sup> I am sure that all of us recognize the importance of the U.S. Treasury markets to our economy and our financial system; indeed, to the world economy and the global financial system. As Bill just outlined, for the next two days, we will collectively address the most important questions facing the Treasury markets today.<sup>2</sup> Are there significant problems in these markets that are not likely to self-correct? More specifically, is liquidity in broad decline, or more prone to sudden disappearance? If so, what are the causes? And what are the costs and benefits of potential market-led or regulatory responses? The design of this conference is to provide a forum for differing perspectives on these issues.

It has been one year since the events of October 15, 2014. Appropriately, the conference will begin with a review of the findings of the recent Joint Staff Report issued by the U.S. Department of Treasury, the Board of Governors, the Federal Reserve Bank of New York, the Securities and Exchange Commission, and the Commodity Futures Trading Commission.<sup>3</sup> The report analyzes in depth the

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<sup>1</sup> These remarks represent my own views, which do not necessarily represent those of the Federal Reserve Board or the Federal Open Market Committee.

<sup>2</sup> References to the “Treasury markets” refer to the interdealer cash and futures markets, unless otherwise specified.

<sup>3</sup> *Joint Staff Report: The U.S. Treasury Market on October 15, 2014*, [http://www.treasury.gov/press-center/press-releases/Documents/Joint\\_Staff\\_Report\\_Treasury\\_10-15-2015.pdf](http://www.treasury.gov/press-center/press-releases/Documents/Joint_Staff_Report_Treasury_10-15-2015.pdf)

unprecedented events and market conditions that day. It also shows clearly how dramatically the structure of Treasury markets has changed in recent years. New participants and new technologies have taken prominent roles in these markets, and long-time market participants have adopted new business models. Today's discussions will reflect this altered landscape, with panels on automated trading, market making, and the impacts that changes in Treasury markets have had on liquidity and on end users.

My discussions with market participants and regulatory colleagues suggest a range of opinions about Treasury market liquidity. While most market participants perceive some reduction in liquidity, views on the severity of the situation seem to be more mixed. Some measures such as trade size and market depth have declined, and investors today have to employ increasingly sophisticated strategies to execute larger trades at a good price. Some other measures show no decline in overall market liquidity. However, we need to consider not just the average level of liquidity under normal trading conditions, but also the risk that liquidity may be more prone to disappearing at times when it is most needed, as it seemed to do on October 15.

This concern is an important one. Because U.S. Treasury securities reflect the full faith and credit of our government, they are rightly considered risk-free. But the value of any security, even a U.S. Treasury, will reflect not just its inherent

credit risk but also investors' faith in the markets where it is traded. We need investors to have full faith in the *structure and functioning* of Treasury markets themselves. Treasury markets need to be as safe as the securities that trade on them. Episodes such as October 15, in which Treasury prices fluctuated wildly with no obvious reason, threaten to erode investor confidence. The growing list of similar events in equity and other markets underscores this concern.

Confidence in Treasury markets helps to support demand for Treasury securities and keep our government's financing costs low. Households and firms and even foreign governments hold Treasury securities as a key form of savings in no small part because of their trust in their safety and liquidity.

Financial firms have particular reasons to care about these markets. Many types of financial firms are represented here today, with diverse roles within Treasury markets. Since before the financial crisis, one of the driving narratives within financial markets has been the growing demand for safe assets. Many have argued that this demand helped to engender the crisis, as a variety of assets came to be accepted as risk-free when in fact they were anything but that. Treasury bills and bonds are about the only freely tradeable dollar-denominated assets that really can be called *safe*. We have a shared interest in guarding against an outcome where the Treasury market becomes a source of stress, rather than a safe haven in times of stress.

And if declining market function did undermine confidence in Treasury securities, we would be putting at risk a key source of credit creation. Our financial system depends on high-quality liquid assets (HQLA) for collateral that is used by banks, dealers, CCPs, money market mutual funds, and countless others. If Treasury prices can fluctuate wildly at any time for no or little reason, then over time investors could require higher haircuts and regulators could see a need for even more HQLA.

How can we protect and strengthen the structure of these markets? In tomorrow's session, several panels will discuss market structure, including potential risks to clearing and settlement infrastructure, and ask how current structures might be adapted to provide greater liquidity and better guard against liquidity risk.

I would point to four important trends that have been driving the changing structure of these markets: first, advances in computerized trading and high-speed communications and the entry of new players using these technologies; second, the intensified prudential regulation and supervision of the systemically important banks that are the largest dealers; third, the banks' own re-evaluation of risk in the wake of the financial crisis; and fourth, the increasing importance of mutual funds and other asset managers. While markets will always continue to evolve, there is

no reason to think these trends will suddenly reverse. In all likelihood, they are here to stay.

Although post-crisis regulatory changes have likely increased the costs of market making, markets were already undergoing dramatic changes well before the crisis. High-frequency and algorithmic trading firms already accounted for a large and growing share of transactions in the interdealer market, altering the speed and nature of market making. As traditional dealers have lost market share, they have sought to remain competitive by internalizing a greater share of their customer trades, finding matches between their own customers and keeping those trades off the public interdealer markets. But internalization does not eliminate the need for a public market, which is where price discovery mainly occurs. Dealers need to place the orders that they cannot internalize onto that market, and at times of market stress such as on October 15, they will likely need to put most of their orders onto the public market.

The current structure of the trading platforms in both the cash and futures markets is based on a central limit order book, which provides for continuous trading but also provides strong incentives to be the fastest. There may be adaptations of this market structure that could give greater emphasis to liquidity provision rather than a never-ending competition for more speed. Some of the panelists we'll hear from tomorrow argue that it may be possible to do so, for

example by considering frequent batch auctions as an alternative to the central limit order book, or by placing minimum time limits on orders. Ideas such as these make me wonder whether it might collectively be possible to come to a compromise in which more trading is done directly on the public market, if at the same time the public market rules were adjusted to emphasize greater liquidity provision, and particularly more stable liquidity provision, over speed. Perhaps public-private forums such as this conference can help in achieving that type of cooperative approach. I look forward to hearing views on these ideas tomorrow.

Treasury repo markets have also been undergoing structural changes. This is a good time to look at potential changes to the clearance and settlement infrastructure in these markets, as we will discuss tomorrow afternoon. We should take this opportunity to ask whether current market structures are well-suited to the new environment, or whether we should be aiming for a substantially different approach in the longer run. There is a tight link between funding liquidity in repo markets and market liquidity in cash and futures markets, so a healthy, liquid repo market is essential to the overall health of the market. However, regulatory changes have made repo activity more expensive.<sup>4</sup> There are currently a number of private proposals to expand the use of central clearing for repo markets that could

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<sup>4</sup> Regulatory efforts have also made tri-party repo infrastructure considerably safer by sharply reducing the market's reliance on discretionary extensions of intraday credit by the clearing banks and fostering improvements in market participants' liquidity and credit risk-management practices.

help to reduce those costs. Since the crisis, reforms have supported greater use of clearing for a wide range of products, and I believe that greater clearing in Treasury repo markets could be beneficial.

The conference will conclude tomorrow with a discussion of regulatory requirements in Treasury markets. Many point to post-crisis regulation as a key factor driving any recent decline in liquidity. Although regulation seems to have had little to do with the events of October 15, I would agree that it is one factor driving recent changes in market making. The same regulations have also greatly strengthened the major banks and made another financial crisis far less likely. In my view, we should be prepared to accept some increase in the cost of market making in order to improve our overall financial stability. That said, these regulations are new, and we should be willing to learn from experience. Regulatory requirements for Treasury markets may need to change over time to reflect a rapidly evolving market environment.

Markets will adapt to new regulation and other developments. We all have a responsibility to make sure that market and regulatory incentives appropriately encourage an evolution that will enhance market liquidity and functioning. I've been eagerly looking forward to this conference, in the belief that our discussions here can do just that.



