Simon M Potter: The implementation of current asset purchases

Remarks by Mr Simon M Potter, Executive Vice President of the Markets Group of the Federal Reserve Bank of New York, at the Annual Meeting with Primary Dealers, New York City, 1 March 2013.

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Thank you all for attending today's annual primary dealer meeting. Primary dealers play an important role in financial markets and an integral role as counterparties for operations to implement monetary policy. You are also an important source of market intelligence for the Desk, providing insight into market developments, structure, and functioning dynamics. A meeting like this provides a valuable opportunity to communicate our counterparty expectations, as well as strengthen our ongoing relationship. Given your important role in the implementation of monetary policy, I thought I would take this opportunity to discuss the Federal Reserve's ongoing purchases of Treasury and agency mortgage-backed securities (MBS).

As you are well aware, at the September 2012 Federal Open Market Committee (FOMC) meeting, the FOMC decided to increase policy accommodation by purchasing $40 billion per month of agency MBS and continue the Maturity Extension Program (MEP). Then at its December meeting, the Committee chose to continue buying $45 billion per month in longer-term Treasury securities following the completion of the MEP. As a result of these decisions, the Federal Reserve is currently adding $85 billion in longer-term securities each month to its holdings, in addition to reinvesting principal payments from its holdings of agency MBS and agency debt securities into agency MBS.[1] Under this program, we have bought about $90 billion in Treasury securities since January and about $220 billion in agency MBS since mid-September, bringing the total par value of the Federal Reserve's SOMA (System Open Market Account) portfolio to over $2.8 trillion.[2]

In my comments today, I will describe the key differences and similarities between the recent policy action and previous programs and discuss how the Desk implements these asset purchases. As always, the views expressed here are my own and do not necessarily reflect those of the Federal Reserve Bank of New York or the Federal Reserve System.[3]

Outcome-based purchases

The FOMC's current asset purchase program has some key differences from earlier policy initiatives. When announcing previous programs to change the size or composition of its balance sheet, the FOMC communicated an expected total size of each program and an anticipated date by when it would be completed. Under the current asset purchase program, the FOMC has announced only the monthly pace and composition of purchases and noted that purchases will continue until there is a substantial improvement in the outlook for the labor market in the context of price stability. The Committee has also indicated that it will take appropriate account of the likely efficacy and costs of its purchases when adjusting their size, pace, and composition. While noting that purchase activity will depend on these factors, the

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1 The FOMC also directed the Desk to reinstate its previous policy of rolling over maturing Treasury holdings into new issues. See the Desk's Frequently Asked Questions for more information. In practice, the amount of maturing proceeds will be quite small, since securities maturing within the next three years were sold as part of the MEP

2 This excludes about $100 billion of MBS trades scheduled to settle in the future.

3 I would like to thank members of the Markets Group Staff, including Katherine Femia, Lorie Logan, Linsey Molloy, Roman Shimonov, and Nathaniel Wuerffel, who contributed to the preparation of these remarks.

Committee has not specified the time at which purchases will be complete or the total expected size of the purchases. Instead, under this conditional, outcome-based approach, the Committee has enacted a policy that will adjust to incoming information about labor market conditions and the broader economy, as well as its ongoing assessment of the efficacy and costs of purchases. Retaining the flexibility to adjust purchases is an important feature of the program, given our relatively limited experience with the use of the balance sheet as a monetary policy tool and the uncertainty about the policy's effects.

One of the potential costs of additional purchases is that they could disrupt functioning in Treasury and MBS markets – a cost that the Desk carefully assesses when it implements the FOMC's policy directive. As you know, there is a finite supply of Treasury and agency securities available to purchase, in terms of both total amount and amounts available in the market at any given time. If the Federal Reserve were to become too dominant a buyer or holder, it could reduce the tradable supply of these securities and discourage trading among market participants, leading to diminished liquidity and price discovery. A significant deterioration in liquidity could lead investors to demand a premium for transacting in these markets, ultimately raising borrowing costs and undermining the program's policy goal.[4] However, as discussed later, the purchases have gone smoothly so far, and market liquidity seems to be holding up well.

Although the current program is different in some respects from prior balance sheet programs, its intended purpose and the ways the Committee anticipates it will impact the economy are similar. The purchases are conducted to achieve the FOMC's dual mandate of maximum employment and price stability. Asset purchases help achieve this mandate by putting downward pressure on longer-term interest rates, supporting mortgage markets, and helping to make broader financial conditions more accommodative.

The current purchases reduce interest rates and ease financial conditions through the same transmission channels as previous balance sheet programs. As has been widely discussed in the academic literature, one of the most important channels is the portfolio balance channel.[5] This theory relies on the premise that financial assets are imperfect substitutes in investors' portfolios, and, as a result, a rise in the demand for a particular financial asset relative to its supply – reflecting the Federal Reserve's asset purchase programs, for example – will increase its price and reduce its yield. After selling that asset to the Federal Reserve, investors may rebalance their portfolios by investing in other assets, raising the prices of those assets, lowering their yields, and easing overall financial conditions.

The Federal Reserve's asset purchase programs were designed to remove risk from the portfolios of private investors. For example, Treasury and agency MBS purchases remove duration risk, thereby lowering longer-term interest rates and reducing private sector borrowing costs. Furthermore, agency MBS purchases also remove prepayment risk in the market. Since homeowners can prepay their mortgage at any time, MBS investors do not know when they will receive their cash flows. Investors generally demand an extra return to bear this risk, which is incorporated into MBS yields and in part passed along to borrowers. The removal of a considerable amount of this risk by the Fed's purchases would be expected to lower MBS rates by lowering this extra return, thereby reducing primary mortgage rates, stimulating demand for housing and prompting increased refinancing activity.

Even though the Committee is communicating a monthly pace and composition of purchases, the predominant effect of those purchases on interest rates likely still comes from the expectations of the total stock of risk that will be removed from private investors and the length of time that the Federal Reserve will hold this risk. One feature of the current program

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[4] For more information about Treasury market liquidity, see Fleming (2002) and Fleming (2000).

[5] For example, see Li and Wei (2012), Gagnon et al (2010), Krishnamurthy and Vissing-Jørgensen (2011), Wright (2012), and Hancock and Passmore (2011).

is that market participants' expectations of the total amount and composition of securities that the Desk will purchase – and thus, the amount of monetary policy accommodation – will evolve over time, along with incoming information about the economy, as well as considerations about policy efficacy and costs.

The Desk's most recent Survey of Primary Dealers indicates that the median respondent expects the FOMC to purchase about $1 trillion in securities, roughly equally split between Treasuries and agency MBS, over the course of 2013 and early 2014. However, the uncertainty around this expectation is large – at $500 billion it is almost as large as the entire size of the large-scale asset purchases announced in November 2010 or the Maturity Extension Program announced in September 2011.[6] This likely reflects uncertainty about how the economy will evolve and how the FOMC will adjust its purchases in response to changes in the economic outlook or the costs and benefits of the policy.

Implementation of the current asset purchase program

In implementing the current purchase program, the Desk has operated in a similar manner as in past programs. As always, outright purchases in Treasuries and agency MBS are conducted through operations that seek to acquire securities at competitive prices while minimizing any market disruptions.

There are some key differences between our Treasury and MBS operations that I would like to discuss. As counterparties in our operations, you know that outright purchases of Treasury securities are conducted through large-scale, multiple-security auctions via the Desk's FedTrade platform, which allows all primary dealers to place multiple offers across all eligible securities simultaneously. Purchases of MBS, on the other hand, are currently conducted using TradeWeb, a commercial trading platform.[7] The platform allows buyers to solicit offers for one security at a time from up to four counterparties, so the Desk includes dealers in operations on a rotating basis. As a result, the Desk purchases MBS in a series of smaller-scale, more frequent auctions. We are currently expanding the FedTrade platform, in order to have more flexibility in conducting MBS auctions in the future.

In the Treasury market, purchases are distributed across securities with different maturities, with the intent of removing a specified amount of duration risk from the market without causing significant market disruption. For recent programs, this maturity distribution has been announced at the outset, and a schedule of specific operations is released at the beginning of each month.[8] Such transparency is possible because the composition of Treasury coupon securities available for purchase is reasonably predictable. Within this purchase distribution, both newly issued (on-the-run) and more seasoned (off-the-run) securities are often purchased.

Outright purchases of MBS are executed in the TBA (To-Be-Announced) market. The TBA market is built around a trading convention that allows market participants to trade thousands of different MBS backed by millions of individual mortgages using only a few standardized contracts, which are grouped based on key characteristics such as the coupon of the security that will be delivered. These factors help make the TBA market homogeneous and highly liquid – useful characteristics given the scale of Desk operations.[9] Mortgage originators sell

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[6] Using the individual answers to Question 8 in the January 2013 Survey of Primary Dealers on the probability of the size of the balance sheet at the end of 2013 and 2014, one can calculate the average individual uncertainty around each dealers' point forecast. For the end of 2014, this is around $500 billion.

[7] The Desk also has the ability to execute agency MBS trades by other means.

[8] Of course, this maturity distribution could change as part of the Committee's ongoing assessment of the efficacy and costs of asset purchases.

[9] For more information on the TBA market, see Vickery and Wright (2013).

MBS backed by new loans into the TBA market because of the market's liquidity and because the TBA market is a forward market, which allows originators to hedge the risk associated with locking in loan rates with new borrowers.[10] The Desk concentrates its TBA purchases in "production coupons," since the yields and prices for production coupons are directly related to the primary mortgage rate.

In general, the Desk purchases MBS in the TBA market across different agencies, maturities, and coupons in amounts that are roughly proportional to anticipated issuance of those securities. Issuance of new TBA securities varies over time, based on the level of refinancing and home purchase activity. Moreover, because the coupon at which new MBS are originated depends on the overall level of interest rates, the possibility of future fluctuations in the primary mortgage rate makes it difficult to determine well in advance which coupons will be issued. As a result, the Desk is not able to provide the same detailed guidance about the composition of its MBS purchases as is possible with Treasury purchases. At times, we adjust our purchases when certain market functioning indicators suggest that particular securities are less readily available for settlement relative to other securities.[11]

As it has always done, the Desk closely monitors how its activities impact financial market functioning. Good market functioning is integral for the successful implementation of the FOMC's directive and for the effective transmission of monetary policy to the real economy. When evaluating market functioning, we consider measures of market activity, such as trading volumes, bid-ask spreads, trade sizes, quote sizes, financing costs, and settlement fails, as well as other indicators. We also monitor the performance of our operations (for example, the prices at which we can execute in comparison to prevailing market quotes or the total amount of competitively priced propositions), the concentration of market participants' holdings in securities with certain characteristics, the extent and concentration of dealer participation in operations, and the pace of settlement of our MBS purchases. Based on these types of measures, purchases of both Treasury securities and MBS have gone smoothly so far, and market liquidity seems to be holding up well.

In addition to this monitoring, we have developed active policies to help prevent market dysfunction as a result of our operations. In the Treasury market, the Desk ceases purchases of a specific security once SOMA holdings of that security reach 70 percent of the outstanding stock. In addition, when SOMA holdings of a specific issue exceed 30 percent of outstanding securities, the Desk limits the rate at which it acquires new holdings of that issue based on a predetermined, graduated schedule. The Desk also refrains from purchasing certain Treasury securities in its operations if investors' demand for those specific securities as collateral in the repurchase market or as deliverables into Treasury futures contracts is relatively high. In the event of significant market demand for specific Treasury collateral held by the SOMA, investors can borrow these holdings through competitive securities lending operations.

In the MBS market, the Desk is supportive of market functioning in two main ways. First, as I mentioned earlier, we adjust our purchase allocation as necessary to respond to concerns about relative scarcity in particular contracts. Second, we use dollar roll transactions to facilitate the orderly settlement of our unsettled purchases. Selling dollar roll contracts essentially postpones the settlement of an outstanding purchase, while buying dollar roll contracts brings it forward. The Desk actively monitors implied financing rates on dollar roll

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[10] Since TBA transactions settle on a forward basis, the Desk is exposed to the risk that a primary dealer is unable or unwilling to meet its contractual obligations. If a counterparty does not deliver on its obligation, the Desk could be forced to replace the transaction at a higher prices. As a result of this risk, the Desk requires primary dealers to post collateral, or margin, in response to changes in the market value of the security

[11] For example, in January, the Desk decreased its purchases of 30-year fixed-rate 3.5 percent coupon MBS relative to projected issuance as a result of concerns about the near-term availability of this coupon for settlement and increased its purchases of 3 percent coupon MBS.

contracts for the level of supply of the securities that the Desk expects to be delivered. When implied financing rates reach levels notably below the general level of short-term interest rates, thereby signaling supply concerns, the Desk sells dollar roll contracts to postpone settlement of that outstanding purchase.[12] Our dollar roll activity is consistent with the guidelines laid out by the Treasury Market Practices Group (TMPG), an industry group sponsored by the Federal Reserve Bank of New York. TMPG Best Practices encourage market participants who have amassed a particularly large position in the agency MBS market to manage that position mindful of the need to support market liquidity and to take care that sudden changes in trading strategies do not adversely impact liquidity or settlement.[13] The Desk has consistently transacted in the dollar roll market when purchasing MBS to facilitate the orderly settlement of its purchases and will continue to do so as necessary to avoid deterioration in the liquidity of these contracts.[14]

So far, there seems to be little evidence that the current pace of purchases is straining the market's ability to deliver securities to us. The current monthly pace is within the range seen during the Federal Reserve's previous asset purchase programs, whether measured in par terms or when adjusted for duration risk. Treasury purchases make up only about 25 percent of monthly gross issuance of coupon securities, and current SOMA holdings are less than 20 percent of coupon Treasuries outstanding, although in some maturity sectors these percentages are significantly larger.

The FOMC's capacity to purchase MBS is somewhat more difficult to gauge, given the uncertainty around future mortgage origination discussed earlier. Since the beginning of the current purchase program in 2012, we have purchased nearly $75 billion in MBS on average per month, including reinvestments. This translates into about 50 percent of monthly gross issuance, below the monthly purchase rate of roughly two-thirds during the first round of large-scale MBS purchases in 2009. If refinancing activity declines, leading to a decrease in gross issuance, our purchases could exceed these levels. Of course, the pace of asset purchases is not strictly limited by the amount of new mortgage origination, as market participants can also deliver older securities into TBA contracts. As the pace of MBS issuance evolves, the Desk will continue to watch the market functioning indicators discussed above, with a particular emphasis on the market's ability to settle further purchases.

Conclusion

Overall, I believe the Desk has effectively and efficiently carried out the FOMC's directive to purchase additional Treasury securities and agency MBS in a transparent fashion that achieves the FOMC's policy objectives, supports orderly market functioning, and obtains competitive market prices. I also believe that the Federal Reserve's balance sheet policies have been effective in easing financial conditions, particularly with respect to making historically low borrowing costs available to existing and prospective American homeowners, as well as lowering interest rates to spur business investment and household spending. To achieve our policy mandate, we rely on your continued ongoing and active participation in our operations both for your own accounts and for the accounts of your customers, consistent with your role as primary dealers. We will continue to implement the FOMC's

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[12] The Desk also purchases dollar roll contracts when implied financing rates are sufficiently positive. Such operations occurred in December 2011.

[13] See TMPG Best Practices.

[14] Selling dollar rolls when concerns arise about the availability of certain TBA contracts is conceptually similar to making SOMA Treasury holdings available to the market through our securities lending program. One key difference is that the Desk offers settled Treasury holdings to the market through its securities lending program, whereas the Desk only rolls unsettled MBS holdings.

directive, with the goal of supporting a stronger economic recovery in the context of price stability.

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