Brian P Sack: Preparing for a smooth (eventual) exit

Remarks by Mr Brian P Sack, Executive Vice President of Markets Group of the Federal Reserve Bank of New York, at the National Association for Business Economics Policy Conference, Arlington, Virginia, 8 March 2010.

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Thank you for inviting me to speak today. In my remarks, I will provide an update on the progress that the Federal Reserve is making toward preparing for a smooth exit from the extraordinary policy actions that were taken in response to the financial crisis.[1] I should note up front that I will not be providing any information about the likely timing of policy tightening; those decisions will be made and communicated by the Federal Open Market Committee (FOMC). Instead, I will focus my comments on the policy tools and strategy that are likely to be used whenever that exit becomes appropriate. I will also discuss the preparedness of financial markets for the Fed's exit, in order to assess how financial conditions may evolve as the exit approaches and gets under way.

When the time comes to tighten monetary policy, the Federal Reserve will be embarking on a tightening cycle like no other in its history. First, this tightening cycle will have two policy dimensions, in that the FOMC will have to decide on the path of its asset holdings in addition to the path of the short-term interest rate. Second, we will be using tools to drain reserves that are new and that will have to be implemented on a scale that the Fed has never before tried. And third, we will be operating in a framework of interest on reserves that has not been fully tested in U.S. markets.

All of that may sound risky. However, I believe the Federal Reserve is positioned to minimize any risks involved. Most important, we have worked hard to ensure that we have all of the tools needed to exit, and FOMC members have begun to describe a strategy for using them that is cautious along several dimensions. In addition, if we communicate effectively, the markets should be clearly informed and well prepared ahead of the exit. These are the points that I will emphasize in more detail.

Liquidity facilities: a success story

When discussing the Federal Reserve's exit strategy, it is important to separate liquidity facilities from the stance of monetary policy. While the exit from the accommodative monetary policy stance has yet to begin, the exit from liquidity facilities is nearly complete. Let me begin with some comments on recent developments regarding the liquidity facilities, and then I will move on to monetary policy.

As is well known, the Federal Reserve launched a number of liquidity facilities to provide short-term funding to the financial markets during the crisis, in order to meet the extraordinary demand for liquidity at that time. Here I am referring to those facilities that provided funding at maturities of up to three months to particular sets of firms, such as the primary dealers, money market mutual funds, commercial paper issuers, and depository institutions.[2] Just today, we conducted the last operation associated with those facilities,

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[1] The views expressed here are not necessarily shared by the Federal Open Market Committee or by other members of the staff of the Federal Reserve Bank of New York.

[2] In discussing these facilities, I am not including any provision of credit intended to support specific institutions, including those associated with the Maiden Lane LLCs. I include the Term Securities Lending Facility in with short-term lending facilities, even though it provided the market with Treasury securities rather than reserves, because it was often used to find funding for positions in less liquid securities.

meaning that all of the short-term liquidity facilities that were introduced during the crisis have now effectively been retired. The only special liquidity program that remains active is the Term Asset-Backed Securities Loan Facility, which I consider to differ from the short-term liquidity programs because it provides funding for up to five years.

With the wind-down of these short-term liquidity facilities, it is a good time to look back and assess their performance. The bottom line here is simple: these programs were an unquestionable success. We have witnessed a remarkable improvement in the functioning of short-term credit markets and an impressive recovery in the stability of large financial firms. While a whole range of government actions contributed to this recovery, giving financial institutions greater confidence about their access to funding, and that of their counterparties, was most likely a crucial step toward achieving stability.

Moreover, the exit from these facilities has been quite smooth. At their peak, these facilities provided more than $1.5 trillion of credit to the economy. Today, the remaining balance across them is around $20 billion. It is impressive that the Fed was able to remove itself from such a large amount of credit extension without creating any significant problems for financial markets or institutions. That success largely reflects the effective design of those programs, as most were structured to provide credit under terms that would be less and less appealing as markets renormalized. This design worked incredibly well, as activity in most of the facilities gradually declined to near zero, allowing the Fed to simply turn them off with no market disruption.

The success of these facilities should be judged by the outcomes they produced for financial market functioning, and not by the financial returns they generated on the Federal Reserve's books. However, there are several reasons why the Fed might be expected to profit from this type of lending under most circumstances. First, the Fed is providing funds in response to an extreme move in the price of liquidity – that is, it is in effect buying a cheap asset. Second, the programs themselves, if successful at returning market functioning, would help the performance of the Fed's loans to be sound. And third, the lending under these facilities has to be adequately secured.

Asset holdings: a policy lever

While the exit from the liquidity facilities has been successful, the exit from the accommodative stance of monetary policy involves a different set of challenges. Many of these challenges arise from the Federal Reserve's outright holdings of Treasury debt, agency debt and agency mortgage-backed securities (MBS), which together represent the overwhelming share of the Fed's balance sheet today. Indeed, as a result of our large-scale asset purchase programs, these asset holdings now account for $2.0 trillion of the Fed's $2.3 trillion balance sheet.

The Federal Reserve is approaching the scheduled end of its large-scale asset purchases. We have bought $169 billion of agency debt to date, nearly fulfilling our plan to purchase "about $175 billion". For MBS, we have only about $30 billion of purchases remaining to reach our $1.25 trillion target. In addition, we completed $300 billion of purchases of Treasury securities late last year. Looking across these programs, we have now purchased $1.69 trillion of assets, bringing us 98 percent of the way through our scheduled purchases. To get to this point, the Trading Desk at the New York Fed has so far conducted 126 discrete operations to purchase Treasury and agency debt, and has managed 292 trading days on which either it or its investment managers have acquired MBS.

My view is that the purchase programs have helped to hold down longer-term interest rates, thereby supporting economic activity. With the conclusion of the programs approaching, the Desk has been tapering the pace of its purchases of agency debt and MBS. However, even as the pace of our purchases has slowed, longer-term interest rates have remained low, and MBS spreads over Treasury yields have remained tight. This pattern suggests that the effects of the purchases have been primarily associated with the stock of the Fed's holdings rather than with the flow of its purchases. In that case, the market effects of the purchase program will only slowly unwind as the balance sheet shrinks gradually over time.[3]

In my previous speech back in December, I discussed in detail the channels through which these market effects may arise. By removing large amounts of duration and prepayment risk from the market, the Fed's asset purchases reduced the volume of risk that the market had to hold, which lowered the risk premia on those assets. Put differently, the purchases bid up the prices of those assets and hence lowered their yields. The lower levels of yields would be expected to boost other asset prices as investors substitute into alternative asset classes. These patterns describe what researchers often refer to as portfolio balance effects.

Such effects are important to consider, because they have implications for monetary policy. If the Fed's holdings of assets have produced lower long-term interest rates, the FOMC has to carefully take into consideration how it will manage the size of its balance sheet going forward. In particular, a rapid and substantial reduction in our holdings of assets would likely push up long-term interest rates that is, it would put upward pressure on those rates by unwinding the portfolio balance effect. That increase in long rates would, in turn, weigh on other asset prices, reversing the positive effects that had been associated with the expansion of the Fed's balance sheet.

Under this view, the size of the Fed's asset holdings becomes a relevant policy lever. Accordingly, this will be the first tightening cycle for which there are two broad policy decisions in play, as the FOMC will have to set out not only the path of the short-term interest rate, but also the path of its asset holdings. The decisions on these two variables will have to be made in conjunction with one another to produce the desired outcome for economic activity and inflation.

These considerations leave open a range of outcomes for how the two instruments will be used. In his February 10 testimony, Chairman Bernanke described a possible approach for managing the size of the balance sheet. In particular, he indicated that he does not currently anticipate that the Fed will sell any of its asset holdings until the economic recovery is more firmly established and policy tightening has gotten underway. Until that time, the portfolio would shrink only through asset redemptions. Chairman Bernanke noted that the Fed's holdings of agency debt and MBS are being allowed to roll off the balance sheet, without reinvestment, as those securities mature or are prepaid, and that the FOMC may choose to redeem some of its holdings of Treasury securities in the future, as well.

With this approach, the FOMC would be shrinking its balance sheet in a gradual and passive manner. That, in my view, is a crucial message for the markets. It should limit any reversal of the portfolio balance effects described earlier, effectively putting reductions in asset holdings in the background for now as a policy instrument. As long as this approach is maintained, it would leave the adjustment of short-term interest rates as the more active policy instrument – the one that would carry the bulk of the work in tightening financial conditions when appropriate.

This approach is cautious in several dimensions. First, a decision to shrink the balance sheet more aggressively could be disruptive to market functioning. Second, a more aggressive approach would risk an immediate and substantial rise in longer-term yields that, at this time, would be counterproductive for achieving the FOMC's objectives. Third, the effects of swings in the balance sheet on the economy are difficult to calibrate and subject to considerable uncertainty, given our limited history with this policy tool. And fourth, policymakers do not need to use this tool to tighten financial conditions. They can tighten financial conditions as

[3] An alternative explanation is that the large-scale asset purchases have had no effect and that the low levels of rates and spreads simply reflect other factors. However, I believe the evidence indicates that the asset purchases have contributed to the low level of longer-term rates.

much as needed by raising short-term interest rates, offsetting any lingering portfolio balance effects arising from the still-elevated portfolio.

Even under this cautious strategy of relying only on redemptions, the Federal Reserve could achieve a considerable decline in the size of its balance sheet over time. From now to the end of 2011, we project that more than $200 billion of the agency debt and MBS held by the Federal Reserve will mature or be prepaid, though the actual total will depend on the path of long-term interest rates and the prepayment behavior of mortgage holders. Thus, the Fed's asset holdings would shrink meaningfully if the FOMC maintains its current strategy of not reinvesting those proceeds. In addition, about $140 billion of Treasury securities mature between now and the end of 2011, giving the FOMC scope to reduce its asset holdings even further if it chooses to not replace some of those maturing securities.

While the passive strategy of relying on redemptions may be appropriate for now, it might not be sufficient over the longer-term. One problem is that relying only on redemptions would still leave some MBS holdings on our balance sheet for several decades. As indicated in the minutes from the January meeting, the FOMC intends to return to a Treasuries-only portfolio over time. This consideration could motivate the FOMC to sell its agency debt and mortgage-backed securities at some point, once the economic recovery has progressed sufficiently.

Draining tools: control of short-term rates

Under the strategies just described, the Fed's asset holdings are likely to still be elevated at the time that the FOMC wants to raise short-term interest rates. That creates a challenge for controlling those rates, because of the large amounts of reserves that were created from the Fed's purchases of those assets. It is therefore important for the Fed to determine the way in which it will raise short-term interest rates in an environment with so much liquidity – a topic that I will now cover.

The primary vehicle for making adjustments to short-term interest rates in that environment is the ability to pay interest on reserves. We would expect changes in the interest rate on reserves to have a significant influence on other short-term interest rates. However, in order to ensure our ability to influence those other short-term interest rates, we have been developing two tools that can be used to reduce the large amount of excess reserves in the banking system – term deposits with banks and reverse repurchase agreements (reverse repos) with a broader universe of financial institutions. Let me first provide an update on the progress we have made in developing these tools.

On term deposits, the Federal Reserve has received public comments on the proposed structure of the facility that was published in December, and we are working toward its final form. As described in the recent Monetary Policy Report, the Federal Reserve expects to be able to conduct test transactions in the spring and to have the facility fully ready, shortly thereafter, to conduct transactions when needed.

On reverse repos, we have already successfully run small-scale operations using Treasury and agency debt as collateral with primary dealers. However, that leaves two significant steps still to take in preparing the tool. One is developing the capacity to use our MBS holdings as collateral. Work in that area is nearly complete, and we will likely conduct some small-scale operations with MBS collateral in a month or so to exercise that capability. The other step is expanding the set of counterparties that we use for such operations. Earlier today, we published criteria for money market mutual funds to become eligible to participate in reverse repo operations, which was a first and important step in that direction. We are currently working with other types of firms to assess their potential participation in the program, as well. Our expectation is to have arrangements in place and to be ready to transact with some non-dealer firms by the end of the second quarter. This expansion of counterparties is important for boosting the capacity of the program.

The bottom line is that the preparation of both facilities is advancing very effectively. Looking across the two programs, we will have established the capacity to drain a significant portion of excess reserves by the second half of the year. Of course, achieving this capacity does not say anything about how and when the FOMC will decide to actually drain reserves.

The actual timing and size of draining operations, and their relation to changes in the interest rate paid on reserves, will depend on how market and economic conditions evolve. Chairman Bernanke discussed one possible sequence in his February 10 testimony. He suggested that operations to drain reserves could be run on a limited basis well ahead of policy tightening, in order to give market participants time to become familiar with them, and then could be scaled up to more significant volume as we approach the time for policy tightening.

Removing a portion of the excess reserves from the system ahead of increasing the rate paid on reserves is a cautious approach, as it should improve the Fed's control of short-term interest rates when it comes time to tighten monetary policy.[4] To be sure, even at today's reserve levels, we would expect the interest rate paid on excess reserves to exert considerable pull on other short-term interest rates such as the federal funds rate or repo rates. However, we are unsure of the exact relationship between these rates and believe that it is likely to be tighter when the banking system is not as saturated with liquidity as it is today. Thus, it may be prudent to remove some portion of excess reserves before raising the interest rate on reserves.

Note that the policy tightening in this scenario will still likely be taking place in an environment of large excess reserve balances, and the main workhorse of the tightening cycle will still be the interest paid on reserves. However, the draining tools can be used to best ensure the success of that framework.

Market conditions: at risk on exit?

Finally, let me turn to conditions in financial markets and discuss whether there may be vulnerabilities related to the Fed's exit from the current monetary policy stance. I think there are two potential areas of concern.

The first potential concern is that the exit strategy could simply cause confusion among market participants, prompting volatility in asset prices. As noted earlier, this tightening cycle, when it arrives, will be more complicated than past cycles, as there will be more decision points facing policymakers. With more decision points come more opportunities for the markets to be confused by our actions. The recent changes to the discount rate and the Treasury's Supplementary Financing Program balances highlight this concern, as the amount of attention that those actions received was outsized relative to their significance for the economy or for the path of short-term interest rates.

The burden is on the Fed to mitigate this risk by communicating clearly about its policy intentions and the purpose of any operational moves it might take. In this regard, the forward-looking policy language that the FOMC is currently using in its statement is important. I would argue that this language contains much more direct and valuable information about the likely path of the short-term interest rate target than does any decision about draining reserves. Indeed, it will be difficult for market participants to make precise inferences about the timing of increases in the target interest rate from the patterns of reserve draining alone, in part

4 Some have discussed whether the draining of excess reserves has effects on the economy beyond the implications for short-term interest rates. In my view, it would be surprising if there were significant effects on the real economy or inflation associated with substituting one short-term, liquid, risk-free asset (reverse repos or term deposits with the Fed) for another (reserves), except for the degree to which that substitution affects the Fed's control of overnight interest rates.

because the FOMC has not specified the path of reserves it intends to achieve before raising interest rates.

The second potential concern that some may have is whether the markets have adequately priced in the exit strategy. However, a few considerations should limit this concern. Most important, the current configuration of yields and asset prices incorporates expectations that short-term interest rates will begin to rise around the end of this year. Thus, the markets seem prepared for the risks toward tighter policy. Moreover, looking out to longer maturities, the shape of the Treasury yield curve appears to incorporate not only expectations of policy tightening, but a decent-sized term premium on longer-term securities. Indeed, the term premium is well above the levels observed over most of the past several years, even though inflation is likely to be low and upside inflation risks are limited. This should help to diminish the chances of a sizable upward shift in yields.

A related issue is whether the current levels of risky asset prices will prove robust in a rising rate environment. This may be a particular concern among those who argue that the current low policy rate environment has fueled an unsustainable rise in asset prices beyond their fundamental values. However, this is not clearly the case on a broad basis. Obviously, risky asset prices have undergone a historic rise from their trough in early 2009. But this rise began from an extreme starting point, one in which asset prices were being depressed by the baseline forecast of a deep recession, by the prospect of further downside risks to the economy, and by very elevated risk premiums.

As the economy stabilized, asset prices benefitted from both the improving economic outlook and a significant renormalization of risk premiums – a pattern that was a desired outcome from the stance of monetary policy. Moreover, we do not see definitive signs that risk premiums have broadly become too low at this point. To be sure, a number of significant risks remain in the economic outlook, and those translate into financial market risks. Eventually, though, we expect to reach a period of sustained, above-trend growth to absorb the substantial slack in place, which is an environment that should be quite supportive of risky asset prices. Policy tightening will presumably occur as that happens, limiting the downside risk to markets associated with policy actions.

Conclusion

In conclusion, the exit from the various liquidity facilities that the Federal Reserve implemented has been very successful, as the up-front design of those facilities reduced the need to actively manage the end of those programs. However, the exit from the current stance of monetary policy is quite different, in that it will have to be actively managed to ensure a smooth exit.

I began the speech by noting that we face an extraordinary challenge with this exit, given the historic steps that have been taken with the Fed's balance sheet. This challenge, which involves operating in uncharted territory along several dimensions, will inherently involve some uncertainties and risks. However, as I hope is clear from my remarks, the Federal Reserve's efforts to date should minimize those risks. Indeed, I believe the Fed's efforts have been prudent along a number of dimensions.

As a first step, we have been careful to make sure we have an adequate set of tools. To that end, we have developed multiple tools that can be used for draining reserves, in order to ensure our capability to do so. Moreover, we have been testing those tools and will continue to take steps to ensure that we and the markets are prepared to use them in more significant volumes when needed. Developing the tools is not enough, though. As a second step, policymakers will need to formulate a strategy for using them in an appropriate manner to avoid any undesired outcomes for financial markets and the economy.

The FOMC is actively engaged in determining that strategy, as indicated in the FOMC minutes from the January meeting. The strategy to be employed has not been fully decided, but recent speeches by FOMC members and the recent FOMC minutes have begun to convey some of the possibilities. Many of the potential steps described seem to guard against the risks involved. For example, reducing the size of the Fed's balance sheet through redemptions for now will produce a gradual adjustment that will be easier for the markets to digest. In addition, steps taken to drain reserves ahead of policy tightening may best ensure the success of interest on reserves at influencing other short-term interest rates.

Overall, an approach along these lines should help to ensure a smooth exit from the current accommodative stance of monetary policy. Moreover, if the Fed's intentions are well communicated to the financial market participants, they too should be fully prepared and in the best possible shape for navigating this exit.