

GLOBAL FIXED INCOME MARKETS

The Federal Reserve's balance sheet

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As the U.S. Federal Reserve continues to gradually raise interest rates from historically low levels, the market's attention is now turning to the next phase of the policynormalization process: balance-sheet reduction. We expect this process to begin in late 2017 or early 2018. In this paper, our Fixed Income Strategy Committee lays out its view on why management of the Fed's balance sheet is important for investors, and how the Fed will likely proceed.

A short history of the Fed's balance sheet

Before we speculate on what the Fed's balance sheet will look like in the future, it is important to touch on its historical role. Prior to the global financial crisis and quantitative easing, the balance sheet was not used as an active policy tool by the Fed. Instead, the assets held were determined mainly by the public's demand for currency, which was itself largely a function of economic growth.

As a direct result of the Fed's unconventional monetarypolicy actions taken in the aftermath of the financial crisis, the balance sheet is now substantially larger than what demand for currency would imply. Absent reductions in the size of the balance sheet, this will remain the case for some time into the future. In fact, if the Fed left its balance sheet unchanged, currency demand would not "catch up" to the balance sheet's current size until around 2035.

The Fed's future balance sheet

It is not clear, however, whether the Fed can or should return to pre-crisis conditions given how much the banking system has changed over the past decade. Capital requirements for banks are much higher than they were before the crisis, and we believe that this translates into a need for the Fed to maintain a large balance sheet indefinitely. The single most transformative regulatory change in the aftermath of the financial crisis has been the amount of capital that banks must hold against short-term liabilities such as deposits. Before the crisis, banks were only required to hold capital against deposits in the U.S and this capital was held as required reserves at the Fed. Crucially, these U.S.-based deposits then, as now, represented only a fraction of the banking system's total short-term liabilities. At the time, this cushion was not considered problematic as banks would routinely tap additional sources of funding from financial markets.

This situation changed during the financial crisis, which resulted in a global shortage of liquidity as the capital held by banks against short-term liabilities proved to be grossly insufficient. As a result, global regulatory efforts have strived to improve banks' liquidity buffers by matching their short-term liabilities with high-quality liquid assets that can be used to meet unanticipated liquidity shortfalls. Instead of only having to hold capital against U.S.-based deposits, banks must now hold high-quality liquid assets against all global short-term liabilities that expire in fewer than 30 days. These capital requirements far exceed the amount of required reserves held by banks in the pre-crisis years. To get an idea of the size of this change in capital needs, required reserves prior to the crisis were around US\$100 billion. Now, these holdings of high-quality liquid assets amount to nearly US\$4.5 trillion.

This increase in capital requirements informs our estimate of what the normal size of the balance sheet should be as the Fed, through its massively expanded balance sheet, is providing what might be considered the safest and most liquid asset in the world: reserves. Indeed, reserves form a substantial portion of the banking system's high-quality liquid assets. Going forward, banks may prefer to hold these reserves as their primary liquidity buffer, as the use of reserves to meet unanticipated liquidity shortfalls entails next to no disruption to bank or market operations if used as such. This is in contrast to other assets that would also satisfy regulatory capital requirements – primarily U.S. government bonds and mortgage-backed securities. We believe that the Fed may also prefer to maintain a larger balance sheet, as doing so will enable the central bank to satisfy an ancillary policy goal of bolstering financial stability.

In summary, due to regulatory changes and banks' preference to use reserves as liquid assets, the Fed's balance sheet may be permanently larger. In addition to demand for currency, the size of the balance sheet will also include demand for reserves.

What to expect

There are three critical elements to the Fed's plans to reduce the size of its balance sheet: when the reduction will start; the pace; and what the Fed will consider the appropriate amount of assets to hold at the end. From public comments as well as published guidance, we know a fair amount about the first two aspects, while the third one is more nebulous.

In terms of timing, the Fed has long maintained that it would address the size of its balance sheet after the normalization of interest rates was well underway. With the Fed funds rate now about halfway towards its median estimate of the long-run neutral policy rate of 2.75%, balance-sheet reduction is in the offing. Indeed, in the May minutes of the Federal Open Market Committee, board members indicated that they would like to begin reducing the size of the Fed's balance sheet by the end of this year.

We know that the Fed is going to use the maturity schedule of its holdings of U.S. government bonds and mortgagebacked securities to facilitate the reduction of the balance sheet. However, the rate at which the Fed's holdings will naturally mature is highly uneven. The Fed will control this by designating a set pace of balance-sheet reduction, which we believe will likely start at US\$10 billion per month and be comprised of U.S. government bonds and mortgage-backed securities, in order to allow the Fed to test the ability of the market to absorb the increased supply of bonds. From the May minutes, we also know that the planned pace of reductions and any changes will be both publicly announced and gradually increase. The Fed does not anticipate altering its balance-sheet policy unless there is a significant change in the economic outlook, according to the minutes.

In contrast to timing and composition, the Fed has released relatively little information regarding what the long-term size of the balance sheet will be. This likely reflects the wide range of opinions among members of the FOMC. What we do know is that the Fed has demonstrated that its framework for controlling interest rates, while maintaining a large balance sheet, works effectively. Overall, given the lack of consensus on the terminal size of the balance sheet, and reflecting the Fed's gradual approach to normalizing interest rates, we expect the shrinkage to proceed fairly slowly and be completed over several years.

In summary, we believe that the eventual reduction of the Fed's balance sheet will be very gradual, mirroring the approach that the central bank has taken to raising interest rates over the past 18 months. Moreover, the amount of re-sizing may be more limited than many think, given changes to the banking system over the past several years. This report has been provided by RBC Global Asset Management (RBC GAM) for informational purposes only and may not be reproduced, distributed or published without the written consent of RBC Global Asset Management Inc. (RBC GAM Inc.). In Canada, this report is provided by RBC GAM Inc. (including Phillips, Hager & North Investment Management). In the United States, this report is provided by RBC Global Asset Management (U.S.) Inc., a federally registered investment adviser. In Europe and the Middle East, this report is provided by RBC Global Asset Management (UK) Limited, which is authorised and regulated by the UK Financial Conduct Authority. In Asia, this document is provided by RBC Investment Management (Asia) Limited, which is registered with the Securities and Futures Commission (SFC) in Hong Kong.

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