Fed's balance sheet normalization - what to expect

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Financial markets, especially bonds, emerging market equities and currencies, were severely shocked back in May-September 2013 when Ben Bernanke, then Fed chairman, announced the intention to slow down the Fed's purchases of securities. The key lesson of that "taper tantrum" episode is that the Fed's balance sheet reduction or normalization program must be pre-announced and conducted in a manner that does not disrupt financial markets.

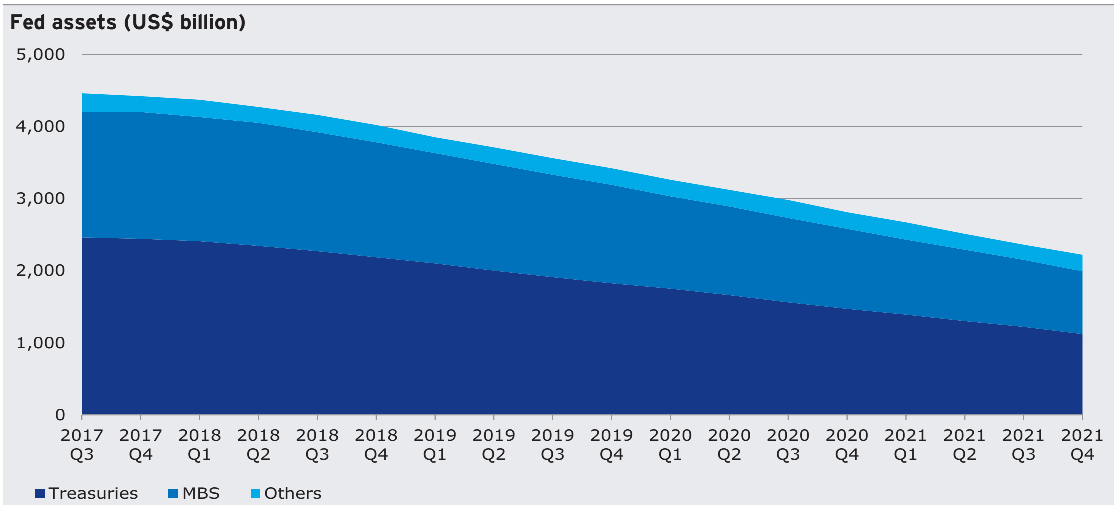
Ever since the Federal Open Market Committee (FOMC) started discussing "policy normalization" in 2014, the authorities have had in mind two sets of measures: (1) raising the federal funds rate back up to "normal" levels, and (2) returning the balance sheet to a "normal" size.

On June 14, the FOMC updated its key principles for balance sheet normalization. One principle was that rate normalization should be "well under way" before the balance sheet could be reduced in size. Given FOMC members have a longer term target for the federal funds rate of 3.0%, and that on June 14 the target range was raised to 1.00%-1.25%, one more hike this year would put the top end of the target range at 1.5%, half way to the median long run projection. That would allow for a start on balance sheet normalization later this year. A second principle calls for a "gradual and predictable" run-off (allowing maturing securities to simply roll off the Fed's balance sheet) rather than outright sales.

The shape and timing of the taper

In two statements on June 14, the FOMC proposed that the taper would start later this year. The amount of run-offs would start small, and gradually be raised at quarterly intervals.

When the Fed starts normalizing its balance sheet, they must keep in mind two sets of objectives: (1) on the asset side the end-game is to end up with all investments in US Treasuries and (2) on the liabilities side the aim will be to end up with a balance sheet that accommodates the growing quantity of Federal Reserve Notes and the desired level of commercial bank reserves.

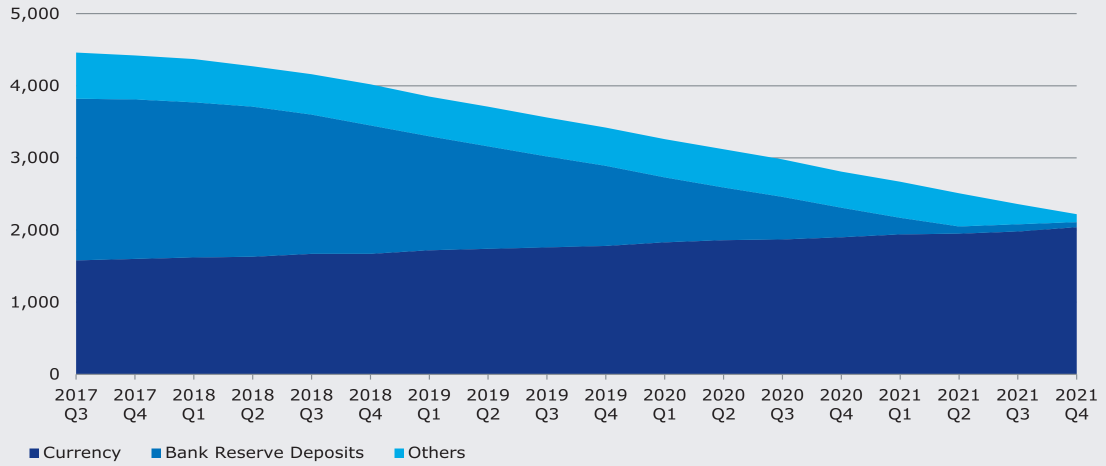


Source: The Federal Reserve Board, H4.1 release. Calculation for forward data are based on the Fed announcements of June 14 together with Invesco calculations.

On the asset side the Fed currently holds US$2.465 trillion Treasuries and US$1.780 mortgage-backed securities (MBS). The June 14 addendum to the "Policy Normalization Principles and Plans" anticipates an initial runoff of US$6 billion Treasuries per month (p.m.), rising in quarterly steps of US$6 billion to US$30 billion per month (p.m.), and an initial runoff of US$4 billion MBS p.m., rising in quarterly steps of US$4 billion to US$20 billion p.m. At the end of the quarterly adjustment process, this implies a runoff of US$50 billion p.m. or $150 billion per quarter. By my estimate, this would enable the Fed to reach a balance sheet size of US $2.5 trillion by mid-2021, consistent on the liabilities side with US$2 trillion of Federal Reserve Notes, US$100 billion of commercial bank reserve deposits plus about US$400 billion of government and other deposits plus RRPs (or Reverse Repos).

To eliminate the MBS holdings altogether and end up with a portfolio of securities that is 100% Treasuries by mid-2021, it will be necessary for the rate of MBS pre-payments and runoffs to exceed the Fed's end-target figure of US$20 billion p.m. Moreover, to keep pace with the need for a growing volume of Federal Reserve Notes and bank reserve deposits, the Fed will need to start buying Treasuries from 2020 or 2021. It is possible that there could be some sales of MBS and purchases of Treasuries in a form of "Operation Twist".

Fed liabilities (US$ billion)



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Fed staff and FOMC members are keen that the balance sheet normalization process, once announced, should operate "in the background" and not be the subject of market focus – hence the pre-announced schedule of accelerated runoffs. So far almost the only thing that the Fed has not announced is the starting date.

Through the period 2018-2021, this kind of schedule would imply a reduction in the size of the Fed's balance sheet of roughly US$2 trillion from US$4.5 trillion at present to around US$2.5 trillion – assuming a stable economic outlook and therefore no interruptions.

Market impact

When the Fed acquired its portfolio of securities in 2008-2014 it purchased most of its securities from *non-banks*, resulting in Fed payments to these institutions which boosted the level of deposits in the banking system, easing financial conditions and supporting asset values in bond and equity markets. To avoid imposing unnecessary stress on financial markets during the reverse process, it will be important to avoid any decline of bank deposits.

To be specific, the runoffs of the Fed's maturing securities will be matched by reductions in government or agency deposits at the Fed. Both sides of the Fed balance sheet will decline. However, being short of funds, the Treasury and Agencies will need to issue replacement securities, selling them to institutional investors. In other words, Treasury and Agency auction amounts will increase.

This carries with it the risk of higher long term interest rates, an increase in risk aversion by the banks and possibly lower loan growth in the banking system. This in turn could result in reduced deposits held by non-banks and therefore slower M2 growth in the US. For this reason, the Fed must ensure that bank credit creation continues uninterrupted during the normalization process in order to prevent an unwarranted slowdown in money and credit growth.

An interesting parallel to the Fed's balance sheet normalization process is worth mentioning. In 2001-2006 the Bank of Japan (BoJ) conducted a quantitative easing (QE) program, which was ended in March 2006. Astonishingly, between April and July 2006, the BoJ's total assets declined by no less than 25%!

So why couldn't the Fed conduct a similarly rapid balance sheet reduction? The main reason is that the BoJ bought mostly *short-term* securities from *banks* (not non-banks), in effect simply doing an asset swap with the banks. When these securities matured and rolled off the BoJ balance sheet from April 2006 onwards, the asset swap was easily reversed with very little impact on the economy or financial markets. Consequently my assessment is that the BoJ experience is not really relevant to the situation of the Fed today.