TCW Insight that works for you.™

METWEST

May 12, 2010

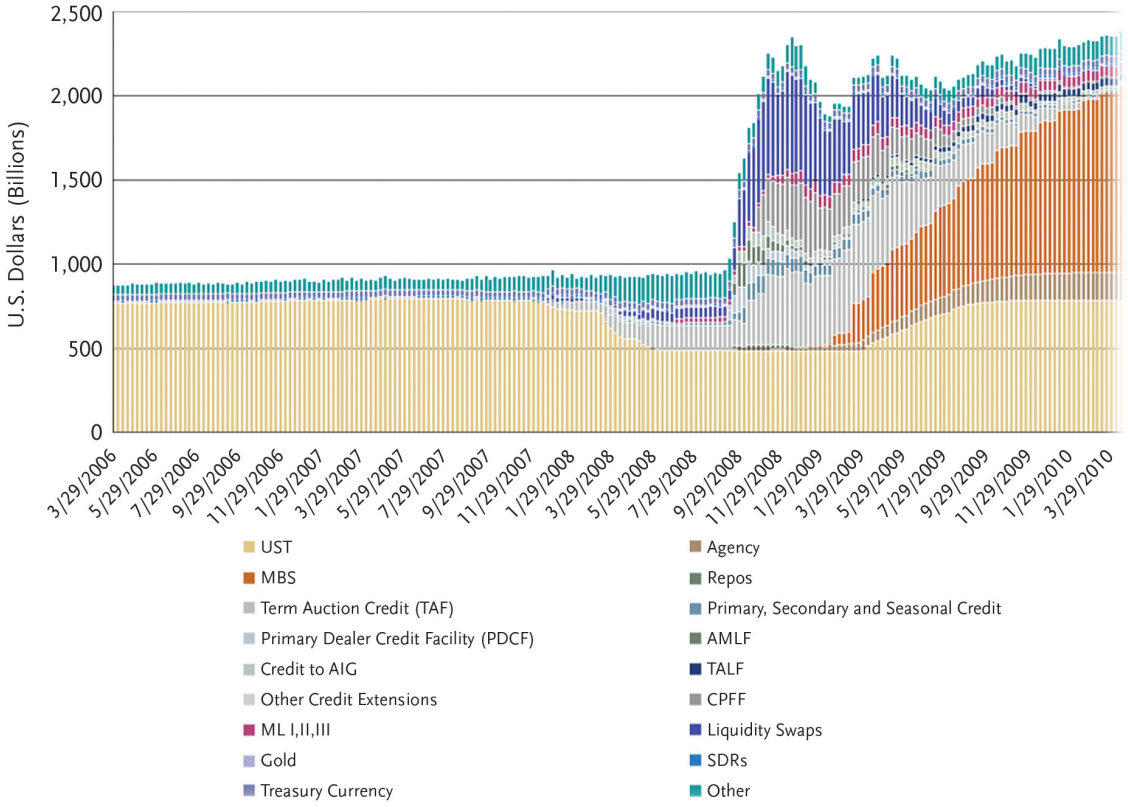
Tad Rivelle
Group Managing Director
Chief Investment Officer
High-Grade Fixed Income

Fixed Income Commentary

To Warily Return: A Note on the Fed's Exit Strategy

Monetary policy has gone where no Fed has gone before. In the wake of the September 2008 Lehman Brothers bankruptcy, every theory and tool of economic growth was activated to arrest the descent into maelstrom. As first responders to the financial disaster, the Fed burst upon the stage with a panoply of emergency loans, liquidity swaps, and credit extensions. In a matter of weeks, the central bank's liabilities (and size of its balance sheet) ballooned from approximately $900 billion to $2.3 trillion (see chart below). As could be dutifully recited by most economics undergraduates, the monetary base ("high powered money") is more or less synonymous with the quantity of liabilities which reside on the Fed's balance sheet. Hence, the capital markets have witnessed the most rapid and massive expansion in the supply of "central bank" money that has ever been experienced.

Federal Reserve Balance Sheet

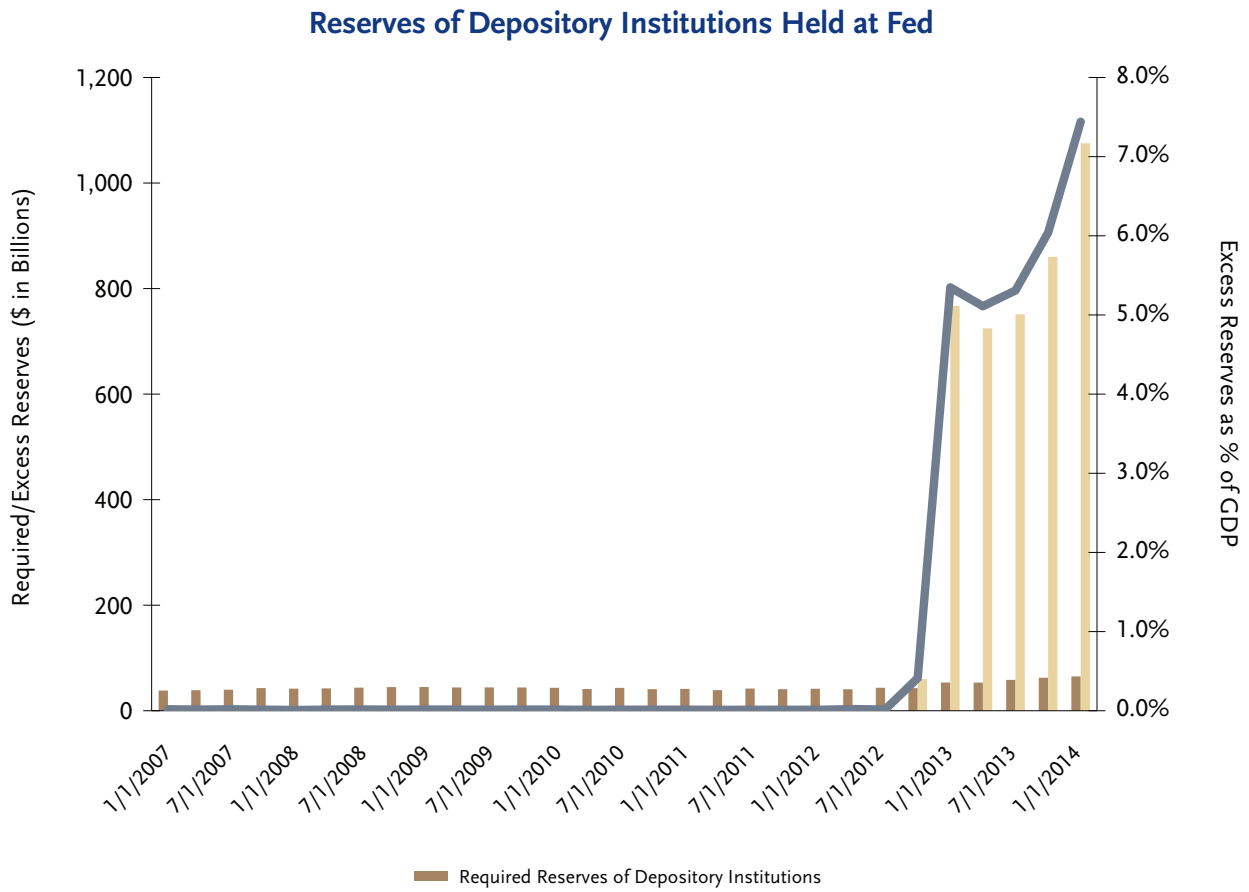


Source: U.S. Federal Reserve, Bloomberg

To Warily Return: A Note on the Fed's Exit Strategy (cont'd)

As we transitioned into 2009, the Fed began to rapidly alter the composition of its balance sheet. The temporary liquidity facilities and emergency loans which were the immediate mechanism used to enlarge the Fed's balance sheet were replaced with a sustained program of quantitative easing (QE). Longer-term additions to the Fed's balance sheet such as agency mortgage pass-throughs were added throughout 2009 and into early 2010. Since Federal Reserve purchases of securities (or of anything else for that matter) are paid for by crediting the seller's (technically, the seller's bank) account at the Fed, the supply of reserves on deposit at the Fed grew as assets held on the books of the central bank expanded.

As dictated by the so-called "reserve ratio," the Fed requires that banks hold a certain portion of their deposits[1] on reserve at the Fed. These are the required reserves; hence, any reserves held above this mandated level is deemed an "excess reserve." Note that, as reserves at the Fed mushroomed, so did the level of excess reserves. In theory, this vast supply of excess reserves has enabled those member banks in possession of these reserves to, if they so wished, accrete deposits (and loans) on their balance sheets. According to classical economics, this vast expansion of "high powered" money has set the table for a massive round of credit creation on the part of the banking system. The size of these excess reserves is staggering:



Source: U.S. Federal Reserve, U.S. Bureau of Economic Analysis, Bloomberg

Exactly how does this stock of excess reserves get translated into new private sector credit? Every dollar "on deposit" at the Fed (i.e. every reserve dollar) provides the banking system with the ability to create ten dollars[2] worth of private sector loans. With nearly $1 trillion in excess reserves—and recognizing that banks traditionally need only hold about 10% of their deposits

1 Technically, the reserve ratio applies to only a subset of the bank's deposit base, i.e. to demand deposits.

2 The Fed's required reserve ratio has been established at 10%. Hence, an additional reserve dollar allows a bank at the margin to add ten dollars of deposits (on the right hand side of the balance sheet) and, therefore, ten additional dollars worth of loans (on the left hand side of the balance sheet).

as reserves—this $1 trillion could, in the absence of capital or other regulatory constraints, support the creation of as much as $10 trillion worth of new private sector bank loans! With a total output of goods and services of perhaps $13 trillion per year, such an extreme and rapid expansion of money and credit would likely have a potent inflationary impact[3].

Should we be worried? After all, these excess reserves have been a fixture of the Fed's balance sheet since late 2008. Is the stage being set for a 1970s style inflationary policy error? In short, why will this time be different when it comes to breaking the connection between excess reserves and excess credit creation?

There are perhaps several reasons. First, it may be that not all of these "excess" reserves are truly "excess" in the sense that banks feel able (or inclined) to fully "encumber" their reserve balances with new loans. In particular, the banking sector may view some $400-$500 billion worth of these excess reserves as a kind of "precautionary reserve" needed to satisfy any potential initiatives to increase minimum regulatory capital, such as Basel III. In effect, there do appear to be constraints to lending that are unrelated to the quantity of excess reserves.

Second, the Fed has signaled that it has given considerable thought to the essential conundrum: how does the central bank gracefully transition the U.S. economy from a condition of QE "to the max" without either moving too fast—and triggering a double-dip—or moving too slowly, thereby igniting inflationary fires? For, if inflation is ultimately a monetary phenomenon, how will we ever get back home to Kansas?

To this end, the set of policy options which might be used to prevent an "out of control" expansion of private sector credit has been enumerated by the Fed. These measures include:

- **Shrinkage of the Fed's balance sheet by conducting a sale of assets.** In effect, this would be placing QE into "reverse." Thus far, the Fed has indicated that it does not favor this approach.
- **"Draining reserves" via reverse repo operations.** While there is nothing new with having the central bank sell assets to the private sector and agree to a later repurchase of said assets (i.e. a "matched sale"), the Fed is now vetting the notion that the $3 trillion pool of money market mutual fund assets could be used to upsize these reverse repo programs dramatically.
- **Continue to pay interest on excess reserves[4].** The Fed has had the legal authority to pay interest on excess reserves since October 2008 and views this as its favored instrumentality for a manageable "exit strategy." For instance, were the Fed to pay a sufficiently high rate on excess reserves, then banks would be predictably reluctant to utilize their excess reserves for the purpose of creating new private sector loans[5]. Consequently, the Fed is of the view that it will be able to interrupt the mechanism that would otherwise allow the banking system to massively expand private loan growth by simply upping the rate paid on excess reserves (i.e. by preserving the incentive on the part of banks to hold onto "valuable" excess reserves). The Fed announced on May 10, that it would, for the first time, offer to let banks "term out" their reserves with the Fed. In effect, the Fed is offering a CD-like product to its member banks. This should further assist the Fed in managing the system's quantity of excess reserves.

3 Monetarists can point to the "equation of exchange", i.e. MV=PQ. The left-hand side of the equation is (money supply x velocity), while the right-hand side is (price x quantity). Essentially, the equation is really a tautology, i.e. that turnover of "money" equals turnover of goods. Hence, a rapid increase in "M" (without say a concomitant decrease in V) would lead to either more output (Q) or higher prices (P), i.e. inflation. We would maintain that an excessively rapid increase in money (M) over a short period of time would likely be inflationary.

4 Technically, the Fed can and is now paying interest on both required as well as excess reserves. However, the Fed can pay a premium rate on excess reserves so as to induce the banks to hold onto their excess reserves by not issuing deposits (and loans) against these reserves.

5 In the ancient regime under which excess reserves paid zero return, banks were incented to put their excess reserves to work. They did this by issuing new loans/deposits (expanding their balance sheet). The new deposits would mandate an increase in the bank's required reserves, thereby inherently reducing the amount of its reserves deemed "excess reserves."

To Warily Return: A Note on the Fed's Exit Strategy (cont'd)

So, there you have it: the Fed will turn the dial up for the rate paid on excess reserves, or maybe have the open market desk reverse a few hundred billion of collateral into a money market fund here or there, and the economy will be spared the indignities of excessive private sector loan growth. It sure sounds simple. Yet, we wonder if the reversal of the Fed's (thus far) successful QE enterprise will be as smooth as we would wish it to be.

Sure, the Fed is very capable, knowledgeable, and has no doubt studied the modalities of the exit strategy very carefully. Still, policies designed to manage the macroeconomy are always subject to a degree of execution risk, particularly when one considers the magnitude and scope of the Fed's "exit strategy." Prudence suggests that while the central bank has both the tools and the talent to manage for relative price stability, we know what can happen to the best laid plans of mice or men. At the moment, the market appears confident, or at least comfortable, that the Fed can maintain price stability. Hopefully, this confidence isn't, well, inflated.