

# INVESTMENT UPDATE

Building on the ground-breaking work of Milton Friedman and Anna Schwartz, Professor (and pre-Fed Chairman) Ben Bernanke wrote some of the best-known and most highly-respected research articles on the history of the Great Depression. Since nine of these papers were compiled into a book (*Essays on the Great Depression*, Princeton University Press, 2004), it's fair to say that Bernanke, literally, wrote the book on this topic. Recently, his colleagues at the Federal Reserve Bank in St. Louis returned the favor, comparing the recent recession, and central bank policy responses, to those of the Great Depression.

The conclusion is not surprising (and some might even say self-serving): Namely, that the response of the modern Federal Reserve was far more effective than that of the Depression-era Fed in putting the US economy back on track and limiting the damage caused by the two biggest financial meltdowns

in modern US history. In this *Investment Update*, we'll review the evidence and compare the outcomes, and take a look at what may lie ahead for Bernanke & Co. in the coming months. First, let's look at the Great Depression. As we all know, in the autumn of 1929 the US stock market peaked after a six-year bull market, with the Dow Jones Industrial Average hitting a high of 382 in early September. By mid-November, that index was trading below 200, a loss of more than 50% in 75 days. The slide continued for another three years, and by July 1932, the Dow Jones hit its bottom at a price of 41, representing a decline of almost 90% from the 1929 peak.

The 1929 stock market crash was only one indicator of what was going on, as it coincided with a major collapse in what was a highly levered, overstretched economy, built on easy credit and poor risk management by lenders and borrowers (sound familiar?). The Federal Reserve had been established in 1913 to deal with bank crises, by both regulating/monitoring member banks and by issuing and controlling the flow of US currency. In the immediate aftermath of the 1929 stock market collapse, the New York Fed (which, like today, had particular influence over the nation's banking system) extended credit to the largest New York banks and brokerage houses and helped calm the markets in the early days of the 1929 crisis. But this is

the point at which, according to Freidman/Schwartz/Bernanke, as well as the recent article by David Wheelock of the St. Louis Fed, the Federal Reserve really "lost the plot."

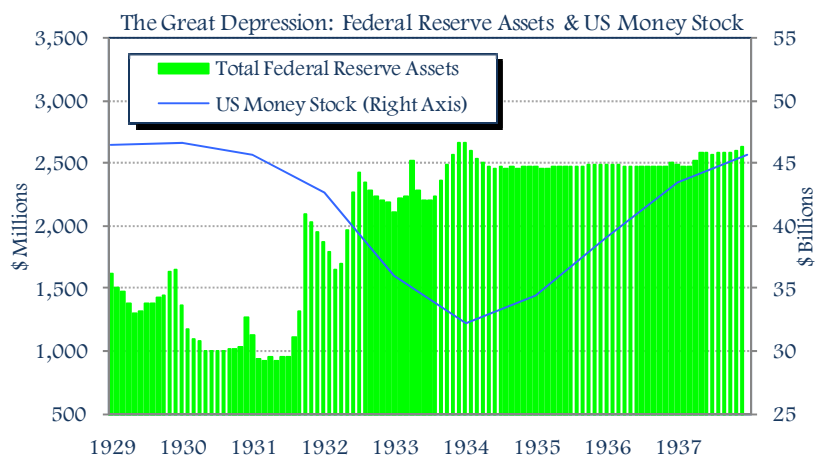
As it turns out, the New York Fed acted independently in making those loans to the Wall Street firms; the Federal Reserve Board refused the New York Fed's request for additional easing in early 1930. In fact, as the top chart shows, after growing its balance sheet to more than \$1.5 billion at the end of 1929, Federal Reserve credit fell by approximately one-third in the first half of 1930 as it pulled back discount window loans to banks (which fell from \$500 to \$231 million between January and April 1930) and reduced purchases of bankers acceptances. The chart also shows that over the next four or five years, the nation's money stock (what we might call "M2" today) shrunk by a similar degree. Freidman and Schwartz identified this contraction

in the money stock as the main cause of the Great Depression.

Why did the Fed choose to pull back on the extension of credit? The governor of the Federal Reserve Bank of San Francisco, for one, argued that credit was already cheap and readily available and "we do not believe that business recovery will be accelerated by mak-

ing credit cheaper and more redundant." Conventional wisdom dictated that credit should be withdrawn as economic activity slowed. The results were disastrous, as bank failures rapidly increased in late 1930, including the high-profile failure of New York-based Bank of the United States on December 11, one day after a crowd estimated to be as large as 25,000 swarmed its branch in the Bronx. Over the next four years, shock after shock rocked the US financial system as depositors pulled currency (and gold) out of the banking system; the Fed's response was to *increase* the discount and acceptance rates in order to reverse the outflow of funds. The Fed made no offsetting open market purchases that would have stabilized the nation's money stock.

The low water mark for the US economy came in early 1933 as bank panics swept across the country, with the Fed responding as it had over previous years, increasing the discount rate with only modest purchases of government securities. The US banking system didn't begin to stabilize until March of 1933, when newly-elected Presi-



dent Franklin Roosevelt implemented deposit insurance and suspension of the gold standard. As the chart on page one shows, deposits and currency began to flow back into the system and the nation's money stock finally began to grow.

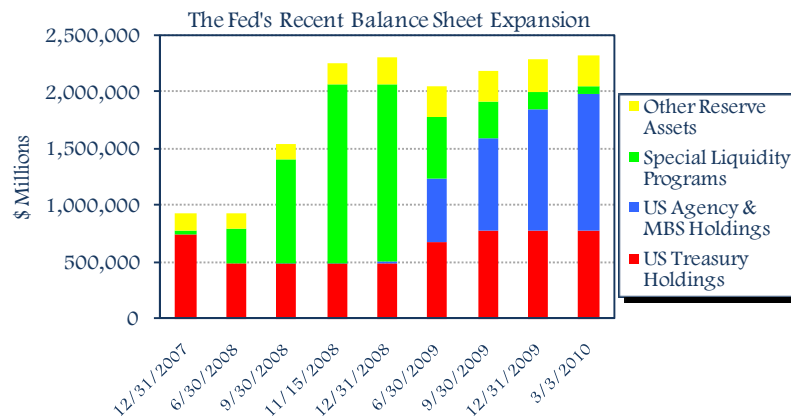
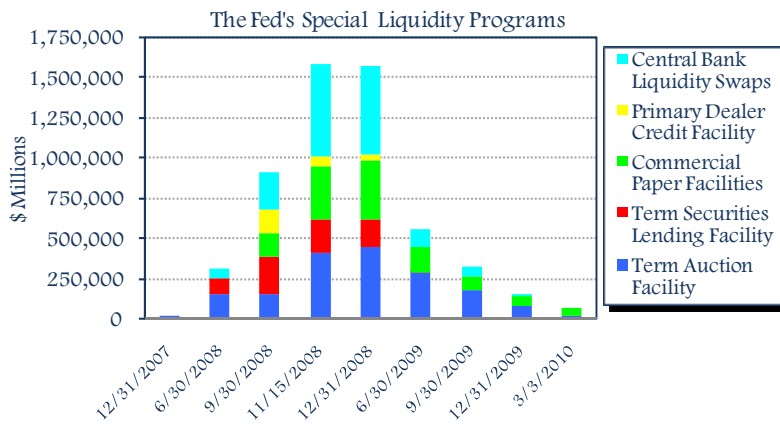
Obviously, the Federal Reserve (as well as other US policy-makers) has taken an utterly different approach in dealing with the recent financial crisis. The top chart shows the growth of special programs that were put in place, beginning in December 2007, after severe cracks began to appear in the US housing market. The Fed was determined to ensure that credit was readily available for interbank and global liquidity needs, as well as to all member institutions. New programs were put in place, expanding the Fed's traditional role by lending to non-banks (the primary dealer credit facility, as well as loans to AIG and guarantees to the buyers of Bear Stearns and Merrill Lynch) in addition to direct purchases and guarantees of commercial paper. By mid-November 2008, as the Fed was addressing the fallout from the Lehman Brothers bankruptcy, these special liquidity programs had grown to more than \$1.5 trillion.

As the bottom chart shows, these programs, taken together, more than doubled the Fed's balance sheet in a period of just a few months. In addition, by late 2008 the Fed had also reduced the overnight borrowing rate to virtually zero for member banks, with the promise that the Fed funds rate would remain at this level "for an extended period" (where it remains today). Both graphs also show that the liquidity facilities were wound down in the first half of 2009, as the stock market rebounded and credit conditions began to normalize, reflecting a turnaround in investor confidence, if not outright economic recovery.

Once the liquidity crisis had passed in the first half of 2009, the Fed moved from providing liquidity to encouraging lending by engineering the yield curve lower—that is, using other, nontraditional tools to reduce longer-term interest rates (especially mortgage rates). The Fed announced in March 2009 that it would begin buying agency-backed mortgage securities (MBS), Agency debentures and US Treasury securities directly in the open market. In doing so, the Fed maintained the size of its economic stimulus at a fairly constant level, at least as measured by the size of its

balance sheet. As the liquidity programs rolled off, they were replaced with purchases of Treasuries, agencies and MBS (together now totaling nearly \$2 trillion).

The St. Louis Fed's Wheelock, in assessing current Fed policy, points to criticism by "pure" monetarists that the Fed could have achieved better results in the early part of the crisis simply by expanding the monetary base. Others have criticized the support of certain markets and institutions that were deemed "too big to fail," providing the wrong incentives to those who practiced poor risk management. Nevertheless, it seems clear, particularly when we look at the statistics comparing this recession and the Great Depression, that policymakers took effective steps at limiting the depth and duration of what was, by any measure, a severe recession.



A quick comparison reveals what could have been: between 1929 and 1933, real US GDP fell by 27%, while the unemployment rate eventually hit 25%. Economic output in the US didn't achieve its 1929 level until 1936, and for the decade following the stock market crash, real GDP grew only 1% per year (keep in mind that this was during a period of deflation—in constant dollars, US GDP fell by 54% in the first part of the 1930s, and didn't reach its pre-crash levels until 1941, when WWII industrial production ramped up). By contrast, real GDP grew in 2007 and 2008, and fell only 2.4% in 2009. The unemployment rate (which we believe has peaked out) hit a high of 10.2%, which, while

high by any standards, failed to exceed the elevated levels of the 1980-82 recession.

The Fed's securities purchases are all but over at this point, and expectations are that the Fed will begin to shrink its balance sheet in coming months. Given the degree of slack in the labor markets and other productive resources, we expect no near-term increase in the Fed funds rate, maybe not for another year or more. In fact, the Fed is likely to remove all of its unconventional "quantitative" stimulative programs before it begins twisting the dials on traditional tools like short rates and reserve requirements. The timing and pace of the tightening will depend on a firming of the US housing market, and concrete signs of job growth.

