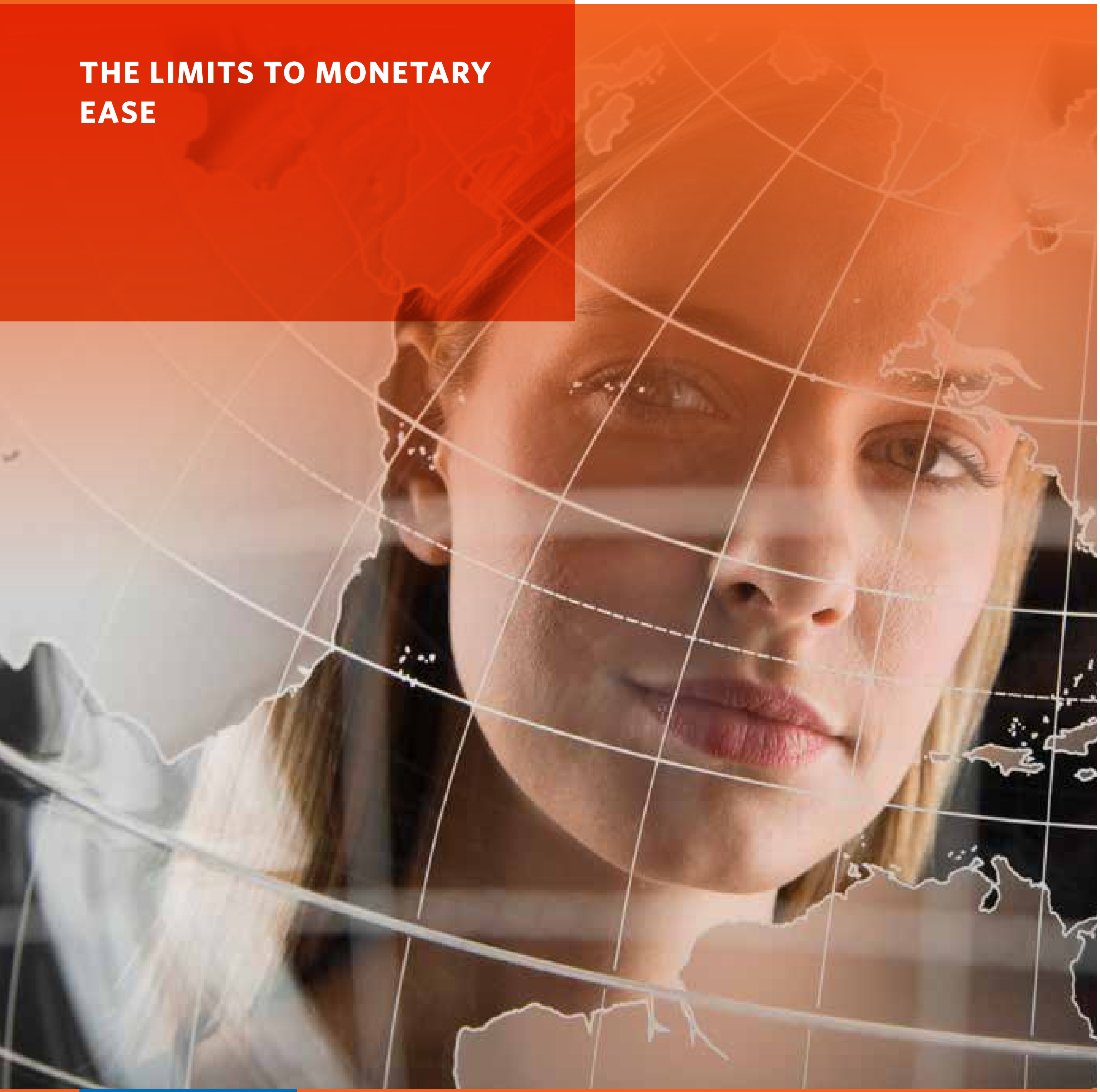
THE LIMITS TO MONETARY EASE



Strategic Investment Group®

Strategic Perspectives

THIS PAPER CONSIDERS WHETHER QUANTITATIVE EASING BY CENTRAL BANKS WILL SOON END, THE FACTORS LIMITING MONETARY EASE, AND THE RISKS THAT WILL ARISE AS CENTRAL BANKS SHRINK THEIR BALANCE SHEETS.

Central Banks Take Center Stage

Shortly after central banks began an unprecedented expansion and transformation of the composition of their balance sheets as part of a policy of quantitative easing, we explored the investment implications of these historic measures in an article entitled "The Incredible Elastic Fed Balance Sheet—Extraordinary Adventures in Monetary Policy." This edition of *Strategic Perspectives* considers whether the Federal Reserve's extraordinary adventure is coming to an end, the factors that may limit monetary ease, and the risks that investors face as central banks contract their balance sheets to absorb liquidity.

There are a number of compelling reasons to chronicle the extraordinary adventure in monetary policy launched by the Fed and other central banks in the wake of the crisis. First, central banks are up against a powerful and insidious contractionary force that has dominated economies and markets since the crisis. The extraordinary measures that central banks have taken aim to counter a post-crisis liquidity trap, as developed economies remain mired in an extended period of deleveraging. Since the crisis, central banks throughout the developed world have been struggling, with mixed success, to restore a rate of credit growth sufficient to promote an economic rebound. In the U.S., where most progress has been made, credit growth is slow relative to other recoveries, while credit continues to contract in the euro area as it remains gripped by rolling crises and financial fragmentation. Developed economies are likely to be experiencing the effects of deleveraging for some years to come, making it important for investors to understand how these forces, and the measures taken by central banks to combat them, can affect markets.

Second, the measures pursued by central banks to counter the contractionary impulse from deleveraging are unprecedented. Central banks are operating in uncharted waters. Since the 2008-09 global economic and financial crisis, all developed economy central banks have kept their policy rates at or near zero. With rates pushed to the floor, and cyclical conditions suggesting the need for further ease, central banks have resorted to massive asset purchases as part of a policy of quantitative easing. These measures are designed to further loosen monetary conditions in a bid to restore financial stability and boost economic growth. As a consequence, the Fed's balance sheet, after having remained at a steady 6% of GDP for a quarter century, has tripled in size since the crisis (Figure 1). Other major central banks are also committed to sustained quantitative easing. The balance sheets of the European Central Bank and the Bank of Japan are over 30% of GDP, and the Bank of Japan has announced a particularly aggressive policy of reflation that will see its balance sheet double to 60% of GDP over the next two years.

Third, the composition of central bank assets has also been transformed in unprecedented ways. Instead of central bank assets comprising primarily short-term government paper, the range of central bank assets has been expanded to encompass corporate securities of various types and longer term government bonds. In the case of the Fed, the range of assets has evolved with the exigencies of the crisis (Figure 2). In the immediate wake of the crisis, the Fed focused on stemming a run on the shadow banking system and restoring confidence in the financial system. At this early stage of its extraordinary intervention in markets, the Fed's asset purchases supported troubled financial institutions and provided liquidity to key credit markets. As financial fragility was reduced, the Fed's focus turned toward reviving the economy by encouraging renewed lending to the housing sector and holding down long-run interest rates. Its asset purchases accordingly shifted to mortgage-backed securities and long-term U.S. Treasuries.

Fourth, the transformation of the Fed's liabilities has also been dramatic, and reflects the intractable nature of the liquidity trap which developed economies continue to face. Excess reserves of banks unwilling or unable to lend have supplanted banknotes as the dominant central bank liability (Figure 3). The Fed and other developed central banks have in effect been pushing on a string as the

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FIGURE 1:

Central Bank Balance Sheets as a Percent of GDP

Source: Bloomberg

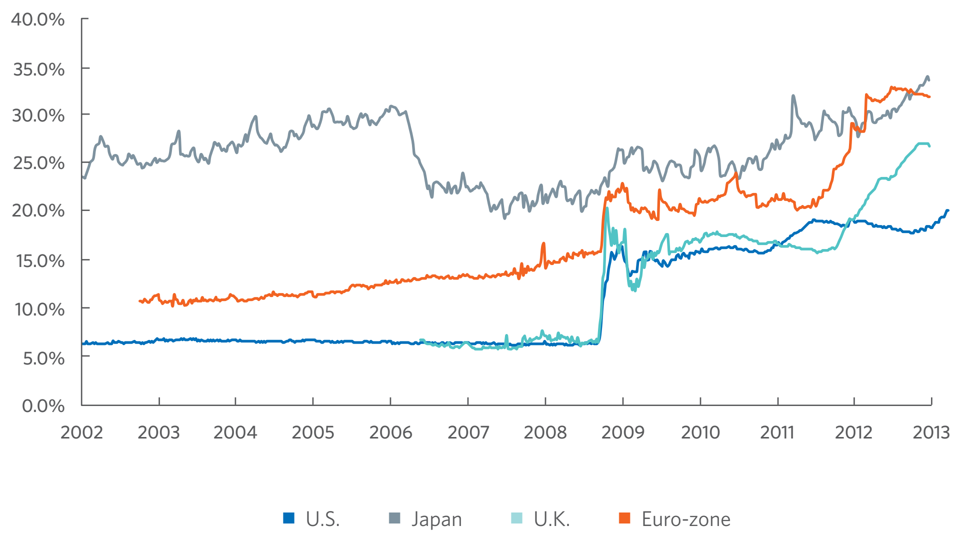
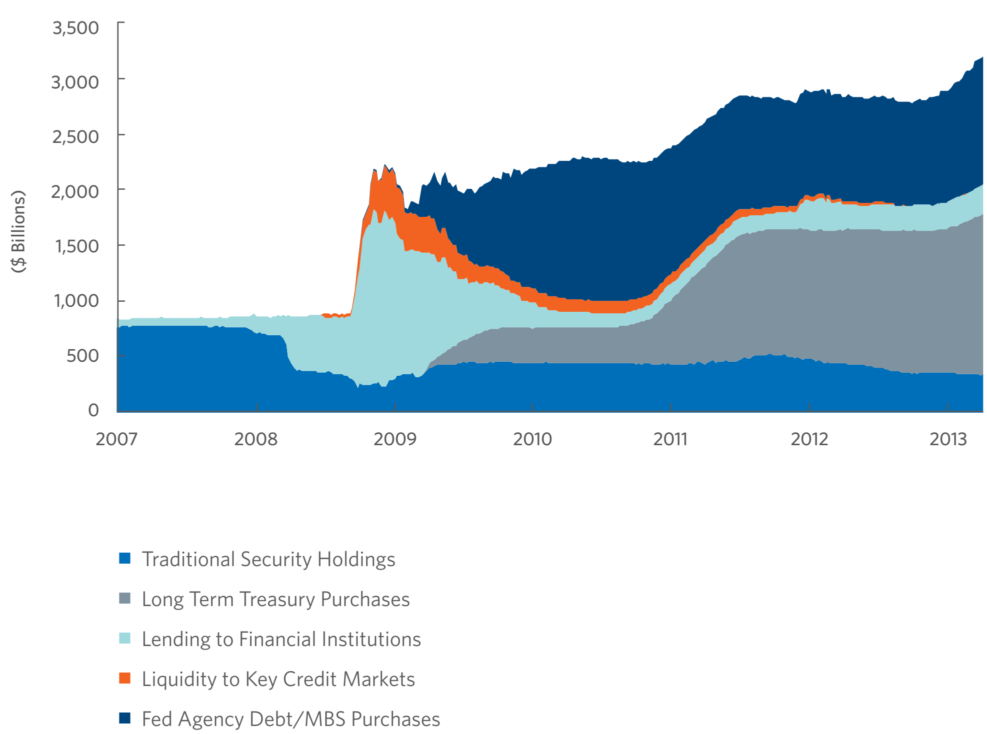


FIGURE 2:

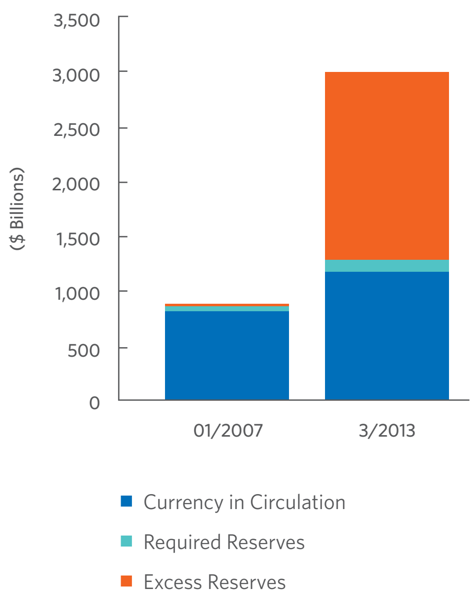
Evolution of Federal Reserve Assets

Source: Federal Reserve



expansion of central bank assets has not resulted in the typical expansion in credit and broader monetary aggregates. Since the crisis, the behavior of the money multiplier has been anomalous, typical of a liquidity trap (Figure 4).

FIGURE 3:
Federal Reserve Liabilities
Source: Federal Reserve



Finally, these truly extraordinary measures by central banks to restore financial stability and promote growth have far-reaching investment implications. Real yields on safe haven assets throughout all major economies are negative well out the maturity spectrum. Nominal yields on these assets are at or near historic lows (Figure 5). By holding government bond yields at very low levels, the Fed and other central banks are attempting to push investors out of the risk spectrum. An inherent risk to a prolonged period of quantitative easing is the very real possibility of distorting asset valuations and creating asset bubbles.

The Fed attempts to influence expectations by using communications as a policy tool. Before late 2012, the Fed had been guiding expectations by specifying the time horizon during which its policy rate would likely remain at about zero. But specifying a particular date (for example, through mid-2015) creates problems. The Fed's guidance could be interpreted to mean that the Fed expects the economy to be weak at least through mid-2015. Such an expectation could be counterproductive. It could, for example, deter businesses from expanding and households from spending. Time-contingent policies thus have a "pessimism problem."

FIGURE 4:
Federal Reserve Pushes on a String
Source: Federal Reserve

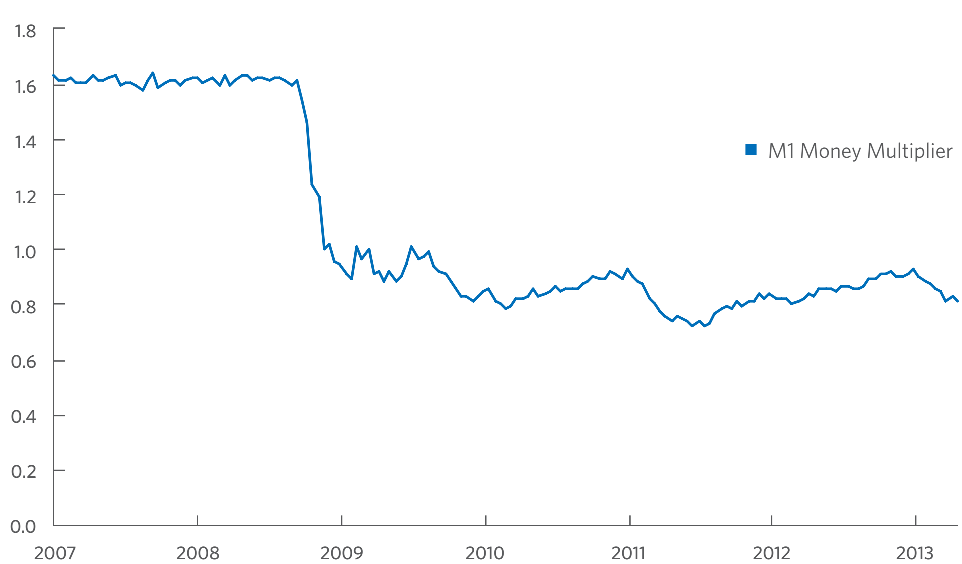
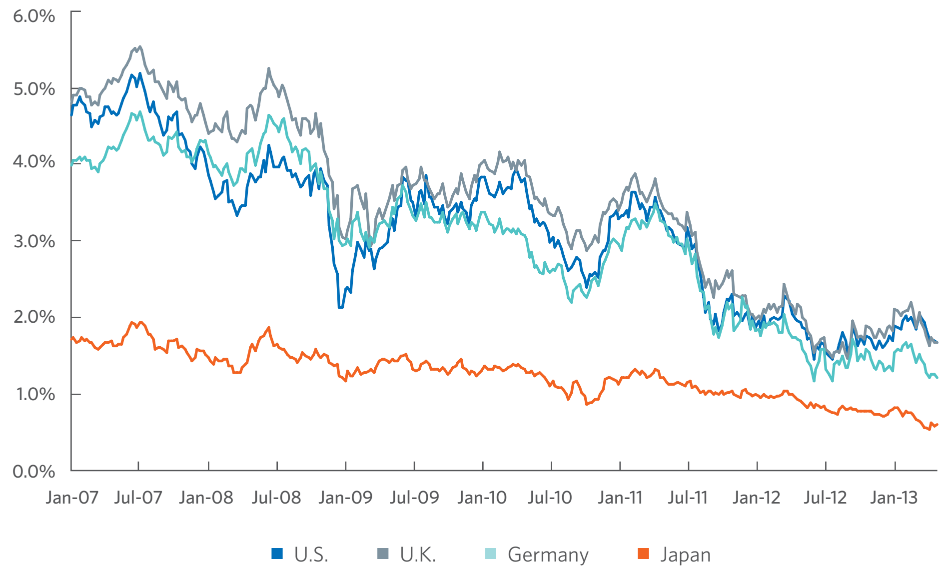


FIGURE 5:

10-Year Government Bond Yields

Source: Bloomberg



Are We There Yet?

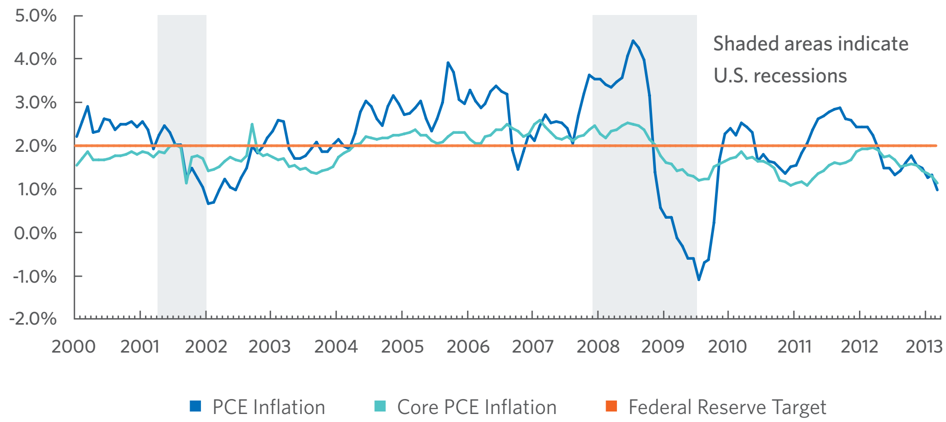
All adventures must eventually end. Given the extraordinary nature of the adventure in monetary policy on which developed economies are now embarked, it will be especially important to recognize when we have reached the end of the journey. Managing expectations is a key element of implementing quantitative easing and will remain critical to a successful, eventual exit strategy.

Moreover, if the economy improves before the appointed time, the Fed might be reluctant to change its guidance.

To combat this problem, the Fed has adopted state-contingent policy guidance. This approach makes policy changes contingent on actual economic conditions, helping to ease the pessimism problem. For example, the Fed now says that rates will remain near zero until unemployment falls below 6.5%, or if projected inflation over a 1- to 2-year horizon rises above 2.5%. This approach, in effect, makes quantitative easing open-ended, and signals that the Fed is willing to tolerate a rate of inflation that is slightly above its 2% target (Figure 6). We will know that we are approaching the end of our extraordinary adventure by watching these indicators. For the moment, a shift in Fed policy seems far off, as unemployment is well above the indicated rate and the Fed's preferred measure of inflation has remained quiescent.

Even the new, state-contingent approach has problems of interpretation. Markets may take the threshold levels of unemployment and inflation as triggers, rather than indications of intention. Other problems relate to the indicators themselves. For example, unemployment may be high for reasons unrelated to monetary policy, resulting in a degree of monetary ease that is inappropriate for cyclical conditions. There is also a timing problem. Monetary policy has an impact on future activity, while unemployment reflects the past state of the economy. Given these leads and lags, the Fed may find itself behind the curve when a full-fledged recovery takes hold.

FIGURE 6:
Headline vs. Core Personal Consumption Expenditures Deflator
% Change Y-o-Y
Source: Federal Reserve



One result could be to allow excessive inflationary pressure to build. A more vexing possible outcome would be a spike and overshooting in longer term yields as investors anticipate a surge in inflationary pressure. Moreover, in the case of the Fed's state-contingent inflation target, the indicator used may miss important signs of overheating in the economy, notably, for example, in asset prices.

Extraordinary Adventures Have Risks

The measures of quantitative easing being widely pursued by major central banks are unprecedented in nature and magnitude. Although extraordinary, they have been kept in place for an extended period and are likely to persist. The prolonged use of "extraordinary" measures, especially when the magnitudes involved are large, is inherently risky. Three risks — the impact of rising interest rates on the Fed's solvency, an inflation spiral, and liquidity-induced asset bubbles — have been identified by some observers as matters of particular concern.

Can the Fed Go Bust?

As we have seen, the Fed's balance sheet has tripled in size and its composition has changed significantly. So far, the larger balance sheet has increased Fed earnings. The Fed's net earnings transferred to the Treasury have increased from an average of about $25 billion a year prior to the crisis to $80 billion in 2010 and 2011 (Figure 7).

At the same time, however, the Fed's interest rate risk has also increased, making it likely that the Fed will have losses as interest rates rise. With the Fed's focus on holding down long-term rates, the weighted average maturity of the Fed's assets has increased from about 40 months before the crisis to about 120 months now.

Losses could stem from two sources. First, as we have seen from Figure 3, excess reserves of the banking system held with the Fed have supplanted currency in circulation as the Fed's largest liability. Currency in circulation is a unique liability, as it is not redeemable and bears no interest. In contrast, banks holding excess reserves with the Fed have been

1 The Fed does not mark its securities to market, but attributes gains and losses to net income as securities are sold. The Fed now has an unrealized gain on its securities holdings of about $250 billion.

receiving interest (0.25%) since the autumn of 2008. As economic conditions improve, the Fed may need to raise the rate paid on excess reserves to prevent lending growth. This would increase the Fed's interest expense and erode net earnings. Second, the Fed may sell assets to reduce the size of its balance sheet and drain excess liquidity from the system as cyclical conditions improve. Such sales could result in the realization of losses.[1]

Under most scenarios, the Fed will indeed incur losses as monetary policy normalizes and will likely have to defer remittances to the Treasury (see Figure 7). This has raised concern that the Fed may become insolvent, or may allow its monetary policy actions to be influenced by the possibility of incurring losses. These fears are ungrounded. First, the Fed has the flexibility to use anticipated future income to cover losses while they persist and would simply suspend remittances to the Treasury until it returned to profit. Given the structure of the Fed's balance sheet in normal times — liabilities that bear no interest and cannot be redeemed and assets consisting of interest-bearing short-term U.S. Treasuries — it is hard to imagine a scenario in which the Fed does not return to profitability. The Fed, in short, cannot become insolvent. Moreover, it is farfetched to argue, as some have, that the Fed would tailor its monetary policies to smooth fluctuations in its income.

Is Inflation Nigh?

There are a number of reasons to consider that the tripling of the balance sheets of major central banks and the heavy debt burdens carried by many developed governments could spark inflation. For example, the Fed and other central banks could respond too slowly to improved economic conditions, as they find maneuvering with a bloated balance sheet cumbersome. Alternatively, in a scenario of "fiscal dominance," the Fed may be reluctant to raise interest rates to levels warranted by cyclical conditions for fear of imposing a

FIGURE 7:
Federal Reserve Remittances to U.S. Treasury
Source: Federal Reserve

higher cost of borrowing on an over-extended U.S. Treasury. For the moment, there appears to be little inflationary pressure. Unemployment is high and the economy is operating below capacity. Credit growth is subdued and the money multiplier remains abnormally low. Actual inflation is low (recall Figure 6) and forward expectations for inflation are well anchored (Figure 8). Inflation may be a concern, but it is not imminent. Nor is it the case that high inflation is needed to burn off the debt. The key is to maintain low, or even better, negative real interest rates. The current constellation of low nominal yields and well-anchored inflation expectations has been generating negative real yields on U.S. Treasuries (and other safe haven assets) well out the maturity spectrum. High inflation that destabilizes inflation expectations could be counterproductive if it triggered a spike in yields.

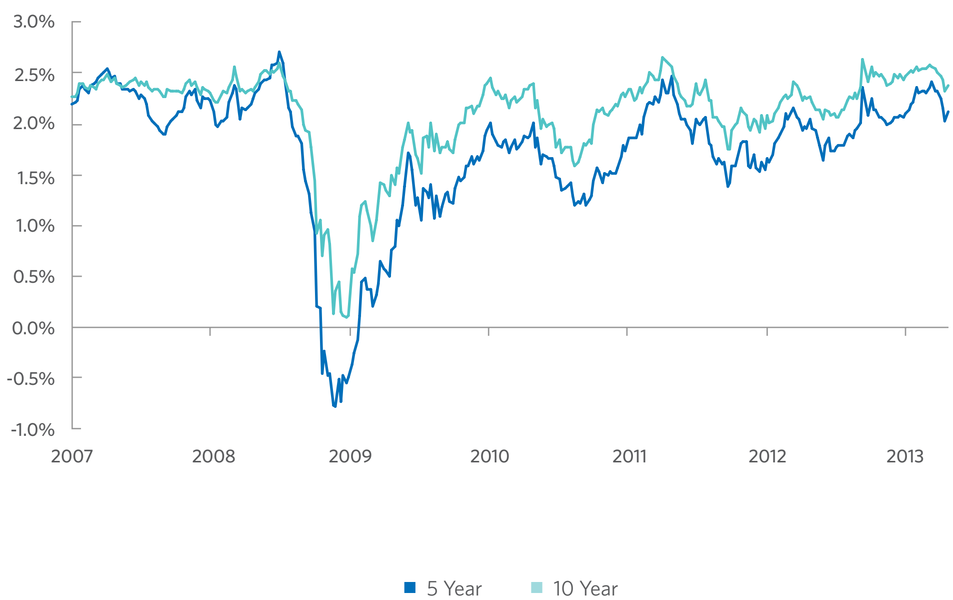
Is the Fed Destabilizing Markets?

We have been and are likely to remain for quite some time in a period in which major central banks are pursuing policies to promote economic growth that are inherently risky to financial stability. In the current environment, the Fed's dual mandate of promoting full employment and price stability can only be achieved by keeping real interest rates at unusually low levels. As we have seen from the Fed's state-contingent policy guidance, we are likely to face unusually low yields for a protracted period.

The Fed and other central banks are "promoting a return to prudent risk-taking."[2] They consider that banks, corporations, and households are too cautious, and that this

2 Vice Federal Reserve Board Chair Janet L. Yellen, "Challenges Confronting Monetary Policy", March 4, 2013. Other Fed officials, including Chairman Bernanke, have variously referred to their aim of promoting "productive" or "responsible" risk-taking.

FIGURE 8:
Inflation Expectations
Source: Bloomberg



caution is in part to blame for the sluggish pace of the post-crisis recovery. While the main targets of central bank intervention are economic agents in the real sector, the Fed and other central banks are also pushing investors in the financial sector out of the risk spectrum. Calibrating risk-taking is notoriously difficult, and there is always a chance that things may go too far. Classic signs of such excess would include rapid credit growth, increased leverage, increased merger and acquisition activity, and asset values that are unhinged from fundamentals. These warning signs are typically only recognized as such after the fact, and asset bubbles have proven quite difficult to detect and preempt.

Some asset price distortions are already apparent. Yields on safe haven assets, including U.S. Treasuries, German Bunds, U.K. Gilts and Japanese government bonds among others, are near historical lows, and these assets are significantly overvalued. While there are a number of reasons for such low yields — sluggish growth and low inflation, a reduced supply of safe haven assets, and a high premium placed on the hedging and diversification characteristics of such assets — the extraordinary intervention of central banks is clearly a key factor. The Fed, for example, holds about 10% of all outstanding U.S. Treasuries and over 30% of U.S. Treasuries with maturities of 10 years and more. Unusually low real yields on safe haven assets are having a ripple effect on valuations across financial markets as investors reach for yield. The longer central banks remain committed to "promoting a return to prudent risk-taking," the greater the risk of excessive asset valuations contributing to instability in financial markets.

Conclusion

Among the many risks of our prolonged extraordinary adventure in monetary policy, the most potentially dangerous one, and the one to which investors should be most attentive, is the risk that unusually low real yields will trigger asset bubbles. Central bank efforts to promote economic recovery compound the risk of financial instability. As we have seen, asset bubbles can be blown to proportions sufficient to trigger far-reaching and prolonged economic and financial market disruption. Although we appear to be far from such extremes for the moment, as long as central banks are intent on promoting risk-taking, investors need to be especially cautious about the valuations of the risky assets they hold.

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