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The Coming Collision of Federal Reserve Policy and U.S. Budget Debate

The budget debate in the US Congress and the future policy decisions of the Federal Reserve are on a collision course over the next few years. The federal budget deficit was \$1.089 trillion, or 7% of nominal GDP for 2012¹. Due to quantitative easing, the Fed now owns \$1.723 trillion of US Treasury securities² equal to about 11% of Gross Domestic Product and 10% of the gross outstanding federal debt.

From a fiscal policy perspective, the only realistic time to reduce the budget deficit is when the economy is growing and not in recession. From a monetary policy perspective, as the economy grows and the unemployment rate drops slowly, possibly reaching the Fed's stated 6.5% threshold rate or lower in 2014, the conditions for the Fed to exit quantitative easing (i.e., sell some of its Treasury securities) and commence raising its target federal funds rate will have arrived.

Possible future actions by the Fed may work to make controlling the budget deficit considerably more difficult, as if the decisions over where to cut spending and which tax loopholes to close were not controversial enough already. Our perspective is that Fed will be drawn into the budget debate in a manner like it has never before experienced, possibly losing some policy-making independence.

Moreover, the appointment of the next Chairman of the Federal Reserve will come right in the middle of this brewing controversy over the Fed's role in budget reduction. The critical issue for Congress will be the potentially severe, negative and unintended consequence of quantitative easing should the Fed chart its return to non-emergency monetary policies.

Outstanding Debt, Budget Deficit Scenarios, and Interest Expense

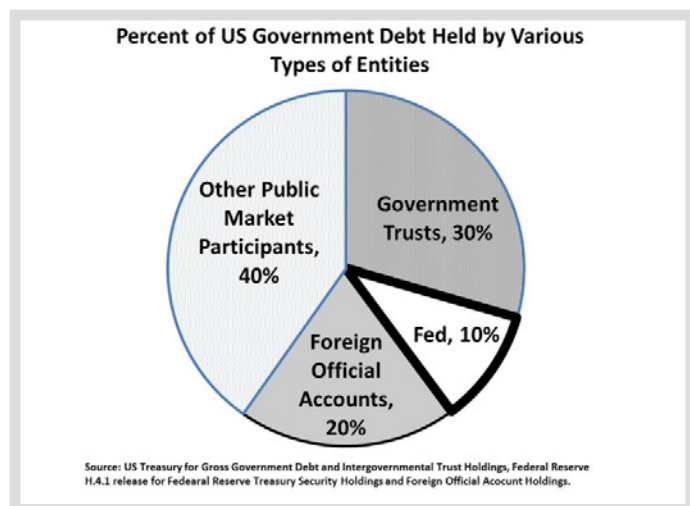
The US Government had issued \$16.541 trillion of Treasury securities as of February 14. Of that gross total, about \$4.857 trillion are held by various government trust funds. That leaves about \$11.684 trillion in the hands of public market participants, which includes the \$1.723 trillion of Treasury securities owned by the Federal Reserve, as well as the \$3.3 trillion US Treasury securities held in custody by the Federal Reserve for foreign official and international accounts.³ If one assumes that foreign official holdings and US Government trust fund holdings are not actively traded, then the Fed's holdings represent one-fifth of the likely quantity of Treasuries potentially available in the market. Even if the Fed takes years to exit QE, this is a huge proportion of the tradable market, and selling this many securities will be like playing poker when everyone else can see all your cards.

1. Congressional Budget Office, "The Budget and Economic Outlook: Fiscal Years 2013 to 2023", Table 1.1: CBO's Baseline Budget Projections, February 2013.

2. Federal Reserve Statistical Release, H.4.1, Table 1: Factors Affecting Reserve Balances of Depository Institutions, for week ending 13 February 2013.

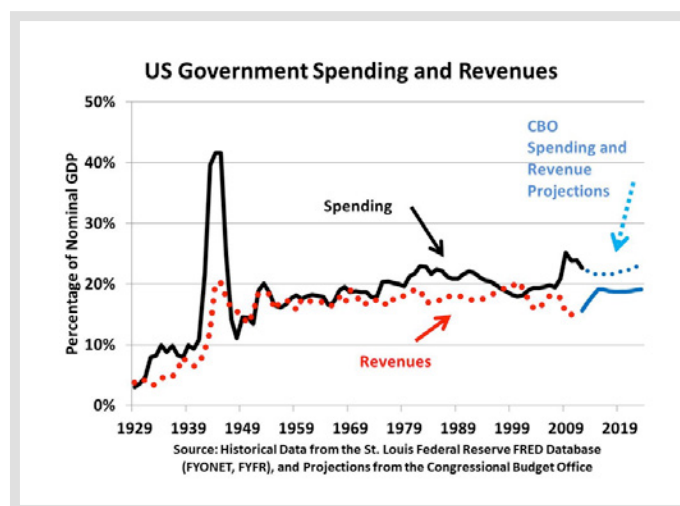
3. Information about Treasury securities held in custody by the Federal Reserve for foreign official and international accounts is contained in Table 1A: Memorandum Items, of the H.4.1 weekly statistical release of the Federal Reserve. These custody accounts are primarily for central banks and international official agencies.

Chart 1: Percent of US Government Debt Held by Various Types of Entities



In 2012, the interest expense on all this debt was \$223 billion, or 1.4% of GDP. The average interest rate paid by the US Treasury was only 1.39%, which has been materially reduced by the current historically low interest rate environment. For example, back in 1999 when the budget last had a small surplus, interest expense represented 2.5% of GDP, and the average interest rate paid was just over 4%. If the budget deficit can be cut in stages to around 3% of GDP by 2017, possibly a heroic objective, this would put the gross outstanding debt at about \$20.793 trillion by end 2018 in the CBO's baseline case, or right around 100% of GDP. If one removes the debt held by government trust funds, then the debt as percentage of GDP would be about 73%.

Figure 2. Base Case Path to 3% Budget Deficit: Revenues and Outlays as Percent of GDP



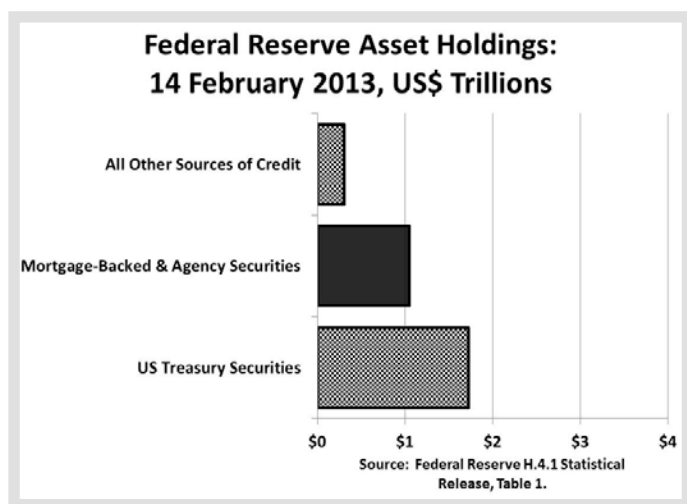
The scenarios get more interesting, however, when one starts calculating potential future interest expense, although this naturally requires some assumptions about where interest rates might be headed. As a base case for 2018, we assume that the Fed is well into its exit from quantitative easing and that the target federal funds rate has returned to a level close to what would be suggested by normal monetary policy rules of thumb, such as the Taylor Rule.⁴ That is, the base case scenario for 2018 would have inflation at 2%, unemployment around 6%, the federal funds rate at 4%, and the 10-year Treasury note yield around 6%, which represents an approximately parallel upward shift in the yield curve from winter 2013 levels. **This base case for rates puts the 2018 interest expense on the US gross outstanding government debt at more than double the current level, between \$515 and \$625 billion, or 2.5%-3.0% of GDP, depending on how quickly rates rise and how the Treasury manages the maturity distribution of the debt.** The lower end projection represents the CBO's base case, and the upper end projection reflects our own concerns that Treasury security yields might rise sooner and faster as market participants anticipate future Fed policy actions.

4. Bluford H. Putnam and Samantha Azzarello, *A Bayesian Interpretation of the Federal Reserve's Dual Mandate and the Taylor Rule*, REV. FIN. ECON., 2012.

Fed's Contribution to Reducing the Deficit Goes to Zero

The rate rise story is not the whole story for the budget deficit, however, as one should also consider the path of the Fed's contributions to US deficit reduction. The Fed returns most of its net profits to the US Treasury every year. In 2012, the Fed contributed \$90 billion to the US Treasury, \$75 billion in 2011, and \$79 billion in 2010. While these numbers were elevated by the zero-rate policy and the expanded balance sheet, the Fed has made a material contribution to budget deficit reduction in the last three years of trillion dollar deficits. For perspective, the current sequestration debate includes highly controversial cuts of \$85 billion in FY2013 spending, which is slightly smaller than the Fed's contributions in 2012.

Figure 3: Federal Reserve Asset Holdings



What is not well appreciated is that as interest rates rise, the Fed will suffer unrealized losses on its portfolios of US Treasury securities and mortgage-backed securities. Under virtually all scenarios that involve rising interest rates in the US, the Fed's losses would require that it suspend payments to the US Treasury. For those

interested in exploring this in detail, we recommend the Fed's own research study⁵ on this issue, which was recently updated, is exceptionally well done, explains the arcane rules of Fed accounting, and highlights the likely disappearance of the Fed's contribution to US deficit reduction for a number of years.

Drag from Fiscal Austerity and Fed's QE Exit, Positives from the US Energy Dividend

Then there is the potential drag on US economic growth from the fiscal austerity and the rising rate environment.

We do not want to overplay these concerns from an economic forecasting perspective, as it is the slow and steady improvement of the US economy since the recovery started in Q3/2009 that actually allows the US Congress to consider budget deficit reduction and makes possible an exit from QE and zero-rate policies by the Fed. Nevertheless, for 2013 taxes are a little higher, government spending growth a little slower, and down the road interest rates may gradually head higher. Before considering special one-off factors, it is hard to see trend real GDP growth much above 2% per annum for 2013-18. **As the 1990s proved, though, modest tax increases and movement toward a balanced budget are not a prescription for recession.** Healthy and sustained economic growth rates are possible as fiscal and monetary policies return to a more normal character, just as happened in the decade after the Savings & Loan debacle and high-yield bond crisis of 1989-1991.

There is one notable, special factor working in favor of US economic growth—the energy dividend from the massive increases in the supply of domestic oil and natural gas achieved over the last seven years or so. As infrastructure bottlenecks are removed and industry takes more advantage of cheaper energy sources in the US than in Europe or elsewhere, **there is an excellent**

chance that the US could see a 0.5% to 1.0% elevation in its trend real GDP growth rate from approximately 2014 through 2020, representing a welcome energy dividend for the economy.

This energy growth dividend also would create some additional tax revenue for the US Treasury.

Implications for the Political Debate

Let's summarize the key points on which Washington politics will likely focus as 2013 develops, and how the debate will undoubtedly intensify into 2014, a Congressional election year. Just as the US Congress is struggling with the budget deficit, the Federal Reserve will be considering how to exit quantitative easing and when to commence raising its target federal funds rate. Higher rates might raise the interest expense of the US Treasury from 1.4% of GDP in 2012 to between 2.5% and 3.0% by 2018. Moreover, the path to higher rates may be exacerbated by the Fed's plans or attempts to withdraw quantitative easing; that is, to sell some of its US Treasury securities. If rising rates occur, the Fed will suffer unrealized losses on its portfolios of US Treasuries and mortgage-back securities, and it is likely that it will be forced to stop its annual contributions to the US Treasury, which have averaged \$81 billion annually for 2010-12.

The Fed may become a political football due to this powerful trifecta of possible implications from future Fed policy – (1) starting to raise the target federal funds rate, (2) selling billions of US Treasury securities into the market, and (3) halting contributions to the US Treasury. Remember, 2014 is a Congressional election year, and the outcome will make an important contribution to defining the race for the Presidency in 2016. Thus, anything that complicates deficit reduction is almost bound to become a controversial political issue.

Congress will probably hold hearings ad nauseam on Fed policy and how it is likely to impact budget

reduction. **In the press and on Capitol Hill, there will be question after question on whether the Fed really understood or fully took into account the unintended consequences of quantitative easing and holding to a zero-rate policy long after the economy started to recover.** The large quantities of hot air coming from Washington on this issue may contribute to climate change.

Interestingly, it will **not** be Ben Bernanke, the current Fed Chairman on the hot seat. His term expires in January 2014. So the appointment of the new Fed chairman in late 2013 or early 2014 may well ignite quite the debate over unintended consequences of quantitative easing.

We think it is worth noting that Fed chairmen often survive Presidential elections that switch the parties in power. Democratic President Carter appointed Paul Volcker as Fed Chairman, and Republican Reagan re-appointed him. President Reagan appointed Alan Greenspan to succeed Paul Volcker, and when it came to his turn, Democratic President Clinton re-appointed Alan Greenspan. Ben Bernanke was appointed by Republican President Bush, and then was re-appointed by Democratic President Obama. Our point here is that Fed Chairmen have a way of quickly becoming integral to the economy, and gaining enough respect in their own right to survive a change of administration. Since this fact is quite well-appreciated in Washington, **the choice of the next Fed chairman and its Senate confirmation hearings may be especially contentious given the collision course on which Fed policy and fiscal policy appear to be headed.** We do not envy the role of the next Fed Chairman or Chairwoman as the apologist to Congress for the policies of the Bernanke Fed.

Implications for Federal Reserve Policy

Being at the center of the budget debate in the US Congress and becoming a political football in the Congressional election year of 2014 is likely to impact

Fed decision-making. A number of Fed board governors and regional bank presidents probably will declare the Fed will make its decisions without considering Congressional politics. While that may be their goal, it may be very hard to achieve. Indeed, how the debate over budgets and future Fed policy actions develops later in 2013 may well impact President Obama's choice of the new Fed Chairman. Does he want someone on the dovish side of Chairman Bernanke, who was an ardent QE supporter? Or, might he choose someone who had some doubts about QE and might be confirmed more easily? It will be a tough choice for the President and most assuredly has implications for future Fed policy.

Delayed Exit - Moreover, the two separate decisions of how to exit QE and when and how fast to commence raising the federal funds rate target are not nearly as independent as some Fed officials' public rhetoric might suggest. The Fed only needs a little more than a trillion-dollar balance sheet to run the financial system in normal times. If the Fed fully carried through its QE plans through the end of 2013, its balance sheet will be approaching \$4 trillion. The Fed will be selling assets into an environment in which it is incrementally raising its target federal funds rate. The concept that one of these decisions will not impact the other is a total non-starter. From any realistic economic perspective, they are part of a package deal to move the Fed slowly back to a more normal monetary policy stance. **Our perspective is that the joint nature of the QE exit with the raising of the federal funds rate is highly likely to lead to delays in the process of raising the federal funds rate.** This means that US monetary policy may remain much more accommodative for a longer period of time than it otherwise would have been if the impact of QE policies had not been so massive. We are especially referring to the approximate \$2 trillion of additional asset accumulation in 2010-12, long after the essential QE1 (about \$1 trillion) of September 2008 – March 2009, which probably prevented the Great Recession from becoming a depression.

Dollar Weakness - Whether an extended period of material monetary accommodation leads to a long-term weakening trend in the US dollar depends critically on what other central banks are doing. The Bank of Japan is on the path of further quantitative easing and zero rates in an effort to end price deflation and achieve a 2% inflation target. So, the Japanese yen may weaken even as the Fed delays its QE exit. The potential actions by the Bank of England and the European Central Bank are less clear. Both of these central banks, despite economic challenges in their economies, are a little better positioned to exit their versions of QE and get back to normal interest rate policy more quickly than the Fed. Small central banks and especially emerging market central banks can be expected to lean against the wind of currency appreciation, which means rate cuts on their part. **On net, the most likely candidates for appreciation against the US dollar during the Fed QE exit and US budget debate are those emerging market countries most resistant to rate cuts.**

Increased Treasury Bond Market Instability - Our research has assumed a parallel upward shift in the US Treasury yield curve from the combined policies of raising the federal funds rate and exiting QE. While this is a useful base case, there is a non-trivial probability that the QE exit could cause relatively more damage to the long-end of the yield curve than commencing the raising of the target federal funds does to the short-end. The reason is that the Fed, as part of its maturity extension program (i.e., Operation Twist), intentionally lengthened the duration of its Treasury securities portfolio. This was done to push the long-end of the yield curve down relative to the short-end, but the unwinding implications are in the opposite direction. That is, since the Fed is loaded with long-maturity Treasury securities, any QE exit might hit long bond yields much more than maturities of five years or less.

Extended Period of Depressed Fed Earnings and No Contributions to the US Treasury - If it proves

the case that the far end of the yield curve is especially impacted by any QE exit plans, then the Fed might respond to the market's taking long bond yields higher than it prefers by slowing the QE exit plan and remaining in an accommodative policy mode that much longer. Also, to make sure that the \$3 trillion or so excess reserves on its balance sheet do not lead to an explosion in bank lending, the Fed's working assumption is that it will raise the interest rate paid on excess reserves in parallel with raising its federal funds rate target.⁶ This has knock-on effects for the Fed's own earnings, as it will raise funding costs for the Fed at the same time that the Fed is taking unrealized losses on its Treasury and mortgage-backed securities portfolios. The action of slowing the QE exit and raising the interest rate paid on excess reserves will depress Fed earnings and extend, possibly for many years, the time during which the Fed will make no contributions to the US Treasury from its net earnings.

Fed's Housing Market Support - The Fed has played a much more critical role in the housing recovery than is generally appreciated, while buying time for the US Congress to work on a solution for the disarray in the housing agencies – Freddie Mac and Fannie Mae. In round one of QE, between September 2008 and March 2009, the Fed purchased billions of distressed assets, of which many were mortgage-backed securities purchased to relieve banks of the burden of carrying these exposures on their books. In the latest rounds of QE, the Fed has been purchasing mortgage-backed securities at the rate of \$40 billion per month, and this is likely to continue through the end of 2013. As of February 2013, the Fed had a \$1 trillion mortgage-backed security and agency debt portfolio, which will continue to grow during 2013.

The original and continuing purchases of mortgage-backed securities by the Fed took a tremendous burden off Freddie Mac and Fannie Mae to support mortgage origination by buying mortgage packages. The Fed also

bought housing agency debt, and still holds \$75 billion of this debt on its balance sheet. These purchases of mortgage-backed securities and housing agency debt bought time for Congress to provide money for recapitalizing the agencies, as well as to determine their future role in the US housing market. This is still a work in progress. The agencies are still under repair. And the Fed's mortgage buying program has probably contributed to a thawing of credit for qualified buyers in the US housing market, the implications of which will need to be considered in a plan to exit quantitative easing.

Once the decision is made to exit QE, our expectation is that the Fed will decide to focus solely on selling its portfolio of Treasuries in stages, while retaining its portfolio of mortgage-backed securities, possibly until maturity. The problem for the Fed is multi-faceted. Housing and home mortgage origination was at the epicenter of the US financial crisis. Housing is as American as apple pie, and intensely political. The Fed may well decide to tread especially softly around the housing issue and avoid any indications that the exit from QE could disturb the recovery in the housing market, which only really got going in 2012.

If this perspective is correct, then the Fed will not include sales of mortgage-backed securities in the first few years of any QE exit plan, but will become a more permanent holder of its mortgage-backed security portfolio, essentially replacing a portion of the work that the housing agencies would have done had they not gotten into such deep financial distress. Any other decision, while possible, puts the Fed right in the middle of the debate within Congress on whether to shut down or reform the housing agencies, and at what cost over the long-term.

Fed as Political Football - As a last point, we note that in the unlikely and hypothetical case of the Fed having its mark-to-market asset portfolio fall below the value

6. See *id.*

of its liabilities, the Fed would be technically insolvent. A bankruptcy, in effect, by the Fed would have no impact on the Fed's ability to conduct monetary policy. After all, the Fed can print money. There might, however, be an enormous impact on the Fed's relationship with Congress, and **one can easily imagine calls for more Congressional control and oversight over the Federal Reserve. Such are the potentially complex and unintended consequences of over-indulging in quantitative easing.**

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