

Sound Monetary Policy

John B. Taylor*

Testimony before the Subcommittee on Monetary Policy and Trade
Committee on Financial Services
U.S. House of Representatives
March 16, 2017

Chair Barr, Ranking Member Moore, and members of the Subcommittee on Monetary Policy and Trade, thank you for inviting me to testify at this hearing on Sound Monetary Policy and, more specifically, on how the Federal Reserve departed from conventional monetary policy, how the Federal Reserve can facilitate an orderly return to a conventional balance sheet, and how monetary policies can reliably support economic growth going forward.

How the Federal Reserve departed from conventional monetary policy

The Federal Reserve's departure from conventional monetary policy began during the "too low for too long" period of 2003-2005 when the Fed held the federal funds rate well below what was indicated by the experience of the previous two decades of good economic performance. I have been critical of the Fed for the "too low for too long" period from 2003-2005, and that contrasts to my positive support for the Fed during the 1980s and 1990s. We have had big swings in monetary policy over the past 50 years. Since the "too low for too long period," policy has been much different, and that is a cause for concern.

During the 2003-2005 period the Fed also started giving forward guidance that its policy rate would remain very low for a "considerable period" and that it would be raised at only a "measured pace." These actions were a departure from the policy strategy that had worked well in the 1980s and 1990s,¹ and many have explored the reasons why the deviation occurred.²

But regardless of the reasons, this original bout of unconventional policy was not helpful. The excessively low rates along with promises that they would remain low brought on a risk-taking search for yield and excesses in the housing market. Along with a breakdown in the regulatory process, these policies were a key factor in the financial crisis and the Great Recession. And in a typical go-stop fashion the unnecessarily low rates in 2003-2005 brought unnecessarily high rates in 2007 and early 2008.

During the panic in the fall of 2008, the Fed did a good job in its lender of last resort capacity by providing liquidity to the financial markets and by cutting its policy interest rate.

* Mary and Robert Raymond Professor of Economics at Stanford University, George P. Shultz Senior Fellow in Economics at Stanford's Hoover Institution, and former Under Secretary of Treasury for International Affairs, 2001-2005. This testimony is based on my testimonies before this committee on May 17, 2016 and December 7, 2016, updated to reflect developments since then in the economy and in policy.

But then Fed policy moved sharply in an unconventional direction. The Fed purchased large amounts of U.S Treasury and mortgage backed securities in 2009, financed by equally large increases in reserve balances, which enlarged the Fed's balance sheet. And long after the recession ended, these large-scale asset purchases continued and the Fed held its policy interest rate near zero when indicators used in the 1980s and 1990s suggested that higher rates were in order. The Fed also utilized forward guidance, but changed the methodology several times, which increased uncertainty.

My research and that of others over the years shows that these post-panic policies were not effective, and may have been counterproductive.³ Economic growth was consistently below the Fed's forecasts with the policies, and was much weaker than in earlier U.S. recoveries from deep recessions. Job growth has been insufficient to raise the percentage of the population that is working above pre-recession levels. There is a growing consensus that the extra low interest rates and unconventional monetary policy have reached diminishing or negative returns. Many have argued that these policies widen the income distribution, adversely affect savers, and increase the volatility of the dollar exchange rate. Experienced market participants have expressed concerns about bubbles, imbalances, and distortions caused by the policies. The unconventional policies have also raised public policy concerns about the Fed being transformed into a multipurpose institution, intervening in particular sectors and allocating credit, areas where Congress may have a role, but not a limited-purpose independent agency of government.

In many ways this whole period can be characterized as a deviation from the more rule-like, systematic, predictable, strategic and limited monetary policy that worked well in the 1980s and 1990s. Empirical research has shown that such deviations worsen performance in the U.S. and in other countries.⁴

How the Federal Reserve can facilitate an orderly return to a conventional balance sheet

The policy implication of this experience is clear. Monetary policy should be normalized. The Fed should transition to a sound rules-based monetary policy like the one that worked in the past while recognizing that the economy and markets have evolved.

I have seen a more determined effort in the past few months at the Federal Reserve to normalize policy and that is a good thing. But normalization, or transition, is difficult in practice, and at times the pace has been slow and uncertain. With the policy interest rate still below appropriate levels, a key step is to raise the policy rate gradually and strategically.

As part of the normalization process, the size of the Fed's balance sheet should be gradually reduced. As long as the normalization plan is strategic, it need not have a negative effect. Studies that have detected impacts of bond purchases on the economy have focused on announcement effects, and thus have not examined the later impacts where fundamentals come into play. I learned a lot by being in charge of currency market policy in the United States when I was Under Secretary of the Treasury for International Affairs. Whenever the Japanese intervened in the currency market by buying or selling they sent me an email. So I saw the real-

time impacts, but soon they were reversed, though the reversal took time. There is an analogy with the Taper Tantrum, when Ben Bernanke's words at a hearing of the Joint Economic Committee in May 2013 conveying the idea that Quantitative Easing would end in "the next few meetings" caused a major disruption. Yet when the strategy to reduce purchases gradually was stated more clearly, there was virtually no effect of the tapering. I think the same would be true of balance sheet reduction.

I do not see balance sheet reduction a substitute for funds rate hikes, though, to be sure, the effects on interest rates are uncertain. Some of the estimated effects of quantitative easing have been attributed to a signaling of longer periods of lower federal funds rates. That need not be the case with balance sheet reduction, and, moreover, a clear adherence to a policy strategy would provide good guidance as to future funds rate changes.

For the reasons I gave when I testified before this committee in May 2016,⁵ reserve balances should be reduced to the size where the interest rate is market determined rather than administered by the Fed's setting the rate on excess reserves. In other words, my target level for the size of the balance sheet would be a level of reserves where the interest rate is determined by the supply and demand for reserves. Reserves are way above that level now so the federal funds rate is effectively determined by the interest on excess reserves.

I know there is some disagreement about the eventual size of the balance sheet. Some feel that more reserves are needed for liquidity purposes. For example, in testimony before this committee in May 2016, Todd Keister argued that with a smaller quantity of reserves the payments system would not adequately function without very large intraday credit to banks (daylight overdrafts).⁶ However, with some workable reforms, such as giving a specific limit on the amount of overdrafts as a percentage of collateral, the system could run smoothly with a smaller amount of reserves. John Cochrane⁷ suggested that it would be beneficial for a government entity to provide liquidity in the form of deposits for anyone—not just banks—but that service could also be provided as part of the Treasury debt management. Others want to have a permanently large balance sheet so that quantitative easing would effectively become a permanent tool of policy; I do not think that is a good idea.

The composition of the Fed's portfolio should focus on Treasury securities so that the Fed is not involved in private credit allocation. Given that the supply of reserves is now many times greater than demand, the Fed has no alternative but to pay interest on reserves during the normalization period. Careful monitoring and communicating with markets will be required to prevent instability.⁸

How monetary policies can reliably support economic growth going forward.

Sound rules-based monetary policy and good economic performance go hand in hand. Thus monetary reform is an important part of overall economic reform along with tax reform, regulatory reform (including financial reform) and budget reform. They reinforce each other. All are crucial to a prosperous economy. In my view, the opportunity for monetary reform is better than it has been in years. The goals of insulating the Fed from political pressures, creating a more

predictable-transparent-accountable policy, and better achieving economic stability and price stability appear to be widely held.

It is very important to have a basic understanding of the monetary policy strategy. The FOMC should be required to adopt and explain its monetary strategy, and then compare that strategy with monetary policy rules that are out there in a transparent way. I have long argued that in practice a strategy is not mechanical nor a formula. In a recent speech,⁹ Federal Reserve Chair Janet Yellen compared current monetary policy with the original Taylor rule, with a Taylor rule which is more reactive to the state of the economy, and with a Taylor rule with inertia. Vice-Chair Stanley Fischer gave two recent speeches¹⁰ which take a similar approach, referring to decisions made in 2011 and more generally, explaining how the analysis feeds-in and is considered by the FOMC to arrive at a policy decision. These speeches show progress in my view toward the kind of policy transparency that is contained in recent legislative proposals including the Fed Oversight, Reform and Modernization Act (FORM).

Despite claims to the contrary, that legislation does not say that the Fed has to follow a mechanical rule, or any particular rule at all. The Fed's "Statement on Longer-Run Goals and Monetary Policy Strategy" says a lot about goals, like an "inflation at the rate of 2 percent" or the "longer-run normal rate of unemployment," but it says little about a strategy for the instruments of policy.

This experience points to the need of some kind of monetary reform such as the FORM Act which would require the Fed to "describe the strategy or rule of the Federal Open Market Committee for the systematic quantitative adjustment" of its policy instruments. The Fed would choose its strategy, and could change it or deviate from it if circumstances called for a change, in which case the Fed would have to explain why. Some worry that, with this reform, the Fed would lose independence, but having and clearly articulating a strategy would improve independence. It is important to emphasize the word "strategy" as stated in the legislation. Though economists frequently use the word "rule," that term may convey the false idea that a rules-based monetary strategy must be purely mechanical.

There is precedent for this type of Congressional oversight. Legislation that appeared in the Federal Reserve Act from 1977 to 2000 required reporting the ranges of the monetary aggregates. The requirement was removed in 2000, creating a void which would be filled by the new legislation.

Empirical research shows that if such legislation had been in place in recent years, the Fed would have had to explain the deviations, which would have likely reduced their size.¹¹ Research also shows that economic performance would improve if the Fed was accountable about the rule for achieving goals as well as about the goals.¹² Such legislation would provide a transparent connection between technical policy analysis at the Fed and actual policy decisions, a connection which is essential to sound monetary policy. For these reasons and others, a number of Nobel Prize winners, former Fed officials, and monetary experts have supported such legislation.¹³

Such a strategic framework would also enable a substantive discussion of issues such as the impact of different estimates of the long-run equilibrium interest rate. Long ago I estimated that the long-run equilibrium federal funds rate was about 2% in real terms, and with an inflation target of 2% that would be 4% in nominal terms. Recently there has been a lot of research arguing that the equilibrium real rate has fallen to 1% or less, including research by Thomas Laubach and John Williams.¹⁴ Their work is based on the idea that the low policy rate has not stimulated the economy by much so that the equilibrium rate must have fallen. In work with Volker Wieland, I have written that there is a great deal of uncertainty about these estimates, and that the apparent low equilibrium rate may be due to poor regulatory and tax policy that has held the economy back.¹⁵

Monetary normalization and reform have important implications for the international monetary system. Unconventional monetary policies with near zero policy rates have spread internationally as the Bank of Japan, the European Central Bank, and other central banks adopted similar policies.¹⁶ Thus the international monetary system has deviated further from a sound rules-based monetary system. This has increased the volatility of the dollar and other exchange rates, which in turn has caused governments to impose capital controls and intervene in exchange markets, frequently in non-transparent ways that raise suspicions of currency manipulation.

A key foundation of a transparent rules-based international monetary system is a rules-based policy in each country. Therefore, normalization and reform by the Fed contributes to normalization elsewhere and ultimately to international monetary reform. In my view, normalization by the Fed would lead other central banks to move away from unconventional policies. Indeed, as the Federal Reserve has shown a more determined effort in the past few months to normalize policy, there has been increased understanding of a change at other central banks, and that is also a good thing.¹⁷ International monetary reform will in turn benefit the United States.

Thank you. I would be happy to answer your questions.

¹ John B. Taylor, *First Principles: Five Keys to Restoring America's Prosperity*, W.W. Norton, 2012; "Housing and Monetary Policy," in *Housing, Housing Finance, and Monetary Policy*, Federal Reserve Bank of Kansas City, September 2007, pp. 463-476.

² Sebastian Mallaby (2016), *The Man Who Knew*; Penguin Press, New York; Allan H. Meltzer (2012), "Federal Reserve Policy in the Great Recession", *The Cato Journal*, Vol. 32(2).

³ Charles W. Calomiris (2016), "The Microeconomic Perils of Monetary Policy Experiments," presentation at the Shadow Open Market Committee, October; Peter R. Fisher (2016) "What's the Matter with the Fed?" presentation at the Shadow Open Market Committee, April; David Malpass (2013), "Fed Policy Is a Drag on Recovery," *Wall Street Journal*, May 30; Johannes Stroebel and John B. Taylor (2012), "Estimated Impact of the Federal Reserve's Mortgage-Backed Securities Purchase Program," *International Journal of Central Banking*, 8 (2), pp. 1-42. John B. Taylor (2013), "Fed Policy Is a Drag on the Economy," *Wall Street Journal*, January 28.

⁴ Alex Nikolsko-Rzhevskyy, David Papell and Ruxandra Prodan (2014) “Deviations from Rules-Based Policy and Their Effects,” *Journal of Economic Dynamics and Control*, Vol. 49, December 2014; Yevgeniy Teryoshin (2016), “Historical Performance of Rule-Like Monetary Policy,” Stanford University, November

⁵ John B. Taylor, “Interest on Reserves and the Fed’s Balance Sheet,” Testimony before the Subcommittee on Monetary Policy and Trade, Committee on Financial Services, U.S. House of Representatives, May 17, 2016

⁶ Todd Keister, “Interest on Reserves,” Testimony before the Subcommittee on Monetary Policy and Trade, Committee on Financial Services, U.S. House of Representatives, May 17

⁷ John Cochrane, “Monetary Policy with Interest on Reserves,” *Journal of Economic Dynamics and Control*, Vol. 49, December 2014, pp. 74-108

⁸ Donald H. Dutkowsky and David D. VanHoose (2016), “Interest on Reserves, Regime Shifts, and Bank Behavior,” June

⁹ Janet L. Yellen, “The Economic Outlook and the Conduct of Monetary Policy,” Stanford Institute for Economic Policy Research, Stanford University, Stanford, California, Jan 19, 2017

¹⁰ Stanley Fischer, “I’d Rather Have Bob Solow Than an Econometric Model, But ...”, Warwick Economics Summit, Coventry, United Kingdom. Feb 11, 2017; “Monetary Policy: By Rule, By Committee, or By Both?” U.S. Monetary Policy Forum, Initiative on Global Markets at the University of Chicago Booth School of Business, New York, New York March 3, 2017

¹¹ Alex Nikolsko-Rzhevskyy, David H. Papell, Ruxandra Prodan (2016), “Policy Rule Legislation in Practice,” in *Central Bank Governance and Oversight Reform*, John H. Cochrane and John B. Taylor (Eds.), Hoover Institution Press, Stanford University

¹² Carl E. Walsh (2016), “Goals versus Rules as Central Bank Performance Measures,” in *Central Bank Governance and Oversight Reform*, John H. Cochrane and John B. Taylor (Eds.), Hoover Institution Press, Stanford University, pp. 109-154.

¹³ Lars Peter Hansen, Robert Lucas, Edward Prescott, George Shultz, Robert Heller, Jerry Jordan, Athanasios Orphanides, William Poole, Michael Bordo, Michael Boskin, Charles Calomiris, Varadarajan Chari, John Cochrane, John Cogan, Steven Davis, Marvin Goodfriend, Gregory Hess, Peter Ireland, Mickey Levy, Bennett McCallum, Allan Meltzer, Gerald O’Driscoll, Lee Ohanian, Scott Sumner, John Taylor (2016), “Statement on Policy Rules Legislation.”

¹⁴ Thomas Laubach and John C. Williams, “Measuring the Natural Rate of Interest Redux,” *Business Economics*, 51, 257-267. 2016

¹⁵ John B. Taylor and Volker Wieland, “Finding the Equilibrium Real Interest Rate in a Fog of Policy Deviations,” *Business Economics*, 51 (3), pp. 147-154, 2016

¹⁶ Hyun Shin (2016) “Macroprudential Tools, Their Limits, and Their Connection with Monetary Policy” in *Progress and Confusion: The State of Macroeconomic Policy*, Olivier Blanchard, Raghuram Rajan, Kenneth Rogoff, and Lawrence H. Summers (Eds.), MIT Press

¹⁷ Harriet Torry and Paul Hannon, “Central Banks Set to Signal Monetary Mood Has Changed,” *Wall Street Journal*, March 14, 2017