

Sound Monetary Policy for Good Times and Bad

Merk Investments/Stanford SIEPR Panel

Stanford University

Palo Alto, California

October 20, 2009

Charles I. Plosser

President and CEO
Federal Reserve Bank of Philadelphia



FEDERAL RESERVE BANK
OF PHILADELPHIA

The views expressed today are my own and not necessarily
those of the Federal Reserve System or the FOMC.

Sound Monetary Policy for Good Times and Bad

Charles I. Plosser
President and CEO
Federal Reserve Bank of Philadelphia

Merk Investments/Stanford SIEPR Panel
Stanford University
Palo Alto, California
October 20, 2009

I am delighted to be on tonight's program, especially with an old friend and one of the most respected contributors to the science of monetary policy: Bill Poole. I have known Bill for nearly 30 years, and as both of us chose to move from academia into policymaking, we share some experiences that such a transition offers. I have learned and continue to learn a great deal from him, and so can you. So that makes tonight's event very special.

The theme of this evening's discussion is "Monetary Policy in a Tough Environment." Well, that is an apt description of the world around us for the last two years. Policy choices have been difficult. No one likes to be forced to choose the least bad option among an even worse set of alternatives. Unfortunately, policymakers have, more than once, faced just such a choice during this crisis.

The key message I want to leave you with this evening is that *good* policy — and by that I mean policy that is clearly defined and systematically followed — should apply in good times as well as in tough times. I do not mean that policy actions should necessarily be the same in both good and bad economic times. Yet, in each environment, we should conduct policy in a systematic way, one that is consistent, transparent, and largely predictable.

A systematic approach to policymaking does not mean that we can know what the future holds or what future policy decisions will be. You often hear Fed officials say that policy decisions are "data dependent" and, indeed, they are. This means that future policy actions are conditional on how the economic data unfold — because the data inform our economic outlook. The incoming economic data should feed into a decision-making process in a mostly systematic way.

Some people think of this systematic approach to policy as a "reaction function" or what economists call a state-contingent plan with parameters that are largely stable over time. This approach is sometimes called "rule-like" policymaking.¹

¹ See Charles Plosser, "The Benefits of Systematic Monetary Policy," speech given to the National Association for Business Economics, Washington Economic Policy Conference, Washington, D.C. (March 3, 2008).

Of course, the alternative to rule-like policy is discretionary policy, in which policymakers are free to choose whatever action seems appropriate or convenient at the time. Rules act as restrictions on policymakers' choices — limiting the degree of discretion. But this is not a bad thing; rather, it can result in better economic outcomes in the long run.

Over the last three decades, economic theory and experience have taught us a lot about good monetary policy, and many central banks around the world have put these lessons into practice. Among the most important lessons are that policy should have clear objectives and be systematic in its approach to achieving them. Doing so promotes both transparency and predictability, which allow households and businesses to more accurately form expectations and therefore make better decisions. As a result, systematic policy promotes a more stable, predictable, and efficient economy.

Tonight I want to suggest ways to apply systematic approaches to central bank policymaking. I believe that this is the best way to ensure that policymaking will be better prepared for the next “tough environment,” whenever it comes and whatever its source. It also helps to avoid sowing the seeds of a new crisis.

I want to stress that a systematic approach applies not just to traditional monetary policy but also to a central bank's role as the lender of last resort. While these two aspects of central banking are different, the approach to policymaking ought to be the same — that is, systematic, consistent, transparent, and largely predictable — whether in good times or bad.

Systematic Monetary Policy

To adopt a systematic approach to monetary policy, we first must ensure that policy has clear, well-defined, and feasible objectives. Congress has established our so-called dual mandate that monetary policy seek to achieve price stability and maximum employment. Policymakers must credibly commit to take actions that will deliver on these stated objectives. Many economists and central bankers believe that creating an environment of stable prices is the most valuable contribution a central bank can make to promoting maximum employment and sustainable economic growth. What's more, central banks have a unique responsibility for price stability, at least in a flexible exchange rate regime. As a consequence, central banks in a number of countries have adopted institutional mechanisms to reinforce the credibility of their commitment to such an objective.

One such approach is to adopt an explicit inflation target, which I and other economists have long proposed as a way to help clarify the central bank's policy objective and as a way to publicly commit the institution to a feasible goal easily understood by all. This can help to anchor inflation expectations if the public finds the commitment credible. A lack of confidence in the central bank's commitment to maintain price stability, for example, can lead to rising inflation expectations that prompt workers and firms to demand higher wages and prices to head off the expectation of higher costs, thus setting off a burst of inflation. A credible inflation target would not only help prevent inflation

expectations and actual inflation from rising to undesirable levels, but it would also help prevent expectations of deflation from materializing that could initiate an undesirable episode of falling prices.

Marvin Goodfriend, for example, has documented episodes during the 1980s and early 1990s when markets lost confidence in the Fed's commitment to price stability. During these episodes — which Goodfriend calls inflation scares² — long-term interest rates rose sharply as expectations of inflation rose. To restore the Fed's credibility and ensure better long-run economic outcomes, the Fed had to aggressively increase short-term interest rates to reduce inflation expectations, even though doing so risked potentially undesirable consequences for the broader economy.

Deflation scares can be just as problematic. Twice in this decade alone we have seen concerns that deflation may pose a threat. In 2003, the Fed responded by dropping the nominal federal funds rate target to 1 percent and holding it there for a prolonged period to reassure the public and markets of its commitment to price stability. Many have argued that by doing so, we risked contributing to excessive asset-price speculation.

Just this year, concerns about deflation surfaced again. Yet with the federal funds rate already near zero, the Fed could not cut rates further. So, with expectations of deflation looming, real, or inflation-adjusted, short-term interest rates were rising, potentially putting at risk the economy's recovery.

These cases help illustrate that maintaining a firm commitment to low and stable inflation helps prevent inflation expectations from rising or falling, which promotes a more sustainable and robust economy. The greater predictability of an inflation-targeting regime amounts to articulating in advance the “rules of the game” as best as possible — even in a crisis. In this way, systematic policy can provide an important stabilizing influence on the real economy at a time when it is very much needed.

A frequently expressed concern is that an inflation-targeting regime is unresponsive to fluctuations in the real economy. This is a misconception. The economy is constantly buffeted by shocks, and markets respond by making adjustments in prices and quantities as required. One of those important prices is the real interest rate. It is not a constant but moves around. Monetary policy must recognize this and adjust accordingly. If the real interest rate falls, signaling weak growth, then so must the nominal federal funds rate if inflation is near the target. Otherwise, policy would be fostering an inflation rate below its target. Likewise, as economic growth rates and real interest rates rise, the nominal federal funds rate must also rise in order to keep inflation from rising above the desired rate. This is not necessarily an easy or straightforward task, but it is nonetheless the appropriate way to think about policy.

One of the most well-known forms of systematic monetary policy was described by John Taylor when he explored how the central bank should set the short-term nominal interest

² See Marvin Goodfriend, “Interest Rate Policy and the Inflation Scare Problem: 1979-1992,” Federal Reserve Bank of Richmond *Economic Quarterly* (Winter 1993), pp 1-23.

rate.³ These Taylor rules require central banks to have an inflation target of some kind, and they are more explicit about exactly how the central bank should respond to deviations from the target. There are many variations of Taylor's rule, but all share the vital characteristic that they systematically describe the behavior of policy. Another advantage of these simple Taylor-like rules is that they make it easier for the public and financial markets to form expectations about policy, and therefore, they can contribute to a more stable and efficiently functioning economy.

Some of these Taylor-like rules yield very good results in a variety of theoretical settings because they produce outcomes close to those of the theoretically optimal rule.⁴

Furthermore, this occurs in a wide variety of models of the type actually used to shape our forecasts and our understanding of actual economic events.⁵

In these simple rules, the interest rate generally responds aggressively to inflation or to the forecast of inflation, which implies that the real rate of interest should rise when inflation or projected inflation increases above its target. Although these rules imply that the interest rate should respond positively to deviations of actual output from some measure of "potential output," the interest rate's response to output movements is usually quite a bit smaller than its response to inflation.

Economists generally view these Taylor-like rules as working in both good and bad times. When economic activity is rapidly growing and inflation is rising, the rule would be systematically applied to raise interest rates to keep inflation in check. When economic activity is declining and inflation is slowing, the rule would ease interest rates to foster the conditions that enable households and businesses to make the necessary adjustments to return the economy to its long-term growth path.

As the economic outlook worsened in late 2007 and 2008 and we experienced the early stages of the financial crisis, the FOMC lowered its federal funds rate target more than many versions of Taylor-like rules would have required. When monetary policymakers who follow a rule choose to significantly deviate from the rule for unusual and temporary reasons, they must be transparent in explaining why so as not to undermine their credibility with the public regarding their systematic approach to policy goals. In light of the severity of the disruptions to financial markets during this crisis, explaining such a deviation might not have been difficult for the Fed or other central banks during this period.

However, with a major financial crisis and the federal funds rate target reaching the zero bound, implementing an interest rate rule can become problematic. In particular, during

³ See John B. Taylor, "Discretion Versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy* 39 (1993), pp. 195-214.

⁴ See Plosser's March 3, 2008 speech cited in footnote 1.

⁵ See Andrew Levin, Volker Wieland, and John C. Williams, "The Performance of Forecast-Based Monetary Policy Rules under Model Uncertainty," *American Economic Review* 93:3 (June 2003), pp. 622-45. Also see Stephanie Schmitt-Grohe and Martin Uribe, "Optimal Simple and Implementable Monetary and Fiscal Rules," Federal Reserve Bank of Atlanta *Working Paper* 2007-24 (2007).

the depth of the financial crisis and amid the sharp declines in economic activity, some versions of the Taylor rule called for reductions in real interest rates that would have meant further cuts in the nominal federal funds rate target when it was already near zero. Since that is not feasible, economists and policymakers have to consider how to adapt such policy rules. Some have suggested that in such circumstances, quantitative rules are more appropriate, perhaps similar to the rules suggested by Bennett McCallum that focus on growth of the monetary base.⁶ Such rules could be mapped into metrics for assessing the appropriate degree of quantitative easing or the expansion of the Federal Reserve's balance sheet.

As we review the current crisis, economists and policymakers will need to determine the appropriate extent of deviations from a policy rule. We might also ask if there are variations of these rules that could be articulated in advance and that would be more adaptable in the extreme circumstances we have witnessed during this crisis. Nevertheless, by using simple rules as the benchmark, policymakers would be forced to explain deviations, thereby helping to make policy more transparent.

If we are to keep expectations of inflation well-anchored, departures from a systematic approach to monetary policy must be clearly communicated and promptly reversed as conditions return to normal. Otherwise, we risk eroding the public's confidence in our commitment to deliver price stability, and we know from the 1970s and early 1980s that the cost of regaining the public's confidence can be quite high.

This leads me to my last point concerning systematic monetary policy. In order to capture the benefits of such a policy, the public must believe that policymakers will stick to their goals and the rules adopted to achieve them. If policymakers fail to act in a way consistent with the stated objectives, credibility is lost and the public becomes uncertain about how policymakers will react in the future. That is surely a recipe for volatility, not stability. This is one reason transparency is important. When policymakers are transparent about how they are setting policy, the public can verify that policymakers are acting in a way consistent with their stated objectives, and thus, the policymakers gain credibility and the economy gains stability.

Systematic Lender-of-Last-Resort Policy

Just as we need to pursue a systematic approach to monetary policy, I believe we must also apply a systematic approach to the central bank's financial stability policy,

⁶ See Bennett McCallum, "Robustness Properties of a Rule for Monetary Policy," *Carnegie- Rochester Conference Series on Public Policy* 29 (Autumn 1988), pp. 173-203. McCallum proposed a rule that calls for varying the growth rate of the monetary base (currency and bank reserves) in response to variations in nominal GDP and a proxy for long-run trends in money demand. The rule specifies a target for nominal GDP that is the sum of the economy's long-run trend growth of real GDP and a desired or targeted inflation rate. If nominal GDP growth is above the target, the rule calls for reducing the growth rate of the monetary base and vice versa.

particularly its policy actions as the lender of last resort. In light of the crisis, academics and policymakers are taking a much greater interest in this aspect of central banking.

The best guide to a systematic lender of last resort policy dates back to Walter Bagehot's simple rule of lending freely to solvent banks at a penalty rate against good collateral.⁷ During the past year, the Fed has taken extraordinary actions to ensure financial stability that have gone far beyond this concept. Some of these actions have supported markets in which intermediation was severely impaired; others have supported the ongoing survival of institutions deemed too big to fail.

Financial market conditions have continued to improve over the past year. However, I believe abandoning Bagehot's simple rule has increased moral hazard and the associated risk for our financial system.

Because a financial crisis of this magnitude does not occur often, policymakers had little experience to draw upon. As events moved quickly, we ended up learning as we went. So it is probably not surprising that policy reactions appeared, at times, erratic, rather than systematic. Yet, in the process, we have learned that not having a clearly communicated systematic approach to our lending that covers bad — and *really bad* — times can be very confusing to the public and the markets.

This was underscored by the public and market reaction to the Fed's and the Treasury's varying approaches during 2008 to the serious problems that arose at three financial firms: Bear Stearns, Lehman Brothers, and the global insurer AIG. The lack of a clearly understood approach to the government's and the Fed's decisions about when assistance efforts would be provided created confusion and uncertainty.

A significant factor contributing to the difficult policy choices was the lack of an explicit resolution mechanism for the orderly failure of a systemically important nonbank financial firm. In fact, we still do not have such a mechanism 18 months after the Bear Stearns merger. The lack of a well-articulated systematic approach to the Fed's lending role contributed to uncertainty in financial markets about who would be "rescued" and who would not. That uncertainty still remains and must be one of the prime objectives of policy reforms going forward.

I believe that no firm should be too big to fail and that a body other than the Fed should have the authority to fail these firms, wipe out shareholders' stakes in the firm, force uninsured creditors to take haircuts, and unwind the firm in an orderly manner. The real challenge in such an approach is whether a policymaker can make a credible commitment to behave in such a manner. Won't there always be some firms that might gamble on a rescue in something like a game of chicken with the government? Does this really eliminate moral hazard? Probably not entirely, but it is likely to substantially improve the situation.

⁷ Walter Bagehot, *Lombard Street: A Description of the Money Market* (New York: E.P. Dutton and Company, 1921). [Orig.pub. 1873]

As the crisis unfolded and problems arose in different parts of the financial system, the Fed responded by trying to increase liquidity in several markets through special lending programs. These programs may have had some stabilizing effects on markets and may have lowered some spreads. Yet, without defining in advance a systematic and consistent approach to such lending, these programs also raised uncertainty — in this case, about who would or would not have access to the various facilities. This was illustrated when the Term Asset-Backed Securities Loan Facility (or TALF) was announced. Many market participants lobbied for expanding the categories of securities eligible for the program. Did these multiple lending programs keep lenders on the sidelines waiting to see which asset classes the Fed would support and which it would not? Did this delay the healing of the financial markets?

In hindsight, a basic problem was that, in our desire to get financial markets working again, we offered no systematic view as to how and where the Fed would intervene — we lacked a well-communicated systematic approach. Moreover, to my way of thinking, we strayed into credit allocation that, in my view, should be the purview of fiscal authorities and not the central bank.

Going forward, to promote a clearer distinction between monetary policy and fiscal policy and help safeguard the Fed's independence, I have advocated that the Fed and the Treasury should agree that the Treasury will take the non-Treasury assets and non-discount window loans from the Fed's balance sheet in exchange for Treasury securities.⁸ Such a new "accord" would transfer funding for these special credit programs to the Treasury — which would issue Treasury securities to fund the transfer — thus ensuring that these extraordinary credit policies are under the oversight of the fiscal authority, where such policies rightfully belong. The accord would return control of the Fed's balance sheet to the Fed, so that it can continue to conduct independent monetary policy.⁹ I would go further and suggest that the Fed adopt an "all Treasuries policy" for the securities held on its balance sheet and follow Bagehot's principle for the loans on its balance sheet — which in a crisis would mean the Fed would lend freely to solvent firms with good collateral at a penalty rate.

⁸ See Charles Plosser, "Ensuring Sound Monetary Policy in the Aftermath of Crisis," speech given to the U.S. Monetary Policy Forum, The Initiative on Global Markets, University of Chicago Booth School of Business, New York, NY (February 27, 2009). For a discussion of such an accord between the Fed and the Treasury in a different context, see J. Alfred Broaddus, Jr. and Marvin Goodfriend's article, "What Assets Should the Federal Reserve Buy?" and Goodfriend's article, "Why We Need an 'Accord' for Federal Reserve Credit Policy: A Note," Federal Reserve Bank of Richmond *Economic Quarterly* (Winter 2001). Such an accord would also be consistent with the recommendations made by the Group of Thirty's Working Group on Financial Reform about the role of central banks in providing financial stability. See "Financial Reform: A Framework for Financial Stability," Group of Thirty, Washington, D.C. (2009).

⁹ There is a historical precedent for such an accord. In 1951, the Treasury and the Fed struck an accord that freed the Fed from pegging the interest rate on long-term Treasury debt below 2.5 percent, which the Fed had done during and after World War II. For several articles about the 1951 Accord, see the Federal Reserve Bank of Richmond's *Economic Quarterly* (Winter 2001).

I believe we must specify in advance the conditions under which the central bank would serve as a lender of last resort. This policy should be systematic and should apply to both good times and bad. It should have clear, realistic, and feasible objectives; it should be consistent, transparent, and predictable; and it should operate independently of interest group pressures to lend to specific sectors or industries.

Developing such a systematic approach is not easy. Making a credible commitment to stick to such a lending policy in good times and bad is even more difficult. Nevertheless, that is what we must tackle if we are going to achieve better results the next time a crisis arises.

Conclusion

Going forward, the Fed as well as other policymakers should strive to follow a systematic, more “rule-like” approach in bad times as well as good. Developing and implementing such systematic rules for making sound policy in all seasons deserves more attention by policymakers because they would yield better economic outcomes for both monetary policy and financial stability policy. I believe that times of crisis are precisely when sound principles and a systematic approach to policy are most needed.