# Charles I Plosser: Influencing expectations in the conduct of monetary policy

Speech by Mr Charles I Plosser, President and Chief Executive Officer of the Federal Reserve Bank of Philadelphia, at the 2014 Bank of Japan-Institute for Monetary and Economic Studies Conference "Monetary policy in a post-financial crisis era", Tokyo, 28 May 2014.

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

## **Highlights**

- President Charles Plosser discusses his views on the role of forward guidance and transparency in influencing expectations.
- President Plosser outlines his proposals to be more explicit about a reaction function.
- President Plosser notes that one way to be more explicit would be to indicate the likely behavior of the policy rate based on a few different Taylor-like rules that have been consistent with past conduct of monetary policy and are robust to our uncertainties regarding the true economic model.
- President Plosser believes that the model created by the Federal Reserve Board staff, called FRB/US, seems to be a reasonable starting point for providing economic forecasts based on those rule-based policies; however, other models would be useful to consider.

#### Introduction

I would like to thank Governor Kuroda for inviting me to participate in this thought-provoking conference. I would also like to thank Professor Maury Obstfeld for suggesting a number of interesting topics for us to consider. He has highlighted some issues that I believe are intimately related to one another: namely, the central bank's ability to influence expectations through forward guidance, the role of quantitative easing, and the process of exiting from that easing. Indeed, I think it is important that we think about monetary policy more holistically, if you will. How effective we are with forward guidance or quantitative easing can only be assessed in the broader context of a central bank's overall approach to policy, including its approach to communication and transparency.

However, before I go any further, I should begin with the usual disclaimer that my views are my own and do not necessarily reflect those of the Federal Reserve System or my colleagues on the Federal Open Market Committee (FOMC).

I want to focus my remarks today on communication and transparency in the conduct of monetary policy. One major reason for this emphasis is the recognition that the stance of monetary policy encompasses not just the current level of the short-term policy rate but its expected future path as well. Economists have come to understand that expectations about monetary policy can play an important role in determining economic outcomes, such as real economic growth and inflation. For example, today's decision to save or to spend is influenced by the current interest rate as well as tomorrow's expected future consumption. In turn, tomorrow's expected future consumption is influenced by next period's interest rate and next period's expected future consumption. Therefore, the entire expected path of interest rates, not just the current interest rate, influences today's consumption. This is not only true

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for personal consumption, but also business investment decisions, and the setting of prices and wages.

An element of communication that has received a good deal of attention is forward guidance. Forward guidance relates to the communication about the future course of monetary policy, both the likely path of the short-term policy rate as well as path of balance sheet actions associated with quantitative easing.

Of course, one reason for this increased focus on future policy actions is that the current short-term policy rate conveys little information, as it has been constrained by the zero lower bound. Thus, forward guidance in the U.S. has evolved to include information about the future pace and duration of asset purchases, as well as under what conditions, and how quickly, the policy rate might eventually lift off from the zero lower bound.

However, forward guidance is not a separate or independent tool of policy. Its effectiveness is intimately related to other features of monetary policy. For example, a credible, systematic approach to policy and the general openness and transparency of the policy process are essential elements in shaping expectations and thus must be considered when formulating forward guidance. For forward guidance to be successful, it must be credible. And it is difficult to make it credible if it is inconsistent with other features of the policy framework.

One of the most important ways to support credibility and thus the effectiveness of forward guidance is to practice it as part of a systematic policy framework. I believe that indicating how the evolution of key economic variables systematically shapes current and future policy decisions is critical to such a policy framework. Indeed, a commitment to a policy framework that is systematic and rule-like provides the foundation for establishing expectations for the future path of policy and thus forward guidance.

## If we only had a reaction function

The appropriate way to make policy systematic and rule-like is to make policy history dependent and base policy decisions on the state of the economy. Doing so does not commit the policymakers to particular future values of the policy rate, but describing a reaction function explains how the policy rate will be determined by economic conditions.

Unfortunately, the science of monetary policy has not reached the point where we can specify a precise or optimal rule for setting policy. That would require an agreed-upon model of the economy – something we don't have yet. Nevertheless, I believe systematic policy can be guided by various forms of robust rules, such as the one proposed by John Taylor – with which we are all familiar.

The attractiveness of Taylor-like rules for monetary policy goes beyond their intuitive appeal or the fact that they seem to describe the actual behavior of monetary policy reasonably well. The reality is that Taylor-like rules yield very good results in a variety of theoretical settings. This feature of the rules is of enormous practical importance. Given our uncertainty about the true model of the economy, knowing that systematic policy in the form of a Taylor-like rule delivers good outcomes in a variety of models means that these simple rules can provide useful guidance for policy.

Systematic policies that provide important information about the policymakers' reaction function combined with other information, such as the policymakers' economic forecasts, can sharpen forward guidance in ways that reduce policy uncertainty and enhance economic performance. Thus, well-designed communications are valuable, and behaving systematically has the added advantage of making those communications easier for the public to understand.

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## **Balance sheet policies**

I have focused my discussion on forward guidance with respect to the setting of the policy rate, but these principles apply equally to balance sheet policies. There is room to debate how effective balance sheet policies, such as quantitative easing, have been, and indeed, just how they affect interest rates and economic activity. Some think balance sheet policies work through portfolio balance effects that alter risk premia. The quantitative effects on macroeconomic outcomes, however, are unclear. And the theoretical underpinnings for this channel depend on the model and the assumptions made regarding the extent of financial market frictions and the degree and form of market segmentation.

Others believe that quantitative easing acts through the potential signaling effects associated with large changes in the balance sheet. Namely, adding to the balance sheet could signal a more accommodative future policy, which lowers longer-term nominal and real interest rates, and thereby spurs current economic activity, including expected inflation. Of course, if the policies and communications regarding the future path of the policy rate were transparent and fully credible, such signaling would not be necessary. Moreover, if signaling is the primary channel through which large-scale asset purchases act, there remains much that we don't understand about how to calibrate such operations. In any event, it will be important that the signals conveyed by balance sheet policies are consistent with the forward guidance about future interest rate policies. This has been a difficult communications challenge at times for the FOMC. And it will likely remain a communications challenge as the Committee coordinates the unwinding of the Fed's balance sheet with the gradual increase in the policy rate.

### Implementing forward guidance

I have indicated conceptually why a systematic approach to communications is important but have yet to discuss how a central bank might implement such an approach. This issue has received increased attention in recent years, with various central banks adopting different strategies. The differences are based on alternative economic viewpoints as well as on varying institutional structures. I think the Fed can learn a great deal from the various approaches. Many of you in this room are very knowledgeable, and have thought deeply about the costs and benefits of the various approaches.

A forecast is, of course, a critical piece of information emanating from the central bank, and the nature of the policy rate's future path is an important element of that forecast. These forecasts are often presented and discussed by central banks in the form of published inflation or monetary policy reports. Such reports can and should be an important element of a central bank's communication and transparency about the policy process. But a number of interesting questions arise. Should a central bank's published forecast be based on its assessment of what the policy rate path is likely to be, or should the forecast be based on an interest rate path that is more arbitrary, such as a constant interest rate path or one that is related to market expectations?

I am fully aware that great care needs to be taken in providing more specific forms of forward guidance. We must avoid a false sense of certainty regarding future policy or a mistaken sense of commitment to a specific path of policy rates. Yet, I believe there are approaches, like the one I am about to suggest, that can avoid or mitigate these pitfalls. Because I believe systematic monetary policymaking can enhance economic performance, I am in favor of clearer communication concerning the formulation of policy.

Now, in our stylized models, there tends to be a single monetary policymaker who knows the structure of the economy. Therefore, the approach for communication would be a forecast derived from the policymaker's model as well as a policy path that yields the best economic outcomes based on that model of the economy.

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Unfortunately, we don't live in such a world. Monetary policymaking is often conducted by committee, and divergent views can and often do exist. While this can be clumsy at times, such governance mechanisms ensure that various views are heard. This promotes better decisions and outcomes and helps preserve central bank independence and accountability.

Thus, it may be difficult for a large committee like the FOMC to achieve a consensus forecast or policy path. Yet, we can enhance our communication by indicating the likely behavior of interest rates based on a few different Taylor-like rules that have been consistent with the conduct of monetary policy. Doing so would require agreement on a particular model in order to produce the resulting rule-based behavior. For the Fed, the economic model called FRB/US, which was developed by the Board's staff, seems like a reasonable place to start. Such an exercise could also be enhanced, I believe, by using some of the dynamic stochastic general equilibrium, or DSGE, models that have been developed within the Federal Reserve System.

The FOMC could then articulate whether and why it anticipates policy to be somewhat more restrained or more accommodative, relative to the projections given by the rules. The current monetary policy report that the Fed delivers each February and July could be adapted to include those exercises as well as a discussion of the opinions of Committee members regarding the results.

It is important that in performing this exercise we illustrate the various dimensions of uncertainty that policymakers face. For example, there is model uncertainty, forecast uncertainty, and the variations implied by different rules. Many central banks use fan charts and other devices to highlight such uncertainty, and we, the Fed, would be wise to do the same. Even acknowledging the uncertainty, the exercise will provide a better sense of the likely direction of policy and the variables most related systematically to that policy.

I believe these steps toward greater transparency and communication would be significant progress, and would encourage the FOMC to conduct policy in a more systematic manner. I believe this would lead to better economic outcomes over the longer run.

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