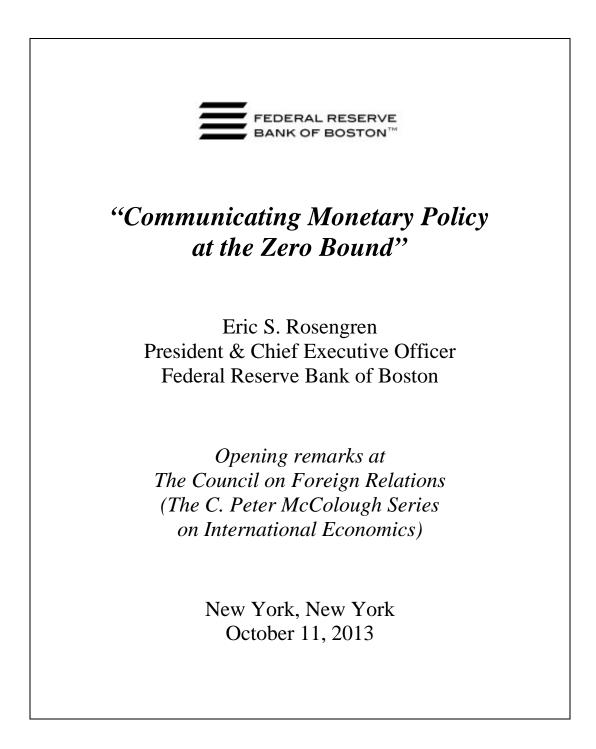
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## "Communicating Monetary Policy at the Zero Bound"

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Good afternoon. It is a pleasure to be invited to speak at the Council on Foreign Relations. Since my introductory remarks will focus on central bank communications, it is certainly appropriate that your format allows for plenty of time for questions and discussion. I would like to begin with a few opening comments, and summarize the two figures you will find in your handout. Of course, I would like to note that the views I express today are my own, not necessarily those of my colleagues on the Board of Governors or the Federal Open Market Committee (the FOMC).

The past several months have highlighted the communication challenges faced by central banks when short-term interest rates are close to zero – what we call the zero lower bound – and policy "tools" include communication about the sequence and nature of future actions. It is important to note that with any monetary policy action, the ultimate impact is highly dependent on the reactions and expectations of a range of economic actors – from financial market investors to firms making capital spending decisions to households considering new purchases. Their decisions can either amplify or reduce the intended impact of policy. Given this dynamic, the ability to communicate clearly is crucial.

Unfortunately, the communication challenges are not at all trivial. Combined with the lack of historical precedent for many of the Fed's recent monetary policy actions, these challenges make us realistic and humble about our ability to gauge the likely impact of our communications at the zero lower bound.

**Figure 1** in your handout charts the movement of the 10-year Treasury bond since the beginning of May, with the largest one-day movements shown in the table. The data over this roughly six-month period highlight that 10-year Treasury rates have been quite volatile, and have tended to respond noticeably to monetary policy announcements and new economic data – particularly data related to the monthly report on the employment situation. That reflects, in part, prior communication about the Committee's focus on the labor market.

While long-term rates declined after the last FOMC announcement, they still remain about 100 basis points higher than they were at the beginning of May. Certainly contributing to the rapid rise in long-term rates were announcements, speeches, and testimony by Fed officials that indicated that if the economy were to improve as they expected at that time, it might be appropriate to reduce the central bank's monthly purchases of Treasury and mortgage-backed securities sometime in the fall.

The reaction to the discussion of a possible reduction in Fed purchases appears to have had an outsized impact on long-term rates. The recent market reactions provide a challenge to the view, argued by some, that the purchase program has no impact – since asset prices seem so sensitive to announcements of even a potential, modest reduction in purchases sometime in the future.

Of course, a monetary policy that affected only financial markets would have little chance of achieving the Fed's Congressionally-mandated goals. In normal times, monetary policy is transmitted largely through interest rates. Although we have used unusual policy tools, our efforts to lower interest rates are evident in consumer spending in the most interest-sensitive sectors, such as residential investment and auto sales.

So it would appear that recent monetary policy actions can have – and have had – a meaningful impact on the economy. And the fact that the possibility of small future changes in policy could elicit such large movements in market interest rates and asset prices emphasizes that while central bank communication can be a powerful tool, it has also proven an imprecise and unpredictable instrument in terms of its impact on longterm rates.

How should we think about using this powerful but hard-to-control tool? For me, the primary objective of any communication should be to clarify how potential current and future actions are consistent with achieving the Federal Reserve's dual mandate goals of maximum employment and price stability within an acceptable period of time. In the current situation, the national unemployment rate is at 7.3 percent (well above most estimates of full employment), and the personal consumption expenditures inflation rate is at 1.2 percent (well below the Fed's target of 2 percent). As a result, forward-looking policy needs to be focused on how we use the policy tools at our disposal to achieve the dual mandate in an acceptable time frame.

The economy is affected by a wide variety of events outside the control of monetary authorities. The fiscal disruption over the past week or so is but one example of an event that was unlikely to have been fully incorporated in most forecasters' baseline outlook – but nonetheless has the potential to affect how quickly we return to a path consistent with the Fed's dual mandate.

As a result, the appropriate path for monetary policy needs to be flexible enough to respond to unexpected shocks, and alert to the evidence of their emergence in incoming data. Monetary policy should always be data-driven, and should respond if the latest information suggests that the economy is likely to significantly diverge from the appropriate path.

Importantly, though, no one data series is likely to fully capture the information that policymakers need in order to make that determination. There are a large number of high-frequency macroeconomic data series on inflation, employment, and GDP, all of which provide nuanced signals about the direction of the economy. This means that

policymakers cannot focus solely on any one data series or data element, but instead need to base policy decisions on a fuller set of data.

Unfortunately, this also generates a communication problem. Saying that we will rely on all available data series, and that we will respond to news in the data that suggests we are off the desired path for the economy, probably provides less clarity and guidance than much of our audience desires. The resulting, inevitable uncertainty in this datadriven, multi-pronged approach may increase variability in financial markets, as different market participants sift through and interpret both the data and the public pronouncements by officials of the central bank.

At the other extreme would be a very transparent and clear communication stating that we will change our policy on a particular calendar date. But a problem with dates is that if the economy's path diverges significantly from what is anticipated, a calendarbound policy may be inconsistent with achieving our goals in an appropriate timeframe. Having very clear communication that "locks" policy into an inappropriate move would clearly be undesirable.

An intermediate case could tie communication about policy to an important economic variable. As long as that variable is a good proxy for overall economic conditions, it has the benefit of being transparent and observable, and thus easily communicated. The potential downside emerges if the variable stops serving as an accurate proxy for overall economic conditions, in which case it could lead to a poor policy decision in much the same way as a rigid calendar date.

For example, the unemployment rate is a widely-used summary measure of labor market conditions. But despite its popularity, the unemployment rate is not always the

best summary indicator. A decline in the unemployment rate resulting from firms hiring more workers would certainly be welcome at this time. However, a decline in the unemployment rate resulting from discouraged workers leaving the labor force would be unwelcome and would provide a quite different signal about the state of the economy. So tying policy to a particular outcome for one economic variable may be observable and transparent, and reduce the uncertainty around monetary policy action – but could also provide the wrong signal and could lead to policies that actually move the economy in a direction inconsistent with the choice a policymaker would make with more flexibility.

This problem is compounded by the fact that most investors seem to focus on calendar dates, not economic outcomes. As a result, investors will naturally translate guidance tied to economic outcomes into calendar dates, and that means caveats about conditionality, data-driven policy, and responsiveness to incoming data are likely to receive far less attention than the translated calendar dates.

**Figure 2** shows results from a survey of primary dealers conducted before the September FOMC meeting.<sup>1</sup> Many market participants thought that there was a reasonably high probability of a reduction in Fed asset purchases in September, but many also saw a relatively high probability that the FOMC might wait until a later date to adjust policy. Whatever the decision, a significant number of participants in the survey were positioned to be disappointed. This lack of unanimity was likely to generate consternation among those caught in an unfavorable financial position once the decision was announced.

No calendar date was specified, and it was clearly communicated that the economy needed to progress as expected for policy to be modified – but again, those

caveats tended to get much less attention. We saw weaker economic data emerge between the June and September FOMC meetings, and a higher than anticipated jump in market interest rates, along with the risk in September of possible fiscal-policy disruptions. Given those data and risks, in my view continuing the asset-purchase program was warranted, and fully consistent with seeking to return to full employment and 2 percent inflation within a reasonable timeframe.

However, the experience of the past several months makes it clear that a datadriven policy that also considers the risks to our forecasts can be difficult to communicate, because the policy will necessarily change as we update our forecasts and risk assessments in the face of new economic data. This was emphasized in the September FOMC statement, which made clear that asset purchases are not on a preset course.

We have more learning to do on how best to communicate monetary policy during uncertain and unprecedented times. However, the most important thing we at the Fed can, and should, communicate is that the policies we are setting are consistent with our goals – our mandate – for maximum employment and price stability. Getting the appropriate balance between flexibly implementing those policies and trying to communicate clearly and transparently to the public and to financial markets is likely to remain a work in progress.

Thank you again for the opportunity to be here today and to offer these opening remarks. Now I would be happy to respond to questions.

<sup>&</sup>lt;sup>1</sup> The New York Fed's Markets Group surveys primary dealers on their expectations for the economy, monetary policy, and financial market developments prior to Federal Open Market Committee meetings. For more information see <u>http://www.newyorkfed.org/markets/primarydealer\_survey\_questions.html</u>.