

"Monetary Policy and Forward Guidance"

Eric S. Rosengren President & Chief Executive Officer Federal Reserve Bank of Boston

Husson University

Bangor, Maine April 15, 2014

It is always a pleasure to return to the state of Maine, where I spent four wonderful years as an undergraduate at Colby College, and where I first developed my interest in economics.

Around New England today, April 15, we are marking one year since the tragic Boston Marathon bombings. For all those who were affected, our thoughts are very much with you.

Turning to my topic today, let me say that when driving up I-95 and crossing the bridge over the Piscataqua River I always like seeing the sign that says, "Maine, the way life should be." Unfortunately, it has been some time since anyone would characterize the U.S. economy's

performance as "the way life should be." By this I mean that it has been more than six years since the beginning of the last recession, and yet we still have a national unemployment rate of 6.7 percent, and the PCE inflation rate is less than 1 percent¹ – well below the 2 percent inflation target set by the Federal Reserve's policymaking body, the Federal Open Market Committee or FOMC.

Of course I would add that, as always, the views I express today are my own, not necessarily those of my colleagues on the Board of Governors or the FOMC.

Actually, the widely reported unemployment rate understates the severity of the problem. The broader labor-market indicators that include workers who are "part time for economic reasons" and workers who have looked for a job in the past year but not in the past four weeks – "marginally attached" workers – remain unusually elevated by historical standards. These indicators quantify what many Americans all too readily observe around them – that significant problems in labor markets persist even at this stage of the recovery.

All this means we have a U.S. economy that still requires an unusually accommodative stance of monetary policy. At the same time, the economy has indeed been gradually improving. The most recent labor market report indicated that the U.S. economy produced 192,000 jobs in March, and there were some positive revisions for the data in previous months. So, after some weaker data in the winter months, these labor market data suggest that there will hopefully be broader improvement in an array of economic indicators this spring. In fact, most economists expect growth around 3 percent over the rest of this year – a forecast that is quite consistent with my own.

As the economy has gradually improved, the Federal Reserve has made adjustments to monetary policy. In light of the weak economy, and with the federal funds rate essentially pinned at zero, the Federal Reserve has been stimulating the economy using alternative methods, primarily by making large-scale purchases of longer-term assets such as Treasury bonds and mortgage-backed securities. These purchases are expected to keep longer-term interest rates lower than they would otherwise be, thus stimulating the economy when we can no longer do so by lowering the funds rate. Since the beginning of this year, we have been reducing the size of the monthly asset purchase program, and this gradual tapering is likely to continue as long as the economy's gradual improvement proceeds.

The second adjustment to monetary policy involves how the FOMC communicates future policy direction, commonly referred to as "forward guidance." When the economy was far from where it needed to be, the FOMC provided fairly specific guidance – that short-term rates would remain low until we had seen significant improvement in labor markets – improvement that could be proxied by seeing the unemployment rate fall to the 6.5 percent threshold.

However, such a threshold does not provide much by way of forward guidance as we approach it. With a gradually improving labor market, we could be below the threshold relatively soon. This scenario led the Federal Reserve to make an adjustment to its communications at the March FOMC meeting, suggesting they would hold short-term rates at very low levels "for a considerable time after the asset purchase program ends, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored."²

Admittedly, this rather qualitative forward guidance is somewhat less specific than the previous forward guidance involving the 6.5 percent threshold. My personal view is that, ideally, forward guidance should, for the time being, remain qualitative but increasingly be linked to progress in achieving our dual mandate based on incoming economic data. In particular, I believe the FOMC's forward guidance should be consistent with keeping interest rates at their very low level until we are within one year of reaching full employment and our 2 percent inflation target – and the guidance could explicitly state that intention.

Parenthetically, I would note that on a quarterly basis the Federal Reserve publishes a summary of the economic projections (SEP) made by Federal Reserve Board members and Federal Reserve Bank presidents. The SEP does give information on the expectations of the Committee regarding when the economy would be reaching the dual mandate goals.³

Today I plan to discuss why, as we gradually do approach achieving our dual mandate goals of maximum sustainable employment and price stability, the Fed's forward guidance should be increasingly focused on how quickly we expect to make progress on inflation that is well below our target, and on the significant underutilization of labor resources that persists well after the official end of the recession.

I would like to see a more productive state of affairs, where market participants are more attentive to the incoming data and how the data fit (or do not fit) with the expectations in the forward guidance. In this way, market participants would be focused more on data and less on changes in the setting of monetary policy tools. I would also like to see much more focus by market participants on a broader set of measures, such as the U-6 measure of unemployment which captures broader utilization of labor resources.

Recent Developments

Let me begin by walking you through some charts that reflect the economy's recent developments.

Figure 1 provides the path of the unemployment rate relative to the Federal Reserve's earlier stated threshold of 6.5 percent. The figure provides visual support for the fact that the forward guidance needed to change. Once we reached a point where we could be below the threshold with one or two favorable employment reports, the guidance was no longer providing much information about our potential actions beyond one or two FOMC meetings. Keep in mind that one purpose of forward guidance is to restrain longer-term market interest rates to support the struggling economy by promising to keep the short-term interest rates the Fed *can* control at very low levels. As such, there was not much to be gained by maintaining our threshold language.

An alternative would be to frame forward guidance in relation to achieving the goals consistent with our dual mandate, within suggested timeframes. For example, the FOMC could promise to keep short-term interest rates at very low levels until the economy is within one year of reaching full employment and 2 percent inflation, based on the trends in incoming data and an assumption about how they will continue. Such guidance would hinge on how far the economy remains from levels consistent with our dual mandate and on the assumed forecasted speed at which inflation and unemployment are expected to converge to those values.

Clearly, such guidance would be highly dependent on the incoming data, and what the data suggest about how quickly the economy will reach full employment and 2 percent inflation.

Given the uncertainty about the future course of the economy, and about the estimate of what constitutes full employment, such guidance could not be precise. Nor would it provide the calendar certainty that many financial participants would prefer. However, these drawbacks are preferable to providing forward guidance that is overly specific, and that does not take into account the uncertainties – because such guidance would risk the possibility of essentially "locking in" mis-timed policy moves.

Figure 2 illustrates the sensitivity of a possible "lift-off" of the short-term rates to different assumptions about when we reach full employment. My own estimate of full employment is around 5.25 percent; for other economists it can be different. However, the figure shows that for three different paths for the unemployment rate – one consistent with 3 percent GDP growth, one consistent with 2.5 percent growth, and one that mirrors the trend decline in unemployment over the past four years – the calendar date estimate for reaching full employment would be quite different. This range of outcomes shows that differing assumptions about the economy can generate very different dates for reaching my definition of full employment – anywhere between April 2016 and January 2020. With the uncertainties surrounding anyone's forecast, and with the ambiguity in the data we have seen to date, any of these forecasts represent plausible outcomes.

Figure 3 highlights a challenge with the inflation side of the Federal Reserve's dual mandate. Despite the fall in the unemployment rate, the *core* inflation rate is currently 1.1 percent, which is well below our 2 percent target. A model of inflation used at the Federal Reserve Bank of Boston takes into account labor market "slack" and an expectation that inflation will return to 2 percent. I would point out that the model we use generates only a very slow

return to a 2 percent inflation rate. Other models may converge to 2 percent more quickly. Still, while the eventual return to 2 percent inflation is in the forecast, I see little evidence in the current data suggesting that we are yet on this modest path to achieving the targeted 2 percent inflation rate.

Uncertainty

While some uncertainty around forecasts is a given, currently the uncertainty is compounded by the unusual behavior of some key economic relationships since the financial crisis. For example, a strong housing rebound is an important component of most forecasts that suggest that GDP growth will be stronger than the economy's "potential" rate over the next two years. The housing sector is expected to improve further because interest rates remain low by historical standards, housing prices have been rising, more workers are being employed, and stock market wealth has increased.

These housing sector factors should all make positive contributions to stronger GDP growth. However, while most forecasters expect housing to improve, the path of improvement differs greatly among forecasters. This is shown in Figure 4. While the consensus forecast is for recent trends to continue improving, there are significant differences in the forecasts related to the speed of the improvement.

Figure 5 shows one of the challenges in predicting housing starts. While the U.S. population has grown at quite a consistent, smooth rate – with no visible impact from the financial crisis and Great Recession – the same is not true for the activity we call "household"

formation." Consider the example, often cited, of recent college graduates returning to their parents' home after graduation rather than getting their own apartment. In part, the slowing in the household formation trend line – you see it flattening, compared to population, beginning around 2007 – reflects many individuals not creating new households because of economic difficulties stemming from the financial crisis and recession. Parenthetically, the chart also shows a pickup in the household formation rate during the housing boom that preceded the crisis. But after the crisis, the rate of increase is clearly slowing relative to population.

Figure 6 shows even more vividly how different household formation has been since the last recession (shaded in gray) and the financial crisis that preceded it. Some view this change in household formation behavior as temporary, and if so, suggest we should see significant increases in household formation as economic problems subside. Alternatively, household formation behavior may bear sufficient scars from the recession and the slow recovery, indicating that the creation of households will now follow a shallower path. Unfortunately, at this point either assumption could play out, and we may need to wait for more data and the passage of time to determine how lasting the impact of the recession is on household formation.

Household formation is not the only economic indicator to show anomalous changes, and I will share a few of them in a moment. But to address the general issue of uncertainty, I would suggest the uncertainty is heightened just now in part due to the very real possibility that typical economic patterns have been altered by the financial crisis and Great Recession, their lead-up, and their aftermath.

In short, a variety of economic data have behaved differently since the recession. These pattern shifts may reflect changes in how households and firms will react as the economy

improves. It is possible that previous patterns will be re-established as the economy normalizes. Alternatively, "scarring" from the recession may have longer-lasting impacts if households, firms, and labor markets persist in behaving in ways that differ from historical patterns. This uncertainty makes it particularly difficult to predict exactly what "normal" will look like – and why specific forward guidance in monetary policy becomes difficult as the economy gradually improves.

Beyond the anomaly of household formation, I would note three other such shifts in economic behavior since the recession suggested in the data.

At non-financial corporate businesses, the level of checkable deposits and currency has been growing rapidly, as Figure 7 shows. This could represent a form of "scarring" from the recession if it means that firms are less confident in raising funds from the market or financial intermediaries, and are now essentially more risk-averse and banking cash. While some risk aversion is clearly vital, a growing degree of risk aversion among non-financial corporate businesses may signal subdued investment behavior by firms – behavior that would, on net, lead to slower economic growth.

Similarly, Figure 8 suggests that households, too, may have been "scarred" by the recession and may now be driven more by a higher quotient of fear than before. While holding cash reserves for unexpected events is prudent, substantially increasing cash holdings may be consistent with more risk aversion, which, in turn, may also be reflected in restrained consumer spending – a key component of the country's GDP.

Second, as I have explored in other talks, broader gauges of the labor markets are showing sizable numbers of Americans working only part time for economic reasons, as shown in Figure 9. Also, Figure 10 highlights the important issue of long-term unemployment. In sum, it is possible that the labor market may have been "scarred" in important and lasting ways by the recession and painfully slow recovery.

Another source of uncertainty for the U.S. economy is its links overseas. Of course, international economic forces are only indirectly impacted by fiscal and monetary policy decisions in the U.S. My own assumption is that Europe, and the emerging economies, are likely to continue to gradually improve.

However, such a forecast could change significantly if the baseline assumptions about Europe and emerging economies prove to be wrong. Figure 11 shows bank exposures to emerging markets.⁴ While U.S. banks have a sizable exposure to emerging markets, the exposure of the Euro area banks is almost triple that of U.S. banks. The United Kingdom has a particularly significant exposure (despite having a much smaller economy than that of the United States), given that some of the U.K. banks are particularly active in emerging markets.

Much of the exposure of the Euro area banks involves emerging European economies. Were problems in Ukraine, for example, to become much more acute, Europe would potentially be impacted by its energy dependence on Russia and also through European bank exposure to emerging European economies. Given that European banks are still recovering from a severe European recession, such a shock – while unlikely and not my prediction – would be most unwelcome.⁵

My forecast for the U.S. economy assumes the impact of foreign linkages will be relatively benign. However, the risk of foreign shocks is still large enough to remain a significant downside risk to the forecast. While I expect the economy to grow at roughly 3 percent over the next two years, these and other uncertainties suggest that as always, it is best to be quite humble about forecasting precision.

Concluding Observations

Recent incoming data continue to be consistent with a slowly improving economy. This improvement is allowing the Federal Reserve to slowly pare back asset purchases and to gradually become less precise in our forward guidance. However, I believe there are several reasons to be cautious and patient before returning monetary policy to a more normal, less accommodative stance.

While the economy has gradually improved, 6.7 percent unemployment and inflation around 1 percent remain far from normal economic conditions. And the broader measures of underemployment tell an even more sobering story. Furthermore, it is important to keep in mind that negative shocks to the economy will be much more difficult to offset with monetary policy than positive shocks.

All told, in my view, monetary policy should remain highly accommodative until the domestic and global economies are on more solid footing.

Thank you.

NOTES:

¹ The most recent figures for PCE inflation and Core PCE are 0.9% and 1.1%, respectively.

² The full statement is available at http://www.federalreserve.gov/newsevents/press/monetary/20140319a.html.

³ See the SEP at http://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20140319.pdf

⁴ More detailed information on banks' exposure to emerging market economies, including lists of reporting countries and emerging market economies and an interactive data tool, can be found on the Bank for International Settlements (BIS) website, in the section on international banking statistics – http://www.bis.org/statistics/about_banking_stats.htm -- and in its publication *BIS Quarterly Review* (http://www.bis.org/publ/qtrpdf/r_qt1403.htm).

⁵ For European reporting countries, roughly two-thirds of the emerging European economies exposure is located in Poland, the Czech Republic, Russia, and Turkey.