* EMBARGOED UNTIL Thursday, September 20, 2012 at 8:15 A.M. Eastern Time OR UPON DELIVERY *

Acting to Avoid a "Great Stagnation"

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

South Shore Chamber of Commerce

Quincy, Massachusetts
September 20, 2012

Good morning and thank you for the opportunity to be with you at the South Shore Chamber of Commerce.

As always, I would like to note that the views I express today are my own, not necessarily those of my colleagues on the Federal Reserve's Board of Governors or the Federal Open Market Committee (the FOMC).

I know it's still early morning, but allow me to start with an observation about economists, historians, and the word "Great." Historians tend to use "Great" to reflect success, particularly military success that results in territorial expansion – think Alexander the Great or Peter the Great. In economics, "Great" is used quite differently.

It's usually applied to difficult episodes with serious economic consequences – think of the Great Depression or the so-called Great Recession. Often such an episode involves economic policymaking – fiscal, monetary, or otherwise – that contributes to the situation or fails to alleviate it.

I have titled this talk "Acting to Avoid a Great Stagnation" and let me be clear, I do believe the Federal Reserve is taking appropriate and forceful action to help the U.S. avoid a prolonged economic stagnation.

Let me explain the terms. In my view a Great Stagnation – in current times or any other – would be a long episode that generally includes a willingness among policymakers to accept as inevitable, and decline to resist, far-less-than-optimal outcomes. Such outcomes could include higher unemployment, with the potential result that high unemployment could become entrenched as a more permanent feature of the economic landscape.[1]

What I am highlighting is the importance and appropriateness of taking the policy actions that are necessary to improve economic conditions much more quickly – so the period of very slow recovery that we have been experiencing of late does not persist and become a Great Stagnation or in fact a "Great" anything.

Unfortunately, the global economy is experiencing a slowdown, and that slowdown is one of the significant impediments to faster growth in the domestic economy. Failure to react to this slowdown would risk a situation where difficult conditions prevail for long enough to become "Great" in the economist's sense. This could occur if policymakers of all sorts – monetary, fiscal, economic, and financial – were to adopt a stance of only reacting to large negative shocks, while accepting (and

declining to act against) a status quo of substantial underutilization of resources, for an extended period of time.

This sort of scenario would be particularly tragic in the job market, and I would note that over the course of this year there has been no meaningful improvement in the unacceptably high level of the U.S. unemployment rate. Fed Chairman Ben Bernanke has called this a "grave concern" and I fully agree with him.

Last week the group charged with monetary policymaking in the U.S., the FOMC, took additional monetary policy actions to promote faster economic growth. I fully support the policy actions. Let me say a bit about them. First, the FOMC noted that it anticipates that low short-term rates are likely to be warranted at least through mid-2015. This guidance makes clear that monetary policy will remain accommodative for a considerable time, likely even after labor markets improve from their current subdued state, in order to promote a robust and sustainable recovery.

Second, given the desire to increase policy accommodation even while the traditional policy instrument (the federal funds rate) is at the zero lower bound, the FOMC announced plans to buy $40 billion worth of mortgage-backed securities a month – until such time as there is substantial ongoing improvement in labor markets. The more open-ended nature of the action – intending to continue such purchases until labor markets have improved – is an important change. Of course, the Fed will do so in the context of price stability (which is the other half of the Fed's "dual mandate," along with maximum sustainable employment) – and hand in hand with a careful ongoing assessment of the program's costs and efficacy.

Of course policy actions such as these are unconventional, and do entail risks. However, in my view the risks involved in pursuing these policies are considerably smaller and more manageable than the risk of allowing the economy to stagnate for another year or more.

The U.S. has seen a series of "false starts" during this recovery. After earlier periods of policy accommodation the economy has improved, but that improvement has not been sustained. These false starts have been interrupted by both natural and man-made disasters, here and abroad. As a consequence of these interruptions, the recovery has been painfully slow by historical standards – resulting in our current highly-elevated unemployment rate and an inflation rate below our objective.

Absent further policy action, most economists expect several more years of weak labor markets and low inflation. As a consequence, it was time for the Fed to announce stimulus that will continue until the U.S. achieves both faster economic growth and lower unemployment, no matter the unanticipated interruptions.

Today I would like to walk through my analysis of the economic situation in more detail. In doing so I hope it will become clear why I have strongly supported the kind of forceful action that the FOMC took last week. In my view, these policies are essential to achieving a strong sustainable recovery that is resilient, despite the inevitable disruptions. Let me add that I am only discussing monetary policy, not fiscal policy, since fiscal policy, though powerful, is not in the Fed's jurisdiction.

Avoiding a Stagnation

Figure 1 provides a powerful real-world example of the potential for a Great Stagnation – the experience of Japan after their financial crisis, which began in 1990. While this period is sometimes called the "Lost Decade," that is actually a misnomer – since the period of stagnant growth has lasted over *two* decades.

There are many factors contributing to a Great Stagnation in Japan, including a very slow realization of the need to recapitalize banks, and a population whose average age is rapidly rising (which changes the composition of economic activity in a country), and a substantial slowdown in population growth. Still, it is striking that there was a dramatic change in the growth of real GDP in Japan coinciding with the start of their financial crisis.[2] The muted policy response to the slower growth that began during the financial crisis is partly responsible for the fact that Japanese growth never returned to its pre-crisis rate, or to where output would have been had the crisis not occurred (the path illustrated by the trend line, based on growth over the 1980-1990 period).

Figure 2 shows the level of U.S. GDP since 1980. Note that we too have a noticeable break in the growth rate of GDP at the advent of the recent financial crisis. However, unlike the Japanese, it appears that we have resumed the pre-crisis growth *rate*. But we have not returned the economy back to its original growth *path,* the only time we have failed to do so in all ten of our other post-war recessions – including the severe recession in 1982.

Failing to return quickly to the original trend line is much more serious than a graph can convey. It implies a significant cumulative loss in goods and services that should have been produced (measured as the sum of the difference between those two

lines), which in turn implies a significant shortfall in employment relative to full employment.

As a result, the goal of monetary and fiscal policy should be to return the economy back to the original trend line. This means getting faster than normal growth until resources are once again fully utilized. A risk in not doing so is that we permanently reduce our trend growth rate, which is what appears to have happened in Japan.

Causes of Slow Growth in the United States

Exploring in detail the many possible *causes* of slow growth in the current economy is beyond the scope of this talk. But let me just highlight some important factors. Figure 3 shows, and compares, the growth rates of real GDP *and real GDP excluding residential investment (housing) and government spending*. As the chart shows, there is a notable difference in the growth rates. While real GDP has grown only by 2.21 percent, real GDP excluding housing and government spending grew by 2.45 percent. Had the economy not had the headwinds from government and housing dragging growth lower – had it grown just by that higher rate of 2.45 percent over the three years of the recovery – outcomes would be somewhat better. However, normally a sector like housing would be expected to grow much more quickly than other sectors of the economy in the early stages of a recovery – given housing's interest-rate sensitivity – and thus we would expect it to provide more impetus to overall economic growth.

To consider the role of housing a bit more, Figure 4 shows housing starts from 2000 onward. The decline in housing starts is striking, and unlike in most other

recoveries the housing sector did not participate in the initial stages of the current recovery – although there has been some improvement recently.

However, I think there are some reasons to believe the recent nascent signs of a housing recovery might be durable. Since the onset of the housing bust the population has grown and per capita income has grown, while interest rates are very low and prices are more affordable. These are all positives when it comes to having potential buyers ready to purchase homes.

These circumstances make it an important time for policymakers to consider additional stimulus to the housing market to finally induce progress. Consider the market psychology: if home buyers feel that house prices are on the rise (as many indicators suggest), and that mortgage rates will only remain this low temporarily, we could see new home buyers come off the sidelines and commit to purchase new homes before rates rise and before house prices rise further than they have.

Also, Figure 5 shows growth in state and local government spending since 2000 and highlights that it has been unusually weak in this recovery. This is, in large part, a result of state and local governments pulling back in response to greatly diminished revenues – a direct consequence of the depth of the recession and the weakness of the recovery. Many states were prepared for a revenue shortfall, having accumulated "rainy day" funds, but the long downturn sapped those funds. Since nationally, the sum of state and local government spending is larger than federal spending[3], the net impact has been that government-sector spending has been a significant drag on growth during the recovery.

Figure 6 highlights another force dragging on the U.S. recovery, the global economic slowdown. Many advanced economies experienced a deeper recession (as measured by output) than did the United States, and countries such as the U.K., France, and Japan have real GDP levels indexed below where they were at the end of 2007, an even weaker rebound than in the United States. Furthermore, in the last several quarters several of the advanced economies in Europe have actually been in decline as they have slashed their government spending.

Costs of a Slow Recovery

A slow recovery can have significant costs. Allow me to show you some charts that are compelling – acknowledging, of course, that charts cannot convey the human toll of the situation they depict.

Figure 7 shows the ratio of employment to population, which has remained very flat during the recovery. This is consistent with the growth in GDP being only about 2 percent – which is enough to keep up with the growth in productivity and the labor force but not leading to the employment of a larger percent of the population. By the way, while there have been some demographic shifts within the workforce that might explain some decline in the employment-to-population ratio, they do not explain the trend in Figure 7; indeed, a very similar pattern emerges when looking at the employment-to-population ratio for particular age groups.

Figure 8 shows one of the painful and unusual features of this recession and recovery, the very elevated percentage of the unemployed who have been out of work for more than six months. Unlike the deep recession in 1982, in which there was a quick

recovery and as a result a relatively small and short-lived increase in long-duration unemployment, the last recession and long, weak recovery have resulted in substantially more people suffering long spells of unemployment. Long periods of unemployment frequently deplete the savings of the unemployed, make re-employment harder (as employers may be tentative about hiring those who have been unemployed for long periods of time), and may lead to skills becoming less than current. These problems highlight why it is important to generate faster growth to avoid what some call labor market "scarring" – where long-duration unemployment becomes ingrained into our labor market.

What Should Monetary Policymakers Do?

The Great Stagnation in Japan did lead to a monetary policy response from the Japanese central bank. The Bank of Japan eased rates until they hit the zero lower bound, and then as Figure 9 shows, began to gradually expand the assets of the central bank.

However, there were key differences from the policy actions we have taken at the Federal Reserve. The Bank of Japan only gradually expanded the assets on its balance sheet, and only after a delay of a number of years. Many of its purchases were of *short*-term securities, which had little impact on already-low short-term rates. This is in contrast to the impact that the U.S. Federal Reserve's purchases of longer-duration assets have had on longer-term rates, which remain well above zero and thus have room to decline.

Finally, the Japanese central bank may in my view have *prematurely* stopped the growth in their balance sheet, considering the weakness in the Japanese economy at the

time. As a result, the Japanese economy has remained stagnant and despite having an expanded balance sheet for an extended period, the Japanese continue to struggle with a deflation problem rather than an inflation problem, as the bottom chart on Figure 9 shows.

Turning to the U.S., the differences in policy are quite striking. There was a rapid expansion of the Fed's balance sheet (see Figure 10), as well as a fiscal stimulus. This may be why we have not experienced a significant decline in the *trend* growth rate in the economy, seen in an earlier chart. There has also been a focus on bringing *long*-term interest rates down, and more recently on utilizing monetary policy communication strategies to convey that rates will likely remain low until the recovery and labor markets show a more sustained improvement.

To reiterate, a key difference is that we didn't hesitate (by years) to take significant actions in the U.S. And when we took actions, they were forceful. And going forward, we also don't want to make the mistake of retreating at the first, early signs of improvement. Japan's experience suggests one must continue until improvement is sustainable and will persist.

However, despite these differences there is an important similarity between our situation and Japan's, as well. Just as Japan has not experienced inflation despite a rapid expansion of their balance sheet, our measure of inflation (the personal consumption expenditure deflator) is currently only 1.3 percent through July despite our balance sheet expanding significantly four years ago (see the bottom chart on Figure 10).

Recent Actions

Last Thursday the FOMC announced several new policies, summarized in the next two slides. The Fed announced a number of important policy changes.

First, in addition to exchanging (as previously announced) $45 billion of short-term Treasury securities for an equal amount of long-term Treasury bonds through the maturity extension program running through December, the Fed will purchase $40 billion a month in agency mortgage backed securities (MBS). These purchases of MBS should place downward pressure on U.S. mortgage rates, which should support the housing market by lowering borrowing costs and providing additional support for house-prices to appreciate from depressed levels. The housing market should be stronger than if these actions were not taken.

Second, the purchases of agency MBS will likely affect the yields on other, similar long-term assets, such as Treasury bonds and corporate bonds. Bonds of similar maturity, duration and risk characteristics are viewed as substitutes for MBS by many investors. Removing some of the MBS from private circulation will create a scarcity of long-maturity, lower-risk securities. This shortage will lower both MBS and other long-term interest rates in the marketplace, with effects that are qualitatively similar to the effects we have when we lower the federal funds rate (something we cannot do now, as it is at the zero lower bound). As a consequence, our policy will have effects on a broad array of economic activity beyond the direct effects on residential investment.

Third, I would note that the plan to purchase MBS securities is open-ended. As the FOMC indicated in its statement last week, the MBS purchases and potentially the use of other tools will continue until there has been improvement in labor markets. This

means the policy actions are being conditioned on an economic outcome rather than a set timeframe. This should provide market participants confidence that the Federal Reserve will do what it takes to improve economic outcomes.

Fourth, highly accommodative policy will continue for a considerable time after the economic recovery strengthens. This means that we will ensure the economy is truly strengthening before raising interest rates. Highly accommodative policy is currently likely to be warranted at least through mid-2015.

The Initial Impact of Policy Actions

The table shown in Figure 11 provides some estimates of the financial impacts of the Fed's recent policy announcement. Such impacts are difficult to measure with any precision, given anticipation about our possible actions built into markets, and the reality that other events can occur coincident with the action.

Still, for reference the first column provides the financial market response when the FOMC announcement was made. The second column extends the period to Thursday and Friday as financial market participants had more time to analyze the policy change and Chairman Bernanke's press conference explaining the announcement. The third column begins the financial response at the Chairman's August speech at the Jackson Hole conference, which was widely viewed as increasing the likelihood of a more forceful easing, though the specifics were not known. The final column dates the event from the prior FOMC meeting, when most observers interpreted the statement as making further forceful action more likely.

While this table shows a range of impacts, I would say in sum that regardless of the event window chosen, stock prices are up substantially, mortgage rates are lower, and exchange rates are lower. On the latter I would point out that our efforts to lower long rates are focused on stimulating domestic demand, but at the same time lower long-term rates affect demand for U.S. assets, resulting in a modest change in the exchange rate – and this is likely to provide some support for export-oriented industries.

All of these impacts are very consistent with what we would expect of the monetary transmission "channels" of purchasing mortgage backed securities and providing additional forward guidance on policy. In fact, they are also quite consistent with the transmission channel that we expect when conducting "normal" – i.e. federal funds rate – monetary policy when we are not constrained by the zero lower bound.

Concluding Observations

In sum, the actions taken by the Federal Reserve last week provide significant additional support to the economic recovery. They should result in stronger economic growth, and return us to full employment more quickly than would be the case absent the policies.

However, monetary policy is not a panacea. Appropriate fiscal policies domestically, and improvement in the global economy could both provide significant positive effects, and shorten the time needed for unconventional monetary policy actions like those we have announced. In addition, it is important to note that significant fiscal policy mistakes, such as an unlikely failure to address the looming "fiscal cliff" in the

U.S., would have effects on economic growth that would be difficult to fully offset with monetary policy.

It is my firm belief that the monetary policy actions taken last week should contribute to a faster economic recovery and a more rapid improvement in labor markets than we would have seen in their absence. However, I want to be careful not to appear to promise too much, as there are limits to the effects of monetary policy. Even with these actions, and assuming no additional negative shocks domestically or internationally, it will still be several years before we are likely to return to full employment.

While that is not an especially upbeat sentiment on which to end my remarks, I think it underlines the importance of our taking action. A very challenging economic climate confronts us all, but I am very pleased that monetary policymakers in the U.S. are proving willing to take difficult actions like these rather than accept the possibility of a long, slow recovery turning into a stagnation that someday earns the dubious title of "Great." Japan's experience is a sobering real-world reminder of why forceful and timely action is appropriate.

Thank you.

---

[1] Recent examples of a Great Stagnation include Japan, as I will discuss in this talk, and the dynamic in some European countries that experience high rates of unemployment and lagging job creation even during periods of growth – a dynamic that some associate with unaffordable social benefit policies and that in some corners is given the moniker "Eurosclerosis."

[2] I would note that demographic changes occurring in Japan include a gradually shrinking domestic workforce. But I see this as a gradual change that would not explain the abrupt change in the growth-path line shown in the chart around the time of Japan's financial crisis.

[3] State and local government accounted for 63 percent of government spending on average over the period 2000-2011.