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"Assessing the Economic Recovery"

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John W. McCormack Graduate School of Policy
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Boston, Massachusetts
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It is a great pleasure to be here at the University of Massachusetts Boston, and to have an opportunity to share my perspectives on the economy and monetary policy. I would like to thank Dean Ira Jackson and the McCormack Graduate School of Policy and Global Studies for hosting me today.

It has been quite a celebratory weekend in Boston, with both the World Series victory parade on Saturday and the Patriots' points-filled win on Sunday. Unfortunately, my message today will be that while the economy has been gradually improving, it is not yet time to celebrate our economic performance.

As always, 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).

Since the beginning of this year, the Federal Reserve has been purchasing Treasury and mortgage-backed securities (MBS) totaling $85 billion per month. In addition, we have indicated our intention to keep short-term interest rates at their exceptionally low levels at least as long as the unemployment rate remains above 6.5 percent and inflation and inflation expectations are well anchored. These two monetary policy tools – asset purchases to push long-term rates lower, and guidance related to rates remaining low – have provided an accommodative monetary policy stance designed to offset some of the "headwinds" that have impeded a more rapid economic recovery.

Since the beginning of this year the unemployment rate has declined from 7.9 to 7.2 percent, interest-sensitive sectors such as housing and autos have continued to improve, and inflation has stabilized at rates well below the Fed's 2 percent target. This has all occurred in the context of an economy wherein fiscal policy has been quite restrictive, with higher income taxes as well as substantial reductions in real government spending. However you feel about the political economy of fiscal matters, government spending is a component of GDP, and tax policy obviously affects consumer spending. From a historical perspective, significant fiscal austerity such as we have seen recently is quite unusual at a time when the economy is trying to recover from a severe recession.

While there have been some areas of improved economic performance, unfortunately the economy remains challenged. Unemployment is well above what anyone would consider a "full employment" rate, and inflation remains well below our 2 percent target. We should all be mindful that inflation can be too low – too close to deflation. For example, deflation characterized troubled economies like Japan's during its "Lost Decade."

Our hope is that the improvement in real GDP growth that many forecasters had expected to be in progress by now will soon begin, and that the economy will grow fast enough to provide sustained improvement in labor markets along with inflation moving towards the 2 percent inflation target.

Monetary policy should, of course, respond to the actual state of the economy and incoming indicators, as well as the progress made to date – in other words, it should be data dependent. But policy should also be forward-looking, taking into consideration *how long* it is expected to take to return to full employment within a context of price stability.

That brings me to our current asset purchase program. As we see more compelling evidence of a sustainable recovery making satisfactory progress toward full employment, it may be appropriate for the Federal Reserve to gradually reduce the size of our large-scale asset purchase program. I would emphasize that when the Fed chooses to do so, we will not be *restraining* the economy – in fact, we will still be *adding stimulus* to the economy but in smaller increments than before.

By way of overview, today I will briefly review recent developments related to the Federal Reserve's monetary policies. I will highlight some areas of the economy where there has been progress, and other areas where we need to make more progress. I will provide some sense of the likely time frame for returning to full employment, and provide a few concluding observations.

Recent Monetary Policy Developments

Figure 1 shows the Treasury yield curves (the market yields for an array of Treasury securities of various maturities) as of three dates this year. The first date is May 1, before widespread discussion emerged about the Fed potentially reducing its purchases of long-term securities. As a benchmark, the 10-year rate at that time was 1.66 percent – a quite low 10-year rate, by historical standards. Over the course of the summer, as the markets began to anticipate a higher probability of the Fed reducing the large-scale asset purchase program, the yield curve steepened significantly. Before the September FOMC meeting, the 10-year rate was just below 3 percent – more than a 100 basis-point increase since the beginning of May.

The steepness of the yield curve prior to the Fed's September meeting was somewhat surprising. Long-term rates rose quite appreciably – more than could be explained by the heightened probability of a modest reduction in asset purchases, and more than was desirable given the still-fragile economic recovery.

Also, since the Fed's 6.5 percent unemployment "threshold" for maintaining very low short-term rates had not changed, it was somewhat surprising how much the *shorter* term rates moved in the marketplace. After all, reductions in the monthly rate of central bank purchases of *long*-term securities would not necessarily affect the length of time that we would maintain very low short-term rates.

The third yield curve in Figure 1 is as of the end of October. The Fed had maintained the pace of purchases at both the September and October FOMC meetings. And market participants had developed concerns over economic disruptions related to the debt-ceiling debate and the partial shutdown of the federal government. The result, in sum, was some reduction of yields – with the 10-year rate now approximately 2.6 percent.

Figure 2 illustrates just how much market expectations changed around the September FOMC meeting. Before the meeting, primary dealers participating in the survey placed an over 50 percent probability on the Fed reducing the scale of purchases of long-term Treasury and MBS securities at the September FOMC meeting, and a greater than 90 percent probability on the first reduction in securities purchases occurring by the December FOMC meeting.

When the survey was updated *after* the September FOMC meeting, but before the government shut-down, there was a significant change. Now the probability of the first reduction in long-term securities purchases occurring at the December meeting was placed at over 40 percent, with over a 40 percent probability placed on the first reduction not occurring until next year.

Financial markets have been very focused on the timing of any reduction in asset purchases. **Figure 3** shows the difference in the size of the central bank's balance sheet under two hypothetical approaches – reducing purchases beginning in December or beginning in April. While the actual reduction decision (both the timing and speed of reductions) will need to consider the economic conditions prevailing at the time, and weigh the potential costs and benefits of different programs, the point of the figure is that start dates differing by a quarter or two would generate only relatively small changes in the overall size of the Fed's balance sheet. That is certainly one reason for being patient – waiting until evidence of a more sustainable recovery is more clear-cut – before beginning any reduction in the size of the purchase program.

Current Economic Conditions

Figure 4 shows the improvement in employment during this recovery relative to the previous three. In the three earlier recoveries, employment returned to its previous peak within two years. While the two mildest recessions had relatively slower recoveries, the deeper recession in 1981 had a steeper recovery. Unfortunately, the most recent recession was deeper than the previous three, yet the recovery in employment has not been as rapid as in 1981. Despite the significant lapse of time since the trough of the recession, we still have not reached the pre-recession peak in employment. The severity of the employment loss, and the significant headwinds facing the economy after the severe financial crisis, are both important reasons why monetary policy has needed to remain quite accommodative.

While there have been a variety of headwinds at play, one of the unusual features of this recovery has been the significant fiscal retrenchment. I am not here to comment on fiscal policy, but to underline its effect on the economic situation that the Fed must respond to. The CBO estimates that fiscal austerity measures have reduced 2013 GDP growth by 1.5 percentage points[1] – a very significant headwind. Had the economy grown by 3.5 percent rather than 2 percent over the past year, job growth would almost surely have been stronger, unemployment lower, and inflation closer to the two percent goal. As a result, with the Federal Reserve focusing on achieving its mandates, absent some of the fiscal headwinds there would be much less need for the current degree (and extended length) of monetary policy accommodation.

Even the *direct* effects of government employment reductions have been quite substantial. **Figure 5** shows that, not including the employment peak resulting from the hiring of temporary census workers, government employment peaked at the end of the recession and has been falling ever since – a cumulative loss of three-quarters of a million workers. This reflects very significant declines in employment by state and local governments, as well as in the federal government.

Figure 6 shows that this is not the typical experience during an economic recovery. All three of the previous recoveries were supported by additional government hiring, not by reductions in employees. In fact, the sharp recovery in total employment during the 1982 recovery included a significant boost in government employment. As I mentioned earlier, there are obviously differing views on the politics of government spending and employment, but as a practical matter, fiscal austerity subtracts from employment and from GDP. As the Federal Reserve pursues its Congressionally-assigned "dual mandate" for price stability and maximum sustainable employment, the substantial contractionary effects of fiscal retrenchment have to be taken into account – just as any other headwind has to be taken into account.

In particular, the tools of forward guidance and large-scale asset purchases have been quite successful in keeping short- and long-term interest rates low, encouraging a recovery in those sectors of the economy that are sensitive to interest rates. For example, **Figure 7** and **Figure 8** show that residential investment and auto sales have been recovering – and explain why, despite significant fiscal retrenchment, the economy has still been able to average 2.2 percent growth since the start of the recovery in 2009. However, with short-term interest rates at the zero lower bound, monetary policy has not been able to fully offset the headwinds created by the financial crisis, fiscal retrenchment, and unusually weak economies among many trading partners.

Figure 9 illustrates the combined effect of the weak and strong sectors on overall GDP during the recession and recovery. While the decline in real GDP was unusually large in this recession, real GDP has already exceeded its pre-recession peak (in contrast to the experience of employment).

Figure 10 shows that this recovery has been slow, but slow growth appears to be characteristic of the last three recoveries as well. What has been more striking is that fiscal policy has become more restrictive, even though we have not seen the improvement that one normally sees, over the past two years of the recovery.

Returning to Full Employment

Figure 11 illustrates the relationship between growth in the economy and how long it is likely to take to return to full employment. My own estimate of the "full employment level of unemployment" is a rate of 5.25 percent, although I would note that my estimate is lower than some of my central bank colleagues, as illustrated by the Summary of Economic Projections (SEP), which has a range for unemployment over the longer run (in other words, unemployment levels consistent with optimal policy outcomes) of 5.2 to 6.0 percent.[2]

The relationship between GDP growth and the unemployment rate can be analyzed using a modified Okun's Law, which is an approximation of how much unemployment falls when the economy grows faster than its potential. While this relationship is only an approximation of what might happen with a given GDP growth rate, it does provide some context for how long it would take to get to my estimate of full employment, assuming different hypothetical rates of GDP growth.

The left-side bars provide the annual growth rate needed to reach my estimate of full employment by the end of the indicated year. For example, if this relationship is about right, to get to 5.25 percent unemployment by the end of 2016 would require an average growth rate of 3.3 percent. With an assumed potential GDP growth rate of 2.1 percent, we should recognize that a realized growth rate below 3 percent will result in a long wait to reach my estimate of full employment. At a growth rate of 2.8 percent, we do not attain 5.25 percent unemployment until the end of *2018*. The right bars show that growth over the most recent recovery falls far short of the growth during the previous three recoveries, and also well short of the growth needed to return to full employment even over the next five years.

Figure 12 replaces the historical growth rates of real GDP during earlier recoveries with the midpoint estimates of growth from the September Summary of Economic Projections of the FOMC members. The SEP midpoint estimate of real GDP growth over the next three years is a little over 3 percent. Assuming the economy behaves as estimated in the modified Okun's Law, this would imply that we do not reach my gauge of full employment until 2017.

Certainly there are a number of important assumptions made in doing this analysis, but it illustrates that unless the economy grows much faster than the 2.2 percent we have experienced to date during the recovery, it will take quite some time to reach full employment – and exact a heavy human toll.

Concluding Observations

Monetary policy has been highly accommodative in order to mitigate the restraining effects emanating from the financial crisis, fiscal restraint, and slow growth of trading partners. Monetary policy has been able to partly but not fully offset these headwinds, resulting in only a tepid recovery to date. Most private forecasts, and the SEP forecasts, expect growth to accelerate – but only modestly, to 3 percent as the effects of these headwinds diminish. However, it is important to note that most of these forecasts see us attaining these results only under the assumption of significant continued stimulus from monetary policy.

Looking forward, on the plus side, firm and household balance sheets have improved, recovery in stock and house prices have provided more capacity to resume consumption patterns, the fiscal headwinds are expected to diminish somewhat, and some of our trading partners are showing signs of recovery. But a good portion of the gains in asset prices and in spending derive from the help that stimulative monetary policy has provided. As a consequence, monetary policy is likely to need to remain accommodative for some time so that we can achieve full employment within a reasonable forecast horizon.

Even when the Fed eventually removes some of its accommodation, such as large-scale asset purchases, we will in my view need to leave short-term interest rates at their very low levels until there is much more progress reaching full employment and the 2 percent inflation target. Furthermore, the pace at which the Fed raises rates, when that becomes appropriate, should be, in my view, quite gradual, unless the economy picks up much faster than is currently expected. Overall, monetary policy needs to continue to be data driven and, of course, to be focused on meeting the Fed's dual mandate – within an appropriate time frame.

Thank you again for inviting me to speak with you at UMass Boston.

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[1] See Congressional Budget Office (2013), *The Budget and Economic Outlook: Fiscal Years 2013 to 2023* (Washington: CBO, February), available at www.cbo.gov/publication/43907. The figure was cited by Chairman Bernanke in his testimony before Congress on May 22, 2013 (available at http://www.federalreserve.gov/newsevents/testimony/bernanke20130522a.htm).

[2] See http://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20130918.pdf