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FEDERAL RESERVE BANK OF BOSTON™

"After the Great Recession, a Not-So-Great Recovery"

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Federal Reserve Bank of Boston

Federal Reserve Bank of Boston's
60th Economic Conference

Boston, Massachusetts
October 14, 2016

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Good morning and welcome to the Federal Reserve Bank of Boston's 60th Economic Conference. I am looking forward to the presentations and discussions over the coming days.

While much has been written about the causes and severity of the so-called Great Recession, much less has been written to date about the not-so-great recovery that has followed. With this conference, we hope to fill some of that gap – as we discuss papers and analysis covering some of the key anomalies in this recovery.

We are looking forward to hearing from our keynote speaker, Federal Reserve Chair Janet Yellen, a little later today. I would also like to welcome some of my fellow Fed policymakers who are joining us. It is wonderful to have them here, as well as all of our presenters and discussants, and all of you who are attending.

At a high level, what are the facts that make this recovery unusual? First, during this recovery, growth in real GDP has been quite subdued – with growth rates that are percentage points slower than the historical average. Second, despite the tepid growth, the unemployment rate has fallen quite a bit faster than many expected. And finally, inflation has lingered stubbornly below the Federal Reserve's inflation target of 2 percent.

Understanding why this recovery has been different is important for monetary policymakers. Understanding the sources of the difference will shape expectations going forward, views on how to calibrate policy, and perspectives on the extent to which monetary and other macro policies can support a return to more normal levels of long-run growth.

Questions abound. Is a slow recovery the unavoidable consequence of a severe recession? Or of a financial crisis? What role is played by the changing demographics in the United States? Will what may seem like temporary anomalies become the "new normal" for the economy or economic cycles? Answers to questions like these will help us understand whether firms and households have changed behavior in ways that are likely to be more permanent than transitory, whether slow growth in productivity is transitory or permanent, and whether recent trends in personal saving behavior are likely to persist well into the future. In view of recent global inflation trends, the answers to these questions also have bearing on whether the global economy will continue to face bouts of undesirably low – rather than high – inflation, challenging policymakers in novel ways.

Again, the answers to these questions not only impact our understanding of the economy during this recovery, but may also have important consequences for setting policy well into the future. For example, will a persistent change to long-run growth and long-run real interest rates require that nontraditional monetary policy actions become part of the traditional "tool kit" of central banks? Has this recovery changed views around using monetary policy rather than fiscal policy to address slow recoveries? And does the experience of a persistently slow rebound alter views on how quickly to address any emerging risks to the current recovery?

This morning, I am going to briefly touch on some of the "puzzles" that we have asked the presenters to address at this conference – leaving the difficult job of answering the questions to our paper givers and discussants. I will then briefly examine how some of these puzzles have impacted financial markets and how we might interpret financial market reactions to this "nonconformist" recovery.

Before I begin, let me note that the views I will express are my own, not necessarily those of my colleagues at the Federal Reserve's Board of Governors or on the Federal Open Market Committee (FOMC).

Economic Anomalies and the Current Recovery

Figure 1 displays the pace of the recoveries from the last three recessions. This recovery has been notably weaker than the previous two. Growth has averaged just a little over 2 percent during the current recovery. The slope of the line is quite a bit flatter, but relatively constant – that is, there has been no substantial surge in growth, as sometimes occurs at the beginning of recoveries, but rather a decidedly gradual recovery of GDP from a very deep recession.

Despite the only gradual increase in real GDP, the unemployment rate has fallen faster than in the previous two recoveries. Given the slower growth, this is somewhat surprising. Given the unusually high unemployment rate coming out of the Great Recession, this more rapid decline in unemployment was certainly welcome – but the pairing of slower, sustained real GDP growth with a rapid decline in the unemployment rate is one of the clear puzzles of the recovery. The falling unemployment rate has also been accompanied by falling labor force participation, as demographic aging of the U.S. workforce causes people to leave the labor force. However, as **Figure 2** shows, even within age cohorts there have been declines in participation rates during the recovery, with declines in the labor force participation of both prime working age men and women. These trends may have implications for how we might expect the economy to evolve, going forward.

At least one of the reasons for relatively slow growth has been the pattern of the saving rate. As **Figure 3** shows, the earlier recoveries (the periods following the recession shading on the chart) were accompanied by periods of secular decline in the personal saving rate. This allowed for somewhat stronger consumer spending, which served as one of the foundations of earlier recoveries. At least to date, the decline in the saving rate prior to the Great Recession has been followed by a higher saving rate, which may suggest different savings behavior stemming from the experience of the Great Recession. Should this pattern persist, it has implications going forward for consumption patterns and the economy more broadly.

Core inflation has also remained subdued during the recovery from the Great Recession, as shown in **Figure 4**. However, core inflation was also below 2 percent after the 2001 recession, but returned to a bit above 2 percent once labor markets tightened. In contrast, while unemployment is now quite close to most economists' estimates of the natural rate, the core PCE inflation rate has remained consistently below the Federal Reserve's 2 percent target over most of the recovery period, and currently stands at 1.7 percent.

The real federal funds rate in the current recovery also differs markedly from previous recoveries, as shown in **Figure 5**. Reflecting the depth of the Great Recession, the real federal funds rate has been significantly lower, and consistently negative, in contrast to the two earlier recoveries. The need for more monetary policy accommodation is not surprising, given the severity of the recession. What is surprising, however, is that even near full employment, the real rate is still so much lower than in the earlier recoveries. By the fourth year of those two earlier recoveries, the real federal funds rate had almost reached 2 percent (following the 2001 recession) or had exceeded 2 percent (following the 1991 recession).

In contrast, in the current recovery the real federal funds rate has not rebounded, remaining quite negative. And as **Figure 6** shows, now seven years into the recovery, the real federal funds rate remains below the nadir of the earlier two recoveries, even though the economy has returned to near full employment.

Economic Anomalies and Asset Prices

The very short-term real federal funds rate is not the only segment of the yield curve that is unusually low, as shown in **Figure 7**. The 10-year Treasury rate minus 10-year inflation expectations (from the Survey of Professional Forecasters) remains unusually low, even late in the recovery. There are a number of possible reasons for this, including the Federal Reserve's holdings of a significant quantity of longer-duration Treasury bonds; depressed long rates globally, stemming from weak national economies inducing asset purchases by their central banks; and concerns that central banks in many parts of the world may have difficulty achieving their inflation targets.

However, looking at **Figure 8**, it is noteworthy that in the seventh year of the recovery, the 10-year real U.S. Treasury yield remains negative – in other words, purchasers of 10-year Treasuries are willing to accept a return that does not even compensate them for the inflation expected over the holding period. This suggests a lack of confidence in U.S. and global growth prospects, and in the ability of policy authorities to offset weak growth.

With both the real federal funds rate and the longer-term Treasury rate unusually low, one might also expect other asset prices to behave differently than in earlier recoveries. **Figure 9** shows the price to operating earnings ratio for the S&P 500 in the period covering the past three recoveries. While the price to earnings ratio for stocks is elevated, it still remains well below levels reached prior to 2001.

Figure 10 shows an index of price to rent for residential housing. While the index has been trending up more recently, it still remains much lower than in the years leading up to the Great Recession.

Figure 11 shows real commercial real estate prices during the past three recessions and recoveries. The recovery from the 1991 recession saw declines in real commercial real estate prices at the beginning of the recovery; even seven years later, prices had not returned to their level in the trough, in real terms. Of course, commercial real estate had been a major cause of that recession, spurring significant bank failures. Unlike the 2001 recession, in which commercial real estate suffered only collateral damage, it was many years before commercial real estate prices stabilized after the 1991 recession. Interestingly, the past two recoveries have contained relatively rapid appreciation in commercial real estate prices.

Figure 12 shows the overall capitalization rate for commercial real estate over the past two recessions and recoveries. Cap rates now stand at historic lows.

Overall, anomalies in this recovery are leaving an imprint on only some financial asset classes. Price to earnings ratios for stocks and price to rent for residential real estate are only somewhat elevated and are well below previous peaks in these series. In contrast, 10-year Treasury rates and commercial real estate capitalization rates are unusually low relative to the past. **Figure 13** shows that the duration of the Federal Reserve System Open Market Account (SOMA) holdings rose as asset-purchase programs increased the holdings of longer-term

Treasury and agency mortgage-backed securities. More recently, there has been some decline in the duration of the Federal Reserve's portfolio as the previously purchased, longer-term securities holdings continued to age. However, if one were concerned about the historically low 10-year Treasury and commercial real estate capitalization rates, perhaps because of potential financial stability concerns, the balance sheet composition could be adjusted to steepen the yield curve.

Concluding Observations

This recovery has been full of surprises, most of which have not been good. Hopefully, the discussions that we have over the next two days will help us better understand these anomalies, and whether they are likely to have a more permanent impact on the economy. They may also have implications for the pricing of financial assets as the policy normalization process proceeds.

While one must always be cautious about assuming that current trends reflect something different from historical experience, it is important to consider whether this time has indeed been different. If it has, then the lessons from this recovery – perhaps an understanding of a "new normal" environment – may very well impact how we should be thinking about monetary policy going forward.

Thank you.