A Time of Testing¹

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¹ This speech closely tracks speeches delivered on Sept. 26, Oct. 4 and Oct. 17, 2013, with the exception of some new material on pages 7 and 8. Thanks to Ron Feldman, David Fettig, Terry Fitzgerald, Claire Hou, Sam Schulhofer-Wohl and Kei-Mu Yi for their assistance with these remarks and the supporting materials.

Thank you for that generous introduction, and thank you for the opportunity to join you here today. I would also like to thank those of you who met with me earlier this morning for a discussion about business prospects and the choices that many of you are facing. As I often note, those types of discussions are important in helping to frame my understanding of the state of the economy. As you will hear in a moment, expectations are key to monetary policymaking, and understanding what informs the expectations of those who must make hiring and pricing decisions is very useful.

The title of my speech today is "A Time of Testing." Paul Volcker, then Chairman of the Federal Reserve Board of Governors, used the same title for a speech that he gave on October 9, 1979. Chairman Volcker intended his title to underscore that monetary policymakers in 1979 were confronted with a severe test in the form of high *inflation* and high *inflation expectations*. I use the title today to underscore that monetary policymakers in 2013 are again confronted with a severe test—but this time a test created by low *employment* and low *employment expectations*. Back in 1979, Chairman Volcker said that "this is a time of testing—a testing not only of our capacity collectively to reach coherent and intelligent policies, but *to stick with them*" [italics mine]. My theme today is that his powerful phrase applies with equal force to our current situation.

Let me give you a brief roadmap of where I plan to take you today.

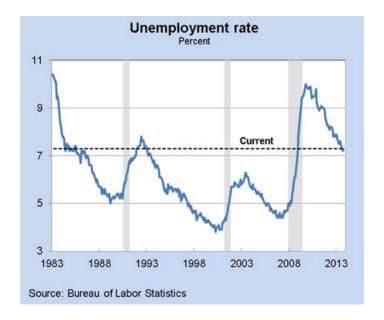
First, I will show you data that depict the painfully slow pace of recovery in the U.S. labor market. Second, I will show you data that demonstrate that there is considerable monetary policy capacity with which to address this problem. Third, I will take you back to 1979 and describe the nature of the problem that monetary policymakers faced then. I will describe how they dealt with those problems by using what I would call goal-oriented monetary policy. Fourth, I will argue that there are several key parallels between 1979 and 2013. Given those parallels, monetary policymakers can best deal with the current labor market problems by also adopting a goal-oriented approach to monetary policy. Unlike 1979, though, the goal-oriented approach to monetary policy will focus on improving labor market outcomes, as opposed to lowering inflation. Finally, I'll draw some connections between a goal-oriented approach to monetary policy and the current public conversation about monetary policy. Throughout my remarks, I'll be making reference to the Federal Open Market Committee, or FOMC for short. The Committee currently consists of the six governors of the Federal Reserve System and the 12 presidents of the various regional Federal Reserve Banks, including me. Its job is to set monetary policy for the United States.

As you listen to me today, please keep in mind that my views are not necessarily those of anyone else in the Federal Reserve System, including other Federal Open Market Committee participants.

² Volcker, Paul A. 1979. "A Time of Testing." Remarks before the American Bankers Association, New Orleans, La., Oct. 9, p. 4. Online at fraser.stlouisfed.org/docs/historical/volcker/Volcker_19791009.pdf.

Evolution of Labor Market Outcomes since 2007

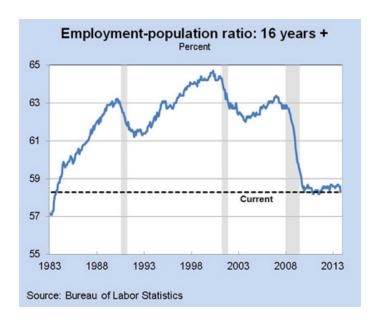
I will begin by documenting the disturbing state of the labor market. I'll start by showing you data on the evolution of the unemployment rate. In March 2007, the unemployment rate was 4.4 percent. It rose slowly throughout 2007 to reach 5.0 percent by the end of the year. The National Bureau of Economic Research dates the Great Recession as having begun in that month. In the wake of the recession, the unemployment rate reached a peak of 10 percent in October 2009.



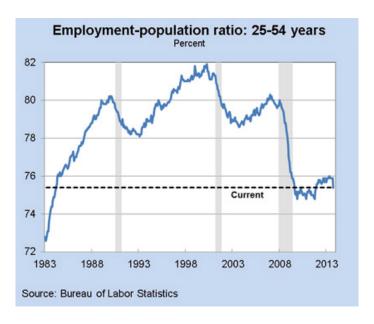
Since that date—four years ago!—the unemployment rate has fallen slowly to 7.3 percent. This is still unusually high relative to the past quarter century or so: Between 1986 and 2007, the unemployment rate was only higher than 7.3 percent in 1992. The current unemployment rate is also high relative to most forecasts of its expected long-run level, including those made by the FOMC. Basically, an unemployment rate of 7.3 percent means that the U.S. labor market is far from healthy.

But I would say that this measure—troubling as it is—overstates the improvement in the U.S. labor market. To estimate the unemployment rate, the Census Bureau asks people two questions: Are you working? And, if not, have you looked for work in the past four weeks? The unemployment rate measures the ratio of the second number—the recent job searchers—to the sum of the two numbers (the recent job searchers and the workers). This means that the unemployment rate can decline for two reasons: because more people are finding work or because fewer people are choosing not to look for work. Most of the declines in the unemployment rate since October 2009 have occurred because the fraction of people who are choosing to look for work has fallen.

This characterization is borne out if we look at the evolution of the fraction of people over the age of 16 who have a job—what's called the employment-to-population ratio. In March 2007, the employment-to-population ratio was over 63 percent. The employment-to-population ratio fell sharply during the Great Recession and bottomed out at just over 58 percent in mid-2011. The percentage has risen little from this low point and remains lower than at any time between 1986 and 2007.



It is true that, even without the Great Recession, demographic forces would have led to some decline in the employment-to-population ratio since 2007. As the baby boom birth cohort—born between 1946 and 1964—ages, the fraction of retirees in the population grows steadily. But these demographic forces are simply too small to account for much of the decline in the employment-to-population ratio that I've described. One way to see this—but not the only way—is to focus on people who are outside the normal retirement age. Here, I've plotted the fraction of the population aged 25 to 54 who have a job. This ratio has improved somewhat more from its low point, but also remains lower than at any time between 1986 and 2007.



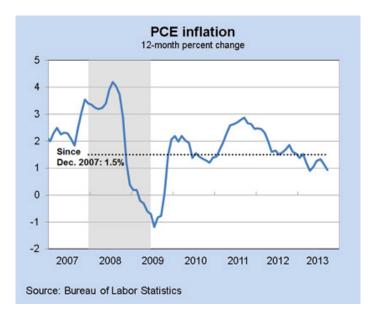
To summarize what we learn from the charts: The good news is that the labor market *has* improved since the end of the Great Recession. The bad news is that the *rate* of improvement over the past four years has been painfully slow. As a consequence, the condition of the labor market remains weak.

There are two aspects of the labor market situation that are worth emphasizing. First, the weak labor market represents considerable hardship for a large number of Americans, both in economic terms and in psychological terms. Second, it represents a significant waste of resources for the national economy, because our country is failing to use a large fraction of our human potential. For both of these reasons, I believe that those of us who are charged with making economic policy should do whatever we can to facilitate a faster rate of improvement in labor market conditions.

Potential Usefulness of Monetary Policy

I have shown you evidence that the labor market is currently weak. But the charts also show that the labor market has been weak for several years. Some observers have concluded from this persistence that monetary policy cannot ameliorate the problems in the labor market. One of my main points today is that this conclusion of monetary policy impotence is at odds with the behavior of inflation.

To understand this point, it's useful to look at the behavior of personal consumption expenditure (PCE) inflation over the past few years. Just to be clear, this is a measure of inflation that incorporates the prices of all goods and services, including food and energy. Since the beginning of the Great Recession in December 2007, the PCE inflation rate has averaged around 1.5 percent. This is noticeably below the FOMC's target inflation rate of 2 percent per year. And the outlook for *future* inflation is similarly subdued. Thus, earlier this year, the Congressional Budget Office projected that PCE inflation will remain below the FOMC's target of 2 percent until the year *2018*.



These low levels of inflation tell us that monetary policy can be useful in increasing the rate of improvement in the labor market. Here's what I mean. At a basic level, monetary stimulus increases the demand for goods among households and firms. This higher demand for goods tends to push upward on both prices and employment. Hence, the downside with using monetary policy to stimulate employment is that, when employment is near its maximum level, further stimulus can lead to unduly high inflation. But the data show that over the past few years inflation has been below the FOMC's target of 2 percent.

It's expected to remain below desirable levels for years to come. These low levels of inflation show that the FOMC has a lot of room to provide much needed stimulus to the labor market.

Learning from 1979

I have argued that there is monetary policy capacity to ameliorate the severe weakness in U.S. labor market conditions. I next turn to the question of how best to use that capacity. In answering this question, I believe that it is useful to consider how the Federal Open Market Committee successfully solved the problem of high inflation back in the early 1980s.

Earlier, I referred to a speech given by Paul Volcker in October 1979, early in his term as Chairman of the FOMC. At that time, the annual inflation rate was over 9 percent, after rising throughout the prior 15 years. Many observers felt that monetary policy was powerless to roll back (or possibly even to stem) this steady increase. As Chairman Volcker noted in his speech, "Some would argue that inflation is so bound up with ... deep-seated forces that monetary and fiscal policies are impotent," and that "we face impossible choices between inflation and prosperity." Indeed, only 10 days before Chairman Volcker spoke, former Federal Reserve Chairman Arthur Burns had given a speech of his own in which he argued that the increase in inflation was grounded in "philosophic and political currents that have been transforming economic life in the United States ... since the 1930s."

The perception that monetary policymakers could not (or would not) address the problem of high inflation was actually a key part of the problem facing the FOMC in 1979. If the public believes that it is impossible to reduce inflation, then the public will expect high inflation to persist or even to increase. Those high inflation expectations themselves generate high inflation. After all, if businesses expect high inflation, they will raise their prices more. And, if workers expect high inflation, they will ask for higher wage increases. In this way, the perception of monetary policy impotence in 1979 was itself a key force in generating higher inflation.

Faced with this challenging issue, the FOMC followed what I would term *goal-oriented* monetary policy. This approach had two parts. First, the Committee formulated and communicated a clear goal: It intended to bring inflation down as quickly as possible. Second, on an ongoing basis, the Committee did whatever it took to achieve that goal, even if those actions had short-term economic costs. In particular, the Committee maintained tight monetary policy so as to push down inflation, even as interest rates and the unemployment rate soared to post-World War II highs. By following a goal-oriented policy, the FOMC was successful in bringing down both inflation and inflation expectations. Indeed, as early as late 1983, inflation had fallen below 4 percent.

In hindsight, I think that it is clear why the FOMC was so successful. With goal-oriented policy, communications and actions work together in a powerful fashion. Communications tell the public where the FOMC is taking the economy. Then, every subsequent action gives the public confidence that the

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³ Volcker, p. 5.

⁴ Burns, Arthur F. 1979. "The Anguish of Central Banking." 1979 Per Jacobsson Lecture, Belgrade, Yugoslavia, Sept. 30, p. 9. Online at perjacobsson.org/lectures/1979.pdf.

Committee is willing and able to take the economy in that direction. Actions and communications operate together to destroy the dangerous perception of monetary policy ineffectiveness.

Goal-Oriented Policy in 2013

I've spent a lot of time talking about 1979, because I see three key parallels between the economic situation in 1979 and the economic situation in 2013. First, just like in 1979, the Federal Open Market Committee faces a challenging macroeconomic problem—although this time, the problem is stubbornly low employment as opposed to stubbornly high inflation. Second, there is a widespread perception that monetary policymakers lack either the tools or the will to solve this problem.

And third, the perception of monetary policy ineffectiveness is itself a key factor in generating the problem. Let me elaborate on this last point. If the public thinks that monetary policy is ineffective, then it will expect relatively weak macroeconomic conditions in the future. But these expectations about the future have a direct impact on current macroeconomic outcomes. If households expect their incomes to be low in the future, they will save more and spend less today. If businesses expect low future demand for their products, they will invest less today and hire fewer people today. In this way, any perceptions of future FOMC ineffectiveness in generating favorable macroeconomic outcomes are hurting current employment.

We've seen how the FOMC dealt with its problems in 1979 by adopting a goal-oriented approach to monetary policy. Given the parallels between 1979 and 2013, I believe that a goal-oriented approach would be useful again. In 1979, the FOMC's goal was to return inflation to low levels as rapidly as it could. In 2013, the FOMC's goal should be to return employment to its maximal level as rapidly as it can, while still keeping inflation close to, although possibly temporarily above, the target of 2 percent. Note that, by keeping inflation expectations well-anchored, the inflation requirement ensures that monetary policy remains effective as a form of employment stimulus.

But, as Paul Volcker said in his 1979 speech, it is not enough to formulate or communicate a goal. The Committee has to stick to its formulated approach—that is, it must do whatever it takes to achieve its communicated goal. In the early 1980s, doing whatever it took meant being willing to keep money tight, even though interest rates and the unemployment rate rose to unusual heights. By doing whatever it took to achieve its goal, despite these short-term costs, the FOMC was able to bring down inflation and inflation expectations.

Doing whatever it takes in the next few years will mean something different. It will mean that the FOMC is willing to continue to use the unconventional monetary policy tools that it has employed in the past few years. Indeed, it will mean that the FOMC is willing to use *any* of its congressionally authorized tools to achieve the goal of higher employment, no matter how unconventional those tools might be. Moreover, doing whatever it takes will mean keeping a historically unusual amount of monetary stimulus in place—and possibly providing more stimulus—even as:

- Interest rates remain near historic lows.
- Economic growth rises above historical averages.

- Per capita employment begins to rise appreciably.
- Asset prices rise to unusually high levels, leading to concerns about "bubbles."
- The medium-term inflation outlook rises temporarily above 2 percent.

It may not be easy to stick to this path. But I anticipate that the benefits of doing so, in terms of employment gains, will be significant.

I have been emphasizing the similarities between the FOMC's situation in 1979 and its situation in 2013. But I should also emphasize one critical difference between the two situations. In 1979, the FOMC was faced with what proved to be a very painful trade-off between keeping inflation low and keeping employment high. In 2013, there is no such trade-off. As I showed you earlier, the impact of the Great Recession has left both prices and employment too low. Thus, the goal-oriented policy that I've described should also help the FOMC do better with respect to its objective of keeping inflation close to 2 percent.

Communication Changes and Policy Choices

I'll close by drawing some connections between the current monetary policy debate and the goaloriented approach to monetary policy that I've described in this speech.

The Federal Open Market Committee is currently buying \$85 billion of long-term assets per month. Recently, there has been an ongoing public conversation about the possibility that the FOMC might reduce its current flow of long-term asset purchases over the next year. The FOMC's asset purchases push down long-term interest rates, and encourage consumers to spend and businesses to invest. Hence, reducing the flow of purchases in the near term would be a drag on the already slow rate of progress of the economy toward the Committee's goals. From the perspective of a goal-oriented approach, the timing of this conversation seems puzzling.

I find that the FOMC's statement, released after its recent meeting, provides a useful way to understand this otherwise puzzling conversation. Long-term asset purchases are still a relatively novel tool, and central banks continue to learn about their costs and benefits. For this reason, the FOMC statement emphasizes that its decisions about asset purchases are based not only on the Committee's economic outlook, but also on its assessment of the costs and efficacy of this unconventional policy tool. The requisite calculus is necessarily a delicate one.

Unfortunately, the recent public conversation about reducing the flow of asset purchases typically places little or no emphasis on these costs and efficacy considerations. As a result, the dialogue risks creating the perception that the Committee is *not* following a goal-oriented approach to monetary policy. Such a perception can create doubts and uncertainty about the criteria underlying Committee decisions. We can see the imprint of those doubts and uncertainty in the heightened level of bond market volatility over the past few months. I believe that the Committee could reduce this volatility by

greatly enhancing its communication on the role of cost and efficacy considerations in its deliberations about the evolution of asset purchases.

The Committee could also promote a goal-oriented approach to monetary policy by making other changes to its communication. The Committee has said little about how it plans to adjust the fed funds rate—the short-term interbank lending rate—once the unemployment rate falls below 6.5 percent. In previous speeches, I've recommended that the FOMC announce its intention to keep the fed funds rate extraordinarily low at least until the unemployment rate falls below 5.5 percent, as long as the one-to-two-year-ahead outlook for the inflation rate stays below 2.5 percent. A recent working paper by senior Board of Governors staff suggests that this policy stance could indeed have material benefits in terms of the evolution of prices and employment.⁵

Beyond these changes in communication, the Committee could also take concrete policy steps to demonstrate commitment to a goal-oriented approach to policy. In its most recent statement, the Committee says that it expects the unemployment rate to decline gradually and the inflation rate to be below 2 percent over the medium term. Under a goal-oriented approach, the Committee would respond to this weak outlook by providing more monetary stimulus—for example, by lowering the interest rate being paid to banks on their excess reserves.

Conclusions

My speech is called "A Time of Testing."

Five years ago, as the nation and the world spiraled into a financial crisis, it was obvious that economic policymakers faced a time of testing. Thanks in large part to Chairman Bernanke's strong and imaginative leadership, the Federal Reserve System was able to pass that challenging test. The System's actions in the fall of 2008 and the first half of 2009 were critical in eliminating what was the nontrivial risk of a second Great Depression, with unemployment rates closer to 25 percent than to 10 percent.

My message today is that this is another time of testing. Over six years after the national unemployment rate first began its ascent, the labor market remains disturbingly weak. The good news is that, with low inflation, the FOMC has considerable monetary policy capacity at its disposal with which to address this problem.

The FOMC's test today is to figure out how best to deploy this capacity. The answer lies in taking two steps. The first step is to communicate that our goal is to accomplish a fast return to maximal

⁵ English, William B., J. David López-Salido and Robert J. Tetlow. 2013. "The Federal Reserve's Framework for Monetary Policy—Recent Changes and New Questions." Paper presented at the 14th Jacques Polak Annual Research Conference, hosted by the International Monetary Fund, Washington, D.C., Nov. 7-8, p. 19. Online at http://www.federalreserve.gov/pubs/feds/2013/201376/201376abs.html

employment while keeping inflation close to, although possibly temporarily above, the target of 2 percent. The second step is to do whatever it takes, on an ongoing basis, to achieve that goal. A goal-oriented approach to monetary policy greatly reduced inflation in the early 1980s. Adopting such an approach in our own time would improve labor market outcomes.

Thank you. I look forward to taking your questions.