

# Thoughts about the Outlook

Narayana Kocherlakota

President

Federal Reserve Bank of Minneapolis

White Bear Lake Area Chamber of Commerce

White Bear Lake, Minnesota

April 12, 2012

Thank you for that generous introduction, and thanks especially for your invitation to speak to the White Bear Lake Chamber of Commerce. I became president of the Minneapolis Fed in October 2009, after many years as an economics professor. I anticipated a fair amount of what this job would entail, but one of the unexpected pleasures has been the opportunity to meet with people from across the Ninth District. I've been everywhere from western Montana to the Upper Peninsula of Michigan and many places in between, but sometimes it's nice to stay close to home, and so I appreciate the opportunity to be with all of you here today.

Today, I want to talk to you about some basics about the FOMC, my outlook for the economy, and the implications of my outlook for monetary policy. I look forward to taking your questions after I'm done. Before I proceed, though, I want to stress that the views you are about to hear are my own, and not those of others in the Federal Reserve System.

### **Some FOMC Basics**

Let me begin with some basics about the Federal Reserve System. I like to tell people that the Fed is a uniquely American institution. What do I mean by that? Well, relative to its counterparts around the world, the U.S. central bank is highly

decentralized. The Federal Reserve Bank of Minneapolis is one of 12 regional Reserve banks that, along with the Board of Governors in Washington, D.C., make up the Federal Reserve System. Our bank represents the ninth of the 12 Federal Reserve districts and includes Montana, the Dakotas, Minnesota, northwestern Wisconsin, and the Upper Peninsula of Michigan.

Eight times per year, the Federal Open Market Committee—the FOMC—meets to set the course of monetary policy. All 12 presidents of the various regional Federal Reserve banks—including me—and the seven governors of the Federal Reserve Board contribute to these deliberations. (Actually, right now, there are only five governors—two positions are unfilled.) However, the Committee itself consists only of the governors, the president of the Federal Reserve Bank of New York, and a rotating group of four other presidents (currently Cleveland, Richmond, Atlanta, and San Francisco). I'll be on the committee in 2014. In this way, the structure of the FOMC mirrors the federalist structure of our government, because representatives from different regions of the country—the various presidents—have input into FOMC deliberations.

I see this federalist structure as being important because it fosters valuable two-way communication between Americans and their central bank—exactly the

kind of two-way communication that we're engaging in today. Of course, one direction of communication is from regional Fed presidents to the residents of their districts, but the other direction matters a lot too. The input from the presidents to the FOMC relies critically on information they receive from their districts about local economic performance. We obtain this information through the work of our research staffs—but we also obtain it through the kinds of conversations that I had with local business and community leaders before my speech. And, after I'm done talking, your questions and comments will be another important input into my thinking about policy. In my view, this two-way communication between the residents of Main Street and the Federal Reserve System, mediated by the presidents of the regional Feds, is a critical ingredient to the System's ongoing effectiveness.

## **Outlook**

Let me turn now to my outlook for the national economy. I will focus on the three variables that are of particular interest to the FOMC: output, inflation, and unemployment. My discussion will proceed in three parts. First, I will describe the behavior of the economy over the past four years. Next, I will describe my model—really, my story—for those events. Finally, I will use that model or story

to form an outlook for the next two years.

I begin, then, with a look back. The national economy slowed dramatically during 2008 and the first half of 2009. National output—as measured by gross domestic product adjusted for inflation (real GDP)—fell by 5.1 percent from the fourth quarter of 2007 through the second quarter of 2009. The unemployment rate, which was 5 percent in December 2007, reached 10 percent in the second half of 2009 (October).

Since the middle of 2009, the national economy has recovered at a moderate rate. After four years, national output has finally returned to its prerecession level. Note, though, that returning to 2007 output levels is a relatively low bar: Output remains about 10 percent below where it would be if it had grown in line with historical averages.

Given the sluggish recovery in national output, it is not surprising that labor markets are also healing slowly. Employment fell by 8.7 million jobs and has recovered only 3.6 million of those jobs. On an encouraging note, the national unemployment rate has recently fallen to 8.2 percent. But the fraction of people over the age of 16 who have a job, known as the employment-population ratio, is still nearly 7 percent lower than in December 2007.

Finally, I should note that while output and employment remain quite low, inflation has remained remarkably close to the Federal Reserve's 2 percent target. From the fourth quarter of 2007 through the fourth quarter of 2011, the personal consumption expenditure (PCE) price index has grown at an average annual rate of 1.8 percent. Here, I should emphasize that the PCE price index is an index that includes *all* goods and services, including food and energy. So, I'm not talking about so-called core inflation—I'm talking about what's called headline inflation.

That's a brief review of the past four years. Real output has recovered back to 2007 levels, but remains well below what one would expect it to be in light of historical growth patterns in the United States. Employment remains well below 2007 levels. Unemployment remains well above 2007 levels. Inflation has averaged close to the Fed's target.

Now, I turn to the question of how one might use these data to fashion a forecast for the next year or two. Any forecast of the future is based on an economic model—again, a story—of how the past data came to be. My story for the past four years centers on two key changes in the economy. The first is that from 2006 to 2012, households have lost trillions of dollars in wealth and net worth, as housing and other assets have fallen in value. The second is that

households and firms now feel that they must stay prepared for the kind of financial market shock they experienced in 2008. I see these changes in economic conditions as improving over time, but only slowly.

Many observers—including me—have emphasized how these two changes in the economy have given rise to a fall in households' demand for consumption goods and in firms' demand for investment goods. Fortunately, the Fed's highly accommodative monetary policy has served to mitigate this fall in demand. The Fed's policy has pushed downward on short-term and long-term interest rates. The lower interest rates encourage consumers to spend and firms to invest.

What's less often emphasized—but I think is also critical—is that the productive capacity of our country has grown much more slowly than we would have expected prior to the recession. This statement may seem strange at first blush—after all, our workers have not been harmed or injured in some fashion, and our factories have not been damaged or destroyed. But the productive capacity of a country doesn't depend on just the number of workers and machines available. We live in a dynamic economy, in which enormous numbers of firms, plants, and jobs are continually created and destroyed. The productive capacity of our country depends on how well that dynamic process of creation

and destruction—the ongoing reallocation of people and machines across economic tasks—is working. Productive capacity has grown more slowly than usual because this process of reallocation has been materially affected by the fall in household net worth and the rise in firm-level uncertainty.

This kind of damage to productive capacity takes many forms, but let me give two concrete examples of what I have in mind. New firms are a major source of employment growth in the economy. But households generally need some kind of capital of their own to initiate a startup—and so the fall in household net worth and wealth makes starting new firms more challenging. Indeed, the number of new firms has fallen sharply since 2006—and so it is not surprising that employment is lower. At the same time, existing firms' fear of a 2008 financial market shock keeps them from hiring workers whom they might have to fire if 2008 recurred. Both of these forces—fewer startups and firms' fear of firing—reduce the productive capacity of our economy by making it harder for destroyed jobs to be replaced by created jobs.

Thus, my view is that the economy has experienced both a reduction in the demand for goods and damage to its productive capacity. However, as I think about the outlook for the economy and the appropriate policy reaction to that

outlook, I would also like to know which of these two changes is more responsible for the low levels of output and employment. To answer this question, I believe it is useful to look at the behavior of inflation. If the demand for goods remained below the productive capacity of the economy for multiple years, then we should see significant downward pressures on prices. Inflation should be well below the Fed's target of 2 percent, and possibly falling. But, as I indicated earlier, this has not been the case. Hence, it does not appear that demand is significantly below the productive capacity of the United States.

To be clear, this observation does not mean that the Fed's highly accommodative policy was unwarranted. Without that policy, I'm sure that output, employment, and prices would all be lower. After all, during the early years of the Great Depression, prices were *falling* at 10 percent per year. Rather, my point is that the Fed's highly accommodative policy has kept the demand for goods relatively close to the diminished productive capacity of the economy, and so has kept inflation near 2 percent.

So, my model of the past four years is that there was a fall in demand and damage to the productive capacity of the country. Fortunately, highly accommodative monetary policy was able to keep the demand for goods close to

the productive capacity of the economy, and thereby keep inflation close to the Fed's target. What does this model imply for my outlook for the evolution of output, employment, and prices over the next four years?

My view is that it will take at least several more years for the damage to productive capacity that I've described to heal. Thus, I predict that output will grow only moderately, at around 2.5 percent to 3 percent in each of the next two years. This moderate growth will imply that output will remain well below what we might have expected it to be back in 2007. In a similar vein, I expect the rate of employment growth in each of the next two years to be only slightly higher than the rate of population growth. In terms of unemployment, I expect that the unemployment rate will continue to fall slowly, to around 7.7 percent at the end of this year and to around 7 percent by the end of 2013.

Finally, let me turn to inflation. It is true that low household net worth and wealth will continue to represent significant headwinds for demand. Hence, I would view a highly accommodative monetary policy as being appropriate. As I will explain shortly, though, I expect that the FOMC's policy will be even more accommodative than I would see as appropriate. Hence, I expect that the core and headline PCE inflation rates will be around 2 percent this year and rise to 2.3

percent in 2013.

To sum up: I expect output to grow at 2.5 percent to 3 percent per year in each of the next two years, unemployment to fall to around 7 percent by the end of 2013, and inflation to average over 2 percent over the next two years. How much confidence should you have in this outlook? I can give two conflicting answers to this question. First, *any* forecast should be viewed as only a benchmark look into the future. Policymakers and the public should both be prepared for other eventualities. Second, I don't think that my admittedly scant forecasting record is all that bad. In February 2010, I provided my first public outlook for the evolution of real GDP, inflation, and unemployment over the next two years. My forecast for real GDP at the end of 2011 has turned out to be about 1.5 percent too high, and my forecast for unemployment at the end of 2011 was about 30 basis points too high. My forecast for headline PCE inflation has proven to be almost exactly right.

### **Three Questions about Policy**

I've described my outlook for the next two years. Now I want to use that outlook to answer three questions that I'm often asked about monetary policy. But first, by way of background, let me remind you of the FOMC's current monetary policy

stance.

Right now, the FOMC has two types of accommodation in place. First, it is targeting a short-term interest rate, the federal funds rate, of between 0 and 0.25 percent, and it expects to keep that interest rate extraordinarily low at least through late 2014. These low interest rates are intended to stimulate consumption by households and investment by firms.

Second, the FOMC has bought a large amount of long-term government-issued and government-backed assets. These asset holdings are designed to stimulate longer-term investment. More specifically, any holder of a long-term bond is exposed to interest rate risk, because the value of that bond fluctuates as interest rates vary. When the Fed buys long-term bonds from the private sector, the private sector as a whole is exposed to less interest rate risk. As a result, some private investors will demand a lower premium for holding other bonds that are exposed to interest rate risk. Consequently, all long-term yields fall—and corporations should correspondingly lower their hurdle rates for long-term investment projects.

The FOMC does have additional tools. It could exert further downward pressure on long-term market interest rates by buying more long-term Treasury

securities or securities issued by government-sponsored enterprises like Fannie Mae and Freddie Mac. Alternatively, the Committee could extend its prediction for how long it will keep its target short-term interest rate exceptionally low. So, tools—and choices—remain. The three questions that I will discuss are about those choices.

### **Question 1: Should the FOMC increase its current level of accommodation?**

Congress has mandated that the FOMC make monetary policy so as to promote price stability and maximum employment. In order to achieve these goals on an ongoing basis, it is essential that FOMC choices evolve in a systematic fashion with the state of the economy. Suppose, for example, that unemployment, and the outlook for unemployment, fall back toward long-run norms. The FOMC is doing better on its employment mandate. Such a change implies that the FOMC does not need to increase its level of monetary accommodation, and may in fact need to reduce the level of accommodation. Suppose that inflation, and the outlook for inflation, rises. Again, such a change implies that the FOMC does not need to raise the level of monetary accommodation, and may in fact need to reduce the level of accommodation.

With these basic guidelines in mind, let's go back to the beginning of last

year—that is, January 2011. The unemployment rate was 9.1 percent. The FOMC expected the unemployment rate to fall only slightly by the end of the upcoming year and to remain at 7.9 percent by the end of the following year. The FOMC expected core PCE inflation to be 1.2 percent over the course of the year and to be 1.3 percent over the course of the following year.

What about now? The unemployment rate has fallen to 8.2 percent. As I've described, I expect that the unemployment rate will be about 7.7 percent by the end of this year and about 7 percent by the end of the following year. I expect inflation to be around 2 percent in this calendar year and over 2 percent next year.

Thus, the outlook for the unemployment rate has improved, and the outlook for inflation has risen since January 2011. In addition, since the beginning of last year, the FOMC actually added more monetary accommodation. I would say that I see no need for still more accommodation at this time. Indeed, as I mentioned earlier, I believe that the FOMC's recent accommodative steps will lead to both core and headline inflation being above 2 percent in 2013.

## **Question 2: Should the FOMC reduce accommodation?**

Using the same logic as I've just described, the answer is yes. From the point of

view of the dual mandate, the outlook is better than a year ago—and so we should have less accommodation in place.

This does not mean that we should be raising rates anytime soon. Last June, the FOMC issued a consensus statement, describing a sequence of steps that it foresaw using to normalize monetary policy. The exit process is a long one, designed to take place over a number of years, and the Committee would likely not raise rates for some time after the exit process begins. I think that the Committee should only begin this exit process if it can be reasonably sure that it won't have to reverse itself in the near term. I don't feel that kind of certainty at this stage, and it follows then that it is not yet time to initiate exit, let alone raise rates.

However, I would say that it would be appropriate to change the Fed's current forward guidance to the public about the future course of interest rates. Currently, the FOMC statement reads that the Committee believes that conditions will warrant extraordinarily low interest rates through late 2014. My own belief is that we will need to initiate our somewhat lengthy exit strategy sometime in the next six to nine months or so, and that conditions will warrant raising rates sometime in 2013 or, possibly, late 2012.

### **Question 3: Would you ever be in favor of adding accommodation?**

The answer to this is simple: yes. If the outlook for inflation fell sufficiently and/or the outlook for unemployment rose sufficiently, then I would recommend adding accommodation. There are a number of ways that this could be done. My own preference would be for the FOMC to purchase additional Treasuries or securities issued by Fannie Mae and Freddie Mac in an attempt to drive down longer-term interest rates.

More generally, as I discussed earlier, any forecast should be viewed as only a benchmark look into the future. Hence, I believe that the Committee would be well served by describing a public contingency plan that discusses its likely policy reactions to an array of scenarios that are viewed as possible in the next year or two. This contingency plan would be beneficial to the economy by reducing the public's uncertainty about the Committee's ability and willingness to react to various future contingencies. A public contingency plan would also enhance accountability by forcing the Committee to explain how its choices are linked to the evolution of the economy.

### **Conclusions**

As is my wont, I've covered a lot of ground today. Let me close by emphasizing

three points that seem especially important. First, the fall in household net worth/wealth and increase in firm uncertainty since 2007 have had adverse impacts on demand and on productive capacity. Over the past four years, the FOMC's highly accommodative policy has been successful at keeping demand close to productive capacity, as is evidenced by how close inflation has been to 2 percent. I see no need for additional accommodation at this time, and I believe that conditions will warrant raising rates well before the end of 2014.

Second, the FOMC has become more transparent about its benchmark outlook for the economy, and the evolution of policy, given that outlook. But outlooks are always uncertain, and especially so today. As I have described in earlier speeches, I believe that the Committee would be well served to be more public about how it would react to scenarios that differ from its benchmark.

Finally, this has been a very busy week for FedSpeak, as it is often called! A number of my colleagues on the Federal Open Market Committee have given speeches this week about their views on the economy and the appropriate course of monetary policy. These speeches often vary in perspectives and conclusions. I want to close by discussing how the public should interpret these speeches.

Let me start by saying what these speeches are *not*. Every speaker has highlighted that he or she is speaking on behalf of him- or herself, and not on behalf of the FOMC. This disclaimer is important and should be taken seriously. The evolution of monetary policy is a *collective* decision made by the Committee in its meetings. No individual speaker can tell you what those decisions will be.

What, then, is the point of these speeches? Monetary policy is made by a committee—both here and elsewhere in the world—because policy is better when it is grounded in the sharing of, and the consideration of, a wide range of perspectives. FOMC meeting participants are using their speeches to give the public a sense of that range of perspectives. Especially over the longer term, I see this form of transparency as making clear to all that we are indeed an institution that makes policies through the process of two-way communication that I described earlier. In this way, FedSpeak enhances and builds the public's trust in our institution.

Thanks for your attention. I look forward to your questions.