Monetary Policy: Recurring Themes

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I. Introduction

Thank you so much for the invitation to speak to you tonight. It's a pleasure to appear before the Money Marketeers, a group whose members are very well acquainted with issues affecting the broad economy, including the unprecedented situation in which we find ourselves today. Over the years, this distinguished group has attracted an impressive number of speakers, Federal Reserve presidents and Governors among them, who have shared their insight and understanding of the economy.

So tonight I don't intend to retread overly familiar ground. Instead, I hope to build on the conversation that Fed Vice Chair Janet Yellen started here just a few weeks ago. First, I will briefly discuss my economic outlook. Then I will point to the elements of Governor Yellen's speech that capture my own policy prescriptions so well. Finally, I will address a few issues that have come up repeatedly during sessions such as this one.

Before I turn to the focus of today's discussion, I would like to remind you that the views expressed are my own and do not necessarily represent those of the Federal Open Market Committee (FOMC) or the Federal Reserve System.

II. Outlook

Let's start with the economic outlook. We are all too familiar with the fact that the financial crisis that unfolded in 2007 and 2008 precipitated an unusually deep and lengthy recession. According to the detailed analysis by Carmen Reinhart and Kenneth Rogoff (2009), in their recent book titled This Time Is Different: Eight Centuries of Financial Folly, recessions caused by financial crises generally are followed by anemic recoveries. By any yardstick, this certainly describes the U.S. recovery to date: Output growth has averaged only 2-1/2 percent annually, and resource gaps remain huge. In particular, the unemployment rate remains over 8 percent—well above the 5-1/4 to 6 percent rate most FOMC participants view as being consistent with a fully employed labor force over the longer run.

Both public and private sector forecasts are projecting relatively moderate rates of growth over the next few years. For example, the midpoint of the FOMC participants' forecast made in April was for growth to average a bit under 3 percent over the next three years—only modestly above the longer-run trend. And I'd have to say the incoming data since those forecasts were made have been on the soft side.

With such growth rates, we would close the large existing resource gaps only gradually. Indeed, I expect that we will face unemployment well above sustainable levels for some time to come.

With regard to inflation, as you know, the FOMC's long-run inflation objective is 2 percent as measured by the price index for personal consumption expenditures (PCE). For a number of reasons, I don't foresee much risk that inflation will rise above reasonable tolerance levels for this objective. First, the ten-year Treasury rate is below 1-1/2 percent! And its decomposition into a long-run real rate and an inflation expectation is flashing something very different than dangerous inflationary pressures. I'll have more on this later. Second, energy and commodity prices have fallen well off their recent peaks as the global outlook dims. Third, as I just noted, the output gap remains large and is likely to close only slowly. In this economic environment, wage pressures are anemic. And it is simply hard to see how any persistent outsized inflation pressures could occur without some parallel building of wage costs. That was the case in the 1970s inflation, a scenario some fear repeating today. Fourth, inflationary dynamics depend in large part on the momentum generated by people's expectations of future inflation. Currently, inflation expectations are well anchored, and so they impart little pull on inflation one way or the other. Putting all of this together (and given that inflation has stood at 1.8. percent over the past year), I conclude that inflation will likely remain near or below our 2 percent target over the medium term.

III. Policy Choices

Since the summer of 2010, I have consistently argued for the strongest policy accommodation available. With huge resource gaps, slow growth and low inflation, the economic circumstances warrant extremely strong accommodation. Many of my views were well captured in the macro-model analyses discussed here last April by Janet Yellen (2012).

If you recall, Governor Yellen compared two approaches to evaluating the stance of monetary policy to a baseline constructed from the midpoint of FOMC participants' forecasts made in January. The first was an optimal control policy, which prescribes the interest rate path that, in a well-specified econometric model for the U.S. economy, minimizes the deviations in inflation and unemployment from their policy goals. The optimal monetary policy in that analysis kept the federal funds rate near zero into early 2015—a year later than in the baseline—in order to keep the cost of capital extremely low.

Of course, economic models, at best, are only approximations to real-world behavior. So it's also prudent to look at policy prescriptions other than the optimal control policy. The most familiar of these are interest rate rules, like the Taylor rule (1993). These interest rate policy prescriptions are relatively simple empirical descriptions of the Fed's historical reactions to misses from its policy goals. If we apply the 1999 version of John Taylor's rule, we see the funds rate rising in early 2015. But even this delayed interest rate liftoff relative to the 1993 Taylor rule does not take additional account of the prolonged period that policy rates have been constrained to be higher than where they could have been because of the zero lower bound on the federal funds rate. Taking account of this additional condition would delay the Taylor Rule's lift-off towards the optimal control policy.¹

Furthermore, neither exercise considers the asymmetric downside balance of risks to the forecast coming from Europe and the U.S. fiscal cliff. Considering all of these factors, I conclude that both policy prescriptions support the need for a high degree of monetary accommodation.

These two conclusions highlighted in Governor Yellen's speech are not much different from the policy recommendation that I have been consistently advocating. Specifically, additional monetary accommodation is needed to more quickly elevate output to its full potential level. In fact, even under the optimal control exercise, the unemployment rate does not reach 5-1/2 percent until mid-2016; that's pretty late, but because of the lower funds rate path in the optimal control policy, it is still at least two years earlier than in the baseline scenario.

Furthermore, even with such additional accommodation, the outlook for inflation remains well contained: The highest that inflation rises in any simulation is 2.3 percent—only 0.3 percentage points above the highest rate in the baseline. This is within any reasonable tolerance band around our 2 percent long-run objective for inflation, especially given that the unemployment rate currently is 2 to 3 percentage points above its sustainable rate.

In weighing alternative policy approaches, I do recognize the risk that these economic model analyses could be wrong. Accordingly, I have proposed that any further accommodative policies should contain a safeguard against an unreasonable increase in inflation. In my judgment, nominal income level targeting is an appropriate policy choice and has such a safeguard. But recognizing the difficult nature of that policy approach, I have a more modest proposal: I support a conditional approach, whereby the federal funds rate is not increased until the unemployment rate falls below 7 percent, at least, or if inflation rises above 3 percent over the medium-term. The economic conditionality in my 7/3 threshold policy would clarify our forward policy intentions greatly and provide a more meaningful guide on how long the federal funds rate will remain low. In addition, I would indicate that steady progress toward stronger growth is essential, and I would be willing to buy mortgage-backed securities to do so.

Finding a way to deliver more accommodation—whether it is monetary or fiscal—is particularly important now because delays in reducing unemployment are costly. An unusually large percentage of the unemployed have been without work for quite an extended period of time; their skills can become less current or even deteriorate, leaving affected workers whose productivity has eroded with permanent scars on their lifetime earnings. And any resulting lower aggregate productivity also weighs on potential output, wages and profits for the economy as a whole. The damage intensifies the longer that unemployment remains high. Failure to act aggressively now will lower the capacity of the economy for many years to come.

IV. Recurring Themes

At this point, I would like to briefly touch on several recurring questions and themes that come up whenever I discuss my views on the economy and monetary policy.

A. Symmetric inflation target and balanced policy

Let's start with policy. I can't tell you how often people look at me in abject horror when I say that we should adopt a conditional policy that tolerates the risk of inflation exceeding our target by as much as 1 percentage point. How can I accept inflation rising above our stated target? Isn't this blasphemy for a central banker?

As you know, in January we announced a specific number—2 percent—for our inflation objective. At the same time, we also said that policy would take a balanced approach in achieving the two legs of the Federal Reserve's dual mandate—maximum employment and price stability. I strongly support these announcements. But questions still remain about the specifics of how policy will be implemented under this framework.

As Chairman Bernanke (2012) stated at his last press conference, the 2 percent inflation goal is a symmetric objective and not a ceiling on inflation. Symmetry means that inflation below 2 percent should be viewed as the same policy miss as if inflation overran 2 percent by equal amount. However, if we disproportionately recoil at inflation a little above 2 percent versus a little below, then we are not symmetrically weighing policy misses. And there is some risk of this misperception taking hold, since in the FOMC's *Summary of Economic Projections* (SEP), several participants' forecasts have the funds rate rising before 2014, even though throughout the projection period inflation is at or below 2 percent and unemployment is well above the sustainable rate indicated by the long-run projections.

To me, a symmetric inflation goal and a balanced approach to policy means that if we are missing by a large mark on our employment mandate, but are close to our inflation target, then we should be willing to undertake policies that could substantially reduce the employment gap but run the risk of a modest, transitory rise in inflation that remains within a reasonable tolerance range. The 7/3 threshold policy I have been advocating is such a plan under which I expect the sum of the resulting two misses would be less than the one miss under a less accommodative policy.

I believe the FOMC can do better at describing our thinking with respect to tolerance bands around our long-run inflation and unemployment goals. Clarification would increase both transparency and accountability. Importantly, it would help markets better anticipate Fed actions, creating one less source of risk for economic agents to manage.

B. Inflation

Now let's turn to the measurement of inflation. As I mentioned earlier, over the past year consumer price inflation, as measured by the PCE index for total consumption expenditures, has been 1.8 percent. Nevertheless, many, many people express disbelief over these small reported numbers: Surely inflation is much higher! For example, I recall Chairman Bernanke being quizzed by Congressman Ron Paul not too

long ago. Ron Paul said something like, Mr. Chairman, you say that inflation is about 2 percent, and I say that it is about 9 percent—OK, let's split the difference and say that inflation is 5 percent!

The sentiments expressed by this exchange resonate with many people. Some prices have gone up by quite a lot: Gas prices are high, food prices have increased and deals are hard to find. But the official data say that when you add up all the numbers, weighted by the appropriate expenditure shares, the total PCE inflation was 1.8 percent over the past year.

I could go on at length on these issues. But the brief points I wish to make are these:

- We use the term "inflation" to refer to the effects of monetary phenomena; this means inflation is a broad-based and sustained growth in prices.
- An increase in the relative price of a single good, like oil, against all other prices is then *not* monetary inflation.
- Behavioral finance shows that retail investors prefer to avoid the pain of losses even more than they enjoy the satisfaction of similarly sized investment gains. Likewise, consumers wish to avoid the recurring ache of higher gas and food prices. Prices of many goods and services have declined—like those for televisions, computers and entertainment options in general—but the satisfaction that consumers feel from these infrequent purchases isn't enough to offset the losses they perceive in their daily shopping.
- Although you might have concerns about a variety of government entities, the Bureau of Labor Statistics and the Bureau of Economic Analysis are among the best statistical organizations around. They are responsible for collecting and publishing high-quality inflation data.
- And when researchers do come up with quibbles, they are not on the order of percentage points, and more often, they are in terms of overstating, not understating, inflation.

C. Nominal long-term Treasury rates

At this point in the evening, experience tells me that many folks who were initially skeptical that inflation pressures are low are still skeptical. And after all, there's another important elephant in the room, right? The Fed's balance sheet has ballooned from a mere \$800 billion in August 2007 to almost \$3 trillion today: With an explosion in the monetary base like this, inflation must be just around the corner, right? Despite the fact that this prediction has been around since mid-2009 and three years later it has not come close to fruition, it's still early days, right?

The argument that inflation is imminent faces an enormous uphill battle these days, and a single number captures this concern very well: 1.45 percent. The ten-year Treasury rate was 1.45 percent as of June 1. This is unprecedented in the post-World War II economy, and it is wildly inconsistent with rising inflation over the timeframe that monetary policy is concerned with, such as the next ten years.

What do such low rates signify? To start, the nominal short-term interest rate is the sum of the real interest rate plus expected inflation. In turn, long-term interest rates are the average of expected future short-term rates plus a term premium, or risk premium. There are a variety of ways to estimate this decomposition; and they all indicate that today all three pieces—expected real rates, expected inflation and the risk premia—appear to be quite low.

What do these estimates imply? First, real interest rates reflect the expected return to saving and investing today in order to obtain more real goods and services tomorrow. Low long-term real rates imply that agents are expecting such returns to be low for a long time—which is consistent with them expecting economic activity to be relatively weak over the coming years. Next, low expected inflation means that market participants are building in little chance of a breakout in inflation. Indeed, if markets were expecting very high inflation, say, 5 percent, then real rates would be on the order of negative 2 or negative 3 percent, implausibly low unless you expected an extraordinary economic meltdown. And if you believed this, you also would probably not think that Treasury securities were a safe bet, and their risk premia would be quite high. These Treasury premia, however, are quite low, reflecting a high demand for safe assets. Economic agents are cautious, and there is little appetite for risk-taking at the moment.

What does this add up to? Well, low long-term Treasury rates support the view that markets are looking for only modest economic growth with low inflation, and a there is a high degree of caution out there—which itself is an important factor holding back economic activity today.

D. Not punishing savers

Next, let me try to address one of the toughest questions I am asked about our stance of monetary policy. Current interest rates are very, very low. Many have expressed concern that the Federal Reserve's low interest rate policy is bad for the economy because it punishes savers. This is an old story with respect to monetary policy when rates are low. My uncle first expressed this view to me in 1992, frustrated that the federal funds rate had been slashed to 3 percent.

The argument goes as follows: Low interest rates reduce the return to savers, and they punish individuals who have played by the rules and worked hard to be fiscally prudent. Clearly, policies like this disadvantage the savers. In order to meet their saving goals in such a low interest rate environment, some claim that these households will consume less and save even more, and that this reduced consumption in turn will lower real gross domestic product (GDP).

I am certainly not going to try to dispute this obvious fact: savers are earning dramatically reduced interest income on their accumulated savings. Unfortunately, throughout the U.S. economy, there is a tremendous amount of pain and hardship. The job of monetary policy, according to the Federal Reserve Act, is to provide monetary and financial conditions to support maximum employment and stable prices. Monetary

policy aims to set short-term rates so that the supply of saving equals the demand for investment in a way that facilitates the economy reaching maximum employment and price stability.

Currently, the forces of supply and demand require very low rates. The supply of saving is high as households delever and repair their balance sheets. Furthermore, the demand for investment is low because most firms have much unused capacity and are unsure of the economic path forward. Therefore, equilibrium real rates are quite low. Indeed, today they are lower than actual rates because nominal short-term rates are constrained by the zero lower bound and can go no lower. Economists refer to this as a liquidity trap because interest rates can't fall low enough to reemploy the economy's unused productive resources. And the mainstream remedy to this dilemma, as articulated clearly in the academic work by Krugman (1998), Eggertsson and Woodford (2003), Werning (2011) and others, is highly accommodative monetary policy.

But if I were bound and determined to address the concerns that savers are being disadvantaged by low interest rates, there are three prescriptions that I could imagine undertaking. And let me tell you, two of them are bad.

First, the FOMC could immediately undertake a program to raise short-term interest rates. In other words, monetary policy could exogenously turn more restrictive. Would this help savers and the economy? In my judgment, that would be a very bad policy. More restrictive credit would further reduce investment and job creation and limit the supply of credit to small business entrepreneurs, resulting in growth even slower than it is now. Savers would not be left with higher returns. And savers' other sources of income would be reduced, like employment and entrepreneurial income. I have few doubts that policy would need to quickly retrace such a misguided increase.

Alternatively, the FOMC could decide to undertake expansionary policies to the point of "recklessness" by pursuing an extremely high rate of inflation. Persistently higher rates of inflation—outside of reasonable tolerance bands around our long-run inflation objective—would indeed lead to higher interest rates for all. Savers would receive higher nominal interest income; but as Chairman Bernanke said recently, the FOMC would clearly view this as reckless and would not choose to pursue such a policy. Again, this is a case where higher nominal interest rates would be bad for savers and the entire public.

But third, if the FOMC and other policymakers could engineer stronger growth policies so that the economy boomed again and unemployment fell, this would organically lead to higher real rates of return on investment and higher interest rates in general, which would benefit savers and the entire public. A more vibrant economy would benefit owners of unused resources, like unused factory capacity and unemployed workers. This is the policy path that is most desirable in my opinion. I also think it is most consistent with the accommodative policies I have been advocating.

V. Conclusion

I have covered a lot of ground here today. But these and other such issues provide important support for my opinions on the appropriate stance for monetary policy. Let me leave you with a brief summary of how all this fits together. With inflation near target, relatively moderate economic growth expected for several more years, potential productive capacity at risk, and a symmetric 2 percent inflation target, we should resist the sirens' call to prematurely raise rates or tighten our policy in any way. Instead, we should be providing more accommodation, in particular by better articulating the economic conditions under which our policy moves will be linked to the achievement of our mandated economic goals. Thank you.

¹ Reifschneider and Williams (2000) show how taking account of the zero lower bound would delay liftoff in the Taylor 1993 rule; they did not investigate the Taylor 1999 rule, but the logic of their analysis would hold for the 1999 rule as well.

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