# More Thoughts on a Liftoff Plan

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Great Falls, Montana
October 10, 2012

*I thank Dave Fettig, Terry Fitzgerald, Sam Schulhofer-Wohl and Kei-Mu Yi for their comments.

Thank you for that introduction, Tim. It's a great pleasure to be here in Great Falls to commemorate your service on the board of directors of the Helena Branch of the Federal Reserve Bank of Minneapolis. From what you have described, people can get a good sense of the contributions that our directors make to the Federal Reserve System. However, as the president of the Federal Reserve Bank of Minneapolis, I would just stress the value of this citizen participation in our nation's central bank. It is important for people to realize that the Federal Reserve is represented and served by dedicated citizens like Tim, from places like Great Falls, Helena, Billings, and from many towns like them all across the country. The time that Tim has contributed to the Federal Reserve is truly public service. So thank you, Tim, for your commitment and dedication; and thanks also to the other members of the Helena branch board of directors, all of whom are here today.

I plan to talk for about a half hour, and then I look forward to your questions and comments. I always find those to be great learning opportunities. However, before we proceed any further, I need to remind you that the following views are my own, and not necessarily those of others in the Federal Reserve.

In my remarks today, I'll begin by briefly discussing the objectives of the Federal Open Market Committee, or FOMC, which is the monetary policymaking arm of the Federal Reserve. With that as background, I will then turn to a discussion of monetary policy. My jumping-off point is a phrase in the FOMC statement issued on September 13. In that statement, the Committee said that it "expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens."

My main message today is that the FOMC can provide additional monetary stimulus by making this sentence more precise in the form of what I'm going to call a *liftoff plan:* a description of the economic conditions that would lead the Committee to contemplate the initial increase in the fed funds rate above its current extraordinarily low level.[1]

I will suggest the following specific contingency plan for liftoff:

**As long as the FOMC satisfies its price stability mandate, it should keep the fed funds rate extraordinarily low until the unemployment rate has fallen below 5.5 percent.**

The fed funds rate is a short-term interbank lending rate that is the FOMC's usual vehicle for influencing credit conditions. I'll be much more precise later about the meaning of the phrase "satisfies its price stability mandate." Briefly, though, I mean that longer-term inflation expectations are stable and that the Committee's medium-term outlook for the annual inflation rate is within a quarter of a percentage point of its target of 2 percent. The substance of this liftoff plan is that, as long as longer-term inflation expectations remain stable, the Committee will not raise the fed funds rate unless the medium-term outlook for the inflation rate exceeds a threshold value of 2¼ percent *or* the unemployment rate falls below a threshold value of 5.5 percent. Note that neither of these *thresholds* should be viewed as *triggers*—that is, once the relevant cutoffs are crossed, the Committee retains the option of either keeping the fed funds rate extraordinarily low or raising the fed funds rate.

Thus, my proposed liftoff plan contains a specific definition of the phrase "a considerable time after the economic recovery strengthens." In my talk, I will argue that this specificity—about an event that may not take place for four or more years—will provide needed current stimulus to the economy.

**FOMC Objectives**

Let me begin by describing the monetary policy objectives of the FOMC. Congress has specified in the Federal Reserve Act that the FOMC should make monetary policy so as to promote price stability and

[1] The liftoff plan is a particularly important example of the kind of public contingency plan for monetary policy that I described in speeches late last year (Kocherlakota 2011a, 2011b).

maximum employment. These two objectives—price stability and maximum employment—are typically termed the FOMC's dual mandate. In January, the FOMC issued an important consensus statement of long-run principles and strategies. The statement provides a specific definition of price stability as representing a goal, over the longer run, of 2 percent inflation.

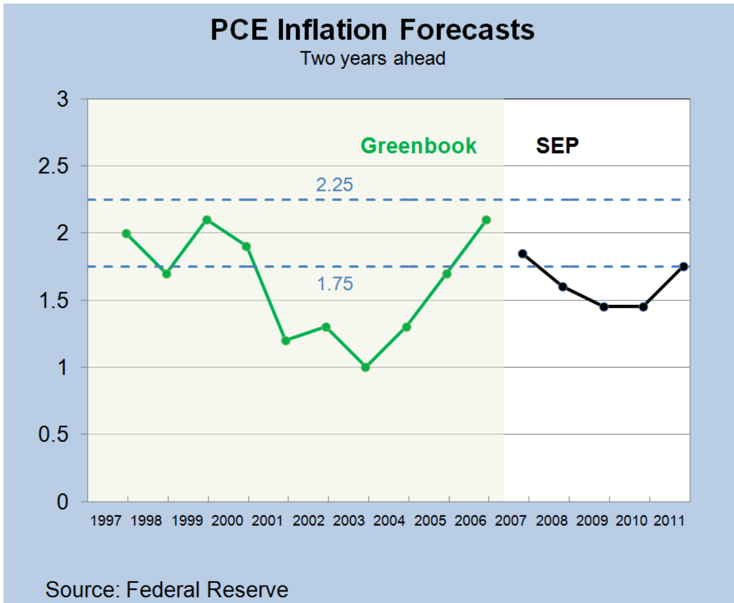
But there are a couple of reasons why this definition of price stability is not as operational as one might like. One issue is that monetary policy affects inflation with lags. Policymakers are generally thinking about making current choices so as to influence the annual inflation rate in about two years' time. Thus, monetary policy choices made toward the end of 2012 should be evaluated in terms of their impact on the annual inflation rate in the calendar year 2014. As a result, policymakers' choices are shaped by what I will call the *medium-term outlook* for the inflation rate—that is, the forecast for the annual inflation rate in two years.[2]

A second operational issue is that in some circumstances, it may be appropriate to follow policies that lead the medium-term outlook for inflation to deviate from the long-run target. Indeed, most central banks—including ones that do not have an employment mandate—find that this kind of flexibility is desirable. Of course, the public may cease to regard 2 percent as a meaningful long-run target if it sees too much of a gap between 2 percent and the Committee's medium-term outlook for inflation. A key question is: How much leeway around 2 percent is appropriate?

The Committee has made no formal decision about this issue, and my own thinking continues to evolve. But I currently believe that allowing the medium-term outlook for inflation to deviate from 2 percent by a quarter of a percentage point in either direction would provide sufficient flexibility to the Committee, while posing no threat to the credibility of the long-run target. My thinking is informed by the following chart. It documents that, even though the unemployment rate was at times below 5

[2] More specifically, the medium-term outlook for inflation in fourth quarter 2012 refers to the outlook for the rate of increase in the PCE price index from fourth quarter 2013 to fourth quarter 2014.

percent, the medium-term inflation outlook based on material prepared for FOMC meetings has not risen above 2¼ percent in the past 15 years.[3]




To sum up, the FOMC defines its price stability mandate as a 2 percent inflation target over the longer run. When making this definition operational, though, it is necessary to take into account the lags associated with monetary policy and to allow for some medium-term flexibility around the long-run target. Given these considerations, in my view, the FOMC can be said to be satisfying its price stability mandate as long as its medium-term outlook for inflation is between 1¾ percent and 2¼ percent, and longer-term inflation expectations remain stable.

In formulating my preferred operational definition of price stability, I've made reference to a Committee medium-term outlook for inflation. What I have in mind here is not my own outlook, or some average of FOMC participants' individual outlooks. Rather, I have in mind a collective outlook for

[3] Strictly speaking, the chart does not depict the FOMC's medium-term outlook for the PCE inflation rate, because the Committee does not formulate a collective quantitative outlook. Instead, for the period 1997-2006, the chart depicts the medium-term outlook for PCE inflation prepared for December FOMC meetings by Federal Reserve staff (Greenbook). Beginning in 2007, FOMC participants released summary information about their projections for inflation conditioned on their individual assessments of appropriate policy. The chart depicts the midpoint of the central tendency of those medium-term outlooks (Summary of Economic Projections, or SEP) for inflation from the fourth quarter of each calendar year.

inflation that has been determined by the Committee as a whole. The Committee currently does formulate such an outlook and communicates that outlook through its statement. However, these communications are typically purely qualitative. My proposed operational definition of price stability hinges on the Committee's formulating, and communicating, a quantitative collective outlook. Regardless of what one thinks of the liftoff plan that I will elaborate on shortly, monetary policy would be clearer and more accountable if the Committee followed the practice of other central banks and reported this kind of quantitative collective medium-term outlook for inflation at least quarterly.

So far, I've focused on the FOMC's price stability mandate. As I mentioned earlier, the FOMC has a second mandate, which is to promote maximum employment. Whenever an organization has two goals, it is logically possible that it might face a tension between those two goals. But recent macroeconomic data and public communications from the FOMC's September 13 meeting reveal that there is *no* such tension at this time. The unemployment rate is elevated above a level that the Committee sees as consistent with its employment mandate. Most FOMC participants' medium-term outlooks for PCE inflation are at 2 percent or below. These observations imply that, by increasing monetary accommodation, the Committee can better meet its employment mandate while still satisfying its price stability mandate.

The FOMC's public communications also suggest that this lack of tension between its two mandates is likely to continue for some time. Most FOMC participants currently project that, in the long run, an unemployment rate less than 6 percent is consistent with 2 percent inflation. These forecasts suggest that violations of price stability are unlikely to occur until the unemployment rate is considerably lower than its current level of 7.8 percent.

**A Liftoff Plan**

I now turn to the development of a liftoff plan: an economic contingency plan for the initial increase in the fed funds rate above its current extraordinarily low level. I've described how the FOMC currently sees little tension between its two mandates and how its public communications suggest that this lack of tension between the mandates seems likely to continue. This current, and future, lack of tension between the two mandates will be a critical foundation for the plan that I describe.

I'll start with some background. Right now, the FOMC has two types of accommodation in place. First, it is targeting the federal funds rate at between 0 and 0.25 percent. The Committee expects to keep that interest rate extraordinarily low at least through mid-2015. Second, the FOMC has bought a large amount of long-term government-issued and government-backed assets—indeed, in September, the Committee announced its intention to expand its holdings of these assets over the coming months. Both of these forms of accommodation are designed to put downward pressure on interest rates. This downward pressure is intended to discourage firms and households from saving or buying financial assets, and instead encourage them to spend. When firms and households spend, their extra demand for goods and services pushes upward on employment and upward on prices.

I think it is safe to say that, relative to historical norms, the current stance of monetary policy is quite unusual. In June 2011, the FOMC released a statement describing its exit strategy—that is, the sequence of steps involved in returning monetary policy to a more normal stance. However, that 2011 statement said nothing about the conditions that would trigger the initiation of this exit strategy. This omission is problematic. The current economic impact of both forms of accommodation—low interest rates and asset purchases—depends on when the public believes that accommodation will be removed.

To understand this critical point, consider two possible scenarios. In the first, the public believes that the FOMC will initiate liftoff once the unemployment rate hits 7 percent. In the second, the public believes that the FOMC will defer initiation of liftoff until the unemployment rate hits 6 percent. The higher unemployment rate in the first scenario means that monetary policy will be tightened sooner, which, in turn, will lead to the unemployment rate being higher for longer. Foreseeing that, people will save more in the first scenario than in the second, to protect themselves against these higher unemployment risks. Because they save more, they spend less, and there is less economic activity. In other words, the FOMC can provide more current stimulus if people believe that liftoff will be triggered by a lower unemployment rate.

With this observation in mind, the remainder of my remarks will describe what I see as an appropriate liftoff plan.[4] The proposed plan is the following:

> **As long as the FOMC is continuing to satisfy its price stability mandate, it should keep the fed funds rate extraordinarily low until the unemployment rate has fallen below 5.5 percent.**

As discussed earlier, by “satisfy its price stability mandate,” I mean that longer-term inflation expectations are stable, and the Committee’s outlook is that the annual inflation rate in two years will be within a quarter of a percentage point of the target inflation rate of 2 percent.

Why is this liftoff plan an appropriate one? I argued earlier that the FOMC can provide more current stimulus by using a lower unemployment rate threshold for liftoff. Of course, additional monetary stimulus will give rise to more inflationary pressures, and those pressures are problematic because they could lead the FOMC to violate its price stability mandate. However, the Committee should choose the lowest unemployment rate threshold that it sees as unlikely to generate a violation of the price stability mandate.

Along those lines, most FOMC participants currently project that a long-run unemployment rate less than 6 percent will be consistent with 2 percent inflation. Given these projections, and given usual

[4] The FOMC’s June 2011 statement of exit strategy principles provides a temporal connection between the first interest rate increase and other exit steps, like sales of assets.

estimates of the impact of the unemployment rate on the medium-term inflation outlook, the medium-term outlook for the inflation rate is unlikely to be above 2¼ percent when the unemployment rate is higher than 5.5 percent.[5] Hence, over the longer run, an unemployment rate threshold of 5.5 percent is likely to be consistent with price stability, although slightly higher or slightly lower thresholds should not materially affect the impact of this plan.

Some observers have suggested that, by committing to keep the fed funds rate low until the unemployment rate is as low as 5.5 percent, the FOMC risks "getting behind the inflationary curve." As I've discussed, this contingency seems unlikely given the FOMC's current assessments of the long-run unemployment rate consistent with 2 percent inflation. But, in any event, the proposed liftoff plan provides an escape clause designed specifically to mitigate this risk. The plan allows the FOMC to raise the fed funds rate if long-term inflation expectations deviate too much from historical norms, or if the medium-term outlook for the inflation rate ever exceeds 2¼ percent. In this fashion, this plan explicitly maintains price stability as an objective while also promoting a more robust recovery.

It is true that the liftoff plan does not say that the Committee *will* raise the fed funds rate when the medium-term inflation outlook exceeds 2¼ percent—only that it *could.* The Committee's decision in this context would hinge on a delicate cost-benefit calculation that would weigh the inflation increases against the employment gains. In my view, that policy conversation should contemplate a reassessment

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[5] Technically, we can rationalize an unemployment threshold of 5.5 percent as follows. Suppose that the inflation outlook $\pi^e$ is related to the current unemployment rate u through the following (crude) Phillips curve relationship: $(\pi^e - 0.02) = -\alpha(u - u^*)$, where u* is the long-run unemployment rate under appropriate monetary policy. In this kind of relationship, estimates of $\alpha < 0.5$ are generally thought to be empirically plausible. (For example, such a small slope is consistent with the fact that inflation is currently projected to be so close to target, while unemployment remains elevated relative to most assessments of its natural rate.) The central tendency of FOMC participants' estimates of u* is between 5.2 percent and 6 percent. For any u* in this range, and given the upper bound of 0.5 on the Phillips curve slope, $\pi^e < 2.25$ percent (that is, is consistent with price stability) as long as u > 5.5 percent.

of the long-run unemployment rate that the Committee sees as being consistent with 2 percent inflation.[6]

In the same vein, the unemployment rate of 5.5 percent should be viewed as *only* a threshold to initiate a policy conversation, not as a trigger for action. For example, it is possible that macroeconomic shocks could lead the Committee's medium-term outlook for inflation to be below 2 percent when the unemployment rate falls below 5.5 percent. At that point, the Committee might want to defer initiating exit, and the liftoff plan allows the Committee to consider doing so.

I should be clear about how the proposed liftoff plan generates current stimulus. The basic economics underlying the plan is that if people's expectations about their future prospects improve, they will save less. As economists like to do, I think that I can best illustrate this through an extreme example. Suppose that a worker were given a new contract that contained a no-layoff provision. That person would not have to save as much to guard against the possibility of involuntary job loss. The reduced need for savings would translate directly into spending more today.

Of course, the proposed liftoff plan does not promise anyone lifetime protection against layoffs! What it does promise is that the FOMC will fully support much higher levels of economic activity. Thus, the plan commits to keeping the fed funds rate extraordinarily low until the unemployment rate is much nearer historical norms, as long as inflation remains under control. With that commitment, households can anticipate that the unemployment rate will fall more quickly, meaning more job security and more jobs available for those who are looking. With that brighter future in store, they will save less and spend more today. That will drive up economic activity.[7]

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[6] In previous speeches, I've discussed the experience of Sweden after its financial/housing/banking crisis in the early 1990s. I've described how monetary policymakers in Sweden eventually concluded—correctly—that the crisis and its aftereffects had caused significant permanent damage to the functioning of their labor markets. It is possible that the evolution of the data may lead the FOMC to conclude the same about the U.S. economy. It would then raise its estimate of the long-run unemployment rate consistent with 2 percent inflation.

[7] See Werning (2012, sections 4.2 and 5) for an extensive discussion of this mechanism.

The liftoff plan that I've discussed is distinct from proposals that recommend that the FOMC attempt to stimulate the economy by generating inflation that is well above target. The idea of those proposals is that, faced with higher inflation, people will spend more today to avoid the higher future prices. As I've just described, the liftoff plan proposed in this speech does not operate that way. Instead, my plan maintains price stability as a cornerstone while also promoting a quicker recovery.

Indeed, I'm highly skeptical about the feasibility of the inflation-based approach, given current economic conditions. The FOMC has said that it views the current unemployment rate as being elevated, relative to levels that it sees as being consistent with its mandate to promote maximum employment. With such high unemployment, labor is not scarce. Wage pressures are muted—and that will translate directly into the medium-term outlook for inflation's being consistent with price stability.

This reasoning argues that it is difficult for the FOMC to foster above-target inflation given current circumstances. Admittedly, the reasoning was based on a key implicit presumption: longer-term inflation expectations remain stable. The FOMC could potentially generate significantly higher inflation in the near term by using words and deeds to shift longer-term expectations upward. I would see any such action as being inconsistent with the FOMC's January 2012 statement of longer-run goals that I mentioned earlier.

**Conclusions**

I've spent much of my time describing what I see as an appropriate liftoff plan. I've proposed that, given current Committee thinking about the economy's productive capacity, the Committee should plan on deferring exit until the unemployment rate falls below 5.5 percent. Critically, there are important inflation safeguards embedded in the plan: The Committee could consider initiating liftoff if its medium-term inflation outlook ever exceeds 2¼ percent. The evidence from the past 15 years suggests that this event is unlikely to occur.

I first described the ideas in this speech about three weeks ago, in Ironwood, Michigan. It evinced mixed reactions. Some observers felt that the proposed liftoff plan was dovish, in the sense that it seemed to put a lot of weight on the employment mandate. Others argued that the plan was hawkish, in the sense that it put a lot of weight on the price stability mandate.

I think that this dispersion of views reflects a simple fact: The plan is neither hawkish nor dovish. The terms “hawkish” and “dovish” presume that the Committee faces a tension between its two mandates. But the Committee does not see any tension between its two mandates now. And its long-run unemployment forecasts suggest that it does not anticipate any tension between the two mandates until the unemployment rate is considerably lower. The liftoff plan in this speech essentially says that as long as the Committee continues to perceive no tension between its mandates, it should not begin to raise the fed funds rate. I see this plan as providing an appropriate policy framework regardless of how the data evolve over time or how one approaches the two mandates of the FOMC.

Thanks for listening, and I look forward to taking your questions.

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