

# **Goal-Based Monetary Policy Report<sup>1</sup>**

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Thanks for the introduction, and thank you for the invitation to join you here today.

There has been a great deal of recent public conversation about Federal Reserve accountability with respect to monetary policy. I view my talk today as being a natural outgrowth of that dialogue. American monetary policymakers like me are employees of the public. As I'll describe, we are charged by the public's representatives with achieving certain objectives. In keeping with this employer-employee relationship, my remarks to the public this evening loosely mimic a standard performance evaluation of the kind that takes place in corporations all over America each year. I first provide an assessment of Federal Open Market Committee (FOMC) performance over the past three years relative to the Committee's monetary policy goals. I then turn to what I see as appropriate plans for the FOMC in 2015, given the Committee's goals.

My remarks differ in a key respect from many or possibly most other discussions about the FOMC. It is common to focus on *what actions the Committee has taken*, such as our decisions about asset purchases or interest rates. In my view, these discussions about what has been done are really tangential to monetary policy accountability. Accountability—in any endeavor, including monetary policy—is not about what actions have been taken. Rather, it's about the *results those actions achieve*—specifically, how well performance accords with the relevant objectives. Accordingly, my discussion of FOMC performance and plans is relentlessly goal-oriented.

My goal-oriented approach to FOMC accountability differs from the approach taken in legislation about monetary policy accountability that is currently under consideration by Congress. The Federal Reserve Accountability and Transparency Act (or FRAT Act) would require the FOMC to tell Congress and the public how the Committee plans to change the level of monetary accommodation in response to macroeconomic developments. A key element of the FRAT Act is a ***reference policy rule*** that would be intended to serve as a baseline for this communication. The rule frames accountability in terms of *what* choices the Committee is making, as opposed to *how* the macroeconomy is performing relative to FOMC objectives. In

my discussion, I'll explain how this approach to accountability means that the reference policy rule in the FRAT Act would be likely to degrade, rather than enhance, the FOMC's ability to achieve its objectives.

Throughout my remarks today, please keep in mind that I will be expressing my own views, and they are not necessarily those of others in the Federal Reserve System.

I look forward to responding to, and learning from, your questions at the conclusion of my remarks.

### **Federal Reserve System objectives**

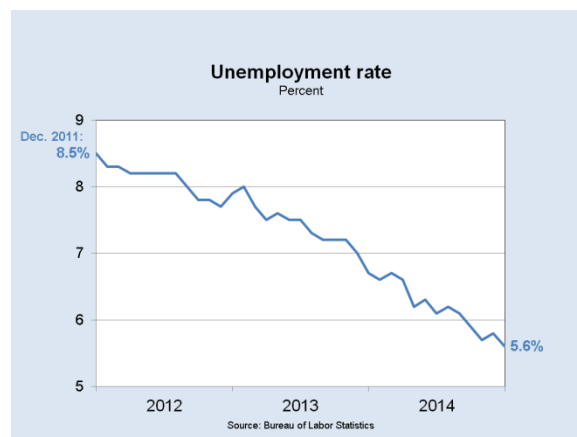
Eight times per year, the Federal Open Market Committee—the FOMC—meets to set the path of interest rates over the next six to seven weeks. All 12 presidents of the various regional Federal Reserve banks—including me—and the seven governors of the Federal Reserve Board contribute to these deliberations. 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. I'm not one of those four presidents this year. At FOMC meetings, we decide on the level of monetary stimulus for the economy. For now, I won't get into too many details of what that term "monetary stimulus" means except to make two high-level points. First, when the FOMC changes the level of stimulus, our actions tend to push inflation—that is, the rate of growth of prices—and employment in the same direction. Raising the level of stimulus puts upward pressure on both inflation and employment. Lowering the level of stimulus puts downward pressure on both inflation and employment. Second, the FOMC's actions only affect inflation and employment with a lag, usually thought to be about one-and-a-half to two years.

What is the FOMC seeking to achieve by varying the level of monetary stimulus? Congress has charged the FOMC with making monetary policy to promote price stability and to promote maximum employment. The FOMC has interpreted the first goal, price stability, to mean keeping inflation close to 2 percent. The FOMC's job is to vary monetary stimulus over time to meet these mandated objectives.

## Maximum employment

With that context, I now turn to an assessment of the FOMC's performance over the past three years. I'll begin by showing you data on FOMC performance with respect to its maximum employment mandate over the past three years.

The best known measure of labor market performance is the unemployment rate.



In December 2011, the unemployment rate was 8.5 percent. Since that date, the unemployment rate has fallen to 5.6 percent. The fall was especially rapid in 2014. However, the unemployment rate remains elevated compared to the FOMC's assessments of its long-run value.

The unemployment rate is the most widely known measure of labor market performance. But there are good reasons to view it as only one of many useful labor market metrics. Recall that, 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 looking for work. Much of the decline in the unemployment rate over the past three years

has occurred because the fraction of people who are looking 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 December 2011, the employment-to-population ratio was 58.6 percent. It has risen, but only to 59.2 percent. Arithmetically, this means that people getting jobs accounts for well under one-half of the fall in the unemployment rate over the past three years.

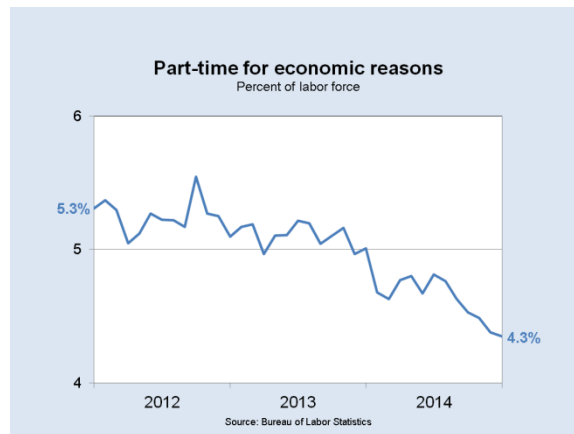
The good news is that the employment-to-population ratio did grow markedly in the past year. And this increase is especially notable given underlying demographic trends. As the baby boom birth cohort—born between 1946 and 1964—ages, the fraction of retirees in the population grows steadily. This demographic force, in and of itself, would have led to a decline in the employment-to-population ratio over the past three years.

One simple way to adjust for this demographic impulse is to focus on people in their prime working-age years. Here, I’ve plotted the fraction of the population aged 25 to 54 who have a job.



Again, we have seen steady improvement in this fraction over the past three years. The rate of improvement was especially marked in the past year.

Of course, just because someone has a job does not mean that they are necessarily fully employed. The Bureau of Labor Statistics reports each month on the number of Americans who are working part time, would like to work more hours, but are unable to obtain those additional hours. That fraction of the labor force has fallen over the past three years.



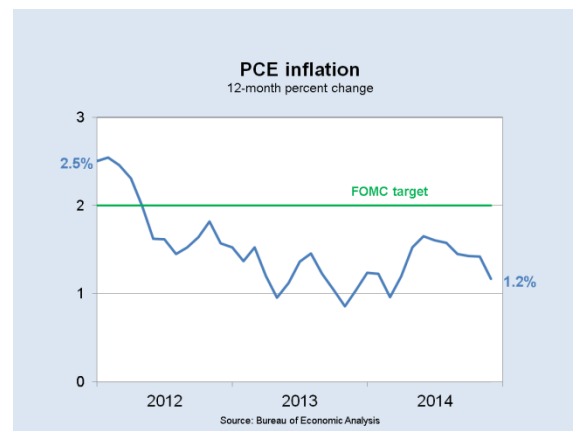
All told, these charts document improvement in all of these measures of labor market performance over the past three years. And in all three measures, the rate of improvement was especially rapid in the last year.

Should Americans view the FOMC's performance with respect to the maximum employment mandate as being satisfactory? That's a hard question to answer on the basis of these pictures alone. Employment growth is clearly better than no growth (or, worse, negative growth). But we are still left with the question: Should the FOMC have facilitated even faster employment growth? To answer this question, we need to examine the behavior of prices.

### Price stability

Accordingly, I now turn to the FOMC's performance relative to its price stability objective. As I noted earlier, operationally, the FOMC has translated this objective into keeping the rate of increase of the price level—that is, the inflation rate—close to 2 percent. Even more specifically, the FOMC uses what's called the personal consumption expenditures (or PCE) price index to calculate inflation. This measure of inflation captures the rate of increase in all goods and services, including those related to food and energy.

Here's a graph of how PCE inflation has behaved over the past three years.



I see three main take-aways from this picture. First, PCE inflation has averaged (less than) 1.3 percent per year since December 2011. This is well under the FOMC's 2 percent target. Second, PCE inflation has been below 2 percent for a long time—over two-and-a-half years. Finally, there was little pickup in inflation last year.

The American public should certainly not expect the FOMC to hit its inflation target every month. But two-and-a-half years is a long time. The FOMC's performance in terms of price

stability can be summarized pretty simply: The Committee has not provided sufficient stimulus to hit its inflation target.

This persistent underrun of the inflation target creates a risk to the credibility of the Committee's target. For monetary policy to be effective, it is critical that investors and other members of the public believe that the FOMC is in fact aiming at 2 percent inflation, and not at some higher or lower figure. Persistent deviations from the target may weaken those beliefs.

Recently, there have been signs of exactly this kind of reduction in FOMC credibility in financial market data. Here, we've plotted the behavior of two market-based measures of longer-term inflation expectations.



These series are not based on surveys. Rather, they are imputed from the prices of particular financial assets. They use those prices to construct measures of inflation expectations five to 10 years hence. Thus, the measure in late 2014 captures inflation expectations for the period 2019-2024. By looking this far ahead in time, we can strip away temporary, short-run influences on the economy and focus on market participants' beliefs about the FOMC's future intentions.

The main take-away is that both of these metrics have drifted downward over the past three years. Indeed, they have fallen especially sharply in the past few months. The FOMC, so far, has largely failed to take substantial policy action in response to these declines. That lack of a response creates additional downside risk to the credibility of the 2 percent inflation target.



I close my discussion of price stability by circling back to a question about the employment mandate that I posed earlier: Should the FOMC have stimulated more rapid employment growth? The data on inflation suggest an answer to this question. Recall that monetary stimulus pushes both employment and prices in the same direction. By providing somewhat more stimulus, the FOMC could have stimulated at least somewhat more employment growth, *without creating undue inflation*. I am sure that this faster employment growth would have been welcomed by the American public. So, even though employment grew, it seems that there was an improvement opportunity: The FOMC should have facilitated even faster employment growth.

My summary assessment is that the FOMC underperformed in the past three years with respect to the price stability mandate and the employment mandate. I'm sometimes asked, "What concrete actions could the FOMC have taken to provide additional stimulus?" I think one concrete action would have been *not* to reduce stimulus. In mid-2013, the FOMC began communicating about the eventual elimination of its asset purchase program that took place from December 2013 and October 2014. These communications, and the follow-up actions, served as a tightening of monetary policy. Accordingly, they were associated with sharp increases in market interest rates and sharp reductions in the rate of home mortgage refinancing.

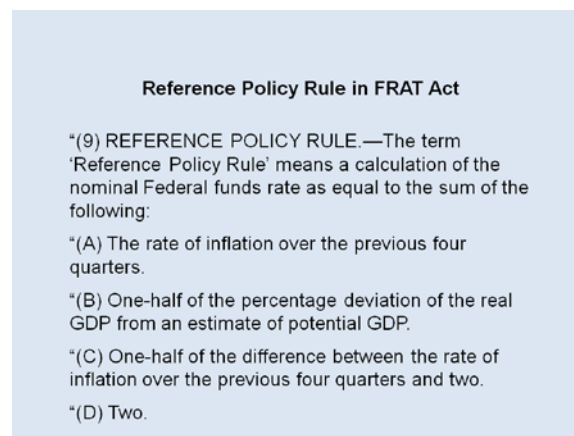
### **Future choices**

I've discussed FOMC performance over the past three years relative to the FOMC's objectives. I now want to turn to the question of how I believe monetary policy stimulus should evolve over the coming year so as to best achieve the FOMC's objectives. I will focus on the particular issue of how the FOMC should adjust the target range for the fed funds rate—the short-term interbank lending rate. As has been true for over six years, that target range is currently set between zero and a quarter percentage point. The main issue facing the Committee is: Should that target range be raised soon?

I'll first answer this question using a **reference policy rule** that is contained in the FRAT Act that is under consideration by Congress. I'll explain why I believe that this answer may be misleading. I'll then turn to another approach that I view as more reliable.

### Reference policy rule

The FRAT Act contains a description of a specific reference policy rule for the FOMC. I've depicted that reference policy rule on this slide.



**Reference Policy Rule in FRAT Act**

“(9) REFERENCE POLICY RULE.—The term ‘Reference Policy Rule’ means a calculation of the nominal Federal funds rate as equal to the sum of the following:

- “(A) The rate of inflation over the previous four quarters.
- “(B) One-half of the percentage deviation of the real GDP from an estimate of potential GDP.
- “(C) One-half of the difference between the rate of inflation over the previous four quarters and two.
- “(D) Two.

The reference policy rule describes how the Fed should set its target for the fed funds rate, given recent observations on inflation and real gross domestic product (GDP). Note that the rule relies on an estimate of potential real GDP. I'm not going to get into what that complicated term means. I'll just note that, unlike real GDP itself, there is considerable disagreement among economists about how to measure potential real GDP. My own estimate is that real GDP is about 2 percent below potential real GDP. With this estimate of potential real GDP, the reference policy rule implies that the FOMC should set the target fed funds rate equal to about 2 percent—about 200 basis points higher than its current level.<sup>2</sup> In other words, the reference policy rule recommends that the FOMC should be following a much tighter monetary policy.

But there are, I believe, good reasons to be skeptical about this recommendation. Clause 9(D) of Section 2c of the FRAT Act has a single word, “two.” This word refers to what macroeconomists call the *natural real rate of interest*—essentially, the interest rate, net of

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<sup>2</sup> This argument abstracts from the stimulative effects being provided by the FOMC's considerable holdings of longer-term assets. Taking those effects into account would imply that, according to the reference policy rule, the FOMC's target for the fed funds rate should be higher than 200 basis points.

inflation, that is expected to prevail in normal economic times. For many years before the financial crisis, the natural real rate of interest did seem to be in the vicinity of 2 percent. Most macroeconomists agree, though, that the natural real rate of interest is not fixed (at “two” or anything else) over time. If businesses are particularly uncertain about future tax policy, they’ll all want to save rather than invest in new projects. That extra demand for savings will push down on the natural real rate of interest. If households are particularly uncertain about their future incomes, they’ll want to save rather than spend. Again, that extra demand for savings will push down on the natural real rate of interest. If banks are ordered by their regulators to hold large amounts of government bonds, that will push down on the natural real rate of interest. All of these forces suggest that the natural real rate of interest is lower now than in the past—and therefore lower than “two,” which means that monetary policy should be more accommodative than is implied by the reference policy rule.

To be clear, the proposed legislation allows for the FOMC to deviate from the reference policy rule. However, the legislation views deviations from the reference policy rule as being undesirable. (In particular, it requires the FOMC to provide Congress with a “detailed justification” for any departure from the reference policy rule “within 48 hours.”) My point is that this perspective is flawed, because the reference policy rule does not allow for the possibility that the natural real rate of interest varies over time.

### **Goal-oriented monetary policy**

I’ve argued that basing policy choices on the reference policy rule enshrined in the FRAT Act is likely to lead to undesirable outcomes. But how else should the FOMC decide on its appropriate policy choices? To answer this question, I find it helpful to return to my earlier analogy of a corporate performance evaluation. Many employees in America are evaluated in terms of their performance with respect to pre-assigned goals. They are given a great deal of latitude in terms of how to make choices that will achieve those objectives. The best employees, of course, are the ones that consistently use that flexibility to optimize their success with respect to their pre-assigned goals.

The FOMC—an employee of the public—also enjoys a great deal of latitude. To be a good employee, it should use that latitude to optimize its success with respect to achieving its macroeconomic goals. This *goal-oriented approach to monetary policy* would focus on keeping the economy as close as possible to the FOMC’s objectives for prices and employment.

A goal-oriented approach has sharp implications for near-term monetary policy decisions. My own current assessment is that it will take a few years for inflation to return to 2 percent from its current low level. As I noted earlier, monetary policy affects prices with about a two-year lag. Raising the target range for the fed funds rate in 2015 would only further retard the pace of the slow recovery in inflation. It would also increase the risk of a loss of credibility, in the sense that the public could increasingly perceive the FOMC as aiming at a lower inflation target. Hence, given my current outlook for inflation, I anticipate that, under a goal-oriented approach, the FOMC would not raise the fed funds rate target this year.

Deciding not to reduce stimulus in 2015 would also be consistent with a goal-oriented approach to the employment mandate. Increases in stimulus would push upward on employment. Such an increase in employment is entirely consistent with the pursuit of maximum employment that Congress has mandated for the FOMC.

Admittedly, there has been considerable skepticism over the course of the past five years about the ability of monetary or fiscal policy to stimulate employment growth. I have expressed some of those concerns myself on occasion. But look at how rapidly employment actually grew in 2014! The job market is—finally—on a highly desirable upward trajectory. We are more likely to continue on that welcome trajectory if the FOMC does not tighten monetary policy in 2015.

## **Conclusion**

The Federal Reserve has been given a lot of latitude by Congress. But that independence is to serve a purpose—to allow the Federal Reserve to achieve key macroeconomic objectives. We are ultimately accountable, for our performance relative to those goals, to the public and its representatives. I have loosely modeled my remarks today on a standard corporate performance evaluation in order to facilitate that accountability.

More specifically, I have provided an assessment of the FOMC's performance, relative to its macroeconomic objectives, over the past three years. That assessment suggested that the FOMC did not provide sufficient accommodation during that time period. There are troubling signs that the credibility of the FOMC's inflation target may have fallen somewhat as a result. I discussed the possibility that the FOMC might raise the target range for the fed funds rate in 2015. I explained how, according to my current outlook, such an increase would only cause the FOMC to fall further short of its objectives.

Thanks for listening. I look forward to your questions.