
Low Inflation Calls for Patience in Normalizing Monetary Policy

**Charles L. Evans
President and Chief Executive Officer
Federal Reserve Bank of Chicago**

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The views expressed today are my own and not necessarily
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Introduction

Thank you, Tim, for that warm introduction. The Rotary Club brings together civic-minded people from all over the world. It is a pleasure to interact with members of this vibrant community. Occasions such as this provide me with a valuable opportunity to describe my views on monetary policy to an interested audience. Equally as important, when I hear your questions and comments following my remarks, I gain a better understanding of the concerns many people have. This valuable communication helps sharpen my thinking on the economy and monetary policy. So, I look forward with particular interest to the discussion following my remarks. I should note that my commentary reflects my own viewpoint and does not necessarily represent the views of my colleagues on the Federal Open Market Committee (FOMC) or within the Federal Reserve System.

Today I will first discuss recent economic developments and my outlook for the economy. I will then explain how that outlook and the risks around it shape my views about the appropriate timing and pace of eventual policy normalization.

In particular, I expect to see continued solid growth in real economic activity and substantial improvements in labor markets. The outlook for economic activity is probably on its best footing since the recovery began in 2009.

However, inflation is too low relative to the FOMC's 2 percent objective. In fact, it has been too low for the past six years, and it is hard to see inflation heading up to target any time soon. This worries me quite a bit, and I will spend a good deal of time today explaining my concern.

It is largely because of this outlook for inflation that I think the FOMC should refrain from raising the federal funds rate, until conditions indicate much greater confidence in forecasts of inflation getting to 2 percent in a year or two. I see no compelling reason for us to be in a hurry to tighten financial conditions before that time.

Goal-Oriented Approach to Monetary Policy

For some time now, I have been advocating a goal-oriented approach to monetary policy.¹ This is distinct from an instrument-rule approach that currently being advocated

¹ This is a point I've been making regularly in my public appearances since 2010. See, for example, Evans (2010, 2014c, 2014b). Minneapolis Fed President Kocherlakota (2015) supports the same approach.

by Professor John Taylor from Stanford, based on analysis he did in 1993.² In fact, it is more closely related to a seminal Taylor 1979 article. The Federal Reserve Act mandates that monetary policy should work to foster financial conditions that promote both full employment and price stability. To me, this means setting our policy tools with the aim of achieving both our goals in a reasonable amount of time while also minimizing potential risks associated with uncertainty over the course of future economic events. This is a tall order, but that's the stuff of central banking.

Before I get to the specifics of how I think policy should be set in the current circumstances, let me first report on where the economy stands today with respect to our goals of full employment and price stability.

Nearing Our Employment Goal

Following years of false starts and tepid growth, economic growth these past two years has been quite good. Real gross domestic product (GDP) increased at an average rate of 2-3/4 percent over this time, and growth was at a quite rapid 3-1/2 percent annualized pace in the second half of 2014. Looking ahead, I am expecting growth to average near a 3 percent pace for the next couple years.

As output growth has improved, so has the labor market. Average monthly payroll employment growth was about 265,000 per month over the past year. This is well above the average monthly gain of roughly 190,000 over the previous two years. With 3 percent output growth, job gains should remain above the 200,000 mark for some time before gradually moving back down toward its longer-run trend.

At the same time, the unemployment rate has declined significantly. In each of the past four years, it has fallen by about 1 percentage point and now stands at 5.7 percent. This is terrific progress, but it remains higher than what a normal, sustainable unemployment rate should be. Most FOMC participants' estimates for the longer-run normal rate of unemployment — which were made last December — fall in the range of 5.2 percent to 5.5 percent.³ My own estimate was at the bottom of this range. But, based in part on the extensive analysis done by my staff on compositional and demographic changes in the labor force, I now think that it might be something more like 5.0 percent.⁴ So in my mind the degree of labor market slack may be somewhat larger than what many others infer when looking at the 5.7 percent unemployment rate.

Some other labor market indicators support this assessment of slack. For example, the number of people who are employed part time for economic reasons remains unusually high. If the economy were closer to full employment, these individuals would have more

² See Taylor (1979, 1993).

³ See Federal Open Market Committee (2014a), which features the most recent results from the Summary of Economic Projections.

⁴ See Aaronson et al. (2014)—which is recent research by Chicago Fed staff on labor force participation rates and the natural rate of unemployment, or longer-run normal rate of unemployment (which represents the unemployment rate that would prevail in an economy making full use of its productive resources).

opportunities to find full-time jobs. Furthermore, wage growth has been much lower than one would expect if labor markets were closer to normal.

Even with these caveats, it's clear that the economy and labor markets have seen great improvement over the past two years. Monetary policy has been an important component to this progress. The Federal Reserve initially responded to the financial crisis and ensuing deep recession by providing accommodation in the usual way — by cutting short-term interest rates. But once rates hit their zero lower bound, we had to turn to other nonconventional tools to provide further accommodation, notably large-scale asset purchases (LSAP) and guidance regarding future movements in the federal funds rate.⁵

One of our most notable and controversial responses followed our September 2012 meeting. At that time, the unemployment rate was over 8 percent and forecasts showed a strong risk that improvements in the labor market were about to stall. It was clear that more accommodation was needed, but just how to provide that accommodation was unclear. Against this backdrop, the FOMC announced that the Fed would steadily purchase \$85 billion of long-term Treasury securities and mortgage-backed securities each month until we saw substantial improvement in the outlook for the labor market. This open-ended program is often referred to as the third round of quantitative easing, or QE3.⁶

Within a year, more accommodative financial conditions helped to re-energize employment gains. Borrowing rates declined. Car sales rose, and consumer conditions improved. This recovery is all the more remarkable in that it occurred just when already strong headwinds — such as higher income tax rates and cuts in federal spending — gained in strength.

Of course, to be completely fair and balanced, the economy was long overdue for just such acceleration in growth and employment. So, maybe the past couple of years have been a combination of luck and good policy. Now I don't think it was all luck. Just as it's good to be lucky, it's also good to be resourceful.

Regardless of whether it was good fortune or effective policy that propelled growth, our asset purchase program and the explicit conditions of its implementation demonstrated clearly that the Federal Reserve is fully committed to undertaking goal-oriented monetary policy actions. The sheer size of our asset purchases certainly had some direct effect on lowering interest rates. But the efficacy of these policies was substantially enhanced by their open-ended, goal-oriented nature that confirmed our commitment to act until we saw the improvements in labor markets that we were looking for.

⁵ For more on LSAPs, see www.federalreserve.gov/faqs/what-are-the-federal-reserves-large-scale-asset-purchases.htm. For more on our guidance regarding future movements in the fed funds rate, see www.federalreserve.gov/faqs/money_19277.htm.

⁶ The Fed halted LSAPs made under QE3 in October 2014; see Federal Open Market Committee (2014b).

Now let me turn to inflation.

Missing Our Inflation Goal

Since 2012, the FOMC has set an explicit longer-run goal for inflation of 2 percent as measured by the year-over-year rate of change in the Price Index for Personal Consumption Expenditures (PCE).⁷ Inflation has been running well below this rate for quite some time, averaging about 1-1/2 percent for the past six years. Currently, core PCE inflation is 1.3 percent compared with a year ago.⁸

Of course, there are other measures of inflation, such as the well-known Consumer Price Index (CPI).⁹ Because of the CPI's construction, CPI inflation runs 1/4 to 1/2 of a percentage point higher than PCE inflation on average. So a 2 percent goal for PCE inflation equates to something closer to a 2-1/2 percent goal in terms of CPI inflation. By this measure, too, inflation is falling well short of our goal, as the CPI has averaged less than 2 percent since 2008.

Inflation is simply too low. I know that it sounds unusual for a central banker to claim that inflation is too low. I certainly never expected I would utter those words. For anyone as old as I am, most of your mature life has occurred while hearing the refrain that inflation is too high and it needs to be lower.

My long-held views on inflation were forged in the 1970s and early 1980s. Inflation then rose to an alarming 10 percent and seemed destined to remain there.¹⁰ Fearing that inflation was spiraling out of control, the Paul Volcker-led Fed raised interest rates steeply and successfully broke the back of double-digit inflation.¹¹ By the time of Volcker's departure in 1987, inflation was running about 4 percent a year. The Greenspan-led Fed spent the next dozen or more years trying to bring inflation down to about 2 percent.

That goal was achieved in the early 2000s, and the Fed has aimed to bring PCE inflation in at 2 percent for the past ten or more years. First, this was an informal objective, but was later made an explicit goal. Why is it important for the Federal Reserve to achieve its 2 percent inflation objective? What is the problem posed by too low inflation? Simply put, prolonged and significant deviations of actual inflation from what consumers and businesses are expecting when they make long-term investment decisions could impose significant costs on the economy.

⁷ This was first acknowledged in Federal Open Market Committee (2012). It remains in the most recent statement of our longer-run goals; see Federal Open Market Committee (2014c).

⁸ Core PCE inflation strips out the volatile energy and food prices and thus provides a more accurate reading on underlying inflation trends than overall PCE inflation. I discuss this measure again later.

⁹ The CPI measures a somewhat different basket of goods than the Price Index for PCE.

¹⁰ For the four quarters ending in 1975:Q1, core PCE inflation was 10.1 percent and then, more than five years later, stood at 9.7 percent in the four quarters ending in 1980:Q4.

¹¹ Volcker was appointed by President Carter in August 1979 and was reappointed by President Reagan in 1983.

For instance, interest rates on loans are set high enough to compensate lenders for expected inflation. From the lenders' point of view, if actual inflation exceeds the level expected when the loan was originated, loan payments remain fixed in nominal terms, but the purchasing power of those interest receipts is less than lenders had expected. So, unexpectedly high inflation hurts creditors.

On the flip side, when prices and, along with them, wages and incomes rise at a slower rate than anticipated, borrowers' fixed monthly loan obligations become more burdensome. And the longer inflation undershoots borrowers' expectations, the higher are these real costs. Today, these costs have been accumulating for the past six years that inflation has underrun the 2 percent rate that the Fed targets and that borrowers had relied upon. To meet these higher real costs, borrowers must make cutbacks in other spending, reducing aggregate demand and ultimately weighing on economic activity.

This is an important reason why we need to achieve our 2 percent inflation objective, and it also explains why achieving symmetry around our two percent goal is important.

Slow and Uncertain Improvement towards Inflation Goal

To reiterate, I am concerned about the current low inflation environment and the outlook for the future. Current core inflation is about 1.3 percent, and my forecast has it rising to 2 percent only by the end of 2018. So, I am anticipating it to rise at a woefully gradual pace. Furthermore, there are downside risks to my projection.

The dramatic decline in oil prices, on net, is a positive development for U.S. economic activity. The lower prices bolster the real spending capacity of consumers and businesses. The drop in oil prices also lowers consumer inflation — both directly, through the effects on gasoline prices, and indirectly, as cost savings for businesses pass through to lower prices for consumer goods and services. Similarly, the appreciation of the dollar since last summer presents another disinflationary pressure through its influence on lowering import prices.

If lower energy and import prices resulted in just a one-time drop in consumer prices, then they wouldn't be an issue for monetary policymakers to worry about. But if the lower pricing gets embedded more persistently in underlying trends, it is problematic — especially if ultimately it lowers longer-run inflationary expectations of households and businesses. This could make it even harder to get inflation back to our 2 percent target.

I should note that low inflation is a global phenomenon. In part, this reflects slower global growth and disinflationary pressures in most advanced economies, which also present some downside risk to the outlook for growth in the United States.

An Appropriate Path for Monetary Policy

Given this assessment, what is my outlook for monetary policy and the most appropriate path for interest rates?

Four times a year, my colleagues and I are asked to submit a forecast of real GDP

growth, the unemployment rate and inflation over the next three years. Along with those projections, we provide our assumptions for the appropriate path for monetary policy that underlies our economic forecasts. In the latest projections made in December, 15 of the 17 FOMC participants expected that it would be appropriate to raise rates sometime this year. While there is a fair amount of dispersion among the individual participants' projections, the median for the target federal funds rate at the end of this year is a bit above 1 percent. Moreover, the median for the target rate at the end of 2016 is slightly above 2 percent.

In other words, according to the median path for the target fed funds rate as projected by FOMC participants, rate increases of about 100 basis points for this year and next are to be expected. The FOMC meets eight times a year. So, the projected path is consistent with a 25 basis point increase at every other FOMC meeting. I should note that this is a considerably slower, more gradual pace of rate increases than those implemented in 2004 through 2006 — the last time the Fed normalized policy following an extended period of very low interest rates.

Indeed, financial market participants expect the pace of rate increases to be even slower than FOMC participants do. The most recent reading on market expectations puts the target rate at the end of 2016 a bit above 1 percent — a full percentage point below the median FOMC forecast.

What is my personal view of the appropriate path for policy? As I have argued for some time, I think economic conditions will evolve in a way such that it will be appropriate to delay normalizing monetary policy — that is, to hold off on raising short-term rates — until 2016.

Economic activity appears to be on a solid, sustainable growth path. However, inflation is low and is expected to remain low for some time — and I have serious concerns that inflation will run even lower than I expect.

Accordingly, in my view, a prudent risk-management and goal-oriented approach to monetary policy dictates that we continue to assess low inflationary condition for some time before generating more restrictive financial conditions.¹² The risk I worry about is if we were to begin to raise rates only to learn that we have misjudged the strength of the economy. Or suppose we were surprised by some disinflationary shock while already drifting along a low inflation path. In these cases we would find ourselves in the extremely uncomfortable position of being forced to lower the fed funds rate back to its zero lower bound — a policy position that has already proved challenging for the Fed. Or if we were too timid to reverse ourselves back to the zero lower bound, we would persist with overly restrict conditions.

Now consider the problem posed by waiting too long to raise rates and, subsequently, inflation picking up faster than we now expect. I simply do not see high costs to this scenario. Given how far inflation is from our target, some greater-than-expected pickup

¹² I have made the case for patience in earlier speeches. See, for example, Evans (2014a).

in inflation would actually be welcome. Furthermore, there is no great cost even if we were to end up with a period of inflation running moderately above 2 percent. It would just be the symmetric flip side of our recent below-target inflation experience. And in the event the risk of overshooting our target by an uncomfortable margin did arise, given the inertia in inflation, we would likely have ample time to address the problem with moderate increases in interest rates.

Markers of Progress

Of course, at some time, it will become appropriate to increase the federal funds rate. So let me now talk about the conditions I would expect to see when policy normalization finally becomes appropriate.

Well, I need to be confident enough that we will achieve our dual mandate goals within an acceptable period of time and that we are at low risk of regressing back to economic conditions that necessitate policy rates returning to their zero lower bound. There are several important indicators that will assure me that growth and inflation are on the right sustainable trajectory.

First, it goes without saying that we need to see continued improvements in labor markets and GDP growth. Even though we have made great strides, the economy has not yet returned to full employment, and we must be confident that growth will not stall before getting there.

Second, we should feel quite confident that inflation is going to start increasing so that it will reach our goal of 2 percent on a sustainable basis within a reasonable amount of time — say, within a year or two. I'm not at that point yet. My forecast assumes policy rates will begin to rise sometime in the first half of 2016. I believe this delayed liftoff relative to what most of my colleagues on the FOMC are expecting in their Summary of Economic Projections (SEPs) is a critical element in my approach to generating higher inflation. Even with this delay in raising short-term rates, my forecast is that we will not actually achieve 2 percent inflation until 2018. Earlier than that — say, in 2017 or 2016 — would be a much more successful outcome.

What would make me more confident that inflation is heading higher?

A simple signal will be if we start seeing a pickup in the year-over-year rate of change in the price index for core PCE. This price index strips out the volatile changes in food and energy prices; and as a matter of practical forecasting, core inflation today may be about the single best predictor of where total inflation will be a year from now. So I would like to see core PCE inflation begin to rise above its current 1.3 percent rate in a sustainable fashion. If it does not, then that's a clear sign that there are important factors persistently driving down inflation.

I would also need to see stronger growth in wages and other forms of labor compensation. Wage growth has been very weak for quite some time, averaging only 2 to 2-1/2 percent per year for the past five years. Usually, productivity growth of 1 to 2

percent annually and 2 percent inflation would produce wage growth in the range of 3 to 4 percent per year. Wage and compensation growth closer to this range is an important sign not just of diminished labor market slack, but also of cost increases more consistent with an economy running closer to a 2 percent inflation rate.

The last signal I will need to see relates to measures of inflation expectations. Specifically, I need more evidence that the public and financial markets expect that inflation will be rising over the medium term in line with our 2 percent objective. Of particular recent concern, the compensation financial market participants require for taking on inflation risk has been moving down dramatically. According to the Treasury Inflation-Protected Securities (TIPS) market,¹³ market participants are currently looking to be compensated for future CPI inflation of about 1.9 percent, six to ten years from now. In PCE terms, this would be an expectation of about 1-1/2 percent. That is simply too low to be consistent with our longer-run inflation objective of 2 percent.

There are a few reasons inflation compensation could be low. Benign technical financial market considerations are one possibility. However, it could be that people are expecting inflation to be low. Alternatively, the cost to investors of higher inflation might have fallen or the cost of low inflation might have risen. At the moment, the data suggest market participants are concerned about low inflation outcomes. Neither depressed inflation expectations nor higher costs of low inflation bode well for the outlook. So I would need to see an increase in inflation compensation to be confident about tightening monetary policy.

Current Circumstances Call for Patience

In summary, I think we should be patient in raising interest rates. There is no prescribed timeline that must be adhered to and no pre-set script to follow other than that we should let economic conditions and risks to the outlook be our guides. Given uncomfortably low inflation and an uncertain global environment, there are few benefits and significant risks to increasing interest rates prematurely. Let's be confident that we will achieve both dual mandate goals within a reasonable period of time before taking actions that could undermine the very progress we seek.

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