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# **Low Inflation and the Symmetry of the 2 Percent Target**

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Those of the Federal Reserve System or the FOMC.

# Low Inflation and the Symmetry of the 2 Percent Target

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## Executive summary<sup>1</sup>

- Real activity in the U.S. is solid, but inflation is—and has been for quite some time—too low.
- I am concerned that persistent factors are holding down inflation, rather than idiosyncratic transitory ones. Namely, the public's inflation expectations appear to me to have drifted down below the Federal Open Market Committee's (FOMC) 2 percent symmetric inflation target.
- In order to dispel any impression that 2 percent is a ceiling, our communications should be much clearer about our willingness to deliver on a symmetric inflation outcome, acknowledging a greater chance of inflation at 2-1/2 percent in the future than what has been communicated in the past.
- Such communications would shore up our credibility and demonstrate our commitment. They would also increase policymakers' ability to attain their goals in normal times and to strengthen the policy framework to deal with future challenges presented by unexpected economic and financial developments.<sup>2</sup>

## Introduction

The real economy in the U.S. is on solid footing, and I expect this momentum to carry forward into 2018. Many private sector forecasts see annualized gross domestic product (GDP) growth in the fourth quarter of 2017 in the range of 2-1/2 to 3 percent; if realized, this would put the increase in output for the year as a whole at about 2-1/2 percent. This is noticeably above the 1-1/2 to 1-3/4 percent pace we at the Chicago Fed see as the current underlying trend, or potential, growth rate of the economy.

For some time now, activity in the U.S. has been led by solid gains in consumer spending; and more recently, growth in business capital spending has picked back up as well. With healthy labor markets and much improved household and business balance sheets, the fundamentals for continued solid growth in 2018 look pretty good.

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<sup>1</sup> The views expressed here are my own and do not necessarily reflect those of my colleagues on the Federal Open Market Committee or within the Federal Reserve System.

<sup>2</sup> See Evans (2017) for my views on the role of communications in strengthening the monetary policy framework so that it has the flexibility and the reach to attain policy goals even in unusual and unexpected circumstances.

The news on inflation, however, has not been as good. The 12-month change in core PCE prices was just 1.3 percent in September. This is well below the Federal Reserve's 2 percent inflation target.<sup>3</sup>

### **Inflation has been too low for many years**

Indeed, inflation has underrun our target throughout most of the post-crisis period. Core inflation did briefly reach target in early 2012, aided by the pass-through of earlier increases in energy costs, but it soon retreated. In the summer of 2016, core inflation rose to just under 2 percent, but it then fell sharply last March and has remained in the 1.3 to 1.5 percent range since then.

Many economists subscribe to the view that this latest drop in core inflation simply reflects temporary factors and that by early next year inflation will be back close to target. I agree this is possible. After all, we can point to some apparently one-off idiosyncratic factors that contributed to the March decline. And if this were our first bout of unexpectedly low inflation this policy cycle, I'd be quite receptive to looking through the most recent inflation data in formulating policy.

But this is not our first bout of unexpectedly low inflation during this policy cycle. For years, the FOMC's Summary of Economic Projections (SEP) have had us reaching our 2 percent target in another year or two.<sup>4</sup> And for years this hasn't happened.

At times we've been able to explain our misses with some easily identifiable transitory factors, such as energy price pass-through or a higher dollar. But that isn't true now. And with each low monthly reading, it gets harder and harder for me to feel comfortable with the idea that the step-down last spring was simply transitory.

### **Inflation expectations have drifted down**

Indeed, I'm concerned something more persistent is holding down inflation today. Namely, I feel we are facing below-target inflation expectations.

Over the past several years, numerous measures of longer-run inflation expectations have moved down noticeably. Of course, inflation expectations serve as an important benchmark for the wage demands of workers and the pricing decisions of businesses, and thus are key determinants of actual inflation itself.

The movements in these measures haven't gone unnoticed by the FOMC. With regard to inflation compensation in financial markets, since October 2014 the first paragraph of

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<sup>3</sup> In January 2012, the FOMC set 2 percent inflation—measured by the annual change in the Price Index for Personal Consumption Expenditures (PCE)—as the explicit inflation target consistent with our price stability mandate (Federal Open Market Committee, 2012). While our objective is stated in terms of overall PCE inflation, core inflation—which strips out the volatile food and energy sectors—is a better gauge of sustained inflationary pressures and where inflation is headed in the future.

<sup>4</sup> Four times a year the FOMC releases its Summary of Economic Projections, which presents FOMC participants' forecasts of key economic variables over the next three years and for the longer run. Participants also provide their assessments of the appropriate monetary policy that supports those forecasts. For the most recent SEP, see Federal Open Market Committee (2017).

our policy statements have acknowledged either that it had moved down or that it had remained substantially unchanged from last time, but at a low level. Only once—with the rise in ten-year Treasuries after the presidential election—did we note a sizable increase, but we still had to caution that inflation compensation remained low.<sup>5</sup>

Some take comfort in the observation that inflation compensation hasn't declined further this year as actual inflation has fallen. But the fact remains that the level of inflation compensation is still low.

There are other measures of inflation expectations which are collected from surveys of households and businesses. The FOMC statements at times have noted the low levels of some of these measures, but they more often refer to the surveys as being stable.

Personally, I think the stability assessment overweights the *Survey of Professional Forecasters* (SPF) long-run PCE inflation expectations.<sup>6</sup> This is the average of the ten-year inflation forecasts made by about 40 professional economic forecasters. It's been almost rock solid at 2 percent since 2013.

It reminds me of when I was doing math homework in high school. At least in the U.S., the answers to the odd-numbered questions are in the back of the textbook. Well, I think everyone answering the SPF is reading the Fed's back-of-the-book answer—our inflation target of 2 percent.

Now the Fed does not have a back-of-the-book answer for the Consumer Price Index (CPI) because we don't target that index. And sure enough, the SPF's ten-year CPI projections have generally drifted lower and are about 25 basis points below where they were before the recession. I don't think there is good reason to forecast a narrowing of the CPI–PCE wedge.

Furthermore, inflation expectations measured by surveys of households have also come down. An important one in the U.S. is done by the University of Michigan, and its five- to ten-year inflation expectations measure has fallen 50 basis points since 2006.<sup>7</sup>

When I look at the downward drift in multiple expectations measures, I find it tougher to confidently buy into the idea that inflation today is just temporarily low once again.

### **The need for clear communications about symmetry of 2 percent inflation target**

Why might inflation expectations have drifted down? The FOMC's 2 percent inflation target is a symmetric one—that is, the Committee is concerned about inflation running either persistently above or persistently below 2 percent. One concern I have is that the public instead thinks the Fed views 2 percent as a ceiling that it aims to keep inflation under.

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<sup>5</sup> Federal Open Market Committee (2016).

<sup>6</sup> Details on the SPF are available online, <https://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters/>.

<sup>7</sup> Details on the University of Michigan's *Surveys of Consumers* are available online, <http://www.sca.isr.umich.edu/>.

By and large, central bankers are conservative types who view their most important task as preventing an outbreak of 1970s-style inflation. So perhaps then it's not surprising that we as a group have not convincingly demonstrated to the public our commitment to a symmetric inflation target.

Indeed, actual inflation outcomes in the U.S. have been far from symmetric. As I noted earlier, core PCE inflation has come close to 2 percent only a couple of times since the recession ended in mid-2009, and these periods were far too short to be consistent with symmetry. This performance could easily be confused with a purposeful strategy in which 2 percent is a ceiling.

Our projections and our commentary about them could reinforce this impression as well. For multiple rounds, SEP forecasts have had inflation gliding up to target under policy paths that do not generate a meaningful risk of inflation rising much above 2 percent. In one sense, this is a natural feature of a forecast. You're thinking about a path that, in the absence of future shocks, will bring inflation to your target. Once there, you know unexpected events will push you above and below 2 percent; but these deviations will be by accident, not by design.

In order to dispel the view that 2 percent is a ceiling, I feel our communications should be much clearer about our willingness to deliver on a symmetric inflation outcome. This means our public commentary needs to acknowledge a much greater chance of inflation running at 2-1/2 percent in the coming years than I believe we have communicated in the past.

### **Failure to achieve 2 percent symmetric inflation target poses a risk**

I believe this issue is especially important now because there is a big strategic risk in failing to get core PCE inflation symmetrically around 2 percent before this economic cycle ends.

At some point in the future, some unexpected economic shock will generate a downturn in activity. When it comes, monetary policy will likely need to provide substantial accommodation to address rising unemployment and below-target inflation.

As many economists have been talking about, we currently live in a world with low trend output growth and low equilibrium interest rates.<sup>8</sup> For example, the FOMC's consensus view for the long-run equilibrium federal funds rate is 2-3/4 percent.<sup>9</sup> This means that we don't have as much room as we have in the past to lower rates in response to a negative shock. In such an environment, a return to the zero lower bound (ZLB) on rates is much more likely.

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<sup>8</sup> Equilibrium real interest rates are the rates consistent with the full employment of the economy's productive resources. The equilibrium interest rate is sometimes called the "natural" or "neutral" interest rate.

<sup>9</sup> The equilibrium federal funds rate is the funds rate associated with a neutral monetary policy (policy that is neither expansionary nor contractionary).

Effective monetary policy actions at the ZLB often take the form of commitments regarding future policy rates or the scale and scope of nonstandard policies. For these to work, central banks need substantial credibility for meeting their mandated policy responsibilities, particularly their inflation targets. For the U.S, this means achieving our symmetric 2 percent inflation objective.

I also worry that giving too much prominence to financial stability considerations in discussions of monetary policy could erode the public's confidence in our commitment to our 2 percent inflation objective. Financial stability is obviously very important. But there are better tools than monetary policy for promoting it. In contrast, when it comes to meeting our inflation objective, monetary policy is the only game in town.

If we let that credibility deteriorate toward a public belief that 2 percent is a ceiling for inflation, we could be in for the kind of trouble that the Bank of Japan has faced for so long. So we should now be fortifying our efforts—reinforcing our commitment to symmetry—so that future policy actions have the best chance for success in a low equilibrium interest rate world.

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