

ECONOMIC ADVISORY PANEL MEETING

**Federal Reserve Bank of New York
33 Liberty Street, New York, New York**

Friday, November 17th, 2017

AGENDA

10:00 a.m. Coffee, Benjamin Strong Room, 10th floor

10:30 a.m. Economic Outlook Discussion

- The future of inflation
 - The discussion will be introduced by
 - Julia Coronado on “The Inflation Outlook”
 - Gita Gopinath on “Inflation: Some Insights from Trade”
- Roundtable on the US and global economic outlook

12:15 p.m. Luncheon, Northwest Conference Room, 10th floor

1:30 p.m. Discussion of New York Fed presidential search with Shawn Phillips, Corporate Secretary of Federal Reserve Bank of New York, and a search firm representative

The Future of Inflation

Background and Questions for Discussion

Economic activity in the United States has been rising at a solid pace over the past several months. GDP growth was 3.1 and 3.0 percent (annual rate) in the second and third quarter, respectively, after averaging 1.5 percent in the previous two quarters. Payroll jobs gains have averaged about 170,000 per month between April and October and the unemployment rate has fallen to 4.1 percent, its lowest level since December 2000 and below the 4.4 to 5 percent range of FOMC participants' projections in the September SEP for the longer-run normal unemployment rate.

Nevertheless, inflation has declined over this same period. At the beginning of the year, the 12-month change in the price index for personal consumption expenditures (PCE) briefly moved above 2 percent, and core PCE inflation reached 1.9 percent. These readings seemed consistent with a view that earlier oil price declines and dollar appreciation had restrained inflation, but that those influences were waning. Accordingly, inflation seemed well on its way to the FOMC's 2 percent inflation objective on a sustained basis. Instead, core PCE inflation has fallen back to 1.3 percent for the 12 month period ending in September.

Chair Yellen discussed these developments in a recent speech, stating:

"The recent softness seems to have been exaggerated by what look like one-off reductions in some categories of prices, especially a large decline in quality-adjusted prices for wireless telephone services. More generally, it is common to see movements in inflation of a few tenths of a percentage point that are hard to explain, and such "surprises" should not really be surprising. My best guess is that these soft readings will not persist, and with the ongoing strengthening of labor markets, I expect inflation to move higher next year. Most of my colleagues on the FOMC agree. In the latest Summary of Economic Projections, my colleagues and I project inflation to move higher next year and to reach 2 percent by 2019.

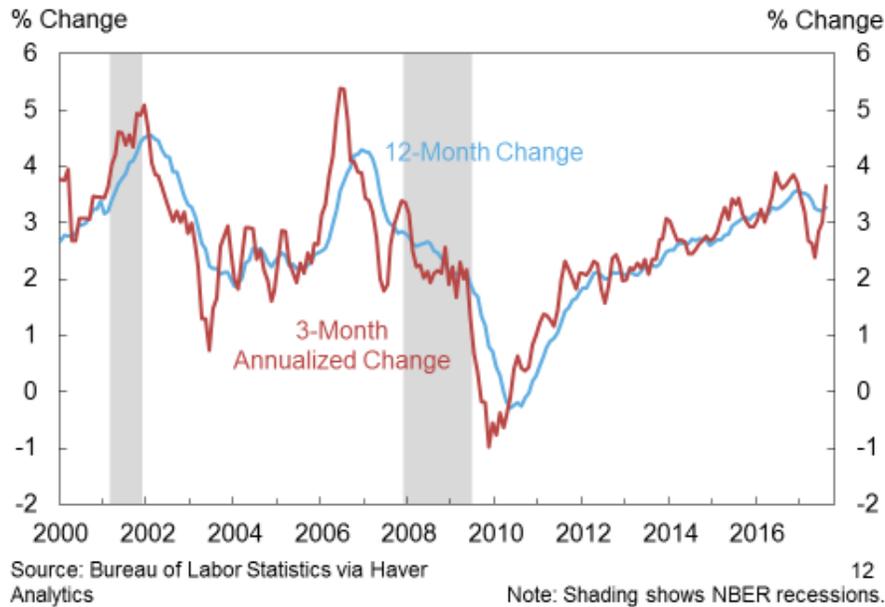
To be sure, our understanding of the forces that drive inflation is imperfect, and we recognize that this year's low inflation could reflect something more persistent than is reflected in our baseline projections. The fact that a number of other advanced economies are also experiencing persistently low inflation understandably adds to the sense among many analysts that something more structural may be going on."¹

Consistent with Chair Yellen's comments, research by the New York Fed staff indicates that the recent soft readings on inflation reflect some idiosyncratic transitory factors. Besides the wireless services that she cites, owner's equivalent rent (OER), which represents about a quarter of the overall CPI basket and a third of core CPI, appears to be another such factor. Because of some relatively soft readings earlier in the year, the 12-month OER inflation rate has declined this year; however, its 3-month change has now returned close to 4 percent, after faltering in the spring (see the figure below). If maintained, this

¹ "The U.S. Economy and Monetary Policy," speech delivered on October 15, 2017 at the Group of 30 International Banking Seminar, Washington, D.C.

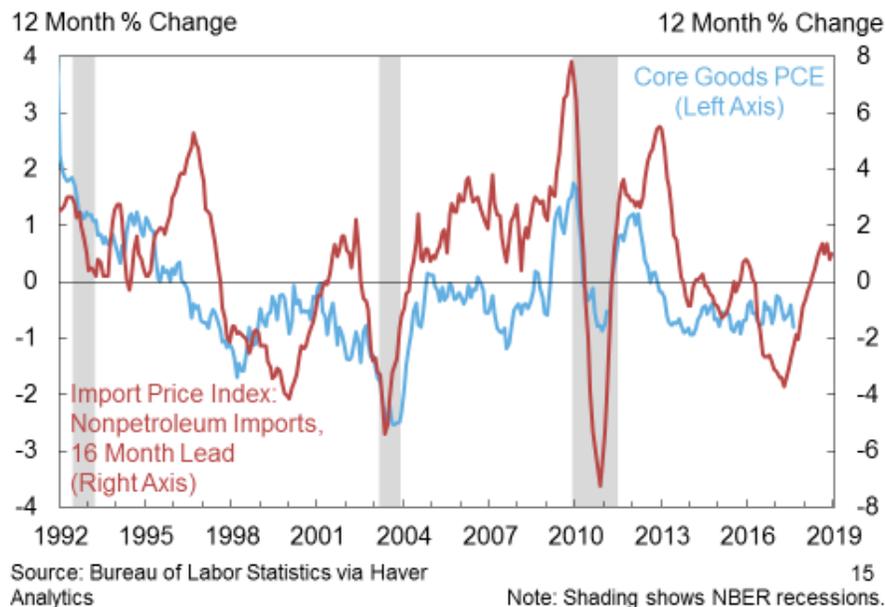
momentum should contribute to lifting the 12-month inflation rate toward the readings of the beginning of 2017.

Owner's Equivalent Rent



Another factor supporting the view that some of the softness in inflation is transitory is the behavior of import prices. The inflation rate for nonpetroleum imports has been positive for several months now, after spending the previous two years in negative territory. Given its leading properties, which are illustrated in the chart below using a 16-month lead, this development suggests that core goods inflation might soon rise above the narrow range of negative readings observed since 2013.

Core Goods PCE and Nonpetroleum Import Price Index



Even so, there are several factors that might restrain inflation more persistently. First, there may be greater slack in the U.S. economy than suggested by the low unemployment rate. For instance, both the labor force participation rate and the employment to population ratio remain well below their levels before the Great Recession, although demographic trends make it more difficult to extract a clear signal from these indicators.

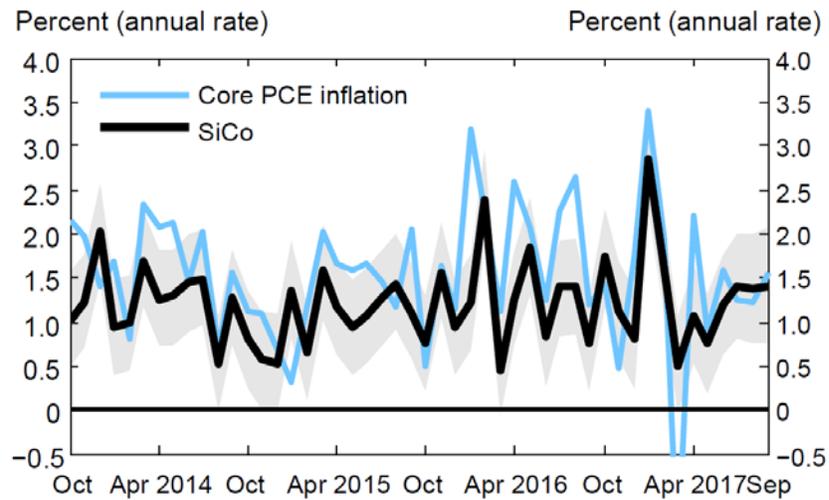
Second, inflation expectations might have declined. Different measures of inflation expectations provide somewhat conflicting signals on this issue. The median expected inflation rate three years ahead from the New York Fed's [Survey of Consumer Expectations \(SCE\)](#) has fluctuated within a narrow range since late 2015, consistent with little change in household inflation expectations. The median forecast from the Survey of Professional Forecasters for long-term annual averages of PCE inflation has remained at 2 percent. In contrast, the median of longer-run inflation expectations from the Michigan Survey of Consumers has declined over the past couple of years and is near its historical low. Also, longer-run inflation compensation measures from TIPS remain well below their levels from a few years ago, although they have been trending up since mid-year.

Third, global developments, such as favorable terms of trade and the growth in online shopping, or persistent sector-specific factors, such as the slowdown in medical care inflation, might be restraining inflation to a greater extent than is captured by traditional models.

At the same time, upside risks to inflation remain. One is that, in light of the long and variable lags associated with monetary policy, accommodative policy might be affecting inflation with a significant delay. Another is that the Phillips Curve could be nonlinear, so that inflation might become more responsive to resource constraints as the labor market tightens further.

In analyzing inflation developments, the New York Fed staff uses several measures to assess the underlying inflation rate. Many of them have been running somewhat below 2 percent. One such measure comes from the Signal Component (SiCo) model for core PCE inflation. This model attempts to separate signal from noise in inflation using cross-sectional price information. As shown in the graph below, SiCo is currently 1.5 percent on a monthly annualized basis, essentially the same as core PCE inflation, suggesting that the overall impact of idiosyncratic factors on the core index is currently limited. On a more encouraging note, SiCo has been recovering from much lower levels earlier in the year.

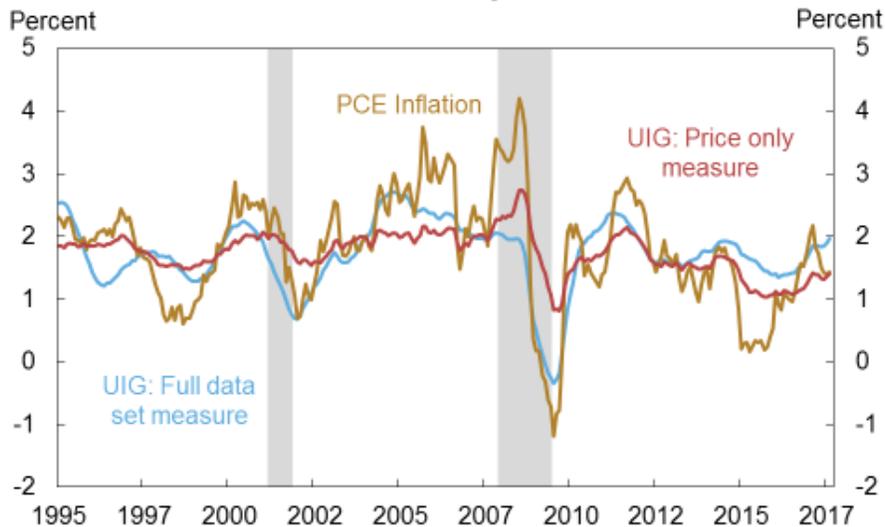
Monthly SiCo



Source: Authors' calculations.
 Note: The gray area represents 90% bands for SiCo.

SiCo's results are consistent with those produced by another New York staff model, the "prices-only" version of the [underlying inflation gage \(UIG\)](#) (see chart below). By contrast, the "full data set" measure of the UIG has a higher estimate of underlying inflation at around 2 percent. The reason for this discrepancy is the more positive signal conveyed by nominal, real, and financial variables in the "full data set," which reflects the solid pace of expansion of economic activity and buoyant financial conditions that have prevailed recently.

PCE Inflation: 12-Month Change and UIG Measures



Source: DLX Haver.
 Note: Shading shows NBER recessions.

With this background, here are some suggested questions for discussion at the meeting:

- Does the low level of core inflation mostly reflect the confluence of a series of transitory factors that will soon dissipate?
- Is the U.S. labor market as tight as most estimates of the natural rate of unemployment suggest? Is there much room for unemployment to fall further without leading to appreciably higher inflation?
- Have inflation expectations drifted lower over the past several years? Has this been an important factor keeping inflation low? If so, what tools do central banks have to bring expectations back to levels more consistent with their inflation goals?
- Are there structural developments in goods and/or labor markets that contribute to depress inflation? Are these factors more prevalent today than they were in previous periods?
- What is the role of global factors in depressing inflation in advanced economies? Are these factors mostly structural or cyclical?
- Should policymakers be concerned about the implications of a potentially overheated economy for asset prices and financial stability?