

Inflation Beyond the Headlines

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I'm aware that Georgia State's College of Business (now the Robinson College of Business) has been convening these economic outlook conferences since at least the 1980s, when I previously lived in Atlanta. You've earned a fine reputation. I'm honored to be included in the program this morning.

The stock in trade of Federal Reserve Bank presidents is the economic outlook speech. Later this morning Rajeev Dhawan will provide his views on the outlook. Instead of competing with such a well-regarded economic forecaster, I will devote my remarks to the topic of inflation.

On August 14, the July reading of the so-called headline consumer price index was released. The 12-month inflation rate through July was measured at 5.6 percent, the highest since 1991. This is a high and worrisome number.

I've titled my talk this morning "Inflation beyond the headlines." Central bankers aren't especially known for clever wordplay, but the title was meant to suggest both a deeper treatment of the topic and a look at the phenomenon of inflation beyond so-called headline inflation: the inflation you and I experience as consumers. I plan to cover the current state of inflation in our economy, some instructional information and views on inflation analytics, and my near-term outlook for inflation. I must emphasize I am speaking only for myself. The views I will express are mine alone and not necessarily those of my colleagues on the Federal Open Market Committee (FOMC).

What do we mean by inflation?

Let me begin by posing the simple question: What do we mean by "inflation"? The answer to that simple question isn't as simple as it may seem.

The popular treatment of inflation in our sound bite society risks confusing inflation with relative price movements and the cost of living. By cost of living, I'm referring to the costs you and I incur to maintain our level of consumption of various goods and services including essential items such as food, gasoline, and lodging.

Relative price movements occur continuously in an economy as individual prices react to market forces affecting that good or service. Neither relative price movements nor sustained high living costs constitute inflation as economists commonly use the term.

Up front, I want to be clear that I'm well aware recent cost increases have hurt many households and businesses, especially those heavily dependent on transportation. Believe me, I'm not happy about paying \$3.80 for a gallon of gasoline, and I know you're not either.

In the past three months, costs faced by the average urban family as measured by the consumer price index (CPI) have risen at an annualized rate of more than 10 percent. Food and energy accounted for about two-thirds of that rise. But the higher cost of maintaining consumption—while certainly painful—is not exactly the same thing as higher inflation. Let me explain.

Early in the last century, the economist Irving Fisher offered a vivid metaphor for the movement of individual costs relative to the aggregate level of inflation. The general inflation, he said, can be thought of as the movement of the swarm of bees. He likened the relative movement of individual prices (both up and down) to the movement of individual bees within the swarm. Now, I admit that Fisher's analogy may be simplistic. Not all prices move in the same direction, but consumers tend to pay greater attention to rising prices than those that are falling. Recently, the average price of personal computing has declined while energy and food costs have increased.

Monetary policy discussions are focused on the movement over time of the swarm, or the aggregate price level. That is where monetary policy holds its influence over prices.

To keep track of overall inflation there are two commonly used measures: the consumer price index, or CPI, and the personal consumption expenditure price index, or PCE price index. Both measures are expenditure-weighted averages of price changes for a notional basket of goods and services. They seldom mirror an individual consumer's personal experience.

The differences between the two measures are largely conceptual. For instance, the CPI measure is based on an average consumer's out-of-pocket expenditure while the PCE index is based on the total cost of the expenditure. So, while the total cost of pharmaceutical drugs is counted in the PCE index, only the consumer's insurance co-pay is counted in the CPI.

Also, the PCE price index updates the consumer basket continuously over time while the CPI is fixed every two years. By this method, the PCE better reflects the tendency for substitution, such as buying more chicken if the price of beef goes up.

In my view, the compositional differences don't clearly favor one index versus the other. While the level of the inflation rate measured by the two indices differs at any point in time, over the short term both generally give the same signal about the pattern of inflation.

Taken together, measures of both CPI and PCE inflation are important tools to help get a fix on the overall inflation picture, giving us a sense of whether the inflation is persistent or transitory along with other information needed to make informed policy decisions.

At times, large movements in some component prices may mask the underlying inflation trends in the CPI and PCE indexes. For this reason, measures of core inflation can be useful tools. Measures of core inflation typically remove volatile food and energy costs from the overall CPI or PCE number.

Insights can be drawn from some alternative measurements of core inflation. For instance, the Cleveland Fed's median CPI and the Dallas Fed's trimmed mean PCE index calculate inflation after stripping out extreme price changes—both high and low. Other approaches to refine core measures of inflation involve using statistical techniques.

Before I go any further, I will say that I agree with those who say core inflation measures in isolation are an inadequate approach to determining the direction of overall price changes. Like you, I ultimately care about the trend rate of overall inflation, which I believe is ultimately the appropriate object of monetary policy.

Upward movements of individual prices may take a variety of forms. For instance, smaller portions or downgraded quality for the same price, removal of service or warranty features accompanying a product, changes in packaging where the package has utility—all these represent individual item inflation. They are called quality changes. The agencies that compute the CPI and PCE indexes work to account for these quality changes.

Attempts to measure the aggregate rate of price change—no matter how sophisticated—remain imperfect. As a result, when it comes to measuring inflation, judgment is needed to distinguish persistent price movements that underlie overall inflation from the relative price adjustments. Separating the inflation signal from noise involves much uncertainty—especially when making decisions in real time. Discerning accurately the underlying trend is difficult. It is essential for those of us who have responsibility for responding to these trends to use a wide variety of core measures and inflation projections to make the most informed judgment we can.

Today's U.S. inflation

With that, let me turn to the current inflation situation. No matter how you measure it, the aggregate inflation we are experiencing in the United States at the moment is uncomfortably high. Over the first half of this year, the CPI has risen at an annualized rate of nearly 5.5 percent. Over the same period, the PCE index has risen at an annualized rate of 4.5 percent. With the surge of energy prices in early summer, the annualized CPI for July was the highest in 17 years.

Also, considering the global context, I should add that consumer inflation measures in most parts of the world also have moved higher in recent months. Headline inflation rose to above 4 percent in major developed economies in July. In developing economies, inflation has been running at the highest rate since the start of the decade. On the positive side, inflation in China has declined in recent months to around 6 percent from a peak of 9 percent at the beginning of the year.

Measures of core inflation in the United States suggest that overall price pressures have been on the rise, perhaps because higher commodities costs have begun to affect prices paid by consumers and businesses across a broader range of other goods and services. In July, core CPI inflation on a year-over-year basis increased 2.5 percent—up from an average annual rate last year of 2.3 percent.

How did we get here? The mechanical answer, of course, is the outsized rise of particularly prominent prices in the consumption basket, notably food and energy. The rate of change in the food and beverages component of the CPI, which accounts for about 15 percent of the total market basket, rose at an annual rate of slightly more than 6.5 percent in the first half of this year.

Over this time, the fuel and utilities piece of housing prices increased at an annual pace of nearly 21 percent and motor fuel by about 32 percent. In the CPI these two components account for more than 10 percent of total household expenditure.

I expect the recent decline in oil prices will begin to reverse some of the pressures we have seen on overall inflation in the first half of the year. But the underlying global supply pressures remain tight, and demand pressures remain relatively high. As such, any relief will likely be only partial.

Furthermore, some government estimates suggest little respite from food price hikes in the near term. At this point, it seems quite probable that PCE index inflation this calendar year will clock in at more than 3.5 percent and the CPI somewhere north of 4 percent—an improvement over the first half of the year, and trending in the right direction, but not numbers I would be comfortable with over the longer term.

Outlook and risks

Although recent measures of inflation are higher than I would like to see, I would say that recent price increases are more likely to be transitory than persistent. I expect that CPI inflation will peak near the July level of 5.6 percent. By comparison, in March 1980 the CPI peaked at 14.8 percent.

Let me elaborate in the context of current Fed policy. On August 5 the FOMC voted to leave the fed funds rate at 2 percent and issued the following statement: "Inflation has been high, spurred by the earlier increases in the prices of energy and some other commodities, and some indicators of inflation expectations have been elevated. The Committee expects inflation to moderate later this year and next year, but the inflation outlook remains highly uncertain."

I concur with that view and believe current Fed policy is consistent with an easing in overall inflation given the dynamics of the economy. With weak growth and financial market strains, I believe the most likely outcome is that both headline and core inflation will diminish over the rest of 2008 and into next year as the temporary effects of energy and food price increases abate. Note that my outlook does not require that food and energy prices fall, but simply that their rates of increase moderate.

Some of you may wonder why a central bank would allow higher energy prices to push up measured inflation even in the short run. Let me respond to that question by posing a counterfactual argument.

Suppose that in the current environment of weakening economic growth the FOMC were to lean heavily against the recent run-up in energy prices. Because monetary policy necessarily works on prices in the aggregate—the swarm—tightening policy would lower the dollar value of all prices, including oil. Unless monetary policy can materially affect demand and supply fundamentals in global oil markets, energy would still be expensive relative to other goods and services. Also, energy would still be expensive relative to wages whose dollar values likely would decline because of policy actions that restricted growth in the entire economy.

It might be possible for restrictive monetary policy to slow the economy enough to reduce the demand for energy and soften prices overall as a consequence. I doubt, however, that many people would be happy with attempts to solve the problem of high oil prices through policies that would deliberately reduce the real incomes of American consumers and wage-earners.

Why expectations matter

With my inflation outlook, I do not mean to dismiss the very real threats to Fed objectives. In today's geopolitical environment, for instance, there's always the potential of a severe energy price shock.

Also, my forecast could be wrong. If overall prices do not moderate in the near term as I expect, inflation expectations could become unmoored.

In the long run, the crux of the problem is not the elevated overall rate of inflation per se. It is the prospect that these elevated rates of inflation persist to such an extent that they become embedded in expectations and mainstreamed into the price and wage setting decisions of businesses, workers, and consumers.

In such an event, the decisions required to serve the FOMC's dual mandate of price stability and maximum sustainable growth would become very difficult indeed. We need not look back many years to recall the seriousness of unfettered inflation expectations. During the so-called Great Inflation between 1965 and 1984, the average CPI inflation rate for this extended period was 6.3 percent and PCE index averaged 5.6 percent.

This persistent run-up in prices was reversed only after the Fed raised the fed funds rate to extremely high levels. Victory was achieved at great cost to the real economy and only after inflation expectations were brought back under control. Such an episode need not recur—even with temporarily elevated prices—if the Fed acts as needed to keep inflation expectations anchored.

There are three commonly cited measures for inflation expectations: economic forecasts, such as the ones you will be hearing at this conference, surveys of households, and financial data such as the term structure of interest rates. One example of the latter is Treasury Inflation-Protected Securities, or TIPS.

Taken as a whole, these measures suggest inflation expectations may have risen modestly—but not by a material degree. By that, I mean not sufficient for me to think Fed policies have been off target with respect to the central bank responsibility for price stability. But like measurements of inflation, measurements of inflation expectations also are far from perfect. For instance, surveys of household inflation expectations can be criticized as flawed stemming from the way questions are posed and the size and selection of the sample. Further, because financial market data reflect more than inflation expectations, these data are not always reliable indicators.

Some fear inflation expectations are on the move in reaction to recent experience. As suggested a moment ago, I don't hold that view. But I feel that it's important to acknowledge that not enough is known about transitional periods from one state of expectations to another. Even though we're measuring expectations, there's an element of looking back to gauge their essence. I do not dismiss the view that we run the risk that by the time change in expectations is clear, it's too late. In my view, we need to know more about how and why inflation expectations shift.

That said, years of hard work by economists have gone into developing the measures of inflation expectations we currently track. And I have challenged our Atlanta Fed research staff to build on this progress.

Protecting hard-won credibility

To recap, I acknowledge that current prices—no matter how measured—have been elevated. Thankfully, commodity prices appear to have declined somewhat, though there is no certainty that they will continue to be better behaved. And, some pass through has unquestionably occurred.

In this context, with higher commodity costs causing painful increases in the cost of living, I believe we should not let the sting of individual bees divert our attention from the direction of the swarm. I believe the Fed's central concern is evidence of broad-based, persistent, and increasingly institutionalized upward price pressures.

Like many forecasts, the Atlanta Fed's forecast shows the inflation trend moving gradually lower as general economic weakness eases some price pressures. My belief is that the Fed has undertaken tactically prudent actions to help move the economy through a difficult transition in line with the larger strategic goals of sustainable growth, low and stable inflation over the long term, and financial stability. Also, let me emphasize that I am mindful of today's elevated risks and am prepared at any point to change tactics to ensure inflation expectations do not become unanchored.

Further, I'm acutely aware that the current FOMC has inherited the inflation policy credibility that was hard won by our predecessors. One thing that has impressed me since taking my position last year is the seriousness with which my colleagues approach the duty to protect that legacy. I am confident that the Federal Reserve's institutional commitment to maintaining low and stable inflation will prevail.

Thank you. I would be happy to respond to your questions and comments.

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