

# Great Expectations

BY JOHN A. WEINBERG

**W**hy hasn't inflation increased more quickly, given the strength of the economy? Part of the answer might be that firms and households don't *expect* inflation to increase more quickly.

Let's start with how individual firms set prices. Under an assumption of perfect competition, as you learned from your *Economics Principles* textbook, firms don't have any pricing power; they just accept the market price, which is determined by the demand for, and supply of, the good being sold. But a textbook is about the only place you'll find perfect competition; in the real world, goods aren't identical, entering or exiting a market can be costly, and information is far from complete. That means firms have opportunities to seek to maximize their profits given their costs, the demand for their goods, and the behavior of their rivals.

There is currently some debate about the extent to which the market power of the largest firms has increased economy-wide and the ensuing effect on the overall price level. There is little debate among economists, however, about the role of expectations in determining the price level. Beginning in the 1960s, a large body of research has investigated the role that expectations play in dictating the future path of inflation — and the “stagflation” of the 1970s, when unemployment and inflation rose together, demonstrated how inflation expectations, once they are embedded in household and business decisions, can make it hard to bring inflation down.

What does this have to do with firms and prices? In addition to competitive factors, firms also have to factor in future inflation when making pricing decisions. If a firm expects prices on average to rise by 3 percent over the coming year, it will take into account the expected increase in the costs of inputs and the prices of substitutes when setting its own prices today. Multiply that across all the firms in an economy, and expected inflation directly influences actual inflation.

Temporary shocks can alter the path of inflation in the short run. For example, suppose there is a significant increase in the intensity of competition in a large sector of the economy that unexpectedly depresses prices in that sector. The deviation in that one sector — if big enough — could hold down overall measured inflation for a period of time. But in the long run, if inflation expectations remain well-anchored, the underlying trend of low inflation will eventually reassert itself. That is arguably what happened last year when competition drove down the price of wireless telephone plans; by some estimates, that decline contributed to nearly half of the decline in core consumer price index inflation. In recent months, however, inflation has

been moving back toward the Fed's 2 percent target, as the Federal Open Market Committee believed it would.

Economists and policymakers can obtain indicators of inflation expectations by asking people what they expect, or they can infer expectations from market activity. In the first category, a well-known survey of consumers conducted by the University of Michigan indicates that inflation expectations have been fairly stable, between 2.2 percent and 2.8 percent in the last three years. In the second category, an important measure is the 10-year “breakeven” rate, which compares the yield of a 10-year Treasury bond to the yield of its inflation-indexed equivalent, the 10-year Treasury Inflation-Protected Security (TIPS). This spread has ranged between 1.2 percent and 2.2 percent in the last three years.

Survey-based measures tend to be higher than market-based measures, which brings me to an important point: We shouldn't interpret the level of any given indicator of inflation expectations as the precise level of expectations for the Fed's benchmark measure of inflation, the index for personal consumption expenditures (PCE). Consumers, for example, might place different weights on various categories of goods than the weights used to calculate the PCE. And the spread between TIPS and nominal bond yields contains not only inflation expectations, but also a risk premium, which is hard to isolate. What matters, then, is not necessarily the level of any measure per se, but rather the changes in that level. Given that levels have remained steady, current inflation expectations appear well-anchored in line with the Fed's target.

The Fed's inflation target is symmetric, which means we are concerned about inflation persistently above or below 2 percent. Because core PCE inflation was below target for quite some time, some observers and policymakers have argued that we should now allow inflation to run above 2 percent for a while. But expectations have not drifted down decisively despite inflation being relatively low. So a period of above-target inflation to ensure stable expectations may not be necessary, since they're reasonably steady to begin with. At the same time, while it may be encouraging that expectations have remained well-anchored despite a number of disinflationary impulses since the Great Recession, this was accomplished in part by unprecedented and unconventional monetary policy actions. Now, as the impulses to inflation appear to be pushing in the other (upward) direction, we have relatively little in the historical record to tell us what might make expectations less stable — which means we shouldn't take their stability for granted. **EF**

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