Price Prediction

Today's inflation expectations are likely to become tomorrow's inflation reality Francesco Grigoli



HAVE YOU NOTICED that goods at your local store are more expensive and you cannot buy as much with your paycheck as you once could? In many parts of the world, prices for goods and services are rising at the fastest pace in 40 years. Newspapers and other media outlets typically report the latest inflation figure—that is, the change in prices compared with the same month a year earlier. Yet policymakers focus largely on inflation expectations.

Inflation expectations describe the rate at which people reckon prices will rise or fall in the future. For example, if you think that a car costing \$20,000 today will cost \$22,000 in a year's time, your inflation expectation for cars is 10 percent. If you expect the car to cost \$18,000, your inflation expectation is -10 percent. Your inflation expectation is 0 if you think the price of the car will stay the same. Broaden this example to include all the goods and services typically consumed in a country and you have a number for overall inflation expectations.

Inflation expectations matter because today's inflation expectations are likely to become tomorrow's actual inflation. If you expect a car to be 10 percent cheaper next year, you are likely to wait until prices have fallen before you buy it. This fall in consumption slows economic growth by lowering demand and pushes prices down further. But if you expect the car to cost 10 percent more, you are likely to buy it immediately to avoid paying the higher price later. This adds to demand in the economy and pushes up prices.

Inflation expectations also influence wage negotiations. If workers and their unions expect prices to increase 10 percent, they will push their bosses for a pay raise at least as large to ensure that their purchasing power does not decline. Workers might even strike to ratchet up the pressure. Firms will then raise their prices to protect their profit margins from the increase in wage costs. This can trigger what is known as a "wage-price spiral"—inflation that leads to higher wages, leading to even higher inflation.

Measuring inflation expectations

Inflation expectations are traditionally measured using surveys by central banks, universities, or private institutions. The University of Michigan, for example, conducts a monthly survey in which at least 600 households across the United States are asked to provide their best forecast for inflation. Some surveys collect forecasts from professional analysts at banks or financial firms. Others collate responses from the stores and other businesses that actually set the prices consumers pay.

Expectations can vary widely between groups of people and within them. Professional forecasters are paid to study all the available information, and their inflation guesses are usually the most accurate. But even these experts disagree among themselves, especially when predicting inflation in countries where prices are more volatile.

Disagreements about inflation expectations are even greater among households and firms. One reason is that most people do not spend

much time thinking about inflation if they do not see it is as directly relevant to their lives—a phenomenon known as "rational inattention." Instead, they may assume that all prices move in line with the cost of a single item they purchase frequently—for example, gasoline. Some people may expect prices to rise while others see them falling. A simple average does not capture this complexity.

Maintaining price stability

Most central banks seek to maintain inflation at a stable rate, known as the "target." Inflation expectations tend to become actual inflation, so it's in the central bank's interest to manage inflation expectations and keep them as close to this target as possible. In other words, central banks want to keep inflation expectations "anchored" to the target to achieve their primary objective of price stability.

Central banks know that anchoring near-term inflation expectations is virtually impossible because they are largely the result of recent events, such as a flood or drought that destroyed a crop and is driving up food prices. Instead, they focus on managing inflation expectations over the medium term, typically two to three years. This is the "policy horizon" over which they have tools that can influence inflation.

If inflation is above the target, the central bank can raise its short-term policy interest rate as well as influence longer-term interest rates to make it more expensive for households and firms to borrow. The higher cost of credit makes it more expensive for people to spend. This will dampen demand and thus slow inflation, and inflation expectations will fall.

Another way to influence inflation expectations over the policy horizon is through communication that provides signals about the future direction of monetary policy. This communication tool, known as "forward guidance," became widespread when the interest rates of many central banks were stuck at or close to zero for the decade or so after the 2008–09 financial crisis. Many central banks were reluctant to push policy rates into negative territory. And even when policy rates were negative, central banks refined their communication of future policy to stimulate demand and push inflation expectations back up to target.

Central bank credibility

Anchoring inflation expectations is not easy. Imagine a situation in which inflation expectations are higher than the target and the central bank lowers interest rates instead of raising them. In this scenario, credit would become cheaper, demand would boom, and prices would be pushed further away from the target. People would realize that the central bank is not serious about its mandate of price stability. So, when asked about their inflation expectations, people would likely answer with numbers above the target. Since expected inflation tends to become actual inflation, this would keep inflation above the target for much longer—a cost of a central bank that lacks credibility.

Let's instead consider the case of a credible central bank that is firmly committed to price stability. Even if inflation deviates from the target, people believe the central bank will do what's needed to restore price stability. As a result, people may not change their expectations for inflation over the two- to three-year policy horizon.

Achieving this degree of credibility takes time and is not always easy. A central bank needs to act consistently in line with its mandate of price stability so that people believe it is always ready to minimize any divergence of inflation expectations from the target. In some cases, this can involve difficult trade-offs, such as raising interest rates to dampen price pressures—even when the economy is weak and unemployment is rising, for example. Yet once inflation expectations are anchored securely, the central bank can be much less aggressive and still achieve price stability. Any overshooting or undershooting of inflation expectations from the target will tend to correct itself, and bouts of inflation will fade away faster—a benefit of a credible central bank. This, in turn, frees the central bank to focus monetary policy on achieving secondary objectives, such as stimulating economic growth and employment.

The inflation figures you read about in the newspapers each month are important. But perhaps more important—for an economy's outlook and future direction of interest rates—are inflation expectations.

FRANCESCO GRIGOLI is a senior economist in the IMF's Research Department.