

Rational Expectations

BY ANDREW FOERSTER

Many economic decisions in life depend upon predictions or expectations about the future. A new college graduate's choice of a career often depends on how he thinks earnings in certain fields will change over coming years. Investors choose stocks based upon their views of likely changes in returns. A farmer decides how much corn to plant according to his expectations of future prices.

In each of these examples, the effect of expectations on current behavior is clear. However, in each case, future prices depend upon the actions of a large group of individuals making current decisions. Earnings in a field will depend upon how many college graduates choose that occupation and how much demand exists for those skills; the price of a stock will depend upon how many shares are available and whether investors want to buy or sell them; and the price of corn will depend upon how much corn farmers have harvested and how much households wish to consume.

The rational expectations hypothesis is important for studying forward-looking decisions and markets. It rests on the premise that any discrepancies between expectations and outcomes are not "systematic." In other words, people do not make the same mistakes over and over, constantly misjudging future events. Rational expectations theory does not assume that people have perfect foresight, but it does assume that decisionmakers understand how future prices will be determined — for instance, the more corn is harvested, the lower the price will tend to be — and do the best job possible forecasting the future with the information available to them now.

Since the idea of rational expectations depends on systematic discrepancies between outcomes and expectations, events that are "surprises" can have large effects. For instance, farmers understand that droughts are possible but infrequent. As a result, when a drought occurs, they are unlikely to have predicted its effects on supply and, hence, prices for the current season. This is a surprise for which rational expectations theory can account. What rational expectations does not allow, however, is for farmers to systematically misjudge the frequency of droughts and their effects on crop yields and prices. That is, one would expect farmers to understand that if a drought occurs, yields will be low and prices will be high.

The same is true when it comes to investors. Certain stocks may be undervalued at certain points in time. But overall, investors are unlikely to consistently underestimate the future prices of equities. If there were such a discrepancy, savvy

investors would realize that their expectations were too low, buy more stock, and drive up prices.

Rational expectations can also help explain people's consumption patterns. Consider a person in mid-career who has been laid off, but expects to find a new job in the next few months. Should this person, whose income has just dropped significantly, make an equal cut in his immediate consumption? Economists would argue there may be no need for a big cut, because he can use debt or savings for a short while, then repay the debt or replenish savings once he is employed again.

People tend to be forward-looking when it comes to public policy changes as well. For instance, temporary tax cuts intended to stimulate the economy may in fact be met with only slight increases of consumption, as people expect future tax rates to return to their previous higher level to raise revenue.

In addition to fiscal policy, rational expectations theory has significant implications for monetary policy. Many economists used to believe that there was an exploitable trade-off between unemployment and inflation: The Fed could cut interest rates, stimulate the economy, and lower unemployment without having to

worry about runaway inflation. But this policy only worked until people figured out that inflation and expansionary policy go hand in hand. As a result, rational expectations suggested the Fed simply keep inflation low and not try to exploit possible trade-offs.

However, the Fed could have a short-term trade-off by unexpectedly letting inflation rise or fall. Alas, this policy would reduce the Fed's credibility, causing people to expect higher inflation. What's more, people would raise their expectations of a "policy surprise," making actions, and therefore results, more volatile in the future. Along these lines, Robert Lucas developed the "policy ineffectiveness proposition," which states that expected policy shifts will have little effect on the economy, as people will rationally adjust their behavior to limit the effect of the policy.

There exist some challengers to rational expectations theory. Behavioral economists, for example, tend to view people as relatively myopic. Still, rational expectations theory today occupies a central place in how most economists think about how people look to the future. For policy institutions such as the Fed, rational expectations theory suggests it is wise to be predictable with policy changes and to not try to manipulate the economy through policy surprises.

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