BY THOMAS LUBIK

When Economists Navigate by the Stars

Monetary policy is often likened to steering a ship. For instance, the key economic policy concept of "commitment" is often visualized as Odysseus listening to the Sirens' call while tied to the mast of his ship; analysis and interpretation of the data often seems like the process of navigation by the currents, the wind, and the sky. Indeed, Fed Chair Jerome Powell suggested in August that monetary policymakers are frequently "navigating by the stars under cloudy skies."

But what good is celestial navigation if the navigator cannot see the sun or the stars because of clouds? The Vikings, apocryphally, used sunstones, a mineral that polarizes light and allows determination of the sun's location with reasonable precision. Modern economists likewise use alternative methods to steer the policy ship to its desired long-run resting place. They employ statistical techniques to extract the presumed location of the stars from what they see in the data.

At the Richmond Fed, we produce one measure of such a star, called r* (pronounced "r-star"), or in the economist's vernacular, the natural real rate of interest. r* is an old theoretical concept originated by the Swedish economist Knut Wicksell more than 100 years ago. It describes the (hypothetical) real interest rate toward which an economy would gravitate and at which it would be in balance, with neither inflationary nor deflationary pressures.

r* has received much recent attention in the monetary policy debate as the Federal Open Market Committee (FOMC) is contemplating the path for interest rates in 2024. r* can serve as a guidepost for their eventual direction. For instance, when the policy rate is above this neutral rate, monetary policy is restrictive in that it tends to constrain economic activity. This, in turn, tends to reduce inflation so that over time, policy rates normalize. In such an equilibrium, the policy rate moves toward its normal level, which can be ascertained by adding the FOMC's 2 percent inflation target to r*.

But just like the ancient Vikings, who sometimes would land in Northumbria, at other times in Wessex or even Iceland, economists arrive at different neutral policy rates.

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The median neutral policy rate projected by FOMC members in the latest Summary of Economic Projections sits at 2.5 percent, while the prominent Laubach-Williams estimate of the New York Fed has it at 3.1 percent. The Richmond Fed's model even comes in at 4.2 percent! So, what is a good Viking to do when confronted with such uncertainty?

Some commentators have suggested that r* is not a useful concept for guiding monetary policy precisely because of this wide range of uncertainty. For instance, one might argue that estimating r* and the uncertainty surrounding this estimate is like — to switch metaphors — ordering pizza delivery for 8:30 p.m. on a Friday night that is promised to arrive sometime between 6 and 11 p.m.

Now, most of the time the pizza does, in fact, get delivered at 8:30 p.m. Very rarely, the driver shows up at 6 because it's a slow evening and he or she wants to close shop early. Sometimes, the delivery is quite late because it is a busy Friday night. As an economist analyzing the data, I know of these possibilities because they have occurred in the past. Naturally, my range of estimates would reflect this even though I consider 8:30 as the most likely outcome.

The upshot of this metaphor is that as a policy advisor, I need to make our president aware of the range in delivery times and counsel him not to take the dog for a walk during this time frame. He may if he must and if he is willing to take the risk that the pizza gets cold on the doorsteps. But he should certainly be at home around 8:30.

Taking into account this uncertainty of the state of the world is the hallmark of good policymaking. For one, it avoids the illusion of false precision of fundamentally uncertain matters. Moreover, r* and other stars are just one of many inputs into the policymaking process. Just as the Vikings eventually ended up at their destination, so will monetary policy. But without guidance from the stars, the Vikings would have never reached land. **EF**

Thomas Lubik is a senior advisor in the Research Department of the Richmond Fed. He leads the team that produces the Richmond Fed's quarterly estimate of r.*