



Predictability and Effectiveness of Monetary Policy

Daniel L. Thornton

Transparency in the conduct of monetary policy is generally considered to be a good thing. Many economists believe that the better market participants are able to predict monetary policy actions—specifically, changes in the target for the federal funds rate—the more effective monetary policy will be in influencing long-term interest rates.

There are two problems with this argument. The first stems from the expectations hypothesis (EH) itself, which asserts that the long-term rate is determined by the market's expectation of the short-term rate over the holding period of the long-term asset (plus a risk premium). The EH implies market participants are able to predict the future level of the short-term rate, which necessarily implies that they can predict changes in the short-term rate. It is not the ability to predict near-term policy actions, per se, that determines the magnitude of the response of long-term rates to policy actions, however. Rather, it is the ability to predict the longer-term course of policy that is important. The following simple example illustrates why this is true: Assume that the market fully and correctly anticipates that the Fed will lower the funds rate target by 50 basis points next week and raise it 50 basis points the following week. Despite the fact that these actions are perfectly predictable in this example, their effect on longer-term rates would be small. Indeed, the longer an asset's term, the smaller will be the effect.

If the future course of policy could be known with certainty, the predictability of policy actions would affect only the timing of the market response to policy actions, not the size of the response of long-term rates. To see why, consider two scenarios where the Fed permanently reduces the funds rate target by 50 basis points. In the first scenario, the market anticipates the Fed's action, so that long-term rates fall by 50 basis points in advance of the Fed's action. In the second, the market does not anticipate the policy action; long-term rates fall by 50 basis points but only after the Fed reveals that it has reduced the funds rate target. In both cases the

effect on long-term rates is the same. The only difference is the timing of the decline in long-term interest rates—either before the action or when the action is announced. In which case is monetary policy more effective? This is not an easy question to answer in general; however, policy is not *obviously* more effective in the case where the market is able to predict the timing of policy actions. Predicting the timing of policy actions is not the critical factor: The effect of policy actions on long-term rates is determined by the market's ability to predict how *long* this new policy will persist.

A second problem with the argument that predictability of policy actions increases the effectiveness of policy is that it depends on how monetary policymakers set their policy instrument. Some policymakers claim to set their instrument at the level consistent with achieving their policy objectives, given all the information they have at the time, including their forecasts for the economy. The instrument setting is changed only when policymakers receive new information that suggests that their policy objectives cannot be obtained with the instrument's current setting. If policy is made in this way, market participants need two pieces of information to predict the timing of policy actions. First, they must anticipate the new information that policymakers will receive. Hence, predicting policy actions requires that market participants predict future events better than policymakers can. This would seem to be a rather severe requirement.

Market participants also must be able to predict how policymakers will respond to the new information. This is extremely difficult, if for no other reason than the fact that information tends to come in packets, not pieces. Each day policymakers receive news about a number of economic variables. How they respond to any one piece of information depends, in part, on the other pieces of information in that packet and, perhaps, on information received in the packets of previous days. ■