## A Neutral Federal Funds Rate?

The stance of monetary policy with respect to aggregate demand is widely measured in terms of the Federal Reserve Open Market Committee's (FOMC) federal funds rate target. Too low a target, it is suggested, will cause the Open Market Desk to inject too much liquidity, "overstimulating" aggregate demand and increasing the inflation rate. Too high a target will result in undue pressures on liquidity, unnecessarily high market interest rates, and slower-than-desired economic activity. Like Goldilocks exploring the three bears' forest home, many analysts appear to believe there exists a "just right," or neutral, target between the two extremes. But what exactly is a neutral monetary policy and is it possible to achieve it?

A neutral level of the federal funds rate often is discussed as having two properties. First, it is a level that neither stimulates nor slows output relative to potential. Second, it is a moving target that varies from one period to another. But such a characterization raises an interesting question: If the neutral rate changes frequently, can it be measured accurately and does the concept have any value for policymakers?

Arguments for the existence of a steady-state neutral federal funds rate frequently begin with the assertion that the historical record suggests bounds for the neutral rate, say, greater than 1 percent and less than 10 percent, and that the task is to narrow that range, perhaps to a single number. One oft-made claim is that the neutral rate, in the long run, should equal the sum of the growth rate of potential real GDP plus the target inflation rate. The Congressional Budget Office projects that real potential GDP will grow at approximately a 3.1 percent rate during 2004-05, with similar growth rates in later years. If measured inflation is to be in the neighborhood of 2 percent with no expectation of an increase or decrease, then a neutral funds rate target might be slightly greater than 5 percent.

This analysis, however, does not allow for the typical upward slope of yield curves-that is, for a positive term premium. Macroeconomic steady-state growth models often assume a horizontal yield curve, thereby excluding
such a premium. In financial markets, however, yields on longer-term assets typically are higher than those on shorter-term assets. To estimate a neutral overnight federal funds rate target, we need to isolate the maturity-related term premium from the inflation-related risk premium that is included in longer-maturity yields as a result of uncertainty regarding future inflation. One possibility is to observe maturity-related Treasury rate spreads during a period when market participants expect future inflation rates to be approximately unchanged from their then-current pace. The figure shows the rate spread between the 10 -year Treasury constant-maturity yield and the bond-equivalent yield on 3 -month Treasury bills. It seems likely that the inflation-uncertainty risk premium was approximately zero during the early 1960s and the mid-1990s, suggesting a maturity-related rate spread of approximately 150 to 200 basis points. Subtracting this spread from the previous 5 percent rate suggests a neutral overnight federal funds rate of approximately 3 to $3^{1 / 2}$ percent.

Recent public statements by FOMC members have suggested a range for a neutral funds target of between $3^{1 / 2}$ and $5^{1 / 2}$ percent. Allowing for the typical positive slope of the yield curve suggests that the neutral federal funds target is more likely to be near the lower than the upper end of this range.
—Richard G. Anderson, Jason J. Buol, and Robert H. Rasche


