



Which Comes First: Inflation or the FOMC's Funds Rate Target?

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The president of the Federal Reserve Bank of Minneapolis, Narayana Kocherlakota (2010), noted recently that monetary neutrality “implies that if the FOMC [Federal Open Market Committee] maintains the fed funds rate at its current level of 0-25 basis points for too long, both anticipated and actual inflation have to become negative.” Using a different theoretical framework, James Bullard (2010), president of the Federal Reserve Bank of St. Louis, also noted recently that policymakers must be wary of falling into a *deflationary trap*. For Kocherlakota, the issue arises from the FOMC’s statement:

The Committee will maintain the target range for the federal funds rate at 0 to 1/4 percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an *extended period* (emphasis added).¹

This statement seems to imply that the FOMC will keep the target funds rate near zero until (i) economic activity increases significantly or (ii) inflation begins to accelerate significantly. Kocherlakota notes that “long-run monetary neutrality is...uncontroversial.” Monetary neutrality implies that monetary policy can have no permanent effects on the real economy—for example, economic growth, the unemployment rate, and the real rate of interest. Economic growth and the real interest rate are determined by economic fundamentals that are not affected by monetary policy in the long run. This fact, coupled with the fact that the nominal interest rate is equal to the real interest rate plus expected inflation, implies that if the FOMC keeps the nominal funds rate near zero for an extended period, the long-run equilibrium rate of inflation consistent with a near-zero nominal funds rate must be negative.

This scenario raises an interesting question: Must the FOMC’s funds rate target increase before inflation, or will inflation increase and cause the FOMC to increase its nomi-

nal funds rate target? Conventional thinking about monetary policy suggests that policymakers should keep the overnight federal funds rate low because the low nominal rate necessarily translates into low real rates in the short run (i.e., as long as the inflation rate remains positive). For example, the 1-year Treasury rate averaged 30 basis points in July 2010, while the consumer price index inflation rate for the year ending in July was 1.31 percent. This means that anyone purchasing a 1-year Treasury security can expect to earn a negative return of about 1 percent if the inflation rate over the next year is the same as during the previous year. Of course, if the inflation rate should decrease, the actual real return would be higher.

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The motivation for keeping real interest rates low is simply that low real interest rates are thought to stimulate aggregate demand, which will increase economic output. As the economy recovers and inflation picks up, the FOMC will adjust its interest rate target to a level that is consistent with both a positive equilibrium real interest rate—determined by economic fundamentals—and a rate of inflation consistent with the FOMC’s objective of price stability.

Kocherlakota suggests that while this approach sounds simple, it isn’t. Specifically, he notes, “When real returns are normalized, inflationary expectations could well be negative, and there may still be a considerable amount of structural unemployment.” In such a circumstance, Kocherlakota raises the concern that the FOMC “might be inclined to keep its target rate low. That kind of reaction would simply re-enforce the deflationary expectations and lead to many years of deflation.”

Kocherlakota considers this scenario “highly unlikely”; however, it can be easily avoided if the FOMC begins now to adjust its funds rate target up to a level more in line with economic fundamentals consistent with a positive real interest rate and with the FOMC’s implicit inflation objective. Most economists believe that the long-run equilibrium real interest rate is in the neighborhood of 2 to 3 percent; however, the real rate may be somewhat lower during periods of economic slack (say, 1 percent). Also, most analysts believe that the FOMC’s implicit inflation objective is about 2 percent. These numbers suggest that the funds rate target consistent with economic fundamentals and the FOMC’s objective for price stability is somewhere in the range of 3 to 5 percent. This means that the FOMC could increase its target for the funds rate to about 2 percent and still have a very accommodative monetary policy.

While neither Kocherlakota nor Bullard suggest such a change in policy, one voting member of the FOMC, Thomas Hoenig (2010), president of the Federal Reserve Bank of Kansas City, has suggested that the FOMC should slowly increase the funds rate target to 1 percent and then assess the economic and financial conditions to determine whether further adjustments are warranted. The Bank of Canada appears to be following this procedure. Since reducing its overnight rate target to 25 basis points on April 21, 2009, the Bank of Canada has increased the target 25 basis points at its past three policy meetings.²

Such a policy offers several advantages, including virtually eliminating the possibility of the deflationary scenario that worries Kocherlakota and Bullard. If the policy is presented in the context of Kocherlakota’s analysis—that it is simply an adjustment to keep the target funds rate more in line with economic fundamentals consistent with a positive real rate and price stability—it could prevent a further erosion of inflation expectations, which have declined in recent months.³ It would also make it considerably easier for the Fed to return to normal monetary policy operations when the economy fully recovers.⁴

Importantly, such a change in policy would likely have a minimal effect on the effectiveness of monetary policy for promoting a sustained economic recovery. A funds rate target of 1 or 2 percent is still very low relative to the rate consistent with the long-run equilibrium real rate, and the FOMC’s implied inflation objective. Hence, monetary policy would remain accommodative.

Furthermore, monetary policy has already been effective in improving economic activity: It is extremely likely that real gross domestic product will be at or above its pre-

recession peak level in the third quarter of 2010, and most forecasters expect economic growth at or near potential in 2011, even though growth is now expected to be slower than previously forecast for the remainder of the year. As Kocherlakota conjectured, employment growth could remain sluggish for some time and the unemployment rate uncomfortably high even as output grows at or near potential, but there is little that monetary policymakers can do to increase employment apart from promoting economic growth. Monetary policy alone cannot correct the dislocations in the labor market that resulted from the severe contractions in residential and commercial real estate and the recession more generally. ■

References

- Bullard, James. “Seven Faces of ‘The Peril.’” *Federal Reserve Bank of St. Louis Review*, September/October 2010, 92(5), pp. 339-52; <http://research.stlouisfed.org/publications/review/10/09/Bullard.pdf>.
- Hoenig, Thomas M. “The High Cost of Exceptionally Low Rates.” Speech at the Bartlesville Federal Reserve Forum, hosted by Bartlesville Chamber of Commerce, Bartlesville, Oklahoma, June 3, 2010; www.kansascityfed.org/SpeechBio/HoenigPDF/Bartlesville.06.03.10.pdf.
- Kocherlakota, Narayana. “Inside the FOMC.” Speech in Marquette Michigan, on August 17, 2010; www.minneapolisfed.org/news_events/pres/kocherlakota_speech_08172010.pdf.
- Thornton, Daniel L. “The Lower and Upper Bounds of the Federal Open Market Committee’s Long-Run Inflation Objective.” *Federal Reserve Bank of St. Louis Review*, May/June 2007, 89(3), pp. 183-93; <http://research.stlouisfed.org/publications/review/07/05/Thornton.pdf>.
- Thornton, Daniel L. “The Unusual Behavior of the Federal Funds Rate and Treasury Yields: A Conundrum or an Instance of Goodhart’s Law?” Working Paper No. 2007-039D, Federal Reserve Bank of St. Louis, revised August 2010; <http://research.stlouisfed.org/wp/2007/2007-039.pdf>.

¹ Board of Governors of the Federal Reserve System. FOMC press release, August 10, 2010; www.federalreserve.gov/newsevents/press/monetary/20100810a.htm.

² The economic fundamentals in the United States and Canada are somewhat similar. For example, real gross domestic product growth over the past four quarters was 3.2 percent for the United States and 3.4 percent for Canada, and both countries experienced a significant slowing of output growth in the second quarter this year. The U.S. unemployment rate has declined 0.6 percent, compared with 0.8 percent for Canada. The Canadian unemployment rate is much lower, however (7.9 percent compared with 9.5 percent in the United States); and Canada’s employment growth during the first half of 2010 was faster (3.7 percent compared with 2.1 percent for the United States).

³ See Thornton (2007) for a specific example of the effects of the FOMC’s policy statements on inflation expectations.

⁴ Critics of this approach argue that if inflation expectations do not adjust, ex post, real interest rates would rise or the increase in the funds rate would increase longer-term rates, which could have a contractionary effect on prices—which, in turn, could reduce rather than increase inflation expectations. See Thornton (2007) for an discussion of why the effect on long-term rates is likely to be negligible.