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The Monetary Policy Transmission Mechanism?

Despite the fact that the Federal Open Market Committee (FOMC) has increased its target for the federal funds rate by 25 basis points at each of its previous ten meetings, and markets anticipate still further increases, the 10-year Treasury yield has remained largely unchanged. (See p. 9.) Chairman Greenspan recently suggested that the behavior of long-term rates in the face of such changes in the funds rate is “clearly without precedent in our recent experience.”¹

In his final speech before leaving the Fed, former Governor Ben Bernanke gave an explanation for this “unprecedented” experience. Specifically, Bernanke provides strong evidence that “the relatively low level of long-term real interest rates in the world today” is the result of structural change over the past decade that “has created a significant increase in the global supply of saving—a global saving glut.”² One possible implication of Bernanke’s analysis is that domestic real long-term interest rates are determined in a global market, whereas short-term interest rates are determined in domestic markets by monetary policy actions. If real long-term yields are determined in the global market, the core real rate in each country would be the same. Cross-country differences would be due to idiosyncratic risk factors. This possibility is supported by the fact that the inflation index yields on long-term bonds in the United States, France, and the United Kingdom have been relatively close to each other and behaved similarly in recent years. (See p. 11.)

The possibility that domestic real long-term interest rates are segmented from domestic short-term rates has strong implications for perhaps the most widely held theory of the monetary policy transmission mechanism—the interest rate channel of monetary policy.

The interest rate channel of monetary policy exists if monetary policy actions affect interest rates that cause individuals and businesses to alter their spending decisions that, in turn, bring about changes in output and prices. While consumption accounts for more than two thirds of gross domestic product (GDP), it is relatively stable over time and is thought to be relatively insensitive to changes in interest rates. In contrast, GDP’s most variable component, investment, is thought to be more interest sensitive.

Investment spending might be more sensitive to long-term interest rates than to short-term rates, such as the overnight federal funds rate, which the FOMC targets. The crucial link between the federal funds rate and the long-term rate is the expectations hypothesis (EH), which states that at each point in time the long-term rate is equal to the average of the short-term rate expected to prevail over the maturity of the long-term asset plus a constant risk premium. If the EH is correct, policy-makers affect long-term rates by changing current and expected future short-term rates. There is virtually no empirical support for empirical implications of the EH, however. The possibility that domestic real long-term interest rates are segmented from domestic short-term rates provides a new reason to question its validity and, consequently, the interest rate channel of monetary policy.

If long-term real interest rates are determined in a global market, the FOMC’s scope for affecting domestic real long-term yields by adjusting its target for the federal funds rate may be limited. It seems unlikely that changes in U.S. monetary policy would have no impact on conditions in the global market. Nevertheless, to the extent that long-term rates are affected by conditions other than the market’s expectation of short-term interest rates, both the magnitude and timing of the effect of FOMC actions on long-term rates would be limited—hence, so would any impact that monetary policy has on inflation and output through the adjustment of long-term interest rates.

Of course, if the Fed affects inflation and output mainly through short-term interest rates, rather than long-term rates, the FOMC’s ability to influence economic activity via the interest rate channel would not be impaired. Finally, the possible segmentation of the long-term rate from the effect of policy actions on the short-term rate may not impair the FOMC’s effectiveness if monetary policy works through other channels.

—Daniel L. Thornton

¹Greenspan, Alan. Monetary Policy Report to the Congress before the Committee on Financial Services, U.S. House of Representatives, July 20, 2005; <http://www.federalreserve.gov/boarddocs/hh/2005/july/testimony.htm>.

²Bernanke, Ben S. “The Global Saving Glut and the U.S. Current Account Deficit.” Speech presented as the Sandridge Lecture, Richmond, Virginia, April 14, 2005; <http://www.federalreserve.gov/boarddocs/speeches/2005/20050414/default.htm>.