

## RESEARCH SUMMARY

## Central Bank Control over Interest Rates: The Myth and the Reality

---

The Federal Reserve's (Fed's) outlook on the economy has long been the subject of intense speculation as observers have tried to divine the Fed's next change of its target interest rate. The conversation surrounding the central bank's operations makes it seem as though the Fed directly controls interest rates. In fact, the extent of this control is grossly overestimated by the general public and overstated even by monetary economists.

In “[Central Bank Control over Interest Rates: The Myth and the Reality](#),” San Jose State University economics professor Jeffrey Rogers Hummel explores the popular belief in central banks' influence over interest rates and presents a more sophisticated description of the relationship between monetary policy and the real (inflation-adjusted) rate of interest, based on both the conventional theory and on empirical and historical evidence. While central banks may have some limited impact on real interest rates in the short run, this impact will be temporary, regardless of any central bank's actions.

### THE CONVENTIONAL WISDOM

- Sophisticated observers are familiar with the *liquidity effect*, a short-run, immediate impact that affects both nominal and real (inflation-adjusted) rates, with an expansionary monetary policy lowering interest rates and vice versa.
- The liquidity effect will be offset by the *income effect*, as the lower interest rates associated with expansionary monetary policy encourage increased real investment and income, while the increased money stock simultaneously drives up the price level, driving real interest rates back to their previous level.
- The resulting long-run neutrality of money reflects the fact that, while an increase in the growth rate of money can initially lower both real and nominal rates, the effect is reversed as anticipated inflation drives up nominal rates, bringing real rates back to their previous level.

### DURATION AND MAGNITUDE OF IMPACTS

- How long it takes the intermediate income effect to return real interest rates to their previous level remains an open question. But the speed at which markets price inflation into nominal interest rates suggests that real rates cannot remain far from equilibrium levels for very long.
- The magnitude of the liquidity effect's impact on rates casts even greater doubt on the ability of central banks to control interest rates. The Fed could more accurately be described as a “price taker” in US and global credit markets, with the Fed's relatively small balance sheet being unlikely to greatly influence market rates.

- This effect could be augmented by the degree of segmentation in credit markets. The greater the segmentation, the greater the Fed's ability to exert some influence on targeted rates, although any wider impact on the economy will thereby be dwarfed.
- On the other hand, if credit markets are not significantly segmented, the liquidity effect on interest rates overall cannot be very large.

### **EMPIRICAL AND HISTORICAL EVIDENCE**

It is not clear whether the Fed even temporarily moves short-term rates or whether it simply follows the market.

- For example, from January 2002 to January 2004, the fall in Treasury bill yields consistently preceded the fall in the Federal Funds target rate.
- Another case is the common belief that interest rates were low in the early-to-mid 2000s because of then Federal Reserve Chairman Alan Greenspan's expansionary monetary policies. In fact, a variety of measures actually showed a slowdown in growth during this period. Moreover, the declining increases in these measures were dwarfed by inflows of savings from abroad, which were likely a better explanation for low interest rates.

### **CONCLUSION**

In a globalized world of open economies, the tight, sustained control of central banks over real interest rates is a mirage. Although central banks remain players in the loan market, important enough that they can push short-term rates up or down slightly, it is the market that ultimately determines real interest rates.