

Pushing on a String

The ability of monetary policy to slow an overheating economy is rarely questioned. However, the efficacy of monetary policy to revive a sagging economy has been long debated. Some economists argue that monetary policy is largely powerless to revive economic activity after a downturn, comparing easy monetary policy to “pushing on a string.” This idea has garnered renewed attention in recent years, in no small part due to weak recoveries following the past two recessions, despite aggressive monetary easing.

Why might one think that the effect of a monetary policy stimulus on the real economy is smaller than that of a monetary policy tightening? One explanation posits an asymmetry in the extent to which prices adjust following a monetary policy action. In the long run, changes in the monetary policy instrument, such as the federal funds rate, are thought to affect only the price level and not real output. However, many macroeconomists believe that prices move sluggishly, allowing monetary policy to have some effect on real output in the short run. If prices move more sluggishly when decreasing than when increasing, a monetary policy tightening will be reflected more in output and less in prices than a monetary policy easing. Such an asymmetry in the speed of price adjustment would arise if firms were less likely to decrease than to increase wages, which could occur if firms enter labor contracts containing built-in wage increases.

To evaluate the evidence of asymmetry in the effects of a monetary policy tightening compared with easing, I use regression techniques to explore the connection between quarterly growth in real gross domestic product and past changes in the Federal Reserve’s policy instrument, the federal funds rate.¹ To separate policy tightening from policy easing, increases and decreases in the funds rate are included in the regression separately. The first row in the table gives the cumulative response of output

growth in the two years following a 1-percentage-point increase in the funds rate. That is, a 1-percentage-point increase in the funds rate is estimated to reduce quarterly output growth over the following two years by about 1.2 percentage points. The second row shows that a 1-percentage-point decline in the funds rate is estimated to increase quarterly output growth over the following two years by about 0.5 percentage points. Thus, the short-run response of output to increases in the funds rate is estimated to be over twice as large as the response to decreases in the funds rate.

Of course, these results are by no means conclusive and may be misleading for many reasons. For example, the extent to which the funds rate precedes output growth may not be a good measure of the effects of monetary policy. This would be true if the funds rate preceded output growth only because the Federal Reserve moves the funds rate in response to other economic forces that truly drive output. However, while the results should be interpreted with caution, they are consistent with the view that a monetary policy tightening has more effect on output growth than a monetary policy easing.

—Jeremy Piger

¹The regression was run over the sample period from 1963:Q2 to 2002:Q4. Other control variables in the regression included past values of output growth and inflation.

Measuring the Effects of Monetary Policy

| Policy action | Cumulative response of quarterly GDP growth (percentage points) |
|-----------------------------|---|
| Federal funds rate increase | -1.21 |
| Federal funds rate decrease | 0.53 |