

[Pushing on a string: US monetary policy is less powerful in recessions](#)

CFM-DP2013-1

Silvana Tenreyro^{1,2,3} and Gregory Thwaites¹

¹London School of Economics; ²Centre for Macroeconomics; and ³Centre for Economic Performance

Numerous empirical studies indicate that central banks can stimulate economic activity by lowering the policy interest rate---or, conversely, slow down activity by raising the policy rate. This relation between the policy interest rate and economic activity is present in many theoretical macroeconomic models, including the New Keynesian framework that is used by researchers at central banks and universities to study the impact of monetary policy. Surprisingly, both empirical studies and theoretical analyses rarely allow for the impact of changes in the central bank's policy rate to depend on the state of the business cycle. Ignoring the dependence on the state of the cycle greatly simplifies the analysis. However, for different and plausible reasons, the effectiveness of monetary policy might not be the same in recessions and booms---and whether or not this is the case is the question we seek to investigate.

Specifically, in our paper, we study the effect of changes in the Fed Funds rate, the policy rate of the Federal Reserve rate, on macroeconomic activity using a sample from 1965 until 2008. We explicitly allow the impact of such changes in the Fed Funds rate to depend on the state of the business cycle. The main result from our investigation is that over this period, changes in the policy rate have significantly affected economic activity during expansions, but have had virtually no effect during recessions---that is, when the stimulus was most needed. In particular, reductions in the policy rate induces households to increase the purchases of durables and residential investment during a boom, but have no such effect in a recession.

Our results suggests that there are risks to using empirical techniques that are too simple. Our more flexible approach reveals that changes in the policy rate have been effective in booms, but not in recessions. During recessions, authorities may need to resort to less conventional monetary policies or fiscal policies to stimulate the economy.