Monetary Policy Lag, Zero Lower Bound, and Inflation Targeting

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Abstract

Although the concept of monetary policy lag has historical roots deep in the monetary economics literature, relatively little attention has been paid to the idea. In this paper, we build on Svensson's (1997) inflation targeting framework by explicitly taking into account the lagged effect of monetary policy and characterize the optimal monetary policy reaction function both in the absence and in the presence of the zero lower bound on the nominal interest rate. We numerically show the function to be more aggressive and more pre-emptive with the lagged effect than without it. We also characterize the long-run stabilization cost to the central bank by explicitly taking into account the lagged effect of monetary policy. It turns out that, in the presence of the zero lower bound constraint, the long-run stabilization cost is higher with the lagged effect than the case without it. This result suggests that the central bank and/or the government should set a relatively high inflation target when confronted with a relatively long monetary policy lag. This can be interpreted as another justification for targeting a positive inflation rate in the long-run.