Interest Rate Rules, Forward Guidance as a Monetary Policy Rule, Zero Lower Bound on Interest Rates and the Cost Channel

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Abstract

The main aim of this study is to examine the behaviour of important macroeconomic variables under a forward guidance rule and some interest rate rules in the presence of the Zero Lower Bound on Interest Rates (ZLB) in a cost channel economy. A cost channel is said to be present in an economy if changes in nominal interest rates affect the supply-side of the economy. The ZLB is considered as an occasionally binding constraint. The forward guidance (FG) rule is an endogenous threshold-based rule while interest rate rules are represented by Taylor-type truncated rules (TTR). Under the FG rule, compared to the TTR, the following results hold, irrespective of the cost channel: First, an appropriate FG rule can avoid deflation bias while strict FG leads to an inflation bias. Second, the FG rule reduces the frequency of liquidity-trapped recessions. Third, the depth of the recession under the FG rule is lower. The existence of the cost channel amplifies the inflation bias under the FG rule. Under TTRs, the cost channel economy is more likely to fall into a liquidity trap and remain longer while the risky steady state of a cost channel economy has more deflation bias than in a no-cost channel economy. The findings of this study suggest that if a cost channel was present in an economy, the transmission of monetary policy may be different from that in a no-cost channel economy in the presence of the ZLB. If agents expect future recessions, achieving the inflation target is more challenging in cost channel economies, while irrespective of cost channel, the endogenous FG rule improves economic conditions and welfare. Therefore, central banks should pay careful attention to the cost channel of monetary policy when they set policies under such economic conditions.

JEL Classification: E31, E32, E43, E52, E58

Keywords: cost channel of monetary policy, zero rates on interest rates, interest rate rules, forward guidance rules, inflation bias, deflation bias