Optimal Interest-Rate Rules at the Zero Lower Bound: What Should a Central Bank Target? *

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Abstract

A recent lower interest rate environment limits the central bank's ability to conduct monetary policy effectively. Using a medium-scale model with a zero lower bound constraint on the nominal interest rate, we study the welfare implications of alternative interest rate rules in which the central bank adjusts its policy rates in response to price level fluctuations (price level targeting); nominal GDP fluctuations (nominal income targeting); and average inflation fluctuations (average inflation targeting) compared to a Taylor-type rule. Our findings show that nominal income targeting is the most effective policy framework among the alternative interest rate rules, and the welfare improvement achieved by switching to nominal income targeting from a Taylor-type rule is significant.

JEL Classification: E12; E32; E58; E61

Keywords: Average inflation targeting; Price level targeting; Nominal GDP targeting; Taylor-type rule; Welfare analysis; Monetary policy inertia; New Keynesian model;

^{*}All errors are ours.

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