The Effectiveness of Monetary Policy: Evidence from Market Operation-based Monetary Policy Indices

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Abstract

Open market operations (MOs) became an integral part of the unconventional monetary policy (UMP) when the policy rates hit the effective lower bound in major advanced countries since the 2008 global financial crisis. This study quantifies the impact of UMP carried out by MO on the macroeconomy in Japan from 2003 to 2019, based on four market operation based monetary policy indices (MO-MPIs). One index is characterized by a broadly defined quantitative easing index while the other three are liquidity supply indices targeting different financial market segments. In our results, we identify three distinctive regimes with different policy impacts: (1) before mid-2008, (2) from mid-2008 to mid-2016, and (3) after mid-2016. Contrary to popular belief, the drastic policy changes of April 4, 2013 (introduction of quantitative and qualitative easing) was not a regime changer. Moreover, UMP carried out by MO was the most effective in the second regime, with very strong impact of all MO-MPIs on macroeconomic variables such as GDP, CPI, government bond prices, and stock prices. Furthermore, MO-MPIs became substantially less effective in the third regime (after mid-2016), after the Bank of Japan introduced yield curve control.

Keywords: Unconventional Monetary Policy; Open Market Operations; Monetary Policy Indices; Markov Switching Vector Autoregression

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