ABSTRACT

Central banks ability to maintain macroeconomic stability is frequently put to the test by various external shocks. This research aims to analyze the extent of monetary policy effectiveness in five countries operating under the Inflation Targeting Framework (ITF). The primary focus of this study is to observe how macroeconomic losses, represented by the Loss Function, respond to the degree of central bank independence (CBI), interest rate instruments, and exchange rate movements. Additionally, the study examines whether there was a structural break caused by the sudden shift in global capital flows during the 2013 Taper Tantrum.

The method applied in this research is a quantitative approach through Panel Structural Vector Autoregression (Panel SVAR) econometric estimation. The data utilized is annual data from five sample countries New Zealand, Indonesia, Thailand, Brazil, and Chile spanning the observation period of 2005 to 2024. To extract pure shocks for each variable, the structural model implements a Cholesky decomposition restriction. The analysis is then expanded by looking at the results of the Impulse Response Function (IRF) and Forecast Error Variance Decomposition (FEVD).

Wald Test results confirm that the global liquidity crisis in 2013 caused a permanent structural break in the monetary policy transmission pattern of the sample countries. Based on the IRF graphs, the institutional authority of the central banks (CBI) was initially highly effective in suppressing the Loss Function during peaceful times, but this effectiveness disappeared and turned volatile when faced with market panic. Findings from the FEVD also show a shift in policy instruments. Before the crisis, the contribution of CBI reached 6.38%, but post-2013, the number plummeted to 0.92%. On the other hand, the portion of the interest rate instrument spiked drastically from 1.80% to 28.52%. This demonstrates that legal independence alone is not robust enough to deal with external shocks, forcing central banks to take over stability control through aggressive interest rate maneuvers.

Keywords: Monetary Policy Effectiveness, Central Bank Independence, Loss Function, Panel SVAR, Taper Tantrum.

FEB UNDIP