Exchange Rate and Interest Rate Relationship in Sri Lanka; An Analysis of Exchange Rate Channel of Monetary Policy

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Abstract:

This study examines the interest rate elasticity of exchange rate to analyze the effectiveness of exchange rate channel in the transmission mechanism of monetary policy in Sri Lanka during the period from 1978 to 2015. A negative relationship between the two variables is accepted in theoretical insights on the topic. An increase in interest rate of domestic currency leads appreciation of domestic currency against other foreign currencies. If the empirical situation is differed from theoretical explanations, decision makers would not be able to make proper decisions to achieve macroeconomic targets in the economy. Monetary policy is conducted to achieve economic and price stability, and policy shocks transforms to the economy through various transmission channels. A developing country like Sri Lanka prefer to currency depreciation to increase export earnings and to reduce import expenditure to get a trade balance increasing exports and declining imports. Expansionary monetary policy results currency depreciation, thus increases net exports. A higher economic growth can be achieved with domestic currency depreciation. In an inflationary situation, contraction monetary policy can reduce the aggregate demand with domestic currency appreciation. If there is not a negative relationship between interest rate and exchange rate, the exchange rate transmission channel of monetary policy does not support to achieve the monetary policy co-objectives.

The study uses the variables; Nominal exchange rate, interest rate on treasury bills, net exports and total external debt. Co-integration and Vector Error Correction tests are employed for the analysis due to the non-stationarity of all the variables used in the study. The results proved the negative relationship between exchange rate and interest rate as expected, and all the variables are jointly significant. The negative and significant magnitude of interest rate sensitivity of exchange rate -0.18 shows the effectiveness of exchange rate channel of the transmission mechanism of monetary policy in Sri Lanka. -27% of the disequilibrium (μ_{t-1}) in exchange rate is corrected towards long-run equilibrium by change in net exports, within one year period.

Key words: Exchange rate channel, transmission mechanism, interest rate elasticity of exchange rate, Co-integration test, Vector Error Correction Test,