

ANALYSING THE EFFECT OF EXCHANGE RATE VOLATILITY AND TRADE OPENNESS ON THE ECONOMIC GROWTH OF SRI LANKA

S.G. GalleArachchi, S.N. Dissanayake and H.S. Ganegama

*Department of Agricultural Systems, Faculty of Agriculture, Rajarata University
of Sri Lanka, Anuradhapura, Sri Lanka.*

²International Bank, Sri Lanka.

Exchange rate volatility has remained a serious issue affecting economic stability, especially in developing countries. This study was aimed to investigate the effect of exchange rate volatility on the economic growth of Sri Lanka, focusing on exploring exchange rate volatility and examining the impact of macroeconomic factors, including the exchange rate volatility, Treasury bill rate, and trade openness, on the relationship between exchange rate volatility and economic growth for the period, 1990 to 2022. To model the exchange rate volatility, a combination of ARCH and GARCH family models was used. The Autoregressive Distributed Lag (ARDL) model was utilized to explore the presence of dynamic short-run and long-run relationships between the exchange rate and macroeconomic variables. The study utilized the Augmented Dickey-Fuller test to determine the presence of a unit root and the Bounds test to establish the relationship among the variables. The results of the estimates offered evidence that exchange rate volatility persists throughout the period considered in the study and has a negative and significant effect ($P < 0.05$) on the economic growth of Sri Lanka, while trade openness exerts a positive and significant relationship with economic growth. The treasury bill rate exhibits varying degrees of influence, its immediate effects on GDP growth are found to be insignificant. The ARDL model empirical findings showed that a long-run relationship does not exist between any of the examined macroeconomic variables and the exchange rate. In contrast, a short-run relationship exists between exchange rate lag one, exchange rate lag two and trade openness. Increased and persistent volatility towards the year 2024 is revealed by the ARCH model, and furthermore, the volatility dynamics of the exchange rate appear to be adequately captured by the simpler ARCH (1/1) model. It's recommended by the study that diversification of export bases, enhancement of investment in infrastructure and human capital, and strengthening of policy coordination between fiscal and monetary authorities would mitigate the adverse effects of exchange rate volatility and promote sustainable economic recovery and growth.

Keywords: ARCH, ARDL, GARCH, GDP Growth, Treasury bill rate