EFFECT OF STRUCTURAL BREAKS ON EXCHANGE RATE AND STOCK MARKET VOLATILITY DURING ECONOMIC DOWNTURN PERIOD IN SRI LANKA

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1. Introduction

Financial markets are mainly navigated by foreign exchange and stock markets. In 2022, market volatility heightened by low investor confidence caused by unfavorable macroeconomic uncertainties and structural breaks (SB) in both currency and stock markets (SM), which are unable to predict future economic fluctuations. Therefore, this study investigates the effect of SBs in the exchange rate (EXR) and stock prices (SP) on the volatilities of respective variables.

2. Research Methodology

Daily EXR and ASPI data were collected for data analysis during the 2010-2023 period. The Bai-Perron test identified SBs, and the ARMA(p,q)-EGARCH(1,1) model with dummy variables for the SB periods was employed to explore the effect of SBs on EXR volatility and stock market volatility (SMV). The DVECH-MGARCH model and real incidents analysis were used to examine the causal nexus between EXR and SMV.

3. Findings and Discussion

Findings revealed that the volatility of SM and EXR are negatively affected by their respective SBs. The existence of a causal nexus between EXR & SMV is also confirmed. Moreover, real incidents analysis further confirmed the causal nexus between EXR structural breaks and SMV structural breaks.

4. Conclusion and Implications

The findings of this study underscore the critical interplay between exchange rate structural breaks and stock market volatility, highlighting the need for robust policy frameworks to mitigate their adverse effects. Thereby, Sri Lanka can foster a more resilient financial ecosystem, ensuring greater stability and predictability in both the exchange rate and stock market, which is essential for long-term economic growth.

Keywords: Exchange rate, Stock market, Structural breaks