Economic Analysis of the impact of rice importation on the Liberian economy

Abstract

This study analyzes the impact of rice importation on the exchange rate, inflation, and GDP in Liberia. It seeks to unearth the contribution of rice importation to the economic perils facing the country, which is visible by the continuous depreciation of the countryǿs currency, the continuous rising of the general price level, and the slum in the total output of the country. This analysis was done using time series data spanning from 1970 to 2018. The unrestricted vector autoregressive (VAR) model was employed to estimate the exchange rate, inflation, and GDP equations used in the study. However, due to the over-parameterization of the VAR estimates, the impulse response function (IRF), forecast error variance decomposition (FEVD), and Granger causality tests were conducted to analyze the dynamic relationships amongst the variables.

Results obtained from the FEVD show the following: i) rice import and interest rate influence the exchange rate; ii) exchange rate and interest rate affect inflation, and iii) domestic rice production and import influence GDP. Reports from the IRF reveal that the interest rate, foreign direct investment, and the balance of trade influence the exchange rate, and the exchange rate influences inflation. The Granger causality tests confirm the FEVD results that rice import and interest rate predict the exchange rate. The Granger causality result is also in conformity with the IRF that interest rate, foreign direct investment, and the balance of trade granger cause the exchange rate. In regards to inflation, the granger causality test results support the findings of FEVD and the IRF that inflation is granger caused or predicted by the exchange rate. Further

evidence from the Granger causality tests confirms the FEVD results that domestic rice production and import granger cause GDP.

Based on the empirical findings of the study, the following recommendations are made: The central government of Liberia must discourage the importation of rice and encourage domestic rice production. Monetary policy should be crafted with care with regards to the interest rate and exchange rate to avoid inflationary pressure in the economy. Efforts must be made to encourage foreign direct investment and improve the countryĝs balance of trade. Finally, the country should prioritize the importation of capital goods.