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STATISTICAL STUDY ON EXCHANGE RATE AND TRADE BALANCE IN SUDAN (1987-2017)

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ABSTRACT

Sudan belongs to low-income countries and facing several domestic and international economic challenges, major macroeconomic imbalances include: (exchange rate fluctuation, low gross domestic product, and high inflation).

According to Unit Root Test (Augmented Dickey-Fuller) exchange rate and exports are stationary in the second difference, the variable imports stationary in the first difference at (α = 0.05). Additionally, there is no cointegration between the variables based on Johansen Co-integration Test.

The causal relationship in the long run between exchange rate and independent variables was detected through the residual correction model (Engel-Grange Method). Moreover, there is no causal relationship between the exchange rate and (exports, imports) at 0.05 significant levels in the short run according to Granger's causality test.

Particularly, the model of simple linear regression indicates there is a weakly positive correlation (R= 48%) between exchange rate and exports. In addition, the fluctuations of 23% from exchange rate due to exports and the value of the correlation (R=57%) between exchange rate and imports are acceptable positive. Therefore, imports explain (33%) of the changes in exchange rate.

KEYWORDS: *Co- integration, Devaluation, Exports, Imports, Official Exchange Rate, Trade Balance, Sudan Economy*

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