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VOLATILITY OF STOCK MARKET RETURNS AND THE NAIRA EXCHANGE RATE

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ABSTRACT

In the wake of steadily declining oil prices, the naira-dollar (Nigeria-US) exchange rate came under severe pressure, leading to extreme volatility in the foreign exchange rate. This study seeks to explore volatility spillovers between stock market returns and the exchange rate due to speculation of foreign investors in the stock market. We employed a multivariate GARCH model (VARMA-AGARCH model) to model the transmission mechanism of mean return, return spillover and shock spillover between the stock market and the foreign exchange market, using their return series. Results indicate the presence of a transmission mechanism between these markets. Shock spillovers however showed a stronger uni-directional transmission of shocks from the stock market to the foreign exchange market without breakpoints. When breakpoints were considered, a bi-directional spillover pattern was observed across both markets. We thus bring into perspective the role played by foreign portfolio investors in determining the exchange rate of a small, open, emerging market economy. Short term capital flows into emerging market securities may thus distort the long-run equilibrium of the foreign exchange market.

KEY WORDS: Stock market return, volatility, naira-dollar exchange rate, portfolio investors

JEL: F3

1.0 Introduction

Speculative demand in the foreign exchange market often has the tendency to destabilize activities in the real economy, as the associated severe fluctuations create an overall sense of uncertainty for market participants (Obstfeld and Rogoff, 1998). Volatility in the exchange rate may result in varied effects across the real economy and financial markets, as the balance sheet of firms exposed across national borders deteriorate rapidly while assets held by portfolio investors also depreciate in value.