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# The Impact of Exchange Rate Volatility on Stock Market Performance in Nigeria from 1981 to 2019

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**Abstract:** *This study examined the impact of exchange rate volatility on stock market performance by adopting quarterly data for Nigeria from the period 1981 - 2019. The Eview9 Statistical Software was employed to analyze the data empirically. The Unit root test was adopted to test the stationarity of variables. The data were analyzed using a three-step procedure and generalized autoregressive conditional heteroskedasticity (GARCH). The models were tested with different econometrics and statistical instruments. The results from the findings indicate that exchange rate volatility was statistically significant with productivity, however, it was revealed that exchange rate volatility is high and that shocks in exchange rate reduce the level of productivity in Nigeria as well as reduces the level of stock market performance in Nigeria. We recommend amongst others that, the government should adopt appropriate macroeconomic policies to cushion the effect of exchange rate volatility so as to create an investment-friendly environment that has the capacity to boost investment, in order to help to guarantee employment generation, maintain a high level of productivity and boost the performances of all the sectors of the economy for rapid economic development in Nigeria. We also suggest that there should be proper coordination of fiscal and monetary policies that target the improvement of the performance of the stock market in the country. The government should adopt a fixed exchange rate to checkmate its volatile nature.*

**Key Word:** *Exchange rate, Volatility, Stock exchange market, Market performance, Nigeria*

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## INTRODUCTION

The exchange rate is the rate at which one currency is exchanged for another. It reflects the ratio at which one currency can be exchanged with another currency. It is the value of a foreign nation's currency in terms of the home nation's currency. It also specifies how much one currency is worth in terms of the other. The exchange rate plays an important role in economic development and attainment of macroeconomic objectives such as economic growth, price stability, a favourable balance of payment conditions and equitable distribution of income if properly managed. Economic growth is measured in terms of persistent growth in national income which translates to an increase in the number of goods and services produced in an economy. Growth is said to occur when a country's productive capacity is on the increase (Akpan, 2008). Production of goods and services involve exports and imports which in turn involves transactions in foreign exchange. Maintaining relative exchange rate stability is crucial to both internal and external balance and economic growth. It is an important economic variable as its appreciation or depreciation affects the performance of all the sectors in an economy and

most especially the manufacturing sector (Odili, 2014). The choice of exchange rate regime can affect economic growth through its effects on macroeconomic variables which are important determinants of growth. Factors such as productivity, export, international trade, capital flows, and economic growth are highly affected by the variation of the exchange rate. According to the balance of payment theory, the exchange rate of the currency of a country depends on its balance of payment position.

The stock market activity affects the economy through the creation of liquidity. It contributes to an increase in investment, level of productivity, economic growth and development by enhancing the creation of liquidity for investments. The stock market facilitates the process of channeling funds from the surplus unit to the deficit unit for productive investment. The stock market is an organized market that provides facilities to the government and private investors to raise long term loans to finance their expenditures and for expansion and modernization of productive sectors. It also exists to offer a platform where suppliers of capital can quickly and easily restore their liquidity. The stock market serves the purpose of capital mobilization and allocation of the nation's capital resources among various competing alternative uses. The stock market functions as an intermediary for buying and selling securities such as stocks, shares, debentures and Government bonds. The essence is to ensure adequate fund channelization for productive investments. Economic growth in the modern economy hinges on an efficient financial sector that pools domestic savings and mobilizes foreign capital for productive investments. The stock market plays an important role in the mobilization of financial resources for long term investment through financial intermediation (Acha and Akpan, 2019).

There is a widespread contention that volatility of the exchange rates of developing countries is one of the main sources of economic instability around the world. The impact of the global economy on developing countries like Nigeria is driven significantly by swings in the currencies of the major economic powers like United State. In recent years these swings have been enormous, volatile and frequently unrelated to underlying economic fundamentals (Philippe, et al., 2006).

This has prompted monetary authorities in developing countries that keep close trade ties with the developed nations to intervene on totally ad hoc and episodic basis, without any clear sense of a sustainable equilibrium. Such exchange rate stability intervention typically comes too late to prevent severe currency misalignment and volatility. These imbalances, in turn, trigger major economic distortions, protectionist trade pressures, and inevitably sharp currency reversals (Philippe et al., 2006). Though, currency instability and volatility could only exist during flexible Adeoye & Atanda exchange rate regime where the cross -country exchange rate is determined by the forces of demand and supply. The liberalization of capital flows in developing countries over the last three decades and the enormous increase in the scale and variety of cross - border financial transactions have clearly increased the magnitude of exchange rate movements in most countries with underdeveloped capital markets and where there is not yet a track record of consistently stable economic policies. Currency crises in emerging markets, which have become more frequent in the last two decades, are especially notable cases of large exchange rate volatility (Carrera & Vuletin, 2003). This has been of particular concern to developing countries and emerging market economies. In addition, the transition to a market-based system often

involves major adjustments in the international value of these economies' currencies. Other changes in the world economy may have reduced the impact of exchange rate volatility.

It should be noted that previous studies dealing with the effects of exchange rate volatility on economic growth have often yielded mixed results. This is explained at least by two reasons. First, the effects of exchange rate volatility on the dynamics of growth are contradictory. On the one hand, exchange rate volatility may be considered as a shock absorber and seems to be more appropriate for countries experiencing frequent real shocks; on the other hand, volatility may be associated with higher macroeconomic volatility in terms of international trade, investment, and economic growth. Second, the relationship between exchange rates and economic growth also depends on other control variables such as financial development (Aghion, et al. 2009, Ndambendia & AlHayky 2011), and exchange rate regime . Also, empirical evidence linking stock market development indicators to output has been inconclusive even though the balance of evidence is in favour of a positive relationship between stock market development indicators and stock market performance. It is also evident in literature that most studies also used annual data and ordinary least square (OLS) technique Nsofo, et al. (2017), Subair and Salihu (2013), and Ezeoha, et al. (2009). This is the gap the present study intends to fill as it examines the impact of exchange rate volatility on stock market performance in Nigeria by employing a three-step procedure, and generalized autoregressive conditional heteroskedasticity (GARCH) modelling. The aim of the study is to empirically investigate the impact of exchange rate volatility on stock market performance in Nigeria.

## **LITERATURE REVIEW**

### **Conceptual Clarifications**

#### **Exchange rate**

Exchange rate volatility is defined as the risk associated with unexpected movements in the exchange rate (Ilhan, 2006). The volatility is the measurement of the amount the frequency of these exchange rates as well as the rates change. With the use of futures to lock in exchange rate, it can reduce the effects of price change even though this volatility is quite difficult to avoid in such circumstances. Volatility can occur in any security that rises or falls in value. The term is most often used in conjunction with the stock market, but foreign currencies can be volatile as well. When exchange rates are floating exchange rates, as opposed to fixed exchange rates, they are likely to go up and down in value depending upon the strength of the economies involved. As a result, volatility is something that affects any business undertaking involving two different countries.

Exchange rate volatility also refers to the exchange rate of one currency note to the other. Exchange rates are never static. The supply and demand of significant currencies fluctuate over time. Thus, exchange rate volatility refers to the tendency for foreign currencies to appreciate or depreciate in value, thus affecting the profitability of foreign exchange trades. The exchange rate is defined as the price of one currency in terms of another currency. In a floating exchange rate regime, the transaction costs are higher than with a pegged or fixed exchange rate. Volatility is defined as an unobservable or latent variable, deterministic or stochastic. There have however

been studies that try to make the exchange rate volatility an observable variable, with varied results (Bauwens & Sucarrat, 2005). Exchange rates are highly volatile in the short run and are very responsive to political events, monetary policy and changes in expectations. In the long run, exchange rates are determined by the relative prices of goods in different countries (Samuelson & Nordhaus, 2001).

The exchange rate is more volatile than the fundamental variables which determine the exchange rate in the long run. Exchange rates have become more volatile in recent years due to the abandonment of the fixed exchange rates, which have resulted in a massive volume in foreign exchange transactions. These transactions have grown faster than international trade and international investments flows of capital. The risk associated with foreign exchange transactions and trading at the foreign exchange market has increased but so has also the awareness and knowledge about the subject. There are also better instruments to cover the risk. International private capital flows are much larger than trade flows today which indicates that exchange rates reflect mostly financial rather than trade flows, especially in the short run. However, the trade flow has a large influence upon exchange rates in the long run (Salvatore, 2004).

Exchange rate volatility is directly influenced by several macro variables, such as demand and supply for goods, services and investments, different growth and inflation rates in different countries, changes in relative rates of return and so forth. The present floating rate has been affected by previous real and monetary disturbances. Expectations about current events and future events are also important factors due to the large influence it has on exchange rate volatility. The volatility can also arise from “overshooting” behaviour which occurs when the current spot rate does not equal a measure of the long-run equilibrium calculated from a long-run model. If this behaviour arises because the financial market is not working correctly, high exchange rate volatility does not have to imply high transaction costs. It would only be efficient for the exchange rate to be highly volatile if the underlying economic variables are equally volatile. If not, there would exist abnormal profit opportunities for speculators that smooth exchange rate movements. The exchange rate cannot contain any pattern or signals about future rates, since it could be used to gain a profit. The volatility is a risk for a company that trade on the international market since it is a variable that cannot be foreseen (Bauwens & Sucarrat, 2005). The determination of exchange rate volatility is an important issue for both policymakers and economic agents involved in the financial market. Firms use volatility models in their estimation of risks and as inputs when they evaluate prices. The policymakers on the other hand use the information about how the factors impact the exchange rate volatility so that the most appropriate policy can be conducted (Bauwens & Sucarrat, 2005).

### **Stock Market**

The stock market is a platform where business enterprises (companies) and government raise long-term funds for various investment plans (Ifionu & Omojefe, 2013). In this wise, the stock market is an integral part of the financial system that provides an efficient delivery mechanism for mobilization and allocation, management and distribution of long-term funds for investment project (Alile & Anao, 1990). Its functions are evident through the interplay of individuals, institutions and various instruments.

Sule and Momoh (2009) see the stock market as a network of specialized financial institutions, series of mechanisms, processes and infrastructure that, in different ways, ensure the coming together of suppliers and users of medium to long term capital for investment in socio-economic developmental projects. The stock market is a segment of the financial system that accommodates certain institutions for the creation, custodianship, distribution and exchange of financial assets and management of long-term liabilities and gross fixed capital formation (Osaze, 2007). The stock market has two segments namely, the primary and secondary markets. The primary market creates the platform through which governments and corporate organizations raise fresh funds through the issuance of securities (Sa'adu, 2014). Otherwise, the primary market is known as the new issues market. These new issues include public offers, right issues and private placements. On the other hand, the secondary market provides the avenue for investors to buy or sell securities that were earlier issued in the primary market.

According to Al-Faki (2006), the secondary market can be organized or unorganized. An organized market refers to a stock market with a physical location, trading in designated (quoted) securities (for example, Nigerian Stock Exchange). An unorganized market has no physical trading location but transactions are conducted mainly through telephone calls and the computer. It is called an Over-the-Counter-Market (OTC). The OTC trades mainly in unquoted securities. The distinguishing factor between the two segments is that in the primary markets, the funds raised from investors go to the issuing entity, while in the secondary market; the proceeds from the transaction go to investors (Sa'adu, 2014).

### **Stock Market Performance Indicator**

Formal capital market activities are representatively measured by the performance of the stock market such as market capitalization, all shares index (ASI), volume and value of transactions (VAT), number of deals and new issue of securities (NIS) of the Nigerian stock exchange. Market capitalization is the total value of all shares of publicly-traded company. Market capitalization is calculated by multiplying the total number of shares by the market price per share. Market capitalization is one of the basic measures of the worth of publicly-traded company; it is a way of determining the actual value of a company. Also, the investment community uses this figure to determine a company's size or worth, as opposed to sales or total assets figures (Ekezie, 2002). Generally speaking, a higher market capitalization indicates a more valuable company. Consequently, it is the sum of the current market value of all securities traded on a financial market. New issues market is the market where companies can raise finances by issuing shares or by floatation of securities. In other words, it is when a company attempts to raise funds by issuing additional shares or an initial public offer (IPO) to the general public who would wish to invest in the shares of the company. An initial public offering (IPO) is a first-time offering of shares by a specific firm to the public (Agarwal, 2001). Volume of transaction refers to the total amount of securities traded in the capital market regardless of what type of security instrument. The volume of transactions often determines the level of transactional activities or the performance of the capital market as far as the business transaction of the market is concerned and this, in turn, could have an effect on the growth of an economy which could either be a positive or negative outcome of the transaction volume (Adewoyin, 2004).

## **Theoretical Framework**

Though there are several theories on the connections between exchange rate fluctuations, stock market operations and the working of an economy, some of these theoretical views which are relevant to this study were presented in this section. The abridged versions of the theories were discussed.

### **The Purchasing Power Parity**

The theory of purchasing power parity (PPP) illustrates the relation between prices and exchange rates. Even though the origins of the PPP concept is traceable to the Salamanca School back in 16th-century Spain, its modern use as a theory of exchange rate determination began with the work of Gustav Cassel (1918), who recommended PPP as a means of amending pre-World War I exchange rate parities for countries resolved to return to the gold standard system after the conflicts ended. Some modification was necessary because countries that left the gold standard in 1914 witnessed extensively different rates of inflation during and after the war. As a principle of exchange rate determination, the easiest and powerful form of PPP (i.e. absolute PPP) is based on an international multi-good edition of the law of one price. Absolute PPP envisages that the exchange rate should adjust to equate the prices of national baskets of goods and services between two countries because of market forces driven by arbitrage.

#### **2.2.3 The Monetary Model of Exchange Rates**

This theory postulates that exchange rates are determined in the process of equilibrating or balancing the stock or total demand and supply of money in each nation. According to the monetary approach, the nominal demand for money is stable in the long run and positively related to the level of nominal national income but inversely related to the interest rate. The nation's money supply is equal to its monetary base times the multiplier. The nation's monetary base is equal to the domestic credit created by its monetary authorities plus its international reserve. Unless satisfied domestically, an excess supply of money in the nation results in an outflow of reserves, or a balance of payment deficit under fixed exchange rates and a depreciation of the nation's currency (without any international flow of reserves) under flexible exchange rate. The opposite takes place with an excess demand for money in the nation.

#### **2.2.4 The Portfolio Balance Approach**

The portfolio balance approach also called the asset market approach differs from the monetary approach in that domestic and foreign bonds are assumed to be imperfect substitutes, and by postulating that the exchange rate is determined in the process of equilibrating or balancing the stock or total demand and supply of financial assets (of which money is only one) in each country. Thus, the portfolio balance approach can be regarded as a more realistic and satisfactory version of the monetary approach. In the portfolio balance model, individual and firms hold their financial wealth in some combination of domestic money, domestic bond, and a foreign bond denominated in foreign currency.

## **Empirical Review**

Lawal and Ijirshar (2013) empirically analyzed the nexus between exchange rate volatility and the performance of the Nigerian stock market from 1986 to 2013. Using the GARCH and the Error Correction Mechanism (ECM); the study observed that growth in key macroeconomic indicators such as the exchange rate and the inflation rate has impacted negatively on the growth of the Nigerian stock market. Furthermore, it was found that long-run volatility in the exchange rate has a strong negative impact on the change in the performance of the Nigerian stock exchange market having proved the uni-directional relationship through the pairwise Granger causality test. The study thus recommends the use of fiscal policy and diversification to avoid subsequent external shocks because the main problem of Nigeria in the international market is its heavy dependence on oil and that manufacturing firms should produce quality goods that attract international patronage in order to have monetary and exchange rate control and remote causes should also be addressed like providing enabling business environment-friendly atmosphere for domestic and foreign investors.

Mlambo, et al (2013) assessed the effects of currency volatility on the Johannesburg Stock Exchange. The Generalized Autoregressive Conditional Heteroskedasticity (GARCH) model was adopted in determining the association between exchange rate fluctuation and stock market behaviour in the study. Specifically, monthly South African stock market data between 2000 and 2010 were used. The data frequency selected ensured an adequate number of observations. A very fragile association between currency fluctuation and stock market performance was validated. The research finding supported the submission that prime overdraft rate, as well as the total mining production, inversely impact the market capitalization. Interestingly, the US interest rates were discovered to have exacted a positive effect on Market capitalization. The study recommendation was developed on the basis of using exchange rate policy as an incentive to attract foreign portfolio investment. This is based on the outcome that the South African stock market rarely suffers from the negative impact of exchange rate fluctuation. The weak association reported to exist between currency fluctuation and the stock market implies that the South African stock exchange can be more enticing as a safe market for foreign investors. However, investors, bankers and portfolio managers will require proper monitoring of foreign exchange rate fluctuation from exacting a spill-over effect on the stock market. Despite a fragile link between the South African currency fluctuation and the country's stock market performance, it does not significantly interpret that investors and portfolio managers should fail to guide the developments between both variables.

Ogbole and Aladejare (2015) examined the extent of the causal relationship between stock market variables and economic performance in Nigeria for the period 1981 to 2012. The findings of the study show that the performance of the economy is influenced by the level of real interest rate, the total number of deals, the total value of deals and the market capitalization. Base on the study findings, the study recommends an enabling macroeconomic environment for the purpose of adequately improving the performance of the stock market. The recommendation from the study finding was for stock market managers to address policy issues, for the purposes of improving investor confidence through better policy development, objective application, and apt supervision to provide for a stable macroeconomic environment.

Kennedy and Nourizad (2016) empirically investigated the effect of the volatility of the exchange rate of the U.S. dollar vis-à-vis the euro on U.S. stock market volatility while controlling for a number of drivers of stock return volatility. Using a GARCH (1, 1) model and using weekly data covering the period from the week of January 1, 1999, through the week of January 25, 2010, it was found by the study that the 9/11 terrorist attack, bear markets, fluctuations in jobless claims, and negative equity market returns increase financial volatility. However, no conclusive results were found regarding the effect of fluctuations in M2, or incorrect expectations of changes in the federal funds' target rate. Furthermore, it is found that when major drivers of financial volatility are controlled for, increased exchange rate volatility exerts a positive and statistically significant effect on the volatility of stock returns. The study then recommends that monetary policymakers need to take this effect into account when formulating exchange rate actions within the prevailing managed float.

Abimbola and Olusegun (2017) appraised the relationship between exchange rate volatility, stock market performance and aggregate output in Nigeria. Using quarterly time series data alongside applying the ARCH and GARCH model, Bayesian VAR, VAR causality and Granger Causality model; the study found that Exchange Rate and Stock price are Volatile in nature. Furthermore, the study observed that the dwindling nature of the exchange rate, grossly affect aggregate output. The study also revealed that there is a high degree of a positive relationship between Exchange rate, stock Price Movement and aggregate output. More so, Exchange rate volatility Granger causes stock price movement and aggregate Output and vice versa. The study further revealed a significant positive response of aggregate output to stock market performance and volatility in the exchange rate. The joint causality revealed the volatility of the exchange rate, impact on stock price, and aggregate output in Nigeria. Thus, concluding that there is a clear causal relationship between exchange rate volatility, stock market performance and aggregate output in Nigeria.

Parker and Boxer (2021) examined the effect of exchange rate volatility on productivity in India adopting the Autoregressive distributed lag technique. They proxied productivity with real gross domestic product and their findings established that an inverse relationship exists between exchange rate volatility and productivity in India.

## **METHODOLOGY**

### **Model Design**

The method adopted in this study is both descriptive and analytical on time series. The researcher adopted the quasi-experimental design called correlational research design which according to Hassan (1995), aims at establishing relationships between variables and to know if the relationship that exist is significant. Another justification for the use of quasi-experimental research design is that the study is descriptive and analytical on the basis of stochastic statistics and the variables are not under the control of the researcher.

**Model Specification**

**Exchange Rate Volatility and Stock Market Performance Model**

MCR= f (EXRV, BOP, INTR) 1

The three stage least square (3SLS) form of the model can be written as:

MCR = b<sub>0</sub> + b<sub>1</sub>EXRV+b<sub>2</sub>BOP+ b<sub>3</sub>INTR + u 2

The log transformed form of the equation is written as:

MCR = a<sub>0</sub> + b<sub>1</sub>EXRV+b<sub>2</sub>logBOP+ b<sub>3</sub>INTR + u. 3

b<sub>1</sub><0; b<sub>2</sub>>0; b<sub>3</sub>>0;

Where:

MCR = Market capitalization ratio as a proxy for stock market performance

BOP = Balance of payments

INTR = Interest rate

b<sub>0</sub> = Constant or intercept

b<sub>1</sub>-b<sub>3</sub> = Co-efficient of explanatory variables

u = Error term or stochastic variable

**Empirical Results and Discussions**

**Unit Root Test on Exchange Rate Volatility and Stock Market Performance Model**

The Augmented Dickey Fuller (ADF) unit root test was used to establish the stationarity of the time series data used in this study. The results of the ADF unit root test are as follows:

**Table 4.4: ADF Unit Root Test**

Variables	ADF Stat. at Levels	1% Crit. Value	5% Crit. Value	ADF Stat. at first Diff.	1% Crit. Value	5% Crit. Value	Order of Integration
Log (MCR)	-0.748690	-3.615588	-2.943427	-4.621577*	-3.621023	-2.943427	I(1)
BOP	-1.543323	-3.615588	-2.943427	-5.972460*	-3.621023	-2.943427	I(1)
INTR	-2.515593	-3.615588	-2.943427	-5.723786*	-3.621023	-2.943427	I(1)
EXRV	-2.677148	-3.615588	-2.943427	-7.007108*	-3.621023	-2.943427	I(1)

Source: Computed from E-view

Note: \*(\*\*) indicates (1%) and (5%) Significant Levels

The unit root test in above shows that all the variables are stationary at first difference [that is, I(1)] at 5% significant levels. Therefore, the time series data used in this study were stationary.

**GARCH Analysis on Exchange Rate Volatility and Stock Market Performance Model**

In order to ascertain the effect of exchange rate volatility on stock market performance, GARCH analysis was carried out. The result of the GARCH analysis is presented in table 4.5.

**GARCH Analysis on Exchange Rate Volatility and Stock Market Performance Model**

Dependent Variable: LOG(MCR)

Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)

Sample: 1981 2019

Included observations: 39

Failure to improve likelihood (non-zero gradients) after 36 iterations

Coefficient covariance computed using outer product of gradients

Presample variance: backcast (parameter = 0.7)

LOG(GARCH) = C(5) + C(6)\*ABS(RESID(-1)/@SQRT(GARCH(-1))) + C(7)

\*RESID(-1)/@SQRT(GARCH(-1)) + C(8)\*LOG(GARCH(-1))

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	6.735553	0.416900	16.15627	0.0000
EXRV	-0.001091	0.008900	-0.122589	0.9024
BOP	3.74E-05	2.54E-06	14.73944	0.0000
INTR	-0.115790	0.024373	-4.750818	0.0000

Variance Equation

C(5)	-1.464554	0.675408	-2.168401	0.0301
C(6)	1.738003	0.869203	1.999536	0.0456
C(7)	-0.235506	0.470186	-0.500877	0.6165
C(8)	0.833515	0.280342	2.973207	0.0029

R-squared	0.497015	Mean dependent var	6.098368
Adjusted R-squared	0.453902	S.D. dependent var	3.106076
S.E. of regression	2.295342	Akaike info criterion	3.537314
Sum squared resid	184.4008	Schwarz criterion	3.878558
Log likelihood	-60.97763	Hannan-Quinn criter.	3.659749
Durbin-Watson stat	1.826007		

Source: Computed from E-views 10.0, 2021

From the results in table 4.5, exchange rate volatility (EXRV) has a negative coefficient but it is not statistically significant. The result of the arch term sign and size of the parameter, C(5) is negative (-1.464554). This means that stock market performance is a negative function of the volatility in exchange rate in Nigeria, thereby, conforming to theoretical expectations that shocks in exchange rate reduce the performance of the stock market in Nigeria. The asymmetry coefficient, C(6) is positive (1.738003). This means that the variance goes up more after positive residual than after negative residual. The persistence coefficient (GARCH), C(8) is very large (0.833515). This implies that the effect of today's shock remains in the forecast of variance for many periods in the future.

### **Hypotheses Testing on Exchange Rate Volatility and Stock Market Performance Model**

**H0:** There is no significant relationship between exchange rate volatility and stock market performance in Nigeria.

The hypothesis was tested at 5% or 0.05 level of significance with t-statistic. From table 4.5, t-statistic indicates that in exchange rate volatility and stock market performance model, exchange rate volatility (EXRV) has a negative coefficient but it is insignificant on stock market performance in Nigeria, the result is in conformity with the work of Brader 2018. But balance of payments (BOP) and interest rate (INTR) were significantly related with stock market performance in Nigeria.

An increase in balance of balance of payment will result increase in stock market performance in Nigeria all things being equal. An increase in interest rate will lead to a decline in stock market performance in Nigeria all things being equal.

### **Discussion of Findings**

From the regression estimates on exchange rate volatility and stock market performance model, it was revealed that exchange rate volatility is high and that shocks in exchange rate reduce the level of stock market performance in Nigeria. The hypothesis tested proved that exchange rate volatility was statistically insignificant with stock market performance.

Also, from the regression estimates on stock market performance and output model, it was revealed that market capitalization (MCR) and all share index (ASI) were rightly signed. This implies that increase in market capitalization (MCR) and all share index (ASI) improve the level of output in Nigeria. On the other hand, interest rate (INTR) is not rightly signed. This is not in line with theoretical apriori expectations. The failure of INTR to improve the level of output may be attributed to high level of high interest rate in Nigeria. The hypothesis tested proved that stock market performance was statistically insignificant with the level of output.

### **Conclusion**

Following the findings, the study draws the conclusions that high volatility in exchange rate (EXRV) appeared to generate great shocks on the performance of stock market in Nigeria. The policy implication is that there is need to properly manage the volatility in exchange rates in Nigeria. There must be improvement in investment environment to boost the performance of stock market in Nigeria.

## Recommendations

Based on the conclusions and findings of the study, the following recommendations are made for policy:

- (i) There should be proper coordination of fiscal and monetary policies that target the improvement of the performance of the stock market in the country. This will spur high level of output and boost development in Nigeria.
- (ii) The government should adopt appropriate macroeconomic policies to cushion the effect of exchange rate volatility so as create investment friendly environment that has the capacity to boost investment. This will help to guarantee employment generation, maintain high level of productivity and boost the performances of all the sectors of the economy for rapid economic development in Nigeria
- (iii) Given the volatile nature of exchange rate the government should adopt a fixed exchange rate as to checkmate its volatile nature.

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