



EFFECT OF FOREIGN EXCHANGE REGIMES ON NIGERIAN ECONOMIC GROWTH

Eneh, Onyinye M.

Department of Accountancy,
Nnamdi Azikiwe University, Awka

Mail: o.eneh@unizik.edu.ng

Amakor, Ifeoma C.

Department of Banking and finance,
Nnamdi Azikiwe University, Awka

Mail: ic.amakor@unizik.edu.ng

Abstract

The study ascertains the effect of foreign exchange regimes on gross domestic product in Nigeria from 1999 to 2020. This study adopts a time-series research design. Data for the study were retrieved from the CBN statistical bulletin and National Bureau of Statistics for various years will be used for the study. Data were tested using regression analysis with aid of e-view 9.0. The analysis revealed that foreign exchange rate regimes have significant effect on gross domestic product of Nigeria. The study recommends that the CBN continues to critically examine the exchange rate system in Nigeria especially because of the potential devaluation of the Naira in the community of other currencies to attract more economic development.

Key words: Exchange rate regime, economic growth and International Trade

Introduction

The relationship between exchange rate and economic growth has piqued the interest of macroeconomists, policymakers, and central bankers in both rich and developing countries over the last few decades (Uddin, Rahman & Quaosar, 2014). Exchange rate policy continues to be one of the most important determinants of economic growth, particularly in emerging nations. As a result, governments prioritize its management. This is because the viability of the external sector is determined by the exchange rate of the local currency against other international currencies. In a pure market, the exchange rate, in whatever form it is conceived, is not only a significant relative price that connects domestic and global markets for goods and assets, but it also indicates the competitiveness of a country's exchange power vis-à-vis the rest of the world (Ismaila, 2016). Investors and businessmen prefer a stable exchange rate to a volatile one because of the impact on their businesses and the economy as a whole; persistent exchange rate fluctuations, which often result in continuous depreciation of the home currency, are considered volatile in exchange rate parlance (Danladi & Uba, 2016).

In one direction, the flow of commodities and services across national borders implies the movement of foreign exchange in the opposing direction. As a result, a rate of exchange between the currencies of two trading partners is required to settle indebtedness arising from trade (Nzotta, 2004). The exchange rate is the price at which a currency is regulated in the market, and it fluctuates from time to time. Government policy, the interaction of demand and supply, the activities of the Nigerian Stock Exchange (NSE), international trade oil gluts, and recession are some of the factors that affect the exchange rate (Ayodele, 2014). Since the mid-1970s, developing countries have moved away from a single currency peg and toward a more flexible exchange rate system, either by pegging to a basket of major currencies or by adopting a more flexible exchange rate regime. Developing countries have tended to adopt intermediate exchange rate regimes rather than the polar regimes of firmly fixed exchange rates and floating exchange rates in order to reduce the uncertainties arising from medium- or long-term swings in major currencies, which have caused them various problems. Severe cases of fixed regimes, such as currency union or free floating foreign exchange, are frequently regarded as "corner" solutions. Bretton Woods was dismantled in a series of events (McDonald, 2006).

Pegged regimes (hard pegs, conventional pegs, horizontal bands), intermediate regimes (crawling pegs, crawling bands, target zones), and floating arrangements are the eight categories of foreign exchange regimes used by the IMF in the post-Bretton Woods period, ranging from currency union at one end to free floating at the other: (free floats, managed floats). The increase of globalization and the appearance of financial crises, according to Obadan (2009), have conditioned the types of exchange rate regimes implemented by developing countries during the early 1990s. No doubt, the deep integration of a number of developing countries into the global economy has promoted trade in goods and services between the developed countries and the developing/emerging market economies.

According to Adekanye (2010), the Second-Tier Foreign Exchange Market (SFEM) aimed to develop a realistic market-oriented exchange rate for the naira in order to reduce demand for foreign exchange to available supply, reduce balance of payments pressures in order to prevent further accumulation of trade debts, reduce imports, stimulate export, and pave the way to self-reliant and sustainable growth.

As a result, developing countries' choice of exchange rate regime is critical to their self-defense against speculative attacks and currency crises, as well as the attainment of long-term

prosperity. However, many developing nations have been recommended to switch to polar exchange rate regimes in recent years, following the currency and financial crises of the 1990s. These include flexible or fixed exchange rates with monetary union (or currency board). Given the trilemma inherent in the premise of the impossible trinity; exchange rate stability, capital mobility, and autonomous monetary policy, it is believed that intermediate regimes between two polar regimes are no longer viable. As a result, the relationship between foreign exchange regimes and Nigeria's Gross Domestic Product was investigated in this study.

Review of related Literature

Exchange Regime in Nigeria

The Central Bank of Nigeria is in charge of managing Nigeria's foreign exchange reserves. Section 16 of the CBN Act 2007 explains this duty by stating that "the Naira exchange rate would be decided, from time to time, via a suitable method devised by the Bank for that purpose" (CBN Act, 2007). The country's foreign exchange rate has seen various variations since its independence in 1960, swinging between a fixed (parity) and flexible system, with capital control or government intervention playing a key role. Nigeria's currency rate policy, for example, had moved from a stable parity when it was completely tied to the British pound sterling by 1960. When the pound sterling was devalued in 1967, the US dollar was included in the parity exchange. The parity exchange with the British pounds sterling was terminated after the US dollar became a stronger currency in 1972. Following the depreciation of the US currency in 1973, the suspension was lifted. The following year (1974), Nigeria's currency was re-linked to both the British pound sterling and the US dollar in order to mitigate the consequences of currency depreciation (Obi, Oniore, & Nnadi, 2016). The Nigerian currency was linked to seven currencies at the end of the 1970s, primarily those of Nigeria's key trading partners. In 1985, this policy was again jettisoned in favour of quoting the naira against the dollar. The prevailing exchange rate before 1985 favoured an overvaluation of the naira. As part of the implementation of the SAP introduced by the Babangida administration in 1986 however, a market-based exchange rate system was introduced to usher in a realistic naira exchange rate.

The SAP package also saw the establishment of the Second Tier Foreign Exchange Market (SFEM), with the goals of achieving a realistic naira exchange rate through market forces, ensuring efficient resource allocation, stimulating non-oil exports, and encouraging foreign exchange inflow while discouraging outflow. It also attempted to eradicate currency trafficking by eliminating the parallel foreign exchange market and boosting the balance of payments (Mordi, 2006). Several changes were made to accomplish the goals of SFEM, according to Obi, Oniore, and Nnadi (2016). These modifications ranged from changing the Foreign Exchange Market (FEM) to Autonomous Foreign Exchange Market (AFEM) to Dutch Action System (DAS), and to the Wholesale Dutch Action System (Wholesale DAS). Bureau De Change market was introduced in 1989 to enlarge the scope of foreign exchange market, and in 1994, the fixed exchange rate system was reintroduced.

In 1999, the Interbank Foreign Exchange Market (IFEM) was established to further expand the foreign exchange market. It should be remembered that the IFEM was created as a two-way quote system with the goal of diversifying the supply of foreign exchange in the economy by encouraging the use of privately generated foreign exchange to fund interbank operations. The IFEM also attempted to help the naira obtain a more reasonable exchange rate. Due to supply-side rigidities, the government's continual expansionary fiscal operations, and the attendant problem of chronic excess liquidity in the economy, the IFEM's functioning had similar problems and setbacks as the AFEM's. The DAS was conceived as a two-way

auction system in which both the CBN and authorised dealers would participate in the foreign exchange market to buy and sell foreign exchange. The CBN is expected to determine the amount of foreign exchange it is willing to sell at the price buyers are willing to buy. The marginal rate, which by definition is the rate that clears the market, represents the “ruling” rate at the auction. Since its introduction in July 2002, the DAS has been largely successful in achieving the objectives of the monetary authorities. Till date the wholesale DAS is the system that is in place.

Exchange rate regimes and Economic Growth

The link between exchange rate regimes and economic growth is still up for debate. There are three types of studies in this area: those that believe a fixed exchange rate regime can contribute to faster economic growth; those that believe a floating exchange rate regime can contribute to faster economic growth; and those that believe a floating exchange rate regime can contribute to Moreno (2000), on the other hand, discovered that the foreign exchange system has a beneficial impact on economic growth, with nations with pegged exchange rates growing faster than those with fixed rates. These findings are based on a study of 98 emerging East Asian countries from 1974 to 1999. The main criticism of all these results was related to the fact that the analysis was unconditional, meaning that other relevant variables, like monetary target control, were not included in the analysis.

The link between exchange rate regimes and economic growth is still up for debate. There are three types of studies in this area: those that believe a fixed exchange rate regime can contribute to faster economic growth; those that believe a floating exchange rate regime can contribute to faster economic growth; and those that believe a floating exchange rate regime can contribute to Moreno (2000), on the other hand, discovered that the foreign exchange system has a beneficial impact on economic growth, with nations with pegged exchange rates growing faster than those with fixed rates. These findings are based on a study of 98 emerging East Asian countries from 1974 to 1999. opBleaney and Francisco (2007) found negative correlation between flexible FX regime and growth, using the sample of 91 developing countries, in period 1984-2001. Opposite conclusion can be found in the work of Bailliu et al (2003). They had a sample of 60 countries, in the period 1973-1998 and by using generalized methods of moments (GMM) conclude that the more flexible FX rates are associated with faster growth. De Grauwe and Schnabl (2004) found the same results, with the same method using the sample of 10 CEE countries, like Eichengreen and Leblang (2003) who used dynamic panel regression analysis on 21 countries, in period 1880-1997. Dubas et al (2005) confirm this conclusion and on sample of 180 countries, in period 1960-2002 and found that the countries with fixed foreign e regimes have, on average, higher growth (apx. 1%) compared with the countries with floating regimes, but these conclusion is significant only for non-industrialized countries. Third group of studies came up with no effect or inconclusive results. Husain et al (2005) used sample of 158 countries, in period 1970-1999, and based on pooled regression found that flexible FX regime do not provide economy growth. No relationship between regime and growth for developed economies can be found in the empirical work of Huang and Malhorta (2004). During the period 1976-2001, they used a rather small sample of 12 developing and 18 developed counties. Domac et al. (2001) validated these findings using a small sample of 22 transition countries during a 10-year period (they used different period, after 1990, for each county). It's also worth mentioning Miles' (2008) work, which applies the difference-in-differences method to a group of emerging markets that changed their currency policy. In the period 1998-2000, he used data from nations that had significant currency intervention and later shifted to more flexible rates, countries with fixed exchange rates in period 1994-2000 and countries with regimes

classified as “fixed” by L-S for the same period as previous. The findings show that exchange rates have no discernible impact on growth, inflation, or output. Moreno (2000), on the other hand, discovered that the foreign exchange system has a beneficial impact on economic growth, with nations with pegged exchange rates growing faster than those with fixed rates. These findings are based on a study of 98 emerging East Asian countries from 1974 to 1999. The main objection leveled at these findings was that the analysis was unconditional, meaning that other relevant variables, such as monetary target control, were not included. Furthermore, Eichengreen (2008) evaluated his model using a sample of 28 industries. The most basic regression shows that the real exchange rate terms are positive, indicating that a real depreciation fosters the growth of industry employment.

De Grauwe and Schnabl (2004) obtained similar results using the same method and a sample of ten CEE nations, similar to Eichengreen and Leblang (2003), who employed dynamic panel regression analysis on 21 countries from 1880 to 1997. Dubas, Lee, and Mark (2005) observed that countries with fixed FX regimes have, on average, higher growth (apx. 1%) than countries with floating regimes, based on a sample of 180 nations from 1960 to 2002. However, this finding is significant mainly for non-industrialized countries. Third group of studies came up with no effect or inconclusive results. Husain et al (2005) used sample of 158 countries, in period 1970-1999, and based on pooled regression found that flexible foreign exchange regime do not provide economy growth. No relationship between regime and growth for developed economies can be found in the empirical work of Huang and Malhorta (2004). They used a relatively small sample of 12 developing and 18 developed counties, in period 1976-2001.

Empirical Studies

Okorontah (2020) investigated the impact of macroeconomic variables on the performance of the Nigerian exchange rate. Using annual data from 1985 to 2018, the study looked at the relationship between some macroeconomic indicators and the Naira exchange rate. The OLS technique, the unit root test, the Johansson co-integration test, and the error correction mechanism were all employed (ECM). The data suggest that the unemployment rate is a crucial determinant of the Naira's exchange rate in the short and long run. From 2000 to 2017, Okegbe, Ezejiofor, and Ofurum (2019) assessed the contribution of Foreign Direct Investment (FDI) to Nigeria's Gross Domestic Product (GDP). The study was conducted using an ex-post facto research design. In order to test the assumptions, the regression analysis technique was used with the help of E-view version 9.0. According to the report, foreign direct investment in Nigeria's financial industry has had a favorable and considerable impact on the country's Gross Domestic Product. It also revealed that foreign direct investment in the oil sector has had a beneficial and considerable impact on Nigeria's Gross Domestic Product. Itodo, Adenekan and Sanni (2019) used daily percentage exchange rate returns of the naira per US-Dollar to build an AR(5)-TGARCH (1,1) to see if there is any asymmetry in the time course of the naira exchange rate volatility. Exchange rate volatility, according to the study, produces an increase in exchange rate returns (depreciation). There is also asymmetry in the movement of exchange rate volatility, with negative shocks causing lower exchange rate returns causing volatility to fall by a bigger amount than the negative shock's impact. From March 1991 through December 2014, Hu and Oxley (2017) employed Phillips, Shi, and Yu (2015)'s Generalized Sup ADF (GSADF) unit root tests to examine the evidence for exchange rate bubbles in a number of G10, Asian, and BRICS countries. They examined for explosiveness in the nominal exchange rate and its origins, as well as if such explosiveness is caused by rational bubbles or fundamentals in the exchange rate. With a few exceptions, the results for some G10 cross rates indicated that there was little indication of

bubbles in most exchange rate pairs. Moreover, there was also evidence of significant explosive behavior in the US Dollar-Mexican Peso exchange rate as well, supporting the hypothesis of a bubble in the US. From 1986 through 2015, Anyanwu, Ananwude, and Okoye (2017) investigated the impact of the real exchange rate on Nigeria's gross domestic product and industrial capacity utilization. We obtained the time series data from the 2015 Central Bank of Nigeria statistical bulletin. The developed models were estimated using the ordinary least square estimation technique. In terms of impact assessment, the pairwise granger causality demonstrates that real exchange rate has a considerable impact on real gross domestic product and that real exchange rate and real gross domestic product have a positive but negligible association. Vadivel and Sampath (2017) looked into whether the huge changes in exchange rates and foreign currency assets (FCA) seen in India's foreign exchange markets have any long memory properties. The study employed monthly data from January 1993 to March 2017 using the fractionally integrated autoregressive moving average (ARFIMA) frameworks of Granger and Joyeux (1980) and Hosking (1980) (1981). Their findings revealed that the foreign currency rate has a long memory, and they advocated that the reference rate be set and that regular participation in the foreign exchange market be encouraged to reduce exchange rate volatility and enhance exports. With the goal of investigating the characteristics of exchange rate volatility in Nigeria and modeling it with exogenous variables to measure any improvement or otherwise of the specified models, as well as to determine the forecasting performance of the specified models, David, Dikko, and Gulumbe (2016) used the GARCH (1,1) to examine the naira exchange rate vis-à-vis the US dollar, euro, British pound, and Japanese yen. In order to build an early warning system for currency crises in Nigeria, Omotosho (2015) modeled currency crisis probability as a logistic function of macroeconomic data. The study investigated into the extent to which real exchange rate misalignment may be used as a leading indicator of currency crisis by disentangling the impacts of exchange rate volatility and real exchange rate misalignment on the probability of currency crisis. The analysis discovered that, among other things, real exchange rate misalignment increases the likelihood of a crisis. The model's performance was improved by the fact that real exchange rate volatility was very stable. Dada and Oyeranti (2012) determined the impact of the currency rate on Nigerian macroeconomic aggregates. The research explores the probable direct and indirect association between real exchange rates and GDP growth using annual time series data from 1970 to 2009. A vector-autoregressive model and a simultaneous equations model within a fully described (but tiny) macroeconomic model are used to derive the relationship. There is no indication of a substantial direct association between changes in the exchange rate and GDP growth, according to the estimation results. Improvements in exchange rate management are required but insufficient to revitalize the Nigerian economy, according to the findings.

On the other hand, a few studies have determined that there is no link between exchange rate regime and current account deficits, such as Chinn and Wei's (2008) study, which looked at the subject for a sample of over 170 countries from 1971 to 2005. The authors investigated whether the degree of de facto exchange rate fixity, as measured by two frequently used indicators, affects the rate of current account reversion. They discovered that the exchange rate regime has no significant, robust, or monotonic relationship with the rate of current account reversal.

Methodology

Research Design

This study adopts a time-series research design. In this study, secondary data retrieved from the CBN statistical bulletin, and National Bureau of Statistics for various years will be used for the study. The data will cover the period from 1999-2020.

Methods of Data Analysis

To estimate and give evidence on the nature of the relationship between foreign exchange regimes and gross domestic product, this study used an ordinary least square (OLS) estimate with panel data from 1999 to 2020, covering a period of twenty-two (22) years. This was done with the help of the e-view 9.0 statistical program, and the coefficient of correlation, which is a good measure of relationship between two variables, was used to indicate the strength and direction of the relationship.

Model specification

The regression model is specified thus;

$$EXC_{it} = \beta_0 + \beta_1GDP_{it} + \beta_2DBT_{it} + \beta_3OPN_{it} + \mu_{it}$$

EXC = Exchange Rate Regime

GDP = Gross domestic Product

Control Variables:

OPN= Economic Openness measured as Import-Export ratio

DBT= Total debt

Decision rule:

Using E-View, 5% is considered a normal significance level. The accept/reject criterion was based on the p-value, alternative hypothesis will be accepted. If p-value > 0.05 otherwise reject and accept the null hypothesis.

Data Analysis

Table 1: Correlation Analysis Matrix

	EXC	GDP	DEBT	OPN
EXC	1	0.82405	0.58874	-0.64702
GDP	0.82405	1	0.40742	-0.67457
DEBT	0.58874	0.40742	1	-0.18143
OPN	-0.64702	-0.67457	-0.18143	1

Source: researcher's computation (2021)

In most regression analyses, the correlation matrix is used to assess for multi-collinearity and investigate the relationship between each explanatory variable (EXC, DEBT, and OPN) and the dependent variable (GDP) represented as deferred tax assets and liabilities. Table 2 looked at the relationship between deferred tax assets minus deferred tax liabilities as a percentage of total assets and the independent variable (EXC).

Finding from the correlation matrix table shows that dependent and control variables, (GDP=0.82, and DEBT=0.59) were observed to be positively and while OPN=-0.65 is negatively associated with EXC. In checking for multi-collinearity, we notice that no two explanatory variables were perfectly correlated. This means that there is no problem of multi-collinearity between the explanatory variables. Multi-collinearity may result to wrong signs or implausible magnitudes in the estimated model coefficients, and the bias of the standard errors of the coefficients.

Test of Hypothesis

Table 2: Regression analysis between EXC, GDP, DEBT and OPN
 Dependent Variable: EXC
 Method: Least Squares
 Date: 10/08/21 Time: 21:04
 Sample: 1999 2020
 Included observations: 22

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	116.2514	73.90478	1.572989	0.1331
GDP	0.002130	0.000639	3.332006	0.0037
DEBT	0.000579	0.000214	2.702099	0.0146
OPN	-2.167395	1.457769	-1.486790	0.1544
R-squared	0.782516	Mean dependent var		145.8806
Adjusted R-squared	0.746268	S.D. dependent var		70.73601
S.E. of regression	35.63100	Akaike info criterion		10.14727
Sum squared resid	22852.23	Schwarz criterion		10.34565
Log likelihood	-107.6200	Hannan-Quinn criter.		10.19401
F-statistic	21.58819	Durbin-Watson stat		1.148538
Prob(F-statistic)	0.000003			

In Table 2, R-squared and adjusted Squared values were (0.78) and (0.75) respectively. This indicates that all the independent variables jointly explain about 78% of the systematic variations in gross domestic product of the country over the period (1999-2020). The F-statistics (21.59) and its P-value (0.00) show that the GDP regression model is well specified.

Test of Autocorrelation: using Durbin-Waston (DW) statistics which we obtained from our regression result in table 2, it is observed that DW statistics is 1.149 and an Akika Info Criterion and Schwarz Criterion which are 10.147 and 10.246 respectively also further confirms that our model is well specified. In addition to the above, the specific findings from each explanatory variable are provided as follows:

Gross Domestic Product (GDP), based on the t-value of 3.332006 and p-value of 0.004, was found to have a positive influence on our economy and this influence is statistically significant as its p-value is less than 0.05 value. This result, therefore suggests that we should reject our null hypothesis and accept alternative hypothesis which states that foreign exchange rate regimes has significant effect on gross domestic product of Nigeria. This means that a country performs better as the analysis reveals that for every #1 decrease in foreign exchange rate regimes in Nigeria, will lead to about #1.00 increase on gross domestic product. However, this result is statistically significant and therefore should be used for any policy consideration.

Conclusion and Recommendation

The study found a positive and significant link between exchange rate regime dummy and GDP of 5%, implying that, unlike the fixed regime dummy, the flexible regime dummy has a greater potential for driving economic growth. The report advises that the CBN continue to critically analyze Nigeria's exchange rate system, particularly in light of the Naira's possible depreciation in the community of currencies in order to promote further economic development.

References

- Anyanwu, F.A., Ananwude, A. C. Okoye, N. T. (2017). Exchange rate policy and Nigeria's economic growth: a granger causality impact assessment. *International Journal of Applied Economics, Finance and Accounting* ISSN 2577-767X 1(1) pp. 1-13 2017 DOI: 10.33094/8.2017.11.1.13 © 2017 by the authors; licensee Online Academic
- Ayodele T. D. (2014). An Empirical Evaluation of the Impact of Exchange Rate on the Nigeria Economy. *Journal of Economics and Sustainable Development* 5(8); ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) www.iiste.org
- Adenekan, A. T., Sanni, G. K. & Itodo, A. I. (2019). Investigating the impact of exchange rate volatility on naira exchange rate in Nigeria. *Economic and Financial Review*. 57(3)
- Adeoye, B. W., & Saibu, O. M. (2014). Monetary policy shocks and exchange rate volatility in Nigeria. *Asian Economic and Financial Review*, 4(4), 544-562.
- Bailliu, J., Lafrance, R., & Perrault, J.F. (2003) Does exchange rate policy matter for growth?. *International Finance* 6(3) 381-414.
- Bleaney, M., & Francisco, M. (2007) Exchange rate regime, inflation and growth in developing economies – an assessment. *The BE Journal of Macroeconomics*, 7(1), 1-18.
- Dada, E.A. & Oyeranti O. A. (2012). Exchange rate and macroeconomic aggregates in Nigeria. *Journal of Economics and Sustainable Development*. 3(2); ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) www.iiste.org
- Danladi, J. D. & Uba, U. P. (2016): Does the volatility of exchange rate affect the economic performance of countries in the West African Monetary Zone? A case of Nigeria and Ghana. *British Journal of Economics, Management & Trade*, 11(3): 1-10.
- David, R. O., Dikko, H. G., & Gulumbe, S. U. (2016). Modelling Volatility of the Exchange Rate of the Naira to Major Currencies. *CBN Journal of Applied Statistics*, 7(2), 159-187.
- De Grauwe, P., & Schnabl, G. (2004) Exchange Rates Regimes and Macroeconomic Stability in Central and Eastern Europe. CESifo Working Paper, 1182, p.1-34.
- Domac, I., Peters K., Yuzefovich Y. (2001). Does the exchange rate regime affect macroeconomic performances? evidence from transition economies, Mimeo, *Policy Research Working Paper*, World Bank, p.1-76.
- Dubas, J., Lee, B-J., & Mark, N. (2005) Effective Exchange Rate Classifications and Growth, *NBER Working Papers* 11272(3) 1-34.
- Eichengreen, B. (2008). The real exchange rate and economic growth. commission on growth and development. The International Bank for Reconstruction and Development *Working Paper (4)* 1-39.
- Eichengreen, B., & Leblang, D. (2003). Exchange rates and cohesion: historical perspectives and political-economy considerations. *Journal of Common Market Studies*, 41(5), 797-822. Hu, Y., & Oxley, L. (2017). Are there bubbles in exchange rates? Some New Evidence from G10 and emerging market economies. *Elsevier Journal, Economic Modelling*, 64, 419-442.
- Huang, H., & Malhotra, P. (2004). Exchange rate regimes and economic growth: evidence from developing Asian and advanced European economies. *IMF Working paper series*, p.1-32.
- Husain, A., Mody, A., & Rogoff, K.S. (2005). Exchange rate regime durability and performance in developing versus advanced economies. *Journal of Monetary Economics* 52,(2) 35-64.

- Ismaila, M. (2016). Exchange rate depreciation and Nigeria economic performance after structural adjustment programmes (saps). *NG-Journal of Social Development*, 5(2): 122-132.
- Levy-Yeyati, E., Sturzenegger, F. (2001). Exchange rate regime and economic performance. *IMF Staff Papers* 47, 62-98.
- Levy-Yeyati, E., Sturzenegger, F. (2002). To Float or to Fix: evidence on the impact of exchange rate regimes on growth. *American Economic Review*, 12(2), 1-49.
- Levy-Yeyati, E., Sturzenegger, F. (2005). Classifying exchange rate regimes: deeds vs words. *European Economic Review* 49(3)1603-35.
- Mordi, C.N. (2006). Challenges of exchange rate volatility in economic management in Nigeria. *Bullion: Publication of the Central Bank of Nigeria*, 30(3): 17-25.
- Nzotta S. M. (2004). *Money, Banking and Finance: Theory and Practice*, Owerri: Hudson-Jude Nig. Publishers.
- Obadan, M.I. (2009). Exchange rate regimes for developing and emerging markets. A paper presented at the 3-day International Conference on “Central banking, financial stability and growth, Organized by the Central Bank of Nigeria on May 4, 2009, in Abuja.
- Obi, K.O., Oniore, J.O. & Nnadi, K.U. (2016). The impact of exchange rate regimes on economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 7(12): 115-127.
- Okorontah, C. F. (2020). Macroeconomic variables and the Nigerian exchange rate performance. *International Journal of Innovative Finance and Economics Research* 8(2):134-145, April-June, 2020. www.seahipaj.org ISSN: 2360-896X
- Omotosho, B. S. (2015). Is real exchange rate misalignment a leading indicator of currency crises in Nigeria? *CBN Journal of Applied Statistics* 6(1), 1153-179.
- Owolabi A. U. & Adegbite T. A. (2013). Inflation and capital market performance: the Nigerian Outlook. *Journal of emerging trends in economics and management Sciences (JETEMS)* 5(1):93-99.
- Oraka, A. O., Ezejiofor, R. A. & Erhirhie F. E. (2018). Effect of inflation rate on capital market performance: the Nigerian Experience (1999-2016). *International Journal of Innovative Finance and Economics Research* 6(2):20-31, April-June, 2018 .www.seahipaj.org ISSN: 2360-896X
- Okegbe, T. O., Ezejiofor, R. A. & Ofurum. D. I. (2019). Foreign Direct Investment (FDI) and Nigerian Economic Growth. *International Journal of Accounting, Finance and Risk Management*. 4(1), pp. 15-23. doi: 10.11648/j.ijafrm.20190401.12.
- Phillips, P. C., Shi, S., & Yu, J. (2015). Testing for multiple bubbles: historical episodes of exuberance and collapse in the S&P 500. *International Economic Review*, 56(4), 1043-1078.
- Uddin, K. M. K., Rahman, M. M. & Quaosar, G. M. A. A. (2014). Causality between exchange rate and economic growth in Bangladesh. *European Scientific Journal*, 10(31): 11-26.
- Vadivel, A., & Sampath, T. (2017). Exchange rate intervention and its long memory property: evidence from reserve bank of India. *The Empirical Economics Letters*, 16(10), October.