

CURRENCY DEPRECIATION AND NON-OIL EXPORT IN NIGERIA (1986 – 2022)

Ukere, Idongesit Justin, PhD¹, Samuel, Isaac Effiong², Amba, Esu Amba³ & Ekpo, Essang Effiong⁴

¹Department of Business Administration and management, Akwa Ibom State Polytechnic, Ikot Osurua, Akwa Ibom State.

²Department of Accountancy, Akwa Ibom State Polytechnic, Ikot Osurua, Akwa Ibom State.

Corresponding Email: ukereid@gmail.com¹; sambaliwo123@gmail.com²; esuamba4@gmail.com³; essang.ekpo@akwaibompoly.edu.ng⁴

ARTICLE INFORMATION

Received: 09th May, 2024
Accepted: 28th July, 2024
Published: 13th August, 2024

KEYWORDS: Currency Depreciation, Non-oil export, Government, Exchange rate policy, Float regime.

JOURNAL URL:
<https://ijois.com/index.php/jobpef>

Editor-in-chief: Assist. Prof. Dr (C) Ari Riswanto

PUBLISHER: Empirical Studies and Communication – (A Research Center)
Website: www.cescd.com.ng

ABSTRACT

In this study, the impact of currency depreciation on non-oil export in Nigeria was examined. Annual time series data spanning the period 1986 - 2022 was employed. Auto Distributive Lag technique was employed. We tested for unit root and co-integration to check for long run relationships. We found no long run relationship. The variables entered into the regression line were non-oil export (NOE) (dependent variable) against nominal exchange rate, domestic investment (DIV), oil output (OUP), trade openness (OPN), inflation rate (INLF) and import (IMP) as explanatory variables. From the results, exchange rate depreciation was negatively related to non-oil export and significant at 5 percent level in the short run. Domestic investment was negatively related to non-oil export and significant at 5 percent level. Import was positively related to non-oil export and significant at 5percent level in the short run. The F-statistics was significant at 5 percent level. Durbin Watson statistic was 2.940517. The results suggested that currency depreciation does not support non-oil export in Nigerian. We recommended that government should review the exchange rate policy from free float back to manage float regime where the government will intermittently intervene in order to control the demand and regulate supply.

1.0 Introduction

Exchange rate movements affect export in two ways, through the weakening and strengthening of the currency (i.e. the depreciation and appreciation), thus, becoming a central economic growth issue. The two effects have received a considerable attention since the collapse of the fixed exchange rates system in the early 1970s. Research related to exchange rate management and economic performance still remains of interest to economic agents and investors because it is a price.

However, exchange rate in whatever conceptualization, is not only an important relative price, which connects domestic and world markets for goods and assets, but it also signals the competitiveness of a country's exchange power vis-à-vis the rest of the world in a pure market. Besides, it is also a potent monetary tool used in the pursuit of certain economic objectives; one of such objectives is to equilibrate the balance of payments. Therefore, there is no simple answer to what determine the equilibrium exchange rate, and estimating the equilibrium exchange rate, and the degree of exchange rate misalignment remains one of the most challenging empirical problems in open economies, Nigeria inclusive (Gbadebo et al, 2020).

In Nigeria, the management of the exchange rate is vested in the Central bank of Nigeria (CBN), and since the introduction of the structural Adjustment Programme (SAP) in 1986 by the World-Bank and International monetary fund in the late 80s to solve the problem of market disequilibrium; exchange rate management has been a core macroeconomic policy function (Ekong and Onye, 2013). The exchange rate management has undergone significant changes over the past four decades, when economic condition changes, the suitability of the existing regime may be called to question, thereby necessitating the need for a change. From 1960 till date, about eight different exchange rate regimes has been introduced, these include; fixed exchange rate regime, freely floating exchange rate regime, crawling peg system, adjusted peg system, target zones System, Dutch auction system, managed float regime and currently free float regime (CBN, 2021).

In the 1960s, Nigeria operated a fixed exchange rate regime that worked fairly well for about thirteen years till 1973; the naira was fixed at par with the British pound and later the American dollar in addition to restrictions on imports via strict administrative controls on foreign exchange (Melender, 2009). In 1978, the monetary authorities pegged the naira to a basket of 12 currencies of her major trading partners. The intermittent sharp falls in international oil prices signaled the fact that oil is exogenously controlled, and consequent decline in foreign exchange receipts in the early 1980s were such that the economy could not meet its international financial commitments, and to mitigate the challenges, the stabilization act of 1982 was implemented. This led to systemic depreciation of the naira with a view to achieving a rate that would be consistent with macroeconomic performance and diversify the productive base of the economy (Oladipupo 2011 and Aliyu 2011) and (Benson and Victor, 2012).

The depreciation of currency on the other hand, is the loss of value of a country's purchasing power with respect to one or more foreign reference currencies, typically in a floating exchange rate regime (Obadan, 2006). There are essentially two main classes of loss of value of currency: planned policies and reactions to market events. Planned devaluations are brought about almost exclusively by government decisions to deliberately reduce the relative value of a currency, usually intended as a means to some improvement in the country's trading position. Market driven devaluation, by contrast, is often the formal recognition by a government, frequently during a monetary crisis, that the value of its currency relative to major world currencies has already depreciated through market forces (Obstfeld and Rogoff, 1995).

The depreciation of the domestic currency, according to Marshall (1923) and Lerner (1944) could boost economic performance through stimulating export". This is by shifting spending from foreign goods and services to domestic goods and services. For developing countries, firstly, we assume that a country has export potential, and depreciation is price elastic for export goods in foreign markets. Secondly, we also assume that depreciation is supported by sound macroeconomic fundamentals and can maintain competitiveness in foreign markets. Since the adoption of a floating exchange-rate regime by developing countries, Nigeria inclusive, the effect of currency depreciation on international trade has been the subject of both theoretical and empirical investigations. Several studies including Melander (2009) and Kalyoncu (2009) and Musawa (2014) found significant negative effect of currency depreciation on international trade. However, the studies by Kasman and Kasman (2005), Oladipupo (2011) and Kohler, Manalo and Perera (2014) provided evidence of positive effects of currency depreciation on international trade. This uncertainty gives credence to why the public sectors, foreign investor and private individuals pay a lot of attention to the exchange rate developments (Sai'du', 2014).

Contrary to the positive expectations from currency depreciation, there are challenges for countries with natural resource abundance such as crude oil in comparison with other countries; they become mono product exporting economies. In most cases, oil driven economic development leads to some undesirable consequences such as the Dutch Disease in the oil rich countries (Edun, 2012) and (Hassan and Muhammad, 2011). Given the Nigerian situation, dividing the overall export position into oil and non-oil exports, one striking feature of export trend is the dominance of oil.

In general, oil accounts for over 90 percent of total export and this has resulted in export exceeding import. In the pre-SAP era from 1981 to 1985, Nigeria's total import averaged 9.32billion naira, total export averaged 10.28billion naira, oil export averaged 9.92billion naira and non-oil exports averaged 0.35billion naira, and in the SAP era 1986 to 2000, total import averaged 367.8billion naira, total export averaged 558.6-billion-naira, oil exports averaged 530.4 billion naira and non-oil exports averaged 12.34 billion naira, this trend continues till date. See appendix 2 for evidence in the table.

From the statistics, the sharp increase in total export values and export exceeding import could be traceable to two main factors, namely; depreciation of the naira and increases in the export price of crude oil. The share of non-oil exports to the total export is relatively very negligible compared to oil export, though witnessed tremendous increase over the period 1981 to 2014. However, depreciation of domestic currency which is specific for these countries negatively affects non-oil export, while export revenue of oil sector mainly depends on oil price in the international market (Hossain and Ahmed, 2002). Following the foregoing discussions, the evidence of the Nigerian experience seems to be contrary to the assertion that currency depreciation leads to expansion of domestic economy, against the conventional wisdom. Against this backdrop, this study is a modest attempt to investigate why currency depreciation has failed to boost non-oil export in the Nigeria economy in the last 36 years. A perceptive examination of the trend of naira-dollar exchange rates and Nigeria's non-oil export position. This has raised the question of what else need to be done in order to diversify the economy and develop the non-oil sector to realize its potentials.

2.0 Theoretical Literature

The Elasticity Approach: The elasticity approach focuses on the trade balance. It studies the responsiveness of the variables in the trade and services account, constituting of imports and exports of merchandise and services relative price changes induced by devaluation. The elasticity approach to balance of payments is built on the Marshall Learner condition

(Sodersten, 1980), which states that the sum of elasticity of demand for a country's export and its demand for imports has to be greater than unity for a devaluation to have a positive effect on a country's balance of payments. If the sum of the elasticity is smaller than unity, then the country can instead improve its balance of trade by revaluation.

The Absorption Approach:

This approach summarily postulates that devaluation would only have positive effects on the balance of trade if the propensity to absorb is lower than the rate at which devaluation would induce increases in the national output of goods and services. It therefore advocates the need to achieve deliberate reduction of absorption capacity to accompany currency devaluation. The basic tenet of this approach is that a favorable computation of price elasticity may not be enough to produce a balance of payments effect resulting from devaluation, if devaluation does not succeed in reducing domestic expenditure. The approach dwells on the national income relationship developed by Keynes and it tries to find out its implication on balance of payments (Machlup, 1955)

2.1 Empirical Literature Review

Miller (2004), investigated the impact of exchange rate depreciation on exports for Singapore, using the bivariate GARCH-M model, real exports as dependent variable was tested against real foreign income (y), real risk. Using monthly data over the period of 1975 to 1992, the effect of exchange rate depreciation on exports was positive but insignificant. Second, time varying real exchange rate risk exhibited a significant negative effect on exports of substantial magnitude. Third, the exchange rate risk effect dominates the depreciation effect, leading to a negative net effect of exchange rate changes on export revenue.

Amaghionyeodiwe and Osinubi (2005), investigated what determined the choice of the exchange rate regimes in Nigeria spanning the period 1986 to 2008. The multinomial qualitative response model was used. The variables used were Monetary Stock (MS), Real Stocks (RS), inflation differential (ID), Foreign Reserve Constraints (FR) and Openness (OPEN) The result indicated that different variables from characteristics of the economy (degree of openness) and macro-economic performance (inflation differential, change in foreign reserves) to real monetary shock helped to explain the Choice of exchange rate regimes at different periods of time. Also, the empirical results indicated that domestic monetary disturbance appreciated the real exchange rate and favoured a more flexible arrangement.

Simon-Oke and Akibisal (2010), examined the impact of exchange rate deregulation on industrial performance in Nigeria, secondary data between 1975 and 2005 was employed and co-integration technique and chow breakpoint test were considered as tools of analyses. The variables used were: Industrial productivity growth rate, index of industrial output, contribution of Industrial production to GDP, exchange rate interest rate and terms of trade. The method used was error correction model (ECM). The results of the findings indicated that there exists a long-run negative relationship between exchange rate and industrial performance. This implies that deregulation of exchange rate does not impact on industrial performance in the long run in Nigeria.

Loto (2011), in his paper investigated the effect of devaluation/depreciation of the Nigerian Naira on the country's trade balance for the period 1986 to 2008. He adopted the elasticity approach; the ordinary least square (OLS) method was used to estimate import and export demand functions. The variables entered into the regression line were: Export, import, foreign trade and GNP, it was however found that devaluation/depreciation does not improve the trade

balance; since the sum of demand elasticities for imports and exports was less than unity, thus the Marshall-Lerner does not hold in Nigerian economy.

Danmola, Wakili and Oladipo (2013), examined the validity of J-curve Hypothesis in the Nigerian economy, the study employed co-integration vector Auto Regression Estimate, Granger Causality and Variance Decomposition to analyze the hypothesis under the period 1970 to 2013. The variables used were: Domestic Income, domestic demand for imports, domestic currency price paid by domestic importers general price level in the foreign country GDP, Trade balance imports and exports. Using OLS technique, they opined that there is absence of long run relationships among variables under consideration but found short-run relationship between exchange rate devaluation and trade balance through Granger causality test and therefore containing the existence of J-curve hypothesis i.e. domestic currency devaluation have bi-directional effect on trade balance in the short-run but with little effect in the long -r run and hence, the need to diversity.

Sai'du' (2014), investigated the dynamic effects of exchange rate fluctuations on exports in Nigeria between 1981 and 2012. Classical least squares and Cochraneorcutt technique was employed, the variables entered into the regression line were real exports, relative prices, foreign income exchange rate volatility. The results of the findings indicated that exchange rate volatility was positive and had significant effects on exports while others exerted negative and significant effects on exports.

Ismaila and Imoughele (2015) the study examined the impact of exchange rate on non-oil exports in Nigeria. Time series data obtained from CBN for a period of 27 years that is 1986 to 2013 was used. Augmented Dickey-Fuller (ADF) test was used for the unit root test and Johansen's co-integration test was also conducted to establish short and long run relationships between non-oil export and independent variables. The result showed three co-integrating equations which establish the existence of long run relationship among the variables. Ordinary Least Square statistical technique was used to assess the determinants of non-oil exports in Nigeria. The results showed that effective exchange rate, money supply, credit to the private sector and economic performance have a significant impact on the growth of non-oil exports in the Nigerian economy and appreciation of exchange rate has negative effect on non-oil exports which is consistent with the economic theory. They recommended among others that monetary authority should ensure exchange rate stability in order to stem inflationary tendencies in Nigeria which have adverse effect on the growth of non-oil exports.

Iwuha and Awoke (2019) examined the impact of real exchange rate on non-oil export in Nigeria using Johansen's cointegration method and Vector Error Correction Model to analyze time series data from 1975 – 2017. The results indicated a long run relationship between non-oil exports, real exchange rate, trade openness and interest rate. The variables were found to be stationary at I (1) and cointegration confirmed after determining the lag length. The result of the vector error correction method showed a negative impact of real exchange and trade openness on non-oil export while interest rate impacted positively on non-oil export. Based on these findings, they recommended that a full deregulation of the exchange rates should be pursued, while it is good to expose local industries to competition they should equally be protected and finally, promotion of non-primary exports should be encouraged.

Gbadebo, et al (2020) examined the effect of currency devaluation on the non-oil export of Nigeria. The study covered the period of 1986 to 2018. Independent variables included: Inflation Rate (INFR), Exchange Rate (EXR), and Money Supply (MS) while Non-Oil Export (NOE) represented the dependent indicator. Ordinary Least Square Regression Model was used to analyze the short run relationship between variables used for the study. The variables were

also subjected to Augmented Dickey Fuller and Philip Perron Unit Root test, Johansen Co-integration and Granger Causality. The result showed that EXR had a negative significant effect while MS had positive significant influence on non-oil export but INFR had negative but insignificant relationship on the dependent variable in Nigeria hence devaluation of currency influenced non-oil export in Nigeria negatively. They recommended that the Nigerian Government needs to increase its competitive chances by either revaluating its currency or banning importation of some items produced locally to boost the domestic economy.

Nweke, et al (2020) examined the impact of exchange rate depreciation on export performance of Nigeria for the period 1981-2018, by adopting the ex-post facto research design in the investigation. The study utilized the Auto-Regressive Distributed Lag model in the analysis. The variables analyzed in the research include oil exports, non-oil exports, total exports, exchange rate, gross domestic product, and interest rate. The results indicated that exchange rate had a positive and significant impact on oil export performance and total export performance in both the short-run and long-run, respectively. It also showed that exchange rate had a positive and insignificant effect on non-oil export performance in the short-run; while in the long-run, exchange rate had a negative and insignificant effect on non-oil export performance. Thus, they recommended that the government should, as a matter of fact, rely holistically on exchange rate depreciation policy in stimulating export performance in the economy, as it promotes and accelerates oil export and total export performance in the economy.

3.0 Research Methodology

The study used ex post facto research design, utilizing data from Central Bank of Nigeria statistical bulletin of various years for analytical purposes. To achieve the above objectives, we develop economic aggregates in line with the theoretical framework and literature reviews. The model which is used for investigating the economic effect of currency depreciation and import on the volume of non-oil exports in Nigeria is based on that proposed by Ismaila and Imuoghele (2016) with some modification. They proposed that volume of non-oil exports (NOE) is affected by the following variables: exchange rate (EXR), real gross domestic product (RGDP), inflation rate (INFR), broad money supply (M2) and credit to the Private sector (CPS) and degree of economic openness (OPEN).

In this study, we replaced credit to the Private sector (CPS) with domestic investment (DINV), import (IMP) replaced interest rate, oil output (OUP) replaced real gross domestic product (RGDP). The variables used to replace them may significantly influence the volume of non-oil exports and give different and more meaningful results. Based on this relationship a functional form of these variables on non-oil exports in Nigeria is stated bellow.

Hence, our study is model thus; $NOE = \log(NEXCR, DINV, IMP, INF, OUT, OPN)$(1) The variables acronyms are defined thus:

NOE = Non-Oil Export,

NEXCR = Nominal Exchange Rate,

OUT = Oil Output,

IMP = Import,

DINV = Domestic Investment,

INFL = Inflation,

OPN = Trade Openness

and \ln – Logging of variable.

The model can be restated in econometric form as: $\ln NOE = a_0 + b_1 \ln(NEXCR) + b_2 \ln(DINV) + b_3 \ln(OUT) + b_4 \ln(INFL) + b_5 \ln(IMP) + b_6 \ln(OPN) + \mu$ (2)

The following linear equation is obtained from the specified model $NOE = a_0 + b_1 \ln(EXCR) + b_2 \ln(DINV) + b_3 \ln(OUT) + b_4 \ln(INFL) + b_5 \ln(IMP) + b_6 \ln(OPN) + \mu$ (3)

b_0, b_1, b_2, b_3, b_4 and b_5 are parameters to be estimated while U_1 is the error term.

3.1. A Priori Expectation

It was expected that increased/higher EXCR (depreciation) is expected to improve non - oil export, high INF can weaken or strengthen non – oil export and high IMP negative non – oil export. While increase OUT, increased Trade Openness should increase non – oil export, and DINV should have positive relationship with non – oil exportation (improve).

3.2. Estimation Technique

Autoregressive Distributed Lag (ARDL) Model: The estimation technique used for this study is the autoregressive distributed lag model estimation where the dependent variable is expressed as a function of the lag value of the dependent variable and the current and lag values of the explanatory variables. This estimation technique is adopted because it allows us to measure the effect of lags which is often present in the study of economic relationships. Also, both the long run and short run relationship can be explained using this procedure. The general form of the ADRL model is expressed as follows;

$$Y_t = \beta_0 + \beta_1 Y_{t-1} + \beta_2 X_t + \beta_3 X_{t-1} + U_t$$

Where

β_0 = constant term

Y_t = the dependent variable

Y_{t-1} = lags of the dependent variable

X_t = the explanatory variables

X_{t-1} = lags of the explanatory variables

$\beta_1, \beta_2, \beta_3$ = the model coefficients

U_t = error term

Stationarity Test:

Since the data used in this study are time series, there is need to check the stationarity of the data. The stationarity properties of our data were will be using the Augmented Dickey Fuller (ADF) test (Dickey and Fuller, 1981) and the Phillips Perron (PP) test.

Co-integration Analysis

If the data set indicates integration property of the order 1 (1) for the employed variables, then we proceed to test for co-integration among the variables employing Johansen and Juselius (1988, 1990, 1991, 1992, 1994) to ascertain the co-integration among the estimating variables.

Assume the variable tested above are co integrated, we then estimate the ECM (Error Correction Model), which incorporates the full short run dynamic model.

$$Y_t = \alpha + \beta y_t + \xi_t \tag{5}$$

Therefore

$$\Delta y_t = U_{t-1} + \Sigma \beta \Delta x_{t-1} + \Sigma \alpha_i \Delta y_{t-1} + \epsilon \tag{6}$$

Here, U_{t-1} is the one period lagged value of the error term from co-integrating regression, while Δ denotes the first differences operator.

4.0 DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Unit Root Test Result

Table 1: ADF Unit Root Test

Variable	ADF Stat	Critical Value			P Value	Remarks
		1%	5%	10%		
NOE	-3.430867	-3.626784	-2.945842	-2.611531	0.0307	I(1)
NEXCR	-5.077553	-3.639407	-2.951125	-2.614300	0.0002	I(1)
OUT	-5.374776	-3.639407	-2.951125	-2.614300	0.0001	I(1)
IMP	-5.679455	-3.639407	-2.951125	-2.614300	0.0000	I(1)
DINV	-5.752388	-3.639407	-2.951125	-2.614300	0.0000	I(0)
INFL	-6.822083	-3.626784	-2.945842	-2.611531	0.0000	I(1)
OPN	-5.536553	-3.639407	-2.951125	-2.614300	0.0001	I(0)

The Augmented Dickey Fuller (ADF) unit test result shows that all variable are stationary at first difference except INFL and OPN which are stationary at levels.

Following the unit root test result which shows that all variables are stationary at first difference and levels, there is an econometric justification to apply the ARDL estimation technique. Consequently, the ARDL bond test and coefficient estimation was done for the specified model and the result is presented as follows:

Table 2: ARDL Bond Test Result

ARDL Bounds Test		
Test Statistic	Value	K
F-statistic	2.846952	5
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.26	3.35
5%	2.62	3.79
2.5%	2.96	4.18
1%	3.41	4.68

The result of the ARDL bond test for the model showed that the test statistic of 2.85 is not greater than both the lower and upper bound critical values of the bond test procedure; hence the null hypothesis of no long run relationship among variables is accepted, indicating that there is no strong statistical evidence to support the existence of a long run relationship among the variables.

Short Run Dynamics

To determine the short run dynamics for the study, the least square's Error Correction Model (ECM) was adopted. The parsimonious ECM was estimated. The parsimonious ECM considers the variables that adjusted rapidly to equilibrium between the leading and the lagged variables. The short run dynamic result is displayed in the Table.

Table showing short run dynamics result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.175225	0.158445	1.105905	0.2813
D(DLOG(NOE (-2)))	0.005279	0.167344	0.270573	0.0394
D(NEXCR)	-0.010772	0.004064	-2.896901	0.0086
DLOG(DINV(-2))	-0.033538	0.306259	-1.082541	0.0213
DLOG(IMP)	0.683304	0.251684	2.714927	0.0130
D(INF(-2))	0.004595	0.005668	-0.810665	0.4267
DLOG(OPN(-1))	-0.639144	0.352412	-1.813628	0.0041
DLOG(OUP(-1))	0.0021993	0.482627	-2.610586	0.0163

R-squared	0.698197	Mean dependent var	0.000905
Adjusted R-squared	0.583224	S.D. dependent var	0.704799
S.E. of regression	0.455005	Akaike info criterion	1.506308
Sum squared resid	4.347621	Schwarz criterion	1.926668
Log likelihood	-13.59463	Hannan-Quinn criter.	1.640785
F-statistic	6.072725	Durbin-Watson stat	2.940517
Prob(F-statistic)	0.000425		

From table above, the result suggests that there is no long-run equilibrium. Therefore, there exist short-run relationships among variables. From the results, the lag of log of non-oil exports is significant at 5 percent level with a positive value of 0.005279. A meagre growth of 0.52 percent in the non-oil sector export in Nigeria was found. However, the variable of interest showed significance at 5 percent level. Nominal exchange rate, oil output and import are significant, in the same vein, domestic investment; inflation and openness are insignificant at 5 percent level.

The coefficient of currency depreciation is -0.010772. It is negatively related to non-oil exports and significant at 5 percent level. This is inconsistent with theory. A 1percent depreciation causes a 1.07 percent decline in non-oil exports in Nigeria. This implies that devaluation/depreciation of the naira impacts negatively on non-oil exports in Nigeria, this could be attributed to the import addicted nature of our economy and the neglect of industrial sector of the economy. Domestic investment is negatively related to non-oil exports with a coefficient of -0.033153. This is not consistent with theory and was significant at 5 percent level, but mirrors the Nigerian situation of poor domestic investment. This implies that a percentage fall in domestic investment causes a 3.3 percent decline in non-oil exports in Nigeria in the short run.

Domestic investment in Nigeria is not encouraged, the reason could be high lending rate, there is lack of basic investment driven infrastructure like good roads, energy, insecurity and the existence of multiple tax system. This has folded up the few existing ones. Import is positively related to non-oil export with a positive value of 0.683304. This is not consistent with theory but significant at 5 percent level. It implies that a 1.0 percent rise in import causes a 6.8 percent fall in non-oil exports. This could be attributed to the import dependent nature of Nigeria. This seems to suggest that in Nigeria, imports of intermediate and capital goods are necessary inputs in the production of goods for export and consequently, import compression can adversely affect export performance especially in the short run.

The coefficient of Inflation is negative by -0.004595. This is consistent with theory. A 1.0 percent decline in inflation causes 0.4 percent rise in non-oil exports. It is insignificant at 5 percent level. It could be observed that openness of the economy (OPN) contradicts its apriori predicted sign with a negative value of -0.639144. This shows that Openness leads to negative change in the growth of non-oil exports in Nigeria. Precisely, 1.0 percent decline in Openness leads to a 6.3 per cent decrease in non-oil exportation in Nigeria, thus causing trade imbalance. The coefficient of (OPN) is significant at 5 percent significance level. The implication of this finding is that openness of the Nigeria economy to the outside world has no significant effect on Nigeria non-oil exportation in the short run.

Oil output (OUP) is positively related to non-oil exports with a value of 0.0021993. This is consistent with a priori expectation but mirrors the Nigerian situation. This implies that a 1 percent increase in oil output causes a 0.2 percent growth in non-oil exports which is very low, this could be caused by the almost neglect of the non-oil sector of the (real sector) economy in Nigeria. The presence of oil has caused the relegation of the real sector to the background thus resulting in the Dutch Disease, whereas, the revenue from the oil sector should be used to stimulate the non-oil sector of the Nigerian economy, and the development of the two sectors should be the achieved target of any sound economy. The overall goodness of the model as shown by the coefficient of determination is 0.698197, which shows that about 70 percent of the variation experienced by the dependent variable (non-oil export) is explained by the independent variables included in the model, while the remaining 30 percent is caused by variables exogenous to the model but covered by the error term. The Adjusted coefficient of determination is 0.583224, which implies that about 60 percent of the total variation in non-oil exports is caused by the independent variables in the model while the remaining 40 percent is caused by variables exogenous to the model but covered by the error term. The F-statistic figure of 6.072725 is significant during the study period while Durbin Watson statistic of 1.940517 which is approximated to 2.0 percent implies that there is absence of autocorrelation among the explanatory variables in the model in the short run.

Conclusion

Economies of the world make use of currency devaluation/depreciation to boost their domestic economy and achieve their macroeconomic targets such as equilibrate balance of payments. In contrast, from the results of our estimates, we conclude that with devaluation/depreciation of the naira expected to boost export, Nigeria is a mono-product (crude oil) exporting country. A recent gain in agricultural and manufacturing export is submerged by international politics which leads to drop in agricultural and manufacturing products export. In addition, violent and random drop in power generating capacity of the country, high interest rate, insecurity, high cost of fuel, corruption, poor infrastructure and lack of synergy between the government and the private sector leads to increased cost of real sector production. This results in a decline in the real sector output and export against the conventional wisdom. Based on this backdrop, the Marshal Lerner theory of currency devaluation/depreciation does not support non-oil exports growth in Nigeria

Recommendations

It is a known fact that the essential infrastructure that drives the development of non-oil exports (real sector) to the desired threshold is lacking in Nigeria. For the formal and informal private individuals and corporate bodies to key into state initiatives, taking advantage of current and emerging opportunities for profitable production and non-oil exports trade, we recommended that government should review the exchange rate policy from free float back to manage float regime where the government intermittently intervene, as no country can go pure float. This will avert handing the market over to speculators for round tripping. The monetary authority should be a major player in the market. They should know what the buyer wants to buy the foreign currency for and at the same time know the quantity to supply. In essence, control the demand and regulate supply.

REFERENCES

- Aliyu, S. (2011). Impact of Oil Price Shock and Exchange Rate Volatility on Economic Growth in Nigeria: An Empirical Investigation. *International Journal of Academic Research in Business and Social Sciences*, 4(14): 294 – 298.
- Amaghionyeodiwe, N. O. and OSinubi, A. (2015). Exchange Rate Regimes in Nigeria. *Pakistan Economic and Social Journal*, 2(1): 23-27
- CBN Statistical Bulletin. (2021). Available at: <http://www.cenbank.org/out/publications/statbulletin/rd/2014/stabull-2014.pdf.05:3403>. Retrieved on October 23, 2015.
- Danmola, R. A., Wakili, M. A. and Oladipo, K. S. (2013). Dynamics of the Trade Balance: An Empirical Investigation of Nigerian J-Curve Hypothesis. *Journal of Humanities and Social Science*, 7(4): 51-57.
- Edun, T. A. (2012). Vector Autoregressive Analysis of Oil and Exchange Rate in Nigeria: Case Study of Dutch Disease. *British Journal of Arts and Social Sciences*, 11(1):12-16.
- Ekong, C. and Onye, K. (2013). The Failure of the Monetary Exchange Rate Model for Naira-Dollar. *American Journal of Social Science and Management Sciences*, 4(1): 12-13
- Gbadebo, A. O., Ogbonna, K. S. and Igwe, E. I. (2020). Currency Devaluation and Non-Oil Export of Nigeria. *International Journal of Business and Management Review*, 8 (3): 1-13.
- Hossain, T. and Ahmed, B. (2002). *Exchange Rate Responses to Inflation in Bangladesh*. London: Oxford University Press, p. 220.
- Ismaila, A. and Imoughele, B. (2015). The Impact of Exchange Rate on Non-Oil Exports in Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(1):190–198.
- Ismaila, M. (2016). Exchange Rate Depreciation and Nigeria Economic Performance after Structural Adjustment Programme (SAP). *Nigerian Journal of Social Development*, 5(1): 37 - 45.
- Iwuoha, J. C. and Awoke, C. F. (2019). Impact Of Real Exchange Rate on Non-Oil Exports in Nigeria. *Dutse Journal of Economics and Development Studies*, 8(1):2536 -6130.
- Johansen, S. and Juselius, K. (1994). Maximum Likelihood Estimation and Inference on Cointegration with Applications to the Demand for Money. *Oxford Bulletin of Economics and Statistics*, 146(53): 171-190.
- Kalyoncu, K. M. (2013). Non-oil Export and Economic Growth in Turkey. *Journal of Economics and Social Studies*, 3(2): 69 – 87
- Kasman, A. and Kasman, A. (2005). Exchange Rate Uncertainty in Turkey and its Impact on Export Volume. *Journal of policy and Development Studies*, 23 (6): 41-58.
- Kohler, M., Manalo, J and Perera, D. (2014). *Exchange Rate Movements and Economic Activity*. Reserve Bank of Australia. Bulletin March Quarter Edition. Madison: Addison-Wesley Publishing Company, p.678

- Loto, M. A. (2011). Does Devaluation Improve the Trade Balance of Nigeria? *Journal of Economics and International Finance*, 3(11): 64 - 69.
- Marshall, A. (1923). *Money, Credit and Commerce*. London: Macmillan Press, p.456
- Melender, O. (2009). *The Effects of Real Exchange Rate Depreciation*. London: Oxford University Press, p. 420
- Miller, M. S. (2004). *Exchange Rate Depreciation and Exports*. Nevada: University of Nevada Press, p.456.
- Musawa, N. (2014). Relationship between Zambia's Exchange Rates and the Trade Balance: J-Curve Hypothesis. *International Journal of Finance and Accounting*, 3(3): 192-196.
- Nweke, A. M., E., Onyebuchi, M. and Atuma, E. (2020). Analysis of the Effect of Exchange Rate Depreciation on Export Performance in Nigeria. *Journal of Business and Management*, 22 (6): 48-60
- Obadan, M. I. (2006). *Overview of Exchange Rate Management in Nigeria from 1986 to Date*. Ibadan: University Press, p. 340.
- Obstfeld, M. and Rogoff, K. (1995). Exchange Rate Dynamics. *Journal of Political Economy*, 10(3): 624 – 660.
- Oladipupo, A. O. (2011). Impact of Exchange Rate on Balance of Payments in Nigeria. *An International Multidisciplinary Journal of Ethiopia*, 5(4): 21.
- Sai'du', M. B. (2014.) The Effect of Exchange Rate Volatility on Exports in Nigeria: A Test of Cochrane-Orcutt Technique. *International Journal of Management and Sustainability*, 3(12): 684-696.
- Simon-Oke, O. O. and Aribisala, S. E. (2010). Exchange Rate Deregulation and Industrial Performance in Ethiopia. *An International Multidisciplinary Journal*, 4 (2): 4.