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An Empirical Analysis of the Long Run Relationship between Foreign Direct Investment and Non-oil Export in Nigeria: Ardl-Bound Test Approach.

Abubakar Saad Bahuli[1] and Inuwa Mohammed Bala[2]

[1]Department of Economic Adamawa State University, Mubi-Nigeria.
[2]Department of Accounting Adamawa State University, Mubi-Nigeria.
Email: saadabubakarbahuli@gmail.com; inuwa494@adsu.edu.ng; prevalem@yahoo.co.uk

ABSTRACT

In every mono cultural economy Foreign Direct Investment (FDI) inflows serve as an engine for economic growth and diversification. The Nigeria is among the countries adopted the trade openness policy with more foreign direct investors' inflows in West Africa since 1986 and challenges of non-oil export is still trending upward. Therefore, this study investigates the long run and causal relationships between foreign direct investment and non-oil export in Nigeria from 1987 to 2017. The study used annual time series data on foreign direct investment inflow (LFDI), exchange rate (EXCR) and non-oil export (LNONL) proxy by agricultural raw material export). The study employed Autoregressive Distributive Lag (ARDL) techniques in analyzing the impact and long run relationships. The result of ARDL Bound test revealed the long run relationship between FDI and non-oil export with evidence of F-statistics 9.805818 greater than lower and upper bound 3.1 and 3.87 at 5% level of significance. Furthermore, Error Correction Mechanism (ECM) analyzed that the speed of adjustment from long to short run equilibrium is 169% each year. The result of VAR granger causality test trace that taken LNOIL as dependent variable only EXCR that granger cause LNOIL individually and they are jointly significant. Finally based on the results this study recommends that themonetary authority should allow the exchange rate to depreciate further since it will reduce the dollar price of some ailing indigenous industries, thereby attracting more foreign investment in the form acquisition or mergers.
Keywords: FDI, Non-oil Export, Exchange Rate, Long run, Bound test and Causality.

INTRODUCTION

The balance of trade/payment surplus is among the macroeconomic objectives of every country as fiscal tools of stabilizing the economy. Before the independent the main source of revenue of Nigeria was non-oil sector that was agricultural and manufacturing sectors but with the introduction of oil in early 1970s the non-oil sectors was abundant and depended absolutely on export as major sources of the national revenue which is about 96% of the national revenue were generated from oil export [1].

The challenges of non-oil export sector is not that it is being over shadowed by the oil export trade, buttraceable to declining non-oil export and loss of market share in the non-oil trade globally is a clear evidence of how the non-oil sector competitiveness of the Nigerian economy has been consistently eroded over the last three decades. A robust and strong export trade is indicative of how competitive the commodities and services are, and how large the scale of the industrial base of an economy is, this is reflected by the comparative advantages possessed by the country. Also, exports of commodities are possible when domestic demand for such are satisfied and surpluses exist in commercial quantities [2].

However, more than four decades the Nigerian government was planning the economic diversification to non-oil sectors with the aims addressing some macroeconomic challenges in the

country unemployment, inflation, balance of trade deficit and so forth [3].

Despite all the economic reform policies country adopted such as Structural Adjustment Programme (SAP) in 1985, the new industrial policy of 1989, the establishment of the Nigeria Investment Promotion Commission (NIPC) in early 1990s, and the signing of Bilateral Investment Treaties (BITs) in the late 1990s the country is still a mono cultural economy Therefore, this paper arise the following questions; first what is the Long run relationship between foreign direct investments and non-oil export in Nigeria? And second what is the Causal relationship between foreign direct investment and non-oil export in Nigeria?

The objectives of this paper are emanating from the questions to investigate the long run relationship between foreign direct investment and non-oil export in Nigeria and to analyze the causal relationship between foreign direct investment and non-oil export in Nigeria.

Research Hypothesis

H_1: There is no long run relationship between foreign direct investment and non-oil export in Nigeria

H_2: There is no causal relationship between foreign direct investment and non-oil export in Nigeria.

LITERATURE REVIEWS

Foreign direct investment (FDI) not only provides developing countries with the much needed capital for investment, it also enhances job creation, managerial skills as well as transfer of technology. All of these contribute to economic growth and development. To this end, Nigerian authorities have been trying to attract FDI via various reforms. The reforms included the deregulation of the economy, the new industrial policy of 1989, the establishment of the Nigeria Investment Promotion Commission (NIPC) in early 1990s, and the signing of Bilateral Investment Treaties (BITs) in the late 1990s. Others were the establishment of the Economic and Financial Crime Commission (EFCC) and the Independent Corrupt Practices Commission (ICPC) [4].

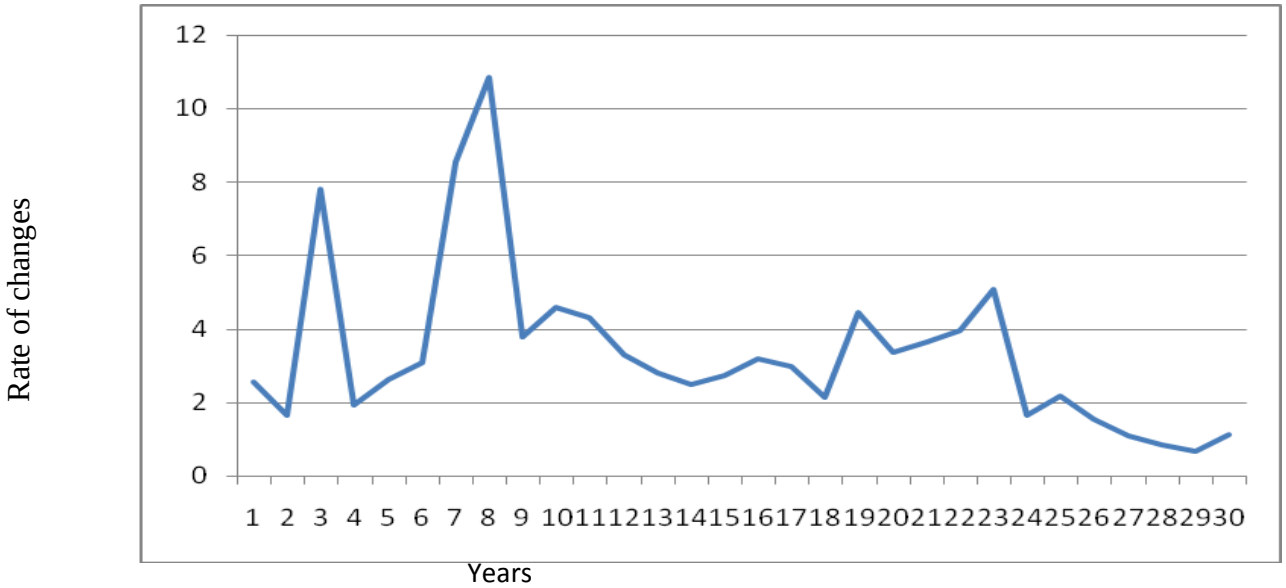
Furthermore, the exchange rate volatility can affect the investment decisions of multinational firms by creating unexpected profit in trade and non-trade sectors and also by the ambiguous cost of imported goods. In some previous decades, the exchange rate volatility badly affected the investment decisions and profits of firms. Exchange rate volatility can affect the FDI in different forms, subject to the place where goods are produced. If the investor desires to invest in a local market, trade and FDI could be used as substitutes. In that scenario, FDI inflow can be increased due to the appreciation of the domestic currency, which helps to increase the buying capacity of domestic consumers, while the devaluation in the exchange rate of the host economy helps to increase FDI by decreasing the cost of capital [5].

However, with down trending of non-oil export from 1970s the macroeconomic problems such as unemployment, inflation, exchange rate depreciation and balance of payment disequilibrium are still increasing as the results of some economic and social factors such as structural changes and inter regional migrations from rural to urban centres of the country searching for white collar jobs and infrastructural contracts. Furthermore, the introduction of structural adjustment progremme (SAP) in 1986 during the military administration Gen. Ibrahim Babangida with an objectives of improving the welfare standard of the Nigerian citizens through attainment of balance of trade surplus, full employment of resources, economic diversification, price stability in the economy and uplift the country in global economic integration [6].

Moreover, Foreign Direct Investment (FDI) can serve as an engine of growth and development by increasing the opportunity for the integration into global financial and capital market, expansion of employment and exports base, generation of technological capability building and efficiency spillovers to local firms. It can also establish investment arrangements that increase the potential of host countries for economic growth. Therefore, graphical evidence of the relationships between foreign direct investment, economic growth proxy gross domestic product (GDP) per capita and non-oil in

Nigerian economy over the years is in figures below.

Figure 1: Foreign Direct Investment from 1987-2017



The figure 1 shows the fluctuation of foreign direct investment in Nigeria for the period of thirty-one years. The trend shows that the foreign direct investment (FDI) inflow was increased by over 8% from 1987 to 1991 due to devaluation of naira per US dollar during the Structural Adjustment Programme in Nigeria. However, as labour intensive and developmental projects the FDI inflow was rapidly increase by 10% from 1991 to 1998 respectively. Furthermore, political and instabilities resulted the persistently declining of FDI due security challenges in most parts of the country and consequently trigger the macroeconomic problems such contribution of non-oil sectors to GDP was deistically decline by 25% from year 2000 to 2005 and 40% in 2014 which cause to high rate of unemployment and price instability in Nigeria

REVIEW OF THEORETICAL LITERATURE

Endogenous Growth Model

Romer's model of endogenous technical change of 1990 identifies a research sector specializing in the production of ideas. This sector invokes human capital along with the existing stock of knowledge to produce ideas or new knowledge. To Romer, ideas are more important than natural resources. He cites the example of Japan which has very few natural resources but it was open to new western ideas and technology. It imported machines from the United States during the Mejia era, dismantled them to see how they worked and manufactured their better prototypes. Therefore, ideas are essential for growth of an economy. These ideas relates to improved designs for the production of producer durable goods for final production [7].

In the Romer model, new knowledge enters into the production process in three ways. First, a new design is used in the intermediate goods s sector for the production of a new intermediate input. Second, in final sector, labour, human capital and available producer durable produce the final product. Third and a new design increase the total stock of knowledge which increases the productivity of human capital employed in the research sector [8].

Given these assumptions, the Romer model can be explained in terms of the following technological production function,

$$DA = F(K_A, H_A, A)$$

When DA is the increasing technology, K_A is the amount of capital invested in producing the new design (or technology), H_A is the amount of human capital (labour) employed in research and development of new design, A is the existing technology of design, and F is the production function for technology.

The production function shows that technology is endogenous when more human capital is employed for research and development of new designs, then technology increases by a larger amount, i.e., A is greater. It more capital is invested in research laboratories and equipment to invent the new design, then technology also increases by a larger amount i.e., DA. Since it is assumed that technology is non – rival and partially excludable, there are positive spillover effects of technology which can be used by other firms [9].

Thus the production of new technology (Knowledge or idea) can be increased through the use of physical capital, human capital, existing technology and also, link of labour in endogenous growth model with foreign direct investment (FDI) inflow as the way of importing new idea may result innovation and economic development in the country.

Empirical Literature Review

[10], investigates effect of non-oil export on the economic development of Nigeria. The study used per capita income as proxy for economic development and expressed it as a function of non-oil export volume, trade openness, exchange rate capital formation and inflation rate. The study applied ordinary least square estimating technique and the result show that non-oil export exhibits a significant positive relationship with per capita income. It was indicates that if non-oil export volume is increased it is going to lead to a significant improvement in the Nigerian level of economic development. In addition, the result shows that the coefficient of trade openness is negative thus, indicating that Nigeria might not be benefiting enough by trading with outside countries. It calls for review of trade policy of Nigeria if the positive effect of non-oil export on Nigerian economic development is to be promoted.

[11], examine the effect of non-oil revenue on economic growth. The study used secondary data. Data collected were analyzing using inferential statistics – the simple regression analysis of the ordinary least square method. The study found that there was significant relationship non-oil revenue and economic growth. Also there was significant relationship between non-oil revenue on total government revenue. The study concluded that Government should use the revenue generated from petroleum to invest in other domestic sectors such as Agriculture and manufacturing sector in order to expand the revenue source of the economy and further increase the revenue base of the economy.

[12], explored the effect of FDI and non-oil exports on economic growth in the country. The dynamic OLS was employed in analyze the relationship between FDI, non-oil exports and economic growth in Nigeria during the period of 1980 to 2016. The study reveals that the impact of FDI on the economic growth was significant and as a unit change in FDI causes 64% impact on the productive capacity of goods and services in Nigeria during the period under consideration. And also, the study recommends policy measures should be formulated and implemented with a view to attracting more of FDI inflows in the country. In the same vein, comatose state of non-oil sector of the Nigerian economy should be revamped as a matter of urgency.

[13], examined the impact of trade openness on economic growth in Nigeria for the period 1981-2017. The study adopted Ordinary Least Square (OLS) using degree of openness as independent variable, the ordinary least squares technique was used on series data to examine the impact of trade openness on Gross Domestic Product (GDP). The result of the Analysis shows that all the variables Real Gross Domestic Product (RGDP) Degree of Openness (DOP), FX and Per Capita Income (PCI) were positive and statistically significant at first difference, the study found that the variables are cointegrated and unidirectional causality was found from RGDP to DOP. The study recommends that policy makers should adopt policies on trade liberalization such as reduction of non-tariff barriers, reducing tariffs, reducing or eliminating quotas that will enable the economy grow at spectacular rates.

[14], examined the relationship between FDI, non-oil exports and economic growth in Nigeria from 1980- 2016 using granger causality approach. The

techniques employed were co-integration and Pairwise Granger Causality Tests were estimated. The results show that unidirectional causality runs from FDI to economic growth as well as non-oil exports. It aslo recommended the policy makers should create friendly economic policies and business environment that will boost further attraction of FDI into non-oil sector of the Nigerian economy.

Gaps in the literatures reviewed

Majority of the recent empirical literatures this study laid hands on such as [15], [16], [17], none of used agricultural intermediate product as the proxy for non-oil and employed ARDL-Bound test approach and Vector Autoregressive (VAR) causality techniques to investigate the cointegral and causation between foreign direct investment (FDI) inflows and non-oil export in Nigeria. Thus, the empirical findings of this paper will be unique among related works mentioned.

METHODOLOGY

Sources and method of data

The data for the study were secondary on Foreign Direct Investment (FDI) inflow Exchange Rate (EXCR) and Non-oil Export (NOIL) proxy Agricultural raw material from1987 to 2017 sourced from the World Bank online database 2018.

Techniques of Analysis

The analytical procedure adopted in this study are conditional Autoregressive Distributive Lag (ARDL) Bound test, Error Correction Mechanism (ECM) and Vector Autoregressive (VAR) granger causality test.

Model Specification

This study adopted the model specified by [18], investigate the impact of Foreign Direct Investment and Export on Economic Growth in Nigeria. But the model was modified by substituting and dropping of some variables in acquiring the correct model for determining the impact of foreign direct investment on non-oil export in Nigeria for the period of this research. The adopted model is:

$GDP_t = \beta_0 + \beta_1 FDI_t + \beta_2 EXP_t + u_t$.....(1.1)

Where:

GDP= Real Gross Domestic Product

FDI= Foreign Direct Investment (inflow)

EXP= Net Export

The modified model was substituted the aggregated net export with non-oil export and real Gross Domestic Product (GDP) with an official exchange rate because the purchasing power of local currency determined the export and foreign direct investor inflow or global economic integration of the country. The specified model is:

NOIL=f(FDI,EXCR).....(2.1)

$NOIL_t = \beta_0 + \beta_1 FDI_t + \beta_2 EXCR_t + u_t$.....(2.2)

Where:

NOIL= Non-oil export

FDI= Foreign Direct Investment inflow

EXCR= Official Exchange Rate

β_0 =intercept

β_1 and β_2 = coefficients of the variables

u=stochastic variable and

t =time series.

A Prior Expectation

β_2 & $\beta_3 > 0$

Unit Root Test

Unit root test are employed to verify the stationary of the data in order to avoid the spurious results. The Augmented Dickey (ADF) the models specified are:

Augmented Dickey Fuller (ADF) Model

$\Delta LNOIL_t = \alpha_1 + \alpha_2 t + \delta LNOIL_{t-1} + \Sigma \beta_i \Delta LNOIL_{t-i} + U_t$ ..... (3.1)

$\Delta EXCR_t = \alpha_1 + \alpha_2 t + \delta EXCR_{t-1} + \Sigma \beta_i \Delta EXCR_{t-i} + U_t$ ..... (3.2)

$\Delta LFDI_t = \alpha_1 + \alpha_2 t + \delta LFDI_{t-1} + \Sigma \beta_i \Delta LFDI_{t-i} + U_t$ ..... (3.3)

Where:

$_{t-1}$ = the numbers of logged difference terms.

Conditional ARDL (Bound test) Model

The study conducted the bound test to determine the long run equilibrium between the foreign direct investment and non-oil export in Nigeria from 1987 to 2017. The ARDL bounds testing approach is suitable for small samples and provides consistent results. The procedure will however crash in the presence of I(2) series so, the unit root test is carried out to ensure that all variables are stationary at most in their first differences. Another advantage of ARDL bounds testing is that unrestricted model of ECM seems to take satisfactory lags that capture the data generating process in a general-to-specific framework of specification [19]. The bound test model is specified as:

$\Delta NOIL_t = a_{01} + b_{11} NOIL_{t-2} + b_{21} EXCR_{t-2} + b_{32} FDI_{t-2} + \Sigma^q_{i=0} a_{1i} \Delta NOIL_{t-2} + \Sigma^q_{i=0} a_{2i} \Delta EXCR_{t-2} + \Sigma^q_{i=0} a_{3i} \Delta FDI_{t-2} + U_t$.....(3.2)

Hypothesis:

H_o: there is not long run relationship among NOIL, EXCR and FDI

H_1: there is long run relationship among NOIL, EXCR and FDI

Error Correction Model

An Error Correction was employed to determine the speed adjustment of non-oil export (NOIL) from long run and short run equilibrium with changes in exchange rate (EXCR) and foreign direct investment (FDI). The model is specified as:

$\Delta NOIL_t = a_0 + \Sigma^q_{i=0} a_{1i} \Delta NOIL_{t-2} + \Sigma^q_{i=0} a_{2i} \Delta EXCR_{t-2} + \Sigma^q_{i=0} a_{3i} \Delta FDI_{t-2} + \lambda ECT_{t-2} + u_{1t}$.....(4)

VAR Granger Causality Model

VAR Granger causality test were conducted to determine the direction of causality between the variables in the model. The granger causality is specified as:

$$NOIL_t = \sum_{j=1}^{n} \alpha_1 EXCR_{t-1} + \sum_{j=1}^{n} \alpha_2 FDI_{t-1} + Ut_1 \text{----------eqn (5.1)}$$

$$EXCR_t = \sum_{j=1}^{n} \beta_1 FDI_{t-1} + \sum_{j=1}^{n} \beta_2 NOIL_{t-1} + Ut_2 \text{----------eqn (5.2)}$$

$$FDI_t = \sum_{j=1}^{n} \delta_1 EXCR_{t-1} + \sum_{j=1}^{n} \delta_2 NOIL_{t-1} + Ut_3 \text{----------eqn (5.3)}$$

Hypothesis I

H_0: EXCR and FDI does not granger cause NOIL

H_1: EXCR and FDI granger cause NOIL

Hypothesis II

H_0: FDI and NOIL does not granger cause EXCR

H_1: FDI and NOIL granger cause EXCR

Hypothesis III

H_0: EXCR and NOIL does not granger cause FDI

H_1: EXCR and NOIL granger cause FDI

DATA PRESENTATION AND ANALYSIS

Table 1: Unit Root Test Results

The analysis of empirical results starts with the examination of the integration order of each of the time series included in the model. Unit root analysis ensures that no variable is integrated at I(2) to keep away from spurious results. According to [20], if any variable is integrated at I(2)then computation of F-statistics for ARDL cointegration becomes senseless. [21] critical bonds are based on assumption such as variables should be stationary at I(0) or I(1).Therefore, application of unit root tests is still necessary to ensure that no variable is integrated atI(2) or beyond. We have applied both Augmented [22] [23] tests. The results of both tests are reported in Tables. The likeness of order of integration supports the use of ARDL bounds testing approach for cointegration.

AUGMENTED DICKEY FULLER UNIT ROOT TEST				
Variable	**ADF Statistic**		**ADF 5% Critical value**	
	Level	**First Diff.Level**		**First Diff**
EXCR	-0.154877	-4.843392	-2.971853	-2.976263
LFDI	-2.474024	-8.790046	-2.971853	-2.976263
LNOIL	-2.028864	-3.678344	-3.081002	-3.259808
PHILIP-PERRONS UNIT ROOT TEST				
Variable	**PP Statistic**		**PP 5% Critical value**	
Level		**First DiffLevel**	**First Diff**	
EXCR	-0.124298	-4.841612	-2.971853	-2.976263
LFDI	-2.484167	-9.179002	-2.971853	-2.976263
LNOIL	-2.028864	-3.648938	-3.081002	-3.11991

Source: *Author's Computation using Eviews 9.0, (2019).*

The results Augmented Dickey Fuller (ADF) unit root test shows that all variables are stationary at first difference and there are integration at order one that is I(1). Similarly, Philip-Perron (PP) unit root confirmatory test gives the same results as ADF. Therefore, the ARDL bounds testing approach is suitable for small samples and provides consistent results. The procedure will however crash in the presence of I(2) series so, the unit root test is carried out to ensure that all variables are stationary at most in their first differences [24].

Table 2: Lag Selection Criteria

Lag	LogL	LR	FPE	AIC
0	-90.94946	NA	0.130775	6.479273
1	-24.03738	115.3657*	0.002422	2.485336
2	-12.97991	16.77685	0.002153*	2.343442*

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

Source*: Author's Computation using Eviews 9.0, (2019).*

Based on the order selection criteria given figure above, two lags have been selected for the estimation of the ARDL model. The selected lags are based on Akaike Information criteria test statistic.

ARDL Bound Test

Base on the unit root test conducted using ADF, the variables are mixed integrated order i.e. I(0) and I(1).Therefore, the appropriate technique adopted is the Autoregressive Distributed Lag ARDL-Bound testing approach. Hence, the ARDL has been estimated and the summary of the results are given below.

Table 3: ARDL Bound Test

Test Statistic	Value	K
F-statistic	9.805818	2
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.63	3.35
5%	3.1	3.87
2.5%	3.55	4.38
1%	4.13	5

Source*: Author's Computation using Eviews 9.0, (2019).*

The results of the bounds test for cointegration, together with critical values of [25] are reported in Table 3. The bounds test indicates that the estimated F-statistic is 9.805818 greater than upper bound critical value provided by [26] at 1% level of significance when LNOILis treated as the dependent variable the EXCR and LFDI is treated as its long run forcing variables. Hence, we reject null hypothesis of no cointegration relationship.

Table 5: Error Correction Mechanism

Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNOIL(-1))	0.402563	0.124685	3.228646	0.0320
D(EXCR)	-0.024703	0.006292	-3.926168	0.0172
D(EXCR(-1))	-0.039459	0.008520	-4.631337	0.0098
D(LFDI)	-1.231320	0.358460	-3.435032	0.0264
D(LFDI(-1))	-1.427583	0.456248	-3.128962	0.0352
CointEq(-1)	-1.694871	0.204572	-8.284970	0.0012
Cointeq = LNOIL - (0.0108*EXCR + 0.5604*LFDI -0.8207)				

Source*: Author's Computation using Eviews 9.0, (2019).*

Based on the result in the table, it is clear that the error correction coefficient is negative (-1.694871) as required, and it is highly statistically significant. This means that there is a valid error correction. The result suggests that the speed of adjustment or convergent from the long run to short run equilibrium is 169% each year with an influences of an effective policies on exchange rate and foreign direct investment inflow [27].

Table 6: VAR Granger causality Result

VAR Granger Causality/Block Exogeneity Wald Tests			
Dependent variable: EXCR			
Excluded	Chi-sq	Df	Prob.
LFDI	2.885126	2	0.2363
LNOL	5.037704	2	0.0806
All	8.194660	4	0.0847
Dependent variable: LFDI			
Excluded	Chi-sq	Df	Prob.
EXCR	0.628498	2	0.7303
LNOL	5.931424	2	0.0515
All	10.16810	4	0.0377
Dependent variable: LNOL			
Excluded	Chi-sq	Df	Prob.
EXCR	8.159243	2	0.0169
LFDI	0.513678	2	0.7735
All	8.744959	4	0.0678

Source*: Author's Computation using Eviews 9.0, (2019).*

The result of the Granger Causality indicates that, using EXCR as dependent variable, it is clear that LFDI and LNOIL does not Granger cause EXCR individually. However, when taken the independent variables all together they appear to have no influence on the EXCR as indicated by their joint probability value of 0.0847 which is greater than 0.05 at the 5% level of significance. Similarly, when taken Foreign Direct Investment (LFDI) as dependent variable, it appears that no any variable granger cause LFDI individually but they are jointly significant with probability values 0.0377 less than 0.05% level of significance.

when taken Non-oil Export (LNOIL) as dependent variable, it appears that only EXCR granger cause LNOIL individually but jointly does not influence the change of LNOIL as shows the probability values are greater than 0.05% level of significance respectively.

Table 7: Diagnostic tests

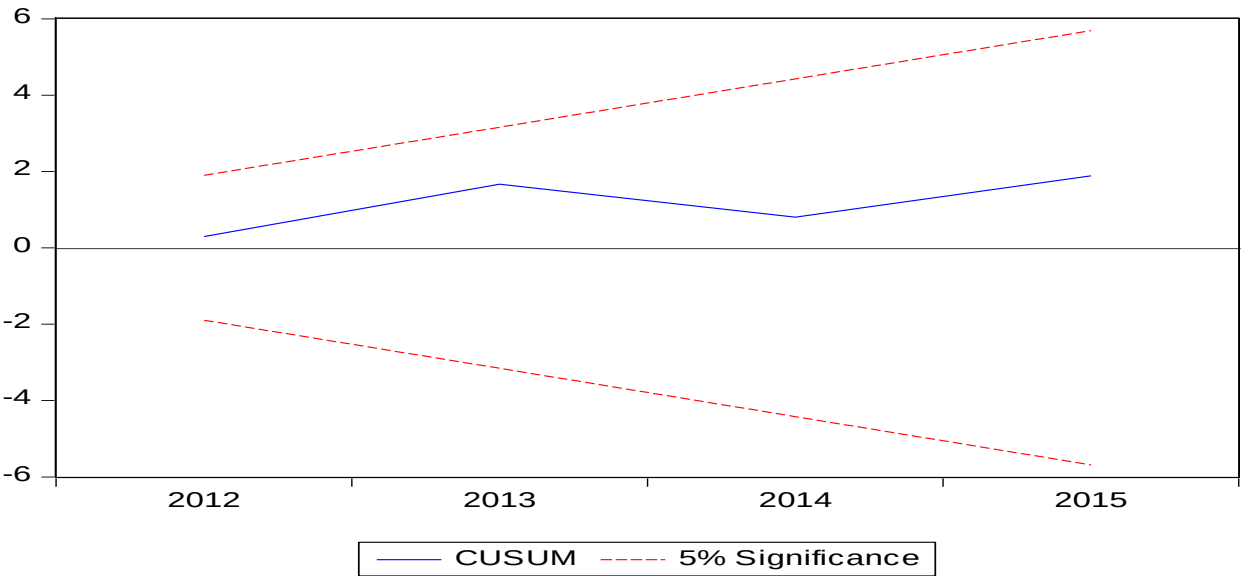
Type of Tests	F-Statistics	P-Value
Normality	0.459936	0.794559
Serial Correlation LM	1.124736	0.4706
ARCH/Heteroskedasticity	1.324556	0.4178
Ramsey RESET	4.273150	0.1896

Source*: Author's Computation using Eviews 9.0, (2019).*

The study applies a number of diagnostic tests to the ARDL estimates in Table 7. The tests suggest that no autocorrelation in the disturbance of the error term. The RESET test indicates that the model is correctly specified and no functional form problem. The model passes the Jarque-Bera normality tests, signifying that the residuals are normally distributed. Moreover, the ARCH test denotes that the errors are homoskedastic and independent of the repressors parameter.

Stability Test-Plot of Cusum and Cusum square

The model stability test is necessary for prediction and econometric inference. We test for the stability of estimated parameters by using the cumulative sum of recursive residual (CUSUM) and the cumulative sum of square recursive residual (CUSUMsq) tests. The graphical presentations of these tests are presented in figures below:



Neither CUSUM nor CUSUMsq test provided any evidence of instability in the estimated at 5% significance level for conventional specification. Therefore, both tests are within the 5% critical bound; this implies that all the coefficients in the short run model are stable and robust for prediction.

CONCLUSION

This study examines the impact of foreign direct investment on no-oil export in Nigeria from 1987 to 2017. Time series data were used on foreign direct investment (FDI), exchange rate (EXCR) and non-oil export (NOIL) .The result ARDL bound test shows the long run relationship between foreign direct investment and non-oil export in Nigeria with and evidence F-statistics 4.496237 greater than upper bound 3.87 at 5% level of significance. However, Error Correction Mechanism (ECM) was employed to analyze the speed of adjustment from long run to short run equilibrium it result shows that the speed of disequilibrium is 23% each year and statistically significant at 5%. Furthermore, the VAR granger causality test was conducted to determine the causal relationships between the variable. The result shows that taken LFDI as dependent variable, EXCR and LNOIL does not granger cause LFDI individually but they are jointly significant. Taken LNOIL as dependent variable only EXCR that granger cause LNOIL individually but they are not jointly significant.

Finally, based on the results this study recommends that; Firstly, monetary authority should allow the exchange rate to depreciate further since it will reduce the dollar price of some ailing indigenous industries, thereby attracting more foreign investment in the form acquisition or mergers. Secondly, government should invest more in infrastructure (like power, transportation, telecommunication and so forth) so as to enhance the competitiveness of the environment of investment and ultimately increase FDI inflows and finally, all of these should be complemented with the on-going war on corruption and encouragement of self-discipline.

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