

## INVESTMENT-DRIVEN ECONOMIC GROWTH IN NIGERIA: THE ROLE OF OIL RENT

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### Abstract

Considering the economic confidence currently perceived in smaller economies of the world, the contribution of investment strategies such as the Foreign Direct Investment (FDI) among other investment pathways cannot be immediately ignored. Given this observation, the current study set out to examine the dynamics of FDI inflow, domestic investment and outward foreign investment in Nigeria from 1981 from 2018. The investigation employs the ARDL bound test which revealed that FDI affect economic growth in a positive but weak way and that outward FDI is an anti-economic expansion. Furthermore, oil rent was found to be a key player in the equation of economic expansion in Nigeria. Thus, recommendation was made of the need to woo new foreign investor into the country by provide an investment-friendly environment with incentive such as tax holidays, free license for operation, peaceful economic and political environment. This study further recommends a new paradigm for the Nigeria economy through diversification to forestall future occurrence of recession occasioned by global price shock.

**Keywords:** Investment; foreign direct investment; oil rent; economic growth; Nigeria

**Ethics Statement:** This study has been prepared in accordance with the values of "Research and Publication Ethics."

## 1. Introduction

It is believed that FDI serves as an agent of economic growth especially to the developing economic who needed advance technologies and knowledge to improve on their production patterns. This has influenced the drastic increase in international relations between countries. Similarly, Mehrara *et al.*, (2017) submits that the current global flow of FDI outweighs that of economic growth. Pandya and Sisombat (2017) see FDI as an investment outside of the investors' country which is capable to produce economic gains. Despite the age long argument in protection the infant firms, empirical evidences still abound that FDI inflow is an integral part of growth equation of the host country (see: Sarkodie and Stezov, 2019; Pradhan *et al.*, 2019; Kalai & Zghidi, 2019 and Sokhanvar, 2019) which cement the work of Gungor and Katirlioglu, (2010) in the case of Turkey. Lee (2013) conclude that the process of capital formation of the host country is complemented by the inflow of FDI. Flora and Agrawa (2014) and Mehic *et al.*, (2017) submit that FDI is a panacea for technical advancement in the host country. This argument is not without contention. Zandile and Phiri (2019) see FDI inflow as anti-economic growth in Burkina Faso as supported by (see Claassen *et al.*, 2011; Carike 2012 Shahbaz & Rahman 2011; Shahbaz & Rahman 2011). In the developing economies like Nigeria, FDI flows into sectors such as the extractive sector. Furthermore, Oladipo (2010) submits that market size among others is the key determinant of FDI inflow to Nigeria. Except for the recent recession experience in (2017&2018) Nigeria has been the leader in terms of FDI inflow to Africa UN conference on Trade and Development, (UNCTAD, 2012). For instance in 2012, Nigeria achieved FDI inflow of \$8.92- billions which drop drastically during the recent recession. Report from UNCTAD (2018) shows that FDI inflow to Nigeria reduced by 21 percent in 2018 to \$3.5 billion; a margin worthy of drawing serious attentions from both the authority concern and the researchers. The sharp fall is presumed to be connected to the significant fall in the global pump price in the market since the FDI inflow into the economy are major for the extraction sector for which oil sector is one. This coupled with the low demand brewing in the economic which have forced many consumer-based firms to exit the economy. Though some works have been carry out which confirm the FDI-led growth nexus, however consensus agreement is yet to be establish in the literature as to whether or not FDI inflow serves as a promoter of economic advancement (See: Sarkodie and Stezov 2019; Pradhan *et al.*, 2019; Kalai & Zghidi, 2019 and Sokhanvar, 2019; Sunde, 2017; Khobai *et al.*, 2017 and Tshepo, 2014). The case is not different with Nigeria. Some studies though backed the growth driving role of FDI inflows; others still question the contribution of FDI to the growth process in Nigeria. This is so because Nigeria has been the flood gate of FDI into the continent yet it seems the desired impact has not been felt especially viewing its contribution as touching the improvement in the standard of living of the citizenry and its complementarity role on domestic capital. Nigeria still suffers insufficient capital available for domestic investment. In view of the above, this study seeks to re-examine the FDI-led growth nexus by incorporating oil rent,

outward FDI and domestic investment as intervening variables in an attempt to build an augmented functional model for the Nigeria economy. The enclosure of the oil rent in particular became necessary because it is an established assertion that the economy of Nigeria is dependent on the oil sector UNCTAD (2018). Similarly, Nigeria is seen as an investment hub for the West African sub-region. This informed the need to embark on this study in order to prove the reality of the presumed impact of FDI and other investment components for the economy of Nigeria particularly, considering the fact that Nigeria as the leader of FDI inflow into the continent witnessed a drastic fall in FDI inflow in recent time. Thus, this study intends to examine the impact of the oil sector relative to that of the investment world to ascertain which one pays off most, thereby contributing to the extant literature. The clear distinction between this study and other previous studies is majorly the comparative analysis of the two important segments of the Nigeria economy – investment world and the oil sector and how they affect economic growth. Most studies focused on either of the two relationships.

The rest of the study consists of the literature review which follows immediately after this section. Next is the theoretical framework, econometric procedures, presentation and interpretation of the result and finally the concluding remarks.

## **2. Empirical Literature Review**

Several empirical findings lend their support to the relationship between FDI inflow and economic growth while others question its potency in driving economic growth which is applicable in the case of Nigeria. It is these mixed feelings without general conclusion that keep the debate an ongoing one. Thus, Sarkodie and Stezov (2019) reaffirm the potency of FDI in driving economic growth. Pradhan *et al.*, (2019) examine the said relationship and submit that economic advancement is a consequence of FDI inflow into the host country. According to the study, FDI will naturally drive economic growth of the host country through its spillover effect in the form of technological transfer and the development of human capital. Similarly, Kalai & Zghidi (2019) submit that FDI inflow is critical in promoting economic advancement of the host nation. The study emphasizes about the complementarity of FDI on the home investment in a quest to advance the course of economic development. Sokhanvar (2019) argued that FDI inflow is a driving force in the developmental process of any given economy. According to the study, the impact of FDI inflow is not just evidence in the long run, but rather felt even within the short run. The work of Gungor and Katircioglu (2010) maintained that a well-developed financial system will trigger the spillover potentials of FDI inflow in order to drive economic growth appropriately as supported by Borensztein *et al.* (1998). Borensztein *et al.* (1998) asserts that once the host country attains the threshold, the spillover effect of FDI inflow becomes natural. Gungor and Rigim (2017) opines that FDI is a key determining factor in the economic growth of Nigeria. This is closely supported by the work of Gungor *et al.*, (2014) and Joshua *et al.* (2020) which also confirmed the FDI-led growth hypothesis in their empirical findings. The study sees FDI as an important factor in determining the productive capacity of the host economy. Sunde (2017) submit that FDI is a critical

determinant of economic progress of South Africa and recommends that the authority concerned should do the needful in an attempt to woo new foreign investors as a way of boasting their growth process. Tshepo (2014) found that FDI is a strong driver of economic growth in South Africa. The findings also confirmed the fact that FDI is an agent that fosters employment opportunity for the citizen of South Africa. In essence, FDI contribute to the reduction of unemployment rate in South Africa by absorbing a significant number of the unemployed youths of the country. Nistor (2014) found similar case for the Romania economy as well as the work of Abbes et al., (2015) for 65 economies in a panel study. Almfraji and Almsafir (2014) investigate the relationship between FDI and economic growth and confirmed the said hypothesis through a review of several empirical literature from 1994 to 2012. This is not different from the work of (see Omr & Kahoulib 2013; Adams 2009). According to Shahbaz and Rahman (2013), FDI is a promoter of economic development in the study area. According to the study, the idea of wooing new foreign investors is embracing economic development in disguise cementing the work of Srinivasan *et al.*, (2011) for the SAARC economies and the work of Lee (2013) for the G20 economies. The study of Abdouli and Hammami, (2017) submitted that the influence of FDI inflow is country-specific for the MENA economies. Except for Egypt and Lebanon the result revealed a negative relationship between the variables. Flora and Agrawa (2014) admit that FDI and economic growth drive each other accordingly. This shows that FDI inflow will promote the course of economic growth, while economic growth will serve as an enlarge market to house more FDI inflow. Pandya and Sisombat, (2017) study viewed FDI inflow as a promoter of economic expansion in Australia. They conclude that the Australian economy advances in part through the spillover contribution of FDI inflow. Mehic *et al.*, (2013) carry out a research on the nexus between FDI and GDP and conclude that FDI is a driver of economic growth. The work of Claassen *et al.*, (2011) and Carike (2012) revealed an interdependent benefit between FDI inflow and economic growth. On the other hand, studies who question the dynamics of FDI in the home economies include the study of Goh *et al.*, (2017) which submit that the purported influence of FDI in the long run is unnoticed in the Asian nations. The study further found that the influence of export on economic growth could not be account for. This is consistent with the work of Mah (2010) for the China economy. Instead, a unidirectional interaction running from economic expansion to FDI inflow was revealed. Khobai *et al.*, (2017) and Bezuidenhout (2009) concluded that the influence of FDI inflow on economic expansion is a mere presumption without empirical evidence. Similarly, the work of Zandile and Phiri (2019) see FDI inflow as an agent that is capable to undo the course of development. On the other hand, the argument about the effect of trade on economic expansion is a long standing one. For instance, Batuo et al., (2018) found a positive influence of trade openness on economic growth which concretized the work of Asongu and Kodila-Tedila (2013). The studies of Nyasha and Odhiambo (2017), Asongu and De More (2017), Ajide et al. (2019), Asongu et al. (2018) and Iyke and Ho (2017) obtain separate outcomes as regards the subject matter.

## 2.2 Theoretical Link between FDI and Economic Growth

Several theories have been advanced to link FDI inflow and economic growth among which are the modernization and the dependency theory. This study leveraged on these two theories mentioned above to examine the said relationship. Modernization theory strongly asserts that globalization for which FDI inflow is an integral part benefits especially the developing economies. To the modernists, FDI inflow is a transmitter of development in the form of advance technology, knowledge and capital which is of greater benefits especially for the less developed economies. Pradhan and Kumar (2002) and Liu (2005) are of the opinion that FDI inflow comes along with benefits such as human capital development. Li and Borensztein *et al.*, (1998) opine that the spillover effect of FDI in the form of technological exerts positive impact on economic growth more than home investment. This theory argued that FDI inflow which is the product of economic openness is of great benefits to the host country especially those FDI flowing from the developed world to the developing world. To the modernist, FDI inflow apart from playing a complementary role to the domestic capital in sponsoring domestic investment, it also help in advancing the course of development in the host country through the provision of employment opportunity and so on. Dependency theory on the contrary is of the view that FDI inflow is exploitative in nature and aim at under-developing the less developed economies. According to Chan and Clark (1996) the creditor nations often contract out loan with a high interest rate to the developing nations. The study maintained that the contractual loans often contracted by the developing nations from developed world is exploitative in nature which most time lead to capital flight through debt servicing and debt overhang. The implication is that the debtor economies normally suffer from the problem of debt overhang through the accumulation of interest charged in addition to the principal where the remaining resources may not be able to sponsor the productive stream of the home economies as supported by Adams (2009).

## 3. Data and Methodological Procedures

This study seeks to investigate the relationship between FDI inflow and economic using annual data between 1981- 2018 for econometric estimation of the functional model for this study. All data are extracted from the World Bank pool of data. The variables incorporated in the model includes real GDP which stand for economic expansion (constant 2010, US\$), oil rent (OIR) as % of GDP, foreign direct investment (FDI) as net inflow (% of GDP), home investment (DI) which is the summation of domestic investment in a financial sector with private participation and domestic investment in a non-financial sector with private participation, outward foreign investment (FDO), interest rate (INT) real interest in percentage and exchange rate (EXR) as real effective exchange rate index. Data on all the variables are transformed into natural log to ascertain the level of the growth effect.

### 3.1 Functional Model Specification

The estimation of the link between FDI inflow and economic expansion is examined by incorporating three extra intervening variables. These include Oil rent, outward FDI (FDO) and domestic investment. The explanatory variables which include FDI inflow, oil rent, outward FDI, domestic investment, interest rate and exchange rate to explain the changes in the real GDP over the period understudied. The functional model is expressed as:

$$RDGP = f(OIR, FDI, DI, FDO, INT, EXR) \quad (1)$$

$$LnGDP = \beta_0 + \beta_1 LnOIR + \beta_2 LnFDI + \beta_3 LnDI + \beta_4 LnFDO + \beta_5 LnINT + \beta_6 LnEXR + \mu_t \quad (2)$$

Where;

LNGDP = Logarithmic value of Gross Domestic product

LNOR = Logarithmic value of oil rent

LNFDI = Logarithmic value of Foreign Direct Investment

LNDI = Logarithmic value of domestic investment

LNFDI = Logarithmic value of outward foreign investment

LNINT = Logarithmic value of interest rate

LNEXR = Logarithmic value of exchange rate

$\mu_t$  = Error term

$\beta_i$  = The parameter for estimation.

### 3.2 Stationary Test

It is widely established that time series data need to be subjected to stationarity test because most of the times, they exhibit the form of non-stationarity Gujarati (2009). Thus, the stationarity test is necessary to detect the maximum order of integration of the variable of interest for the purpose of doglegged misleading achieved from spurious. In view of the above, this study adopts the widely known ADF and PP proposed by Dickey and Fuller (1981) and Phillip and Perron (1988) respectively for stationarity tests. Thus, the general formula for these widely known unit root test is as stated below;

$$\Delta Y_t = \alpha_1 + \alpha_2 + \delta Y_{t-1} + \sum_{i=1}^m \beta_i \Delta Y_{t-i} + \varepsilon_t$$

Where, Gaussians white noise that is assumed to have a mean value of zero is represented by  $\varepsilon_t$ , and possible autocorrelation represent series to be regressed on the time t.

### 3.3 ARDL Bounds Testing

It is imperative to estimate existence of cointegration between series in the long run following the assertion made by Gujarati (2009) that most macroeconomic series are not natural trended without disturbances. Therefore, the ARDL bounds test as developed by Pesaran *et al.* (2001) is preferably used in place of OLS method and more suitable for cointegration testing. This is because the method accepts any form of integration of the series whether same order of integration or mixed order. In essence ARDL bound test is more flexible than the traditional method. It helps to determine whether the variables of interest correct the short run disequilibrium between the variables to co-move in the long run or otherwise.

$$\Delta Z = \mu_0 + \mu_1 t + \varepsilon_1 \delta_{t-1} + \sum_{i=1}^n \sigma_1 v_{it-1} + \sum_{j=1}^k \phi_j \Delta Z_{t-j} + \sum_{i=1}^n \sum_{j=1}^k \omega_{ij} \Delta V_{it-j} + \Upsilon D_t + \varepsilon_t \quad (4)$$

$$H_0 : \beta_1 = \beta_2 = \dots = \beta_{n+2} = 0$$

$$H_1 : \beta_1 \neq \beta_2 \neq \dots \neq \beta_{n+2} \neq 0$$

The reject of the  $H_0$  implies that the series converged in the long run and vice versa.

### 4. Empirical Finding and Discussion

This study attempted to employ the widely known ADF and PP unit root tests to establish the stationarity of the series under investigation in a quest to avoid a misleading result from spurious regression. Table 1 below represents the unit root test which indicates that apart from the GDP, all variables were stationary at level under the ADF unit root test. For instance, FDI and FDO and interest rate were statistically significant at 1% level under the ADF. In contrast, OIR, DI and EXR were found to be stationary at 5% level of significance. However, GDP become stationary at 1% degree of freedom only after first differencing. Similarly, the outcome from the PP unit root test confirmed the result as reported by the ADF test. Furthermore, these residual were estimated against the value for the dependent variable (real GDP) to ensure there is no evidence of serial correlation as shown in table 3 below. The result proves absent of serial correlation with the residual as confirmed by the Breusch-Godfrey serial correlation LM Test. The result further indicate a homogenous model which means the influence of the independent variable on the dependent variable can be trusted to be consistence over the period of the study. Similarly, the result from the Ramsey reset test which is responsible to detect error in model specification; whether or not a variable has been omitted shows that the model is well specified. Finally, since the F-Statistic is greater than all the upper bounds, we reject the null hypothesis and conclude that the series under investigation do converged in the distance future. This means that the disequilibrium among the series in the short run can be correct in the long run as presented in table 2.

**Table 1. Unit Root Stationarity Result**

Variables	ADF	P-V	I(d)	PP	P-V	I(d)
LNGDP	-3.8087	0.0063	I(1)	-3.8087	0.0063	I(1)
LNOR	-2.9972	0.0444	I(0)	-2.8300	0.0638	I(0)
LNFDI	-3.0392	0.0034	I(0)	-3.0392	0.0034	I(0)
LNFD0	-3.4062	0.0013	I(0)	-3.4755	0.0010	I(0)
LNDI	-4.1882	0.0110	I(0)	-4.0746	0.0002	I(0)
LNINT	-7.1781	0.0000	I(0)	-6.7871	0.0000	I(0)
LNEXR	-1.9895	0.0902	I(0)	-1.6255	0.0973	I(0)

Note: Author's Computation

**Table 2: ARDL Bound Test**

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	23.86955	10%	2.387	3.671
K	6	5%	2.864	4.324
		1%	4.016	5.797

Note: Author's Computation

**Table 3: Diagnostic Tests**

Tests	F-statistic	P. Value
<b>X2</b> NORMALITY	0.5220	0.7702
<b>X2</b> SERIAL	1.4444	0.2914
<b>X2</b> SERIAL	0.7577	0.7080
<b>X2</b> SERIAL	0.0252	0.8774

Source: Author computation 2019.

Table 5 below presents the result from the long run and short run relationship between the variables. The findings show that oil rent exerts a positive and significant relationship on GDP in Nigeria both in the short run and long run. In the short run, a 1% change in the oil rent will result to an increase in GDP by 0.10 ( $P > 0.0027$ ) in the previous year and 0.04 ( $P > 0.0086$ ) in the current year, whereas, in the long run the change will generate about 0.46% (0.0002) increase in GDP which confirm the position of the World Bank Development Indicator (WDI 2018) that the oil sector is the main driver of the Nigeria economy. The impact of FDI on GDP in the short run is negative and significant for all the previous and the current years. Thus, a 1% change in FDI will hurt GDP by 0.035 ( $P > 0.0045$ ), 0.05% ( $P > 0.0002$ ) and 0.03 ( $P > 0.0003$ ) in the last two years, last year and the current year respectively. However, the outcome turn out to be positive and insignificant in the long

run such that a 1% increase in FDI will lead to a 0.13 ( $P > 0.13$ ) increase in GDP. This means that the impact of FDI on economic growth is positive and insignificant, validating the work of Joshua (2019). Shockingly, the results prove that domestic investment influences GDP negatively in both terms, accounting for about 0.19% ( $P > 0.0010$ ), and 0.27% ( $P > 0.0005$ ) in the last one year and the current year. In the long run, the negative significant impact turns out to be elastic such that a 1% increase in DI will hurt the GDP by 1.24% (0.0000). This shocking outcome, which aligns with the work of Bouchoucha and Bakari (2019), Fakraoui and Bakari (2019), Bayar (2014), Bakari (2017) and Bakari and Mabrouki (2017) for Tunisia, India, Turkey, Algeria, Tunisia respectively, is likely to be associated with poor management of domestic investment coupled with the issue of insecurity ravaging the country. Similarly, a 0.004% ( $P > 0.2019$ ), 0.01% ( $P > 0.0516$ ) and 0.009% ( $P > 0.0111$ ) increase in the dependent variable in the last two years, last year and the current year resulted from a 1% change in FDI. In the long term, the impact of FDI on GDP remained negative and significant as expected, indicating that for every 1% increase in the FDI, economic expansion witnesses a slowdown of about 0.09% ( $P > 0.0031$ ). The implication is that the aftermath effect of Nigerian investment overseas is harmful to the path of economic fortune. Interestingly, the results prove that interest rate influences GDP positively in a significant way in both terms. A 1% change in interest rate will lead to a 0.001% ( $P > 0.0702$ ) and 0.003% ( $P > 0.0000$ ) increase in GDP in the last one year and current year of the short run. While in the long run, a 1% change in interest rate will bring about a 0.01% increase in the GDP. This means that the authority concerned must ensure that interest rate should be lower to encourage investors to borrow money for investment purposes, particularly the ones targeted on the productive sector that will bring future economic gain. In addition, exchange rates demonstrate negative and significant impacts on GDP both in the short and long run. For instance, in the short run, for every 1% increase in exchange rate, GDP will decrease by 0.0003% ( $P > 0.0244$ ), while in the long run, GDP will decrease by about 0.0016% ( $P > 0.0039$ ). This suggests that exchange rate is not a contributor to the path of economic advancement in Nigeria. Finally, the ECT indicated in Table 6 shows that the speed of adjustment between the series is 22%, implying that any disequilibrium in the short run will be corrected in the distance future with the speed of 22%. Similarly, the cumulative sum of recursive residuals (CUSUM and CUSUMSQ) as presented in figure 1 (a) and 1 (b) below is employed to test the stability of the functional model. The estimated model parameter is represented by the blue line in the critical bound. Since the blue line in both CUSUM and CUSUMSQ is well fitted into the critical bound, it suggests that the model is stable and fit for estimation as supported by Joshua (2020).

**Table 5. ARDL Short Run and Long Run Relationship**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<b>Short Run</b>				
LNOIR(-1)	0.1032	0.0261	3.9550	0.0027

LNOIR	0.0488	0.0149	3.2589	0.0086
LNNOIR(-1)	0.1032	0.0261	3.9550	0.0027
LNFDI	-0.0307	0.0084	-3.6425	0.0045
LNFDI(-1)	-0.0554	0.0096	-5.7381	0.0002
LNFDI(-2)	-0.0346	0.0063	-5.4488	0.0003
LNDI	-0.1904	0.0416	-4.5704	0.0010
LNDI(-1)	-0.2744	0.0550	-4.9865	0.0005
LNFD0	-0.0047	0.0034	-1.3658	0.2019
LNFD0(-1)	-0.0105	0.0047	-2.2092	0.0516
LNFD0(-2)	-0.0099	0.0032	-3.1057	0.0111
LNINT	0.00107	0.0005	2.0268	0.0702
INT(-1)	0.0034	0.0004	7.0831	0.0000
D(EXR)	-0.0003	0.0001	-2.6484	0.0244
LNEXR(-1)	-0.0003	0.0001	-3.1014	0.0112
ECT(-1)	-0.2212	0.0135	-16.3505	0.0000
<b>Long Run</b>				
LNOIR	0.4666	0.0813	5.7375	0.0002
LNFDI	0.1304	0.0791	1.6492	0.1301
LNDI	-1.2408	0.0878	-14.119	0.0000
LNFD0	-0.0916	0.0237	-3.8645	0.0031
INT	0.0156	0.0032	4.7981	0.0007
EXR	-0.0016	0.0004	-3.7321	0.0039

**Note: Author's Computation**

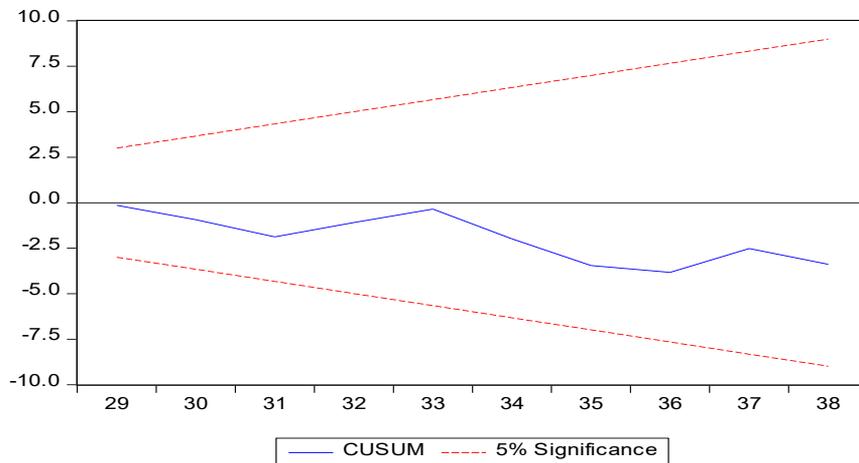
**Table 6. TY Causality Result**

Excluded	Chi-sq	df	Prob.
Dependent variable: LNOIR			
LNOIR	10.83850	2	0.0044
LNFDI	26.21097	2	0.0000
LNDI	11.01907	2	0.0040
LNFD0	10.92605	2	0.0042
INT	40.93019	2	0.0000

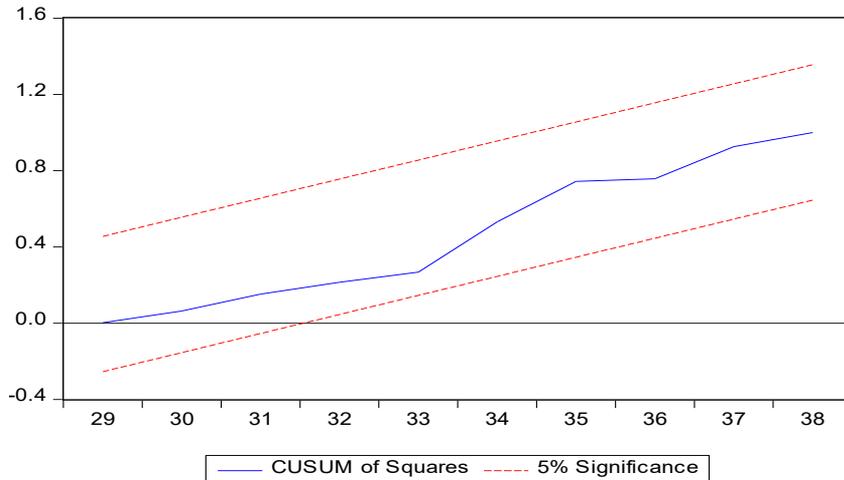
EXR	7.697420	2	0.0213
All	66.94429	12	0.0000
Dependent variable: LNOIR			
LNGDP	3.132023	2	0.2089
LNFDI	3.057940	2	0.2168
LNDI	2.714669	2	0.2573
LNFD0	1.314667	2	0.5182
INT	0.850643	2	0.6536
EXR	0.564031	2	0.7543
All	17.49185	12	0.1320
Dependent variable: LNFDI			
LNGDP	0.231352	2	0.8908
LNOIR	0.494923	2	0.7808
LNDI	2.148269	2	0.3416
LNFD0	1.279197	2	0.5275
INT	1.819080	2	0.4027
EXR	0.011333	2	0.9943
All	7.585633	12	0.8166
Dependent variable: LNDI			
LNGDP	29.82943	2	0.0000
LNOIR	6.526256	2	0.0383
LNFDI	15.58068	2	0.0004
LNFD0	31.52472	2	0.0000
INT	13.79859	2	0.0010
EXR	3.179664	2	0.2040
All	97.05353	12	0.0000
Dependent variable: LNFD0			
LNGDP	4.819514	2	0.0898
LNOIR	2.271783	2	0.3211
LNFDI	1.163680	2	0.5589
LNDI	2.149488	2	0.3414
INT	0.350350	2	0.8393
EXR	11.31088	2	0.0035

All	17.44826	12	0.1335
Dependent variable: INT			
LNGDP	9.384666	2	0.0092
LNOIR	0.942691	2	0.6242
LNFDI	0.414161	2	0.8130
LNDI	2.583225	2	0.2748
LNFD0	8.422854	2	0.0148
EXR	0.849100	2	0.6541
All	33.31879	12	0.0009
Dependent variable: EXR			
LNGDP	1.466367	2	0.4804
LNOIR	3.575755	2	0.1673
LNFDI	3.737330	2	0.1543
LNDI	4.634692	2	0.0985
LNFD0	0.651354	2	0.7220
INT	0.927513	2	0.6289
All	33.31009	12	0.0009

**Note: Author's Computation**



**Figure 1 (a): Plot of Cumulative sum of Recursive Residuals**



**Figure 2 (b): Plot of Cumulative Sum of Squares of Recursive Residual**

The result from the causality test is presented in Table 6. The findings from the test show a bidirectional connection between GDP and DI, GDP and FDI as well as between GDP and INT. Similarly, the overall result proves that all the variables Granger cause GDP. This implies that the variables under investigation are predictors of GDP in the Nigeria economy which is consistent with our a priori expectation. This implies that FDI is a key determinant of economic growth in Nigeria as economic expansion (market size) also plays a key role in wooing investors into the economy. The Nigeria government must set in motion some machinery such as tax holidays for the newcomers in an attempt to attract new investors. Furthermore, the authority concerned should be informed that infant industry protection policy which most of the time restricts inflow of FDI would not be healthy to the economy. Thus, more of FDI inflow into the country will strengthen the path of economic prosperity in Nigeria. Similarly, the result reveals that all the variables with the exception of exchange rate are determinants of DI. This means that for domestic investment to yield meaningful results a stable macroeconomic environment is required. These include, stable interest rate, complementary role of FDI, proper management of the crude oil revenue and the stable rate of economic growth. In essence, all things being equal, achieving reasonable inflow of FDI, economic growth and stable interest rate will enhance the Nigeria domestic investment which is instructive to the authority concerned. The result indicates a bidirectional link between GDP and DI which implies that achieving economic advancement is of great benefit to Nigeria as it will determine the level of domestic investment in the economy and vice versa. The authority concerned should know that the investment potential of the country depends on the economic prosperity of Nigeria as a whole.

## 5. Conclusion and Policy Recommendation

This study seeks to reinvestigate the relationship between the investment path and economic growth in Nigeria to ascertain a comparative impact between the investment world and the oil sector from 1981 to 2018. Thus, the focus is on; first, to check the interaction between FDI and economic advancement in Nigeria and to also find out which of the FDI inflow and outward (FDO) exerts or influence the path of economic growth significantly in Nigeria. And also to examine if oil sector exhibits a significant impact on economic growth than the investment components. This studies became necessary and timely because of the current economic situations characterizing the Nigeria economy, ranging from drastic fall in FDI inflow, drop in oil price in the global market and a general economic recession both in the recent time. Notes that the oil sector control the economy of Nigeria which make this study very relevant to undertake. Empirical conclusion indicates that FDI exhibits positive but insignificant influence on the economic advancement of Nigeria in the long run similar to the work of Joshua (2019) in the case of Nigeria. The result from the granger causality confirmed the FDI-led economic growth for the Nigerian economy. This shows that FDI into the economy of Nigeria is a driving force for the economic prosperity of the country. Furthermore, this study also established that outward FDI act as an obstacle to the path of economic expansion. This is not surprising as the outward FDI is a channel of outward flow of resources which is expected to benefit majorly the outside world. The government must look for diplomatic way of discouraging indigenious investment outside the shore of Nigeria. The inability of the domestic investment to influence economic growth positively is likely to be connected to mismanagement and the unstable macroeconomic environment prevailing in the country at the moment where political and ethnic crises distorting economic activities in the nation particularly in the recent past. Thus, in other to encourage domestic investment to produce the desire achievement the government must put in place various machineries to restore peace back to the country in other to make the country investment friendly for the potential domestic investors. Secondly, the study revealed that the oil sector remain the major actor that influence the Nigerian economy similar to the work of Asagunla and Agbede (2018) in Nigeria, but negates the study of Akanni (2007) for the oil exporting countries in Africa for which Nigeria is inclusive. In essence, the impact of the oil sector on economic growth is more notable than the investment world. Although this sound good, it poses danger to the economy in terms of global oil price shocks which could result to economic distress and recession as experience occasionally, the most recent in 2015. Thus, a called for proper diversification of the economy to avoid been trap in the mono-economy syndrome due to over-dependent on the oil sector. Sectors such as the industry, agriculture can be revitalize to increase the productivity (market size) of the economy. This will in turn increase the investment viability of the economy, thus, wooing new investors to the economy will follow naturally. The clear distinction between this study and other previous studies is majorly the comparative analysis of the two important segments of the Nigeria economy – investment world and the oil sector and how they affect economic growth. Most studies focused on either of the two relationships.

**Author's Role:** Udi Joshua conceptualized the idea and wrote the introduction and the literature review. Audu Ismaila AMEH run the estimations and interpretation. Finally, Andrew Adewale Alola wrote the methodology and the conclusion and the policy implication.

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