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RE-VISITING THE DETERMINANTS OF FDI INFLOW IN NIGERIA IN THE FACE OF GLOBAL OIL PRICE CRISES

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ÖZ

This study mainly seeks to investigate the determinants of FDI inflow to Nigeria within the time frame from 1980 to 2018. The empirical analysis begins with stationarity test which revealed a mixed order of integration. The dynamic ARDL bound test was adapted for this study. The findings show that only economic openness and economic expansion are the main determinants of FDI inflow to Nigeria in the period under investigation, while industrialization and oil price exert negative impact on FDI inflow. A 1% change in GDP will cause 46% and 68% increase in FDI inflow though in an insignificant way. Similarly, a 1% changes in the economic openness will bring about a significant increase of 100% and 180% in FDI inflow both in the short and long run. The insignificant impact of economic expansion in attracting FDI inflow may be connected with the recent recession face in the country from 2015 till date. Thus, this study suggests two probable policy measures which includes government intervention in the working of the economic as supported by J.S Keynes through various spending policies directed to the productive sector of the economic to help raise demand and to revive the economy and position it on the path that will significantly influence potential foreign investors into the economy. Secondly, there is the need for diversification of the economy to help diversify FDI inflow to other sectors to avoid been caught up with the oil price shock in the future in an attempt to avoid future occurrence of a short fall in FDI inflow.

Keywords: Foreign Direct Investment, Economic Growth, ARDL Bound Testing Approach

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1. INTRODUCTION

Traditionally, it is believed that FDI inflow into a region or any economy is not automatic, but depends on certain critical factors and the type of investment demand as well as the absorptive capacity of the recipient country. According to Kinda (2013) vertical FDI inflow is attracted into an economy through efficient human capital and adequate financial development, while horizontal FDI is determine by adequate infrastructure and strong institutions. It follow logically that a country with better and improve financial market, adequate infrastructure, strong institutions couples with good educational system aimed at improving or training human capital is likely to attract continuous FDI inflow. The work of Fukao and Wei (2008) supports the idea that Market size is the determinant of horizontal FDI, while labor cost is a key driver of FDI inflow. The intuition here is that cheap labor will help actualized the cost minimization behavior of the investing company, while a large commercial market will increase the profits opportunity of the company. In the developing economies like Nigeria, FDI flows into sectors such as the primary sector, extractive sector and services. Furthermore, the study of Oladipo (2010) revealed that the FDI inflows into Nigeria are strongly connected to the country potential market size, export encouragement, human capital, infrastructure and macroeconomic stability. The study of Onyeiwu and Shrestha (2004) carry out on selected African countries with Nigeria inclusive found that the main promoters of FDI inflow to Africa are GDP, inflation, trade openness, external reserves and natural resources, while the traditional factors such as political right and infrastructure were found to be irrelevant in attracting FDI inflow to Africa. According to Udo and Egwaikhide (2008) FDI inflow to Nigeria is discouraged by exchange rate and inflation fluctuation, while infrastructure, openness and the public sector are the determining factors for attracting FDI inflow. According to Nurudeen et al. (2011), openness, privatization, infrastructure improvement and exchange rate promotes FDI inflow in a significant level, while market size influence FDI inflow negatively at a significant level. Inflation on the other hand exhibits insignificant favourable impact on FDI that flows into Nigeria. However, Nigeria is known to be the gate way of FDI inflow into the continent of Africa in most periods particularly in the recent decades. In essence, Nigeria takes the highest proportion of the FDI inflows into Africa, world investment report by UN conference on Trade and Development, (UNCTAD, 2012). The report further indicates that Nigeria achieved the highest FDI inflow in the continent, amounting to about $8.92-billions in 2012, closely followed by South Africa. The commercial potentials of the Nigeria economy have helped in attracting market-seeking FDI inflow from the united states corporations such as the Facebook and Uber, while efficiency-seeking FDI from china flows into textile and automotive. However, in recent time the current persistence economic depression for which the Nigeria economy is suffering from its bi-product of low demand is one of the major causes of the sharp fall in FDI inflows into the West African region due to the fact that the Nigeria economy is the largest emerging economy in the region. Thus, the low demand causes many consumer-based companies most of which are from

South Africa to exit the country leading to relative consequence in the reduction of FDI inflow to Nigeria by 21 percent to 3.5billions UNCTAD (2018). Furthermore, in the same recent time there was sharp fall in global oil price which coincided with a significant reduction in the FDI inflow into Nigeria.

1.2 Aim and purpose of the study

Recently, particularly from 2015, Nigeria has faced a serious economic depression characterized by low GDP growth rate, poverty, unemployment and low demand. According to Ajayi S.I, (2006), Political and institutional instability continue to persist in Nigeria, couple with the weakening of the institutions by the seating government has scared foreign investors and traders apart from the FDI inflow into the extractive sector. According to the UNCTAD (2018), the sharp fall in oil price and the sharp economic depression is responsible for the drastic fall in the FDI inflow into the economy. The report further state that, many consumer-based companies particularly those ones from South Africa have been forced out of the country due to the weak demand characterizing the Nigeria economy. This is responsible for the significant fall in FDI inflow by 21 percent to $3.5billion in 2018. Initially, FDI inflow to the oil producing economies in Africa reduce drastically which is presumed to be connected with the global fall in oil price. In the case of Nigeria, the share of FDI inflow to GDP dropped from 1.09% in 2016 to 0.93% in 2017. Thus, this study intends to employ an ARDL method to revisit the case study for Nigeria to ascertain the effect of the recent economic crisis (fall in economic growth) and the fall in global oil price on the FDI inflow considering the fact that Nigeria economy is one of the fastest emerging economy which is dependent on oil resources. In essence, this study set out to investigate if the sharp fall in both economic growth and the oil sector exhibit a detective effect on FDI inflow into the economy. Secondly, the subject matter of FDI inflow and its determinants remains under-researched in the case of Nigeria (see: Asiedu E. 2002; Onyeiwu and Shrestha 2004; Udo and Egwaikhide 2008; Oladipo 2010; Kinda 2013). However, among the few previous studies, the focus has been on the traditional factors such as market size and human capital development as the determining factors for FDI inflow. Thus, this study intend to examine the determining factors of FDI inflow into Nigeria with a specific emphasis on oil price in addition to the traditional economic growth, trade openness and industrialization considering the economic recession experiencing in Nigeria in recent year from 2015 to 2018, as well as the sharp fall in the global oil price in the same period.

2. EMPIRICAL LITERATURE REVIEW

Empirical literatures abound proving different factors that determine the inflow of FDI into the host economy. For instance Joshua et al., (2020) investigate the relationship between FDI inflow and GDP through the granger causality in the case of South Africa. The revelation shows that natural resources rent drives FDI inflow. This is contrary to the study of Joshua (2019). The study found a non-causal effect between FDI inflow and economic expansion in Nigeria. According to Kinoshita and

Campos, (2003) lower labour cost and adequate natural resources are the key promoters of FDI inflow. The work of Asiedu (2002) submits that the main determinants of FDI that flows to the sub-Saharan African economies are infrastructure improvement and trade openness, while large profitability demonstrate insignificant attraction to FDI unlike the non-sub-Saharan African countries which attracts FDI through high investment return. According to Asiedu (2006), the key promoters of FDI inflow into Africa are the GDP size in the host country, abundance natural resources, improved infrastructure, manageable inflation rate, good legal system and functioning investment environment as opposed by corruption and political unrest. The study of Ayanwale (2007) lent to support to work of Asiedu (2006). The findings of the study revealed that the drivers of FDI inflow to Nigeria includes market size and better infrastructure. The study of Nunnenkamp (2002) revealed that the market factor still retain its domineering position as the promoter of FDI coupled with efficient domestic skills. Accoring to Raluca and Alecsanru (2012) the choice of Romanian as the destination of FDI is closely connected to the emerging local market, efficient skill labour, infrastructure and low wage rate. Hunady and Orviska (2014), carry out a study on the EU countries and finds that FDI is attracted to the region through labour cost, trade openness, firing costs, GDP per capital and public debt, whereas, corporate taxes is of no effect in attracting FDI. The study of Antonescu (2015) reveals that the promoters of FDI into EU and Romania regions are the local firms and the sectoral/regional characteristic. Kinuthia and Murshed (2015) carry out a comparative study between Kenya and Malaysia on the subject matter. Their findings reveals that wage, exchange rates and democracy are the factors that account for FDI inflow to Kenya, while deficiency in trade openness, infrastructure, weak governance/financial development, and unstable rate of inflation does not encouraged FDI inflow in the Kenya. The study concludes that the case of Malaysia is a direct opposite of Kenya. The study of Tintin (2013) submits that FDI inflow into the six central eastern European countries responds to GDP size, trade openness, EU membership and institution. The findings from the work of Boateng et al. (2015) prove that factors such as real GDP, exchange rate and international trade asserts positive influence on FDI inflow, whereas money supply, inflation, unemployment and interest rate causes significant opposite impact in Norway. In the case of Malaysia, the study of Tang et al. (2014) proves that GDP, real exchange rate, financial development, promote FDI inflow into the electrical and electronic industry. The work of Chidlow et al. (2009) submits that labour skill development, domestic market and agglomeration induces FDI inflow into Mazowieckie, while efficiency and locational factors encourage the inflow of FDI into the other part of Poland as supported by the work of Villaverde and Maza (2015) in the case of the European regions. Chan et al. (2014) stressed that the promoters of FDI in China under the period of the investigation was majorly the size of GDP, while domestic infrastructure and investment exerts indirect impact in driving FDI inflow. Bilgili et al. (2012) in the case of Turkey submits that FDI growth is influenced by the country GDP growth rates, labour cost, export and import growth, steam coal and natural Gas among

others. In the case of Malaysia, the findings revealed that infrastructure promotes FDI inflow significantly to augment the traditional factors like labour cost according to Mat et al. (2012). Findings in the recent study still in the case of Malaysia carry out by Mugableh (2015) prove that exchange rate, GDP, broad money supply and trade drive FDI inflow accordingly. The study of Jadhav (2012) revealed that economic factor like natural resource is more relevant in attracting FDI inflow than the political and institutional factors in Brazil, Russia, India, China and South Africa. The study of Oladipo (2010) revealed that inward FDI in Nigeria are strongly connected to the country potential market size, export encouragement, human capital, infrastructure and macroeconomic stability. Onyeiwu and Shrestha (2004), maintain that the promoters of FDI inflow to Africa are economic growth, inflation, trade openness, external reserves and natural resources, while the traditional factors such as political right and infrastructure were found to be irrelevant in attracting FDI inflow to the continent. The study of Na and Lightfoot (2004) submits that the essential driver of FDI inflow to China includes openness, human capital development and infrastructure. The study of Kalotay and Sulstarova (2010) on the outward FDI of Russian revealed that factors such as natural resources and market size in the recipient countries are responsible for the attraction FDI inflow from Russia. The study of Udo and Egwaikhide (2008) revealed that exchange rate and inflation unrest discourages FDI inflow to Nigeria, while infrastructure, openness and the public sector size are key factors for attracting FDI inflow. The sudy of Babatunde (2011) submits that openness and GDP per capital are strong determinants of FDI in the sub Saharan Africa. According to Nurudeen et al. (2011), openness, privatization, infrastructure improvement and exchange rate exert significant positive impact on the FDI inflow, while market size influences FDI inflow negatively at a significant level. Inflation on the other hand exhibits insignificant positive impact on FDI inflow in Nigeria. The study of Singhania and Gupta (2011) submits that the promoters of FDI inflows to India are GDP, inflation rate and scientific research. Wafure and Nurudeen (2010) submit that market size, deregulation, political instability and exchange rate depreciation are responsible for the attraction of FDI inflow to Nigeria.

2.2. Theoretical Framework

Traditionally, there is uneven distribution of resources across the globe. This facilitate international trade for which FDI inflow is an integral part. Heckscher-Ohlin model asserts that the differences in resources across the globe serve as the sole reason for international trade. Thus, FDI inflow such as technological transfer, human capital development are determined by the different technological endowment across different region of the world as supported by (Li & Liu 2005; Pradhan & Kumar 2002). Furthermore, according to the work of Asiedu (2006), the key promoters of FDI inflow into Africa are the GDP size in the host country, abundance natural resources, improved infrastructure, manageable inflation rate, good legal system and functioning investment environment as opposed by

corruption and political unrest. The study of Ayanwale (2007) and Raluca and Alecsanru, (2012) lent to support to work of Asiedu (2006). Antonescu (2015) reveals that the promoters of FDI into EU and Romania regions are the local firms and the sectoral/regional characteristic. The model is supported by modernization theory which stress that FDI inflow is beneficial to the host economies especially the developing ones. The theorists view international interaction between the developed and the emerging economies as a way of assisting the later to achieving the objective of economic expansion which could transcend down to economic development. Empirically, some studies lent their support to the benefits accrued to FDI inflow. These include the study of Joshua et al., (2020). The study investigated the interaction between FDI inflow and economic acceleration in South Africa by adopting the dynamic ARDL method and found that FDI inflow influence the rate of economic advancement in the nation. Similarly, the work of Shahbaz et al., (2019) for the French economy using ARDL approach. The result show that FDI inflow is a driver of economic acceleration in the economy similar to the study of Joshua (2019). On the contrary, the dependency theory asserts that FDI inflow serve as a panaceas for capital flight, thus, exerting excruciating economic distress on the home economies (Adams 2009 and Chan & Clark 1996). Under the theory, the determinants of FDI is market size, cheap labour and so on. In essence, FDI inflow is a way of seeking for expanded market for the local product as well as to achieve cost maximization behaviours of the local firm.

3. THEORETICAL SETTING OF THE MODEL

This study seeks to investigate the determinants of FDI inflow into Nigeria within the study period. Some study (see: Hunady and Orviska, 2014; Tintin 2013; and Boateng et al. 2015) asserts that economic growth traditionally serve as a major determinant of FDI and vice versa. While other study submits that industrialization and trade openness serve as drivers of FDI inflow (Asiedu 2002). Thus, the theoretical setting of the study follows that economic growth, industrialization, and trade openness should promote FDI inflow positively. In addition, the study included the global oil price to the model as a control variable considering the fact that Nigeria economy depends almost ultimately on the oil resources. Thus, including the oil price is a measure that helps the researcher to avoid the omission of important variable.

Thus, the mode is express in the form:

$$FDI_t = f(GDP_t^{\beta_1}, ID_t^{\beta_{2,}}, \mathrm{OP}_t^{\beta_3}, TO_t^{\beta_4}), \quad (1)$$

Where FDI is proxies by foreign direct investment, GDP is a proxy of economic growth, ID represents industrialization, OP and TO are proxies by oil price and trade openness respectively. While β_i is the parameter of estimates.

The model is further express in log form to ascertain the growth impact in the long run economy:

$$\ln FDI_t = \beta_0 + \beta_1 \ln GDP_t + \beta_2 \ln ID_t + \beta_3 \ln OP_t + \beta_4 \ln TO_t + \varepsilon_t \quad (2)$$

Thus, at period t, lnFDI, lnGDP, lnID, lnOP and lnTO are in their natural logarithm form.

4. DATA AND METHODOLOGY

This study depends on the data stretching from 1980 to 2018. The variables are FDI, GDP, ID, OP, and TO which represent foreign direct investment, gross domestic product, industrialization, oil price and trade openness all of which are obtain from the World Bank data base, 2018.

Unit Root Tests

This study employ the traditional ADF and PP unit root tests to ascertain the stationarity of the series since it is generally assumes that time series data mostly exhibit non-stationarity at level. ADF and PP capture higher order autoregressive process and controlling of higher order correlation respective as stated below:

$$\Delta Y_t = \beta_1 + \beta_2 + \delta Y_{t-1} + \sum_{i-1}^{n} \alpha_1 \Delta Y_{t-1} + \varepsilon_t \qquad (3)$$

4.1 Bounds test to level relationship

This study adapted the ARDL bound test to co-integration as developed by Pesaran, Shin, and Smith (2001) which is flexible and suitable to be use irrespective of the order of integration of the series (Katricioglu, Fethi, Kalmaz, & Caglar, 2016). Thus, equation one is estimated through:

$$\Delta \ln FDI_t = a_0 + \sum_{i-1}^{m} b_i \Delta \ln FDI_{t-1} + \sum_{i-1}^{m} c_i \Delta \ln GDP_{t-1} + \sum_{i-1}^{m} d_i \Delta \ln ID_{t-1} + \sum_{i-1}^{m} e_i \ln OP_{t-1} + \sum_{i-1}^{m} f_i \ln TO_{t-1}$$
$$+\sigma_1 \ln FDI_{t-1} + \sigma_2 \ln GDP_{t-1} + \sigma_3 \ln ID_{t-1} + \sigma_4 \ln OP_{t-1} + \sigma_5 \ln TO_{t-1} \qquad (4)$$

Where Δ is the difference operator, and ε_t is the serially independent random error with a mean zero and a finite covariance matrix (Katircioglu et al, 2016).

Conclusively, the F-test statistic approach was employed by this study to examine the single long-term relationship as specified in equation 4, pesaran et al. (2001). Thus, the null hypothesis of a no-long-run relationship is $H_0 : \sigma_1 = \sigma_2 = \sigma_3 = \sigma_4 = \sigma_5 = 0$, while the alternative hypothesis of long run relationship is $H_1 : \sigma_1 \neq \sigma_2 \neq \sigma_3 \neq \sigma_4 \neq \sigma_5 \neq 0$.

5. The Empirical Findings and Explanation

This section deals with the empirical findings and interpretation. The series were converted to their natural form to eliminate heteroscedasticity in the series. The stationarity test proves a mixed order, thus, the ARDL bound testing was adapted to examine the long run equilibrium link between the variables. This study went further to carry out a causality flow exhibit by the series using the TY Granger causality test. The visual effect of the series was also examined as represented in figure 1. In Table 1, the result shows that the series were positively skewed with the exception of trade openness, while the

Jargue-Bera reports via it P-value that except for GDP and trade openness, series are normally distributed on the overall. On the other hand, the correlation coefficient matrix presented in table 3 above revealed a negative but significant link between economic growth and FDI inflow, oil price and FDI inflow, and a negative but insignificant relationship between industrialization and FDI inflow. These revelations are most likely connected with the sharp economic depression experience in Nigeria between 2017 to 2018 which resulted to persistence fall in demand which forced many firms to exits the country, couple with a drastic fall in the world oil price about the same period, while trade openness have help attract little FDI inflow as supported by UNCTAD (2018). The Table 4 represents the findings from the stationarity test via the traditional tools of ADF and PP test. The results show that at level only FDI was proved to be stationary at 10% degree of freedom, while other series became stationary at first difference by 1% percent level of significance respectively. For the PP unit root test, only industrialization was found stationary at level and at 1% level of significance, while the other series became stationary at first difference and at 1% level of significance a case of mixed order of integration. Thus, the dynamic ARDL bound test is suggested to be adopted by this study as a suitable method of estimation. The lower part of table 5 represents the findings from the diagnostic tests which prove that there model is pure and normally distributed, homoscedastic and no case of serial correlation. The Ramsey reset test indicates the dynamic and well specified nature of the model. Finally, the CUSUM and CUSUM of square statistics as present in figure 1a and 1b revealed the correct fitness into the critical bounds.

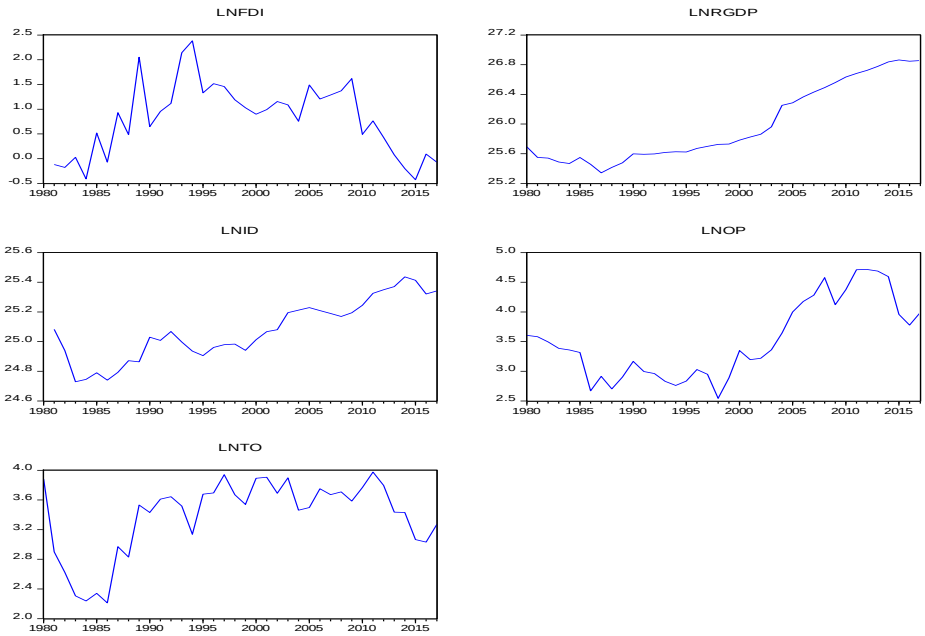

Figure 1: Trend movement of the series of interest

Table 2: Summary Statistics

	LNFDI	LNRGDP	LNID	LNOP	LNTO
Mean	0.812	25.994	25.074	3.514	3.369
Median	0.929	25.731	25.067	3.359	3.532
Maximum	2.382	26.864	25.436	4.716	3.976
Minimum	-0.427	25.343	24.729	2.543	2.212
Std. Dev.	0.725	0.521	0.202	0.666	0.506
Skewness	0.069	0.531	0.044	0.471	-1.041
Kurtosis	2.325	1.667	2.018	1.952	3.021
Jarque-Bera	0.731	4.478	1.498	3.062	6.686
Probability	0.694	0.107	0.473	0.216	0.035
Sum	30.026	961.803	927.728	130.032	124.657
Sum Sq. Dev.	18.913	9.778	1.462	15.949	9.219
Observations	37	37	37	37	37

LnFDI: log of foreign Direct Investment, lnRGDP: log of Real Gross Domestic Product, lnID: log of Industrialization, lnOP: Oil Price, lnTO: Trade Openness

Table 3: Correlation coefficient matrix analysis

Observations	FDI	RGDP	ID	OP	TO
FDI	1.000				
RGDP	-0.288**	1.000			
ID	0.234	0.927***	1.000		
OP	0.269	0.822***	0.778***	1.000	
TO	0.277**	0.199	0.373**	0.275**	1.000

FDI: log of Foreign Direct Investment, RGDP: log of Real Gross Domestic Product, ID: log of Industrialization,
OP: oil price, TO: Trade Openness

Table 4: ADF & PP Unit Root Tests

Statistic Level	lnFDI	lnRGDP	lnID	lnOP	lnTO
t_T (ADF)	-2.645	-3.155	-2.942	-2.138	-2.755
t_μ (ADF)	-2.673*	1.196	-0.581	-1.094	-2.125
t (ADF)	-1.645*	2.737	0.615	0.037	-0.607
t_T (PP)	-2.489	-3.155	-4.533***	-2.138	-3.122
t_μ (PP)	-2.547	0.851	-0.789	-1.095	-2.398
t (PP)	-1.512	2.169	0.564	0.037	-0.607
Statistic First Difference					
t_T (ADF)	-10.531***	-5.059***	-5.043***	-5.713***	-7.269***
t_μ (ADF)	-10.133***	-4.909***	-5.132***	-5.740***	-7.358***
t (ADF)	-10.284***	-4.042***	-5.078***	-5.815***	-7.495***
t_T (PP)	-27.227***	-5.064***	-5.043***	-5.713***	-7.377***
t_μ (PP)	-10.129***	-4.904***	-5.132***	-5.740***	-7.358***
t (PP)	10.281***	-4.083***	-5.069***	-5.815***	-7.495***

Note: Both in ADF and PP tests, unit root tests were performed. *, ** and *** denote rejection of the null hypothesis at the 1 percent, 5 percent and 10 percent levels respectively. Tests for unit roots have been carried out in E-VIEWS 10

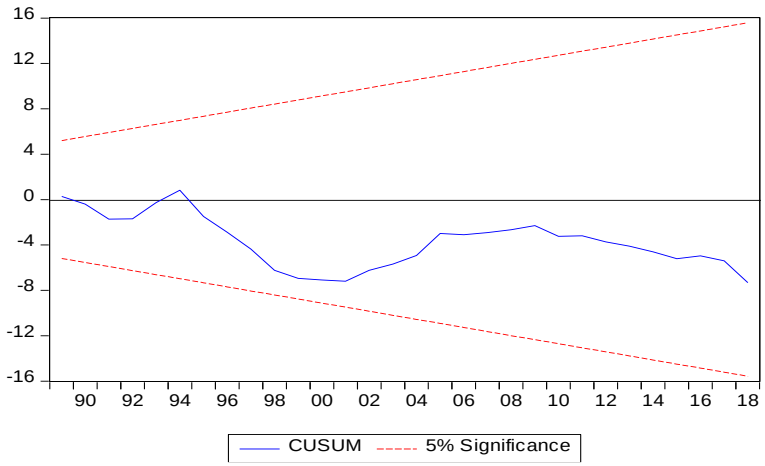

Figure 2a: cumulative sum of Recursive Residuals showing stability

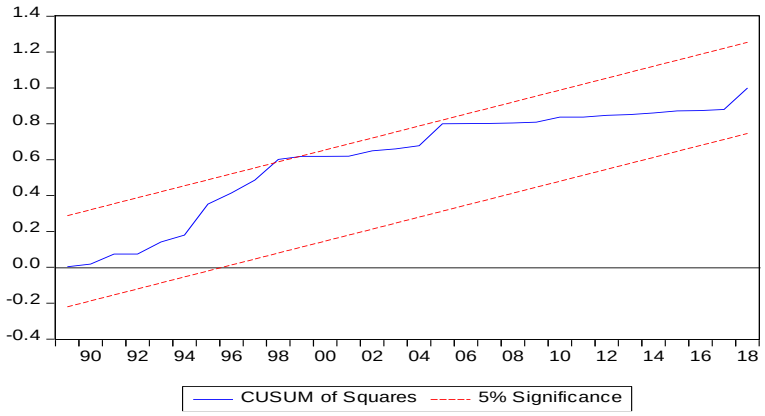

Figure 2b: Cumulative Sum of Squares of Recursive Residuals which indicates stability

Table 5 reports the findings from the long run level relationship coefficient from the ADRL bound test. The result revealed that economic growth asserts a positive but insignificant impact on FDI inflow contradicting the work of Hunady and Orviska (2014). Thus, a 1% increase in economic growth (market size) will attract more FDI inflow by about 31% and 17% in the short and long distance terms respectively. This insignificant impact of economic growth (market size) on FDI inflow may be connected to the recent economic recession experienced in the country which still lingered till date. On the other hand, a 1% change in oil price will cause a 0.086% and 0.118% decrease in FDI inflow into the country in both short run and long run. In the period under review, oil price exert negative impact on FDI inflow as earlier expected which may be connected to the recent fall in oil price in the world market. Note that most of the FDI inflow into the country are channeled into the extraction (oil) sector (UNCTAD 2018). Thus, a fall in the oil price cause an automatically decline in the level of FDI inflow into the economy. Thus, the government must be ready to diversify FDI inflow into other sectors of the economy to avoid over dependency on oil as major determinant of FDI inflow to forestall future occurrence. While a 1% changes in industrialization will cause a 2.020% and 2.855% decrease in FDI

inflow in the short term as well as in the future. The magnitude of the coefficients indicate that the respond of FDI inflow to change in industrialization is elastic which implies that for every unit change in industrialization will lead to sharp fall in FDI inflow into the economy. Trade openness, demonstrate a positive and significant influence over FDI inflow in the short and long run as expected confirming the work of Asiedu (2002). A 1% change in openness will promote FDI inflow by 1.027% and 1.541% in both short and long run. The magnitude of the result shows that the interaction between trade openness and FDI inflow is elastic in nature implying that a little favourable openness policies will lead to a sharp attraction of FDI inflow into the Nigeria economy. This suggest that the economic boarder of Nigeria should be widely open to attract more foreign investors. The results from this study is the reflection of the rapid economic depression peculiar with the country from 2015 through 2018 a situation that cause a sharp fall in demand and forced many firms to exits the economy, couple with the fall in the world oil price as supported by UNCTAD (2018). Finally, the result from Table 6 indicate a co-movement between the variable of interest in distance future. This shows that in the future the disturbances will be corrected within the speed of 71% as indicated speedily by the ECM.

Table 5: *ARDL Result FDI=f(GDP,IND,OP, TO)*

Variables	Coefficient	SE	t-statistic	P-Value
Short-run				
LNGDP	0.483	0.668	0.725	0.4742
LNIND	-2.020	1.618	-1.249	0.2210
LNOP	-0.083	0.219	-0.383	0.7043
LNTO	1.027	0.285	3.599	0.0011
ECT	-0.701	0.137	-5.114	0.0000
Long run				
LNGDP	0.684	0.941	0.726	0.4733
LNIND	-2.855	2.329	-1.226	0.2295
LNOP	-0.118	0.305	-0.388	0.7009
LNTO	1.451	0.292	4.978	0.0000
Diagnostic Tests				
Tests	F-statistic	Prob. Value		
χ^2 *SERIAL*	0.1737	0.8414	F(2,28)	
χ^2 *WHITE*	1.1916	0.3375	F(6,30)	
χ^2 *RAMSEY*	1.8323	0.1863	F(1,29)	

Note: ***,** and * represent 1, 5 and 10 percent respectively

Note: author computation

Table 6: ARDL Bounds test

Test stat.	Value	K
F-stat	3.7367	4
Critical Value Bounds		
significance	I(0) Bounds	I(1) Bounds
10%	2.427	3.395
5%	2.893	4
1%	3.967	5.455

Table 7 presents the result from the dynamic TY causality test which shows a one way drive running only from GDP to FDI inflow as supported by Joshua et al., (2020) as well as the long run level relationship of this study which revealed that economic expansion exerts positive influence on FDI inflow. The rest of the series does not granger cause FDI inflow as revealed by the study. The findings further shows a feedback causal link between GDP and oil price, implying that economic growth and oil price drive each other accordingly. This support the assertion that the Nigeria economy is highly dependent on oil resources for sustenance. Another interesting result proved that only industrialization drives GDP. This support the economic intuition that achieving industrialization will assist in expanding economic progress of a nation particularly the emerging economies. Trade openness and industrialization exhibit a unidirectional causal interaction running only from trade openness to industrialization. This implies that economic openness particular inform of FDI inflow will help drive the local firm to maturity through transfer of advance technology and foreign capital. Finally, the study revealed a one way drives running from oil price to trade openness which mean that the abundance of natural resources of Nigeria serves as a driving forces for the national involvement in international trade. Many nations trade with Nigeria as a result of her natural wealth like the crude oil and so on.

Table 7. TY Granger Results.

Excluded	Chi-sq	df	Prob.
Dependent variable: LNFDI			
LNGDP	10.47061	1	0.0012
LNIND	1.604631	1	0.2052
LNOP	0.086676	1	0.7684
LNTO	0.451871	1	0.5014
All	16.04188	4	0.0030
Dependent variable: LNGDP			
LNFDI	1.090071	1	0.2965
LNIND	6.803468	1	0.0091
LNOP	7.731727	1	0.0054
LNTO	1.000883	1	0.3171
All	15.80347	4	0.0033
Dependent variable: LNIND			
LNFDI	0.687055	1	0.4072
LNGDP	0.423917	1	0.5150
LNOP	1.105610	1	0.2930
LNTO	6.334229	1	0.0118
All	10.16556	4	0.0377
Dependent variable: LNOP			
LNFDI	1.639548	1	0.2004
LNGDP	18.16413	1	0.0000
LNIND	9.576867	1	0.0020
LNTO	0.088303	1	0.7663
All	25.05546	4	0.0000
Dependent variable: LNTO			
LNFDI	0.940839	1	0.3321

LNGDP	2.616301	1	0.1058
LNIND	2.504727	1	0.1135
LNOP	4.629178	1	0.0314
All	10.22137	4	0.0369

Note: significance at ***0.01 and **0.05

6. CONCLUSION AND RECOMMENDATION

This study seeks to investigate the determinants of FDI inflow to Nigeria with a specific focus on oil price and economic growth as control variables considering the centrality of the oil sector to the economy of Nigeria considering the decline in the oil price that set in recently. The recent recession witnessed in Nigeria is another issue of major concern. The findings revealed that economic growth exerts insignificant positive impact on FDI inflow as supported by the work of Udo and Egwaikhide (2008) in the case of Nigeria as well as (see Onyeiwu and Shrestha 2004; Oladipo 2010) in separate studies. However, the insignificant impact is most likely connected to the recent great economic depression which set in from 2015 to 2018 that causes a drastic fall in demand, thus forcing many firms to exits the country as reported by the UNCTAD (2018). Similarly, the findings also prove that oil price influences FDI inflow negatively which is believed to be connected with the recent fall in oil price considering the fact that Nigeria is an oil driven economy which attract FDI inflow into the oil sector and other segment of extraction industry.

Inview of the above findings, there is the need for government intervene through increased government expenditure in order to raise demand and to improve the productivity. By so doing the economy would be revived, thereby attracting new line of foreign investors. Moreover, the government need to diversify the FDI inflow into other sectors such as industry, agriculture by revitalizing the affected sectors to a functional level. In essence, the authority concern need to diversify the economy to avoid over dependency on the oil sector in other to cushion the effect of oil price shock in the future since oil price is an exogenous factor. Thirdly, more strategic free trade policies is critical for the attraction of FDI into the economy. Thus, the boarder closure policy embarked upon in the recent time by the Nigeria government is not healthy to the economy because it could cut down the level of FDI inflow. Thus, the possible immediate review and reversal of the policy is crucial to the economy. Finally, the government can strengthen the trade liberation by putting in place measures that remove trade barriers as corporate tax. Government could as well enter into new bilateral relationship with potential partners in other to increase its chances to integrate into the global village. This will encourage new inflow of firms to invest in the economy and other benefits accrued to globalization.

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