Effect of Foreign Direct Investment on Economic Growth in Nigeria

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Abstract

Nigeria as a nation has used foreign direct investment as a mean to complement the domestic resources toward economic growth. Many literature have suggested a positive effect of foreign direct investment on economic growth while others see it in another angle. It is as a result of this differences that necessitate the need of this study to investigate whether foreign direct investment has a causal relationship with Nigerian economic growth. The study covered the period of 38 years of 1981-2018. The study employed secondary data sourced from the Central Bank of Nigeria. The Ordinary Least Square of the Regression model was used with E-view –version (10) for statistical analysis. The results reveal that Foreign Direct Investment has a significant effect on the Nigerian economy growth represented by gross domestic product. The result also find that exchange rate has a positive effect on the Nigerian economy growth.Thus, the conclusion of the study is that foreign direct investment and foreign exchange have causal relationship with economic growth in Nigeria. The study recommends that the Nigeria government should improve the infrastructural development of the nation in order to encourage more economy (driven) FDI. Also, the Nigeria government should improve the security situation of the nation so as to attract more investment. Finally, there is need to have a total liberalization of the trans-national investment sector. This will help to remove barriers and create a free investment environment for the nation.

Keywords: Foreign Direct Investment, Economic Growth, Exchange Rate

1. INTRODUCTION

A nation is driven to a greater economic growth through savings. In most developing countries, the amount of income not consumed in a given year (savings)is usually low, thereby, creating an imbalance in the economy. When a nation cannot boast of development through savings, that nation may have to adopt the options of either having a deficit budget (financing investment through borrowing) or rely on attracting foreign direct investment. Many researchers have proven that Foreign Direct Investment (FDI) has a positive relationship to economic growth of a host country. Foreign DirectInvestment lead to openness in trade, encourage technology transfer, financial capacities, create large market size andhuman capital development (Bakari&Tiba, 2019). Buckley, Clegg, Wang and Cross (2002) also opined that FDI contribute to economy growth in capital accumulation, technology, development of human capital. FDI sourcesalso matter most to many countries. FDI from North America and Southern Asia contribute more than FDI from Central and South America (Tango & Tan, 2018).

Lambe and Uwaleke (2018) opined that there is directional causal relationship that exists in an economy. Economy could be driven by development of the host country called development –driven FDI, or a situation where FDI improves development of the host economy, called FDI-led development, and the mixture of the two variables or none. Nigeria as a nation has adopted many policies towards wooing investors to the economy. The government has enhancedfree market economy, reduce administrative and bureaucratic procedure of doing business, improvement in area of fiscal policies, diaspora involvement in capital formation, privatization of some moribund industries, and the review of the Nigeria Investment Promotion Commission Act amongst others to promote and encourage both local and foreign investment. Nigeria as a nation must work on both directions towards a robust FDI drive to the nation. Foreign Direct Investment climate in Nigeria has witnessed a significantly downward trend and has been bedeviled with the ravaging economic and socio-political crisis in the country of recent and this has negatively affected economic growth and development. Ntembe and Sengupta, (2016) suggested that regions can encourage and promote economic growth by mobilizing more resources domestically, and ensure political stability that would open the economy to external competitiveness.

According to Transparency International report of 2019, Nigeria scored 26 points out of 100 on 2019 corruption perceptionindex report. Having ranked 146 out of 180 countries examined, this report has given the country a serious setback on her quest to build the economy through capital inflow from around the globe. This study intends toexaminethe effect of FDI on economic development for a varying period of 38 years from 1981-2018.The study of Emmanuel (2016) stopped in 2015 while this study seeks to update by extending to cover the effect of FDI between 2016 and 2018, the Ordinary Least Square of the Regression model was used with E-view –version (10) statistical analysis. This study will helpto examine the effectof Foreign Direct Investmenttothe economic growthto reveal whether the aggressive efforts of the current Nigerian President to persuade foreign investors to channel more resources to Nigeria is yielding any positive result. Therefore, the main objective of the study is to examine the effect of Foreign Direct Investment on economic growth. The following hypotheses in null form guide this study:
Ho1: There is no significant relationship between FDI and Economicgrowth in Nigeria.
Ho2: Exchange rate has no significant relationship with Economic growth in Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Concept of Foreign Direct Investment and Economic Growth

Organisation for Economic Cooperation and Development (OECD,1996) defines Foreign Direct Investment as ‘An investment that reflect the objective of obtaining a lasting interest by a resident entity in one economy (“direct investor”) in an entity resident in an economy other than that of the investor(“direct investment enterprises”).The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence on the management of the enterprises” (OECD,I996). In a similar vein, World Bank (1996) sees Foreign Direct Investment as investment made to acquire a lasting interest in or effective control over an enterprise operating outside the home country of the investor. Economic growth on the other hand is the expansion of productionpossibilities that results from increased availability and increased productivity of economic resources in a country (David, 1997).

2.2 Empirical Review

Edwards and Madid (2016) investigated Foreign Direct Investment, economic growth, and volatility: a useful model for policy makers. Dozens of variables and modelling were employed and finding suggested that FDI may have positive or negative effect on growth depending on whether the economic and social conditions are met by the host country. Emmanuel (2016) examined the effect of foreign direct investment on economic growth in Nigeria using data derived from Central Bank of Nigeria statistical bulletin and publications of National Bureau of Statistics covering a period of 1981-2015.The data were analysed using multiple regression technique and Gretl 1.9.8 econometric software. The result showed that FDI has a positive and significant effect on gross domestic product of Nigeria and that exchange rate has no effect on gross domestic product.

Aminu, El-Maudeand Hamza(2015) studied foreign direct investment and the growth of the Nigerian Economy.The study covered the period from 1981- 2013,Augmented Dickey-Fuller and Philip-Perron technique was adopted. The result showed that foreign direct investment, foreign exchange rate and openness has a significant impact on economic growth (GDP). Khun (2018) assessed the impact of foreign direct investment on the economic growth in Cambadio: Empirical evidence .The data used covered a period of 2006-2016.Correlation matrix and multiple regression analysis techniques were used. The result revealed that FDI has a positive impact on the economic growth of Cambadio. Oumarou and Maiga (2019) studied a causal relationship between trade, FDI and economic growth in Niger. The study deployed time series econometric tests including the Augmented Dickey - Fuller (ADF) unit root test developed by Dickey-Fuller, stationary test developed by Kwiatkowski-Philips-Schmidt-Shin (KPSS), Johansen co-integration test and Granger causality. The result revealed that while trade has a positive effect on economic growth, FDI has a negative effect on the economic growth in Niger.

Yeboua (2019) assessed foreign direct investment, financial development and economic growth in Africa: evidence from threshold modeling. Data were collected from 26 African countries from 1990-2013. Panel smooth transition regression model (PSTR) was deployed. The result showedthat only African countries that are operating over certain level of financial development enjoyed growth induced effect of FDI. Adigwe, Ezeagbu and Francis (2015) assessed the effect of foreign direct investment on Nigeria economic growth. The study covered the period 2008-2013 and Pearson correlation together with SPSS version 20.0 was deployed. They corroborated others earlier studies which showed a positive significant relationship between FDI and economic growth in Nigeria. Bakariand Tiba (2019) examined foreign direct investment and domestic investment on economic growth: New evidence from Asian Developing Countries. Data covered the period of 2002-2017. The fixed and random effect model was deployed. The result showed that FDI and export affect the growth of the 24 Asian economies negatively and that domestic investment influence economic growth positively.

Chigbu, UbahandChigbu (2015) studied the impact of capital inflows on economic growth of developing countries using Nigeria, Ghana and India, with data from 1986-2012. Augmented Dickey-Fuller unit root test, together Johansen Co-integration were used. The casual relationship was tested using Granger Causality, and Ordinary Least Square method was used to estimate the model. The findings showed that capital inflows (through FDI) have significant impact on economic growth in the three countries. The study further asserted that in Nigeria and Ghana, what influenced economic growth wereFDI, portfolio movement and foreign borrowing. Tang and Tan (2018) assessed whether the source of foreign direct investment matter to economic growth in Malaysia.Data were sourced over the period, 2008 Qi- 2016 Q3.The Autoregressive distributed lag (ARDL) was deployed for the research. The findings revealed that the source of the FDI matter most to the effect of the host economy. The research further revealed that FDI from North America and Southern Asia contribute more significantly to the economic growth of Malaysia than FDI flow from Central and South America, Northeast Asia and Oceania.

2.3 Theoretical Framework

2.3.1 The Eclectic Theory

There has not been a universally accepted theory in most literatures on FDI. Why different theories exist on the concept, this research work assessed the Eclectic Paradigm (mostly referred to as Ownership Location Internalisation -OLI) and the motives for FDI framework by Dunning in the several publications in the year 1980, 1981, 1988 and 1992. The theory provides for three factors that determined the activities internationally by Multi National Enterprises (MNEs). The factors are Ownership (O) advantages, Location (L) advantages, and Internalization (I) advantages. The theory explained that MNE developed competitive O advantages at their home countries; transfer the ownership advantages to outside home country depending on location L advantages through FDI. Thereby, internalize the O advantages, while the Internalization explain the choice of entry mode. The theory further explains that there is a close linkage between the advantages of O and I, this is because O advantages in knowledge type needs to be internalized. As stated by Danning, the O advantages include firm's intangible assets, such as knowledge, brands, organizational structure, management skills, including natural factor endowments, manpower, capital; the cultural, legal and institutional environment; and industry market structure (Rugman, 2010). The criticism of this theory by Dunning is that the theory is too eclectic and the elements of FDI in other nation were too overdesigned. This may be linked to the Uppsala theory (one of the theoryof internationalization process of firms) whereby firms grow locally at home country before internalization. Another theory of consideration is that of Endogenous growth theorywhich argues that economic growth is an internal growth, and the development of human capital will create technological change and thereby leads to a better production.

3. METHODOLOGY

The main objective of this study is to examine the effect of FDI on economic growth in Nigeria; which is to provide an understanding as to whether FDI prompt economic growth. This study uses ex-post facto methodology and the research used secondary data collected method obtained from CBN Statistical Bulletin and the Nigerian Bureau of Statistics.In conducting the study. Multiple regression analysis was appliedusing E-view statistical analysis. The model below was developed to establish relationship between FDI, GDP and Exchange rate:

GDP= $\beta0 + \beta1FDIt + \beta2EXR + e$

Where: GDP= Gross domestic product
$\beta0$ =Intercept (constant term)
$\beta1FDI$ = Foreign direct investment
$\beta1EXR$=Exchange rate
E=Error term.

Gross domestic product is the proxy for economic growth (dependent variable); FDI is the explanatory variable and Exchange rate stands for moderating (M) variable. Apriori Expectation: It is expected *that* $\beta1\beta2 > 0$

4. RESULT AND DISCUSSION

Table 1.Gross Domestic Product (GDP at Constant Basic Price), Foreign Direct Investment (FDI) and Exchange Rate (EXR) in Nigeria from 1981-2018.

Year	GDP(N'BILLION)	FDI (N'BILLION)	EXR (=N=/$)
2018	69,810.02	4465.48	306.08
2017	68,490.98	3432.42	305.79
2016	67,931.24	2106.12	253.49
2015	69,023.93	2389.69	193.18
2014	67,152.79	3043.37	158.55
2013	63,218.72	3924.05	157.31
2012	59,929.89	3457.68	157.5
2011	57,511.04	3506.91	153.86
2010	54,612.26	2978.26	150.3
2009	49,856.10	2224.05	148.88
2008	46,012.52	2006.5	118.57
2007	42,922.41	1640.14	125.83
2006	39,995.50	740.21	128.65
2005	37,474.95	341.72	132.15
2004	35,020.55	248.22	133.5
2003	31,709.45	258.39	129.36
2002	28,957.71	225.22	120.97
2001	25,267.54	132.43	111.94
2000	23,688.28	115.95	101.65
1999	22,449.41	92.79	92.34
1998	22,332.87	80.75	21.89
1997	21,789.10	110.45	21.88
1996	21,177.92	111.29	21.88
1995	20,353.20	75.94	21.9
1994	19,979.12	22.23	21.89
1993	19,927.99	29.6603	22.07
1992	19,620.19	14.463	17.3

1991	19,199.06	6.9161	9.91
1990	19,305.63	4.686	8.04
1989	17,294.68	13.8774	7.36
1988	16,215.37	1.7182	4.54
1987	15,263.93	2.4528	4.02
1986	15,237.99	0.7358	1.75
1985	14,953.91	0.4341	0.89
1984	13,779.26	0.3604	0.77
1983	13,849.73	0.2643	0.73
1982	14,985.00	0.29	0.67
1981	15,258.00	0.3347	0.62

Source: CBN Statistical Bulletin (2018)

Test of Hypothesis

The results of various tests of hypotheses are presented in this section.

Decision Rule

The hypotheses are tested using Ordinary Least Square of the Regression model. The significance of the variables tested in the model is assessed by comparing the p-value against the level of significance (0.05). The H_O is rejected if the p-value is less than the level of significant and we thus conclude that the variable under consideration is significant. Otherwise we accept the null hypothesis and conclude that the independent variable under consideration does not have significant effect on the dependent variable.

Hypothesis I:

Ho: Foreign Direct Investment has no significant effect on the Nigerian economic growth.

Table 1

Dependent Variable: GDP_N_BILLION_
Method: Least Squares
Date: 02/27/20 Time: 01:36
Sample: 1981- 2018
Included observations: 38

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI__N_BILLION_	12.88344	0.817637	15.75693	0.0000
C	20907.40	1405.197	14.87863	0.0000

R-squared	0.873365	Mean dependent var	33725.22
Adjusted R-squared	0.869847	S.D. dependent var	19578.10
S.E. of regression	7063.139	Akaike info criterion	20.61436
Sum squared resid	1.80E+09	Schwarz criterion	20.70055
Log likelihood	-389.6729	Hannan-Quinn criter.	20.64503
F-statistic	248.2807	Durbin-Watson stat	0.525510
Prob (F-statistic)	0.000000		

Source: Compilation of the author, based on the analysis results using E-views

The R-square value is 0.87; it means that the model has successfully predicted the variables. This implies that 87% changes in the Nigerian economy growth are explained by the changes in the Nigerian Foreign Direct Investment. The Adjusted R-squared value of 0.87 indicates that there is strong relationship between Nigerian economy growth and Nigerian Foreign Direct Investment. Finally, the P-value is 0.0000, less than 0.05. We therefore, reject the null hypothesis and conclude that Foreign Direct Investment has a significant effect on the Nigerian economic growth.

Hypothesis II:
Ho: Exchange rate has no significant effect on the Nigerian economic growth

Table 2

Dependent Variable: GDP_N_BILLION_
Method: Least Squares
Date: 02/27/20 Time: 01:40
Sample: 1981 -2018
Included observations: 38

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXR___N__$_	206.5819	14.66296	14.08869	0.0000
C	15415.48	1811.234	8.511038	0.0000

R-squared	0.846476	Mean dependent var	33725.22
Adjusted R-squared	0.842212	S.D. dependent var	19578.10
S.E. of regression	7776.928	Akaike info criterion	20.80691
Sum squared resid	2.18E+09	Schwarz criterion	20.89310
Log likelihood	-393.3312	Hannan-Quinn criter.	20.83757
F-statistic	198.4913	Durbin-Watson stat	0.302072
Prob(F-statistic)	0.000000		

Source: Compilation of the author, based on the analysis results using E-views.

The R-square value is 0.85; it means that the model has successfully predicted the variables. This implies that 85% changes in the Nigerian economic growth are explained by the changes in the Nigerian Exchange Rate. The Adjusted R-squared value of 0.84 indicates that there is strong relationship between Nigerian economic growth and Nigerian Exchange Rate. Finally, the P-value is 0.0000, less than 0.05. We therefore, reject the null hypothesis and conclude that Exchange rate has a significant effect on the Nigeria economic growth.

5 CONCLUSION AND RECOMMENDATIONS

This study investigates the effect of foreign direct investment-FDI-on economic growth (GDP) in Nigeria. The study has revealed that foreign direct investment has a significant positive effect on economic growth in Nigeria. The study also revealed that foreign exchange has a significant effect on the economic growth of Nigeria. This could be attributed to the wide exchange rate between the local currency and the currencies in which the foreign direct investment were denominated. The findings therefore concur with the findings of Aminu, El-Maudeand Hamza (2015) which also discovered that the effect of FDI on the economic growth was positively significant, this also justified the consistent increase in the GDP growth for 2016, 2017 and 2018 at 67,931.24, 68,490.98 and 69,810.02 respectively. This increase may be linked to the positive effect of the globetrotting effort of the Nigerian president in the recent past to convince foreign investors and the development partners to come and invest in Nigeria and the currency swap initiatives with the Chinese government. However, the study is at variance with the study ofOumarou and Maiga (2019) whose results revealed that FDI has a negative effect on the economic growth in Niger. Although, Niger's economy cannot be compared with the Nigeria since Nigeria is the hub of west African regional market and was adjudged the largest economy in Africa in 2016 and besides, it was reported by the United Nations that about 20% of the whole African's populations lives in Nigeria and almost 50% of African investments are also in the country (World Bank, 1996). Following the findings of this study, the following recommendations are made:

i. The Nigeria government should improve the infrastructural development of the nation in order to encourage more Economy –driven- FDI.
ii. The Nigeria government should improve the security situation of the nation so as to attract more investment.
iii. A total liberalization of the trans-national investment sector is required. This will help to remove barriers and create a free investment environment.
iv. Nigeria government should also intensify more efforts on advocacy visit to technologically advanced countries to partner on development agenda and encourage more foreign direct investment while the ongoing efforts at addressing the security challenges should be stepped up so as to provide a very conducive environment for the potential investors and technical partners.

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