

FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

Foreign Direct Investment (FDI) is a direct investment by a corporation in a commercial venture in another country. Its' important towards catalyzing the growth of an economy can never be over emphasized. Hence this study is to ascertain its contribution to the national grid. To achieve this, the study employed some useful variables as the real gross domestic product, exchange rate, trade openness and foreign direct investment. These variables were analyzed and the result depict that trade openness has a negative relationship and not significant in contributing to the growth of Nigeria economy. Though Exchange rate and foreign direct investment are positively related to the economic growth, yet they both have no significant impact on the economic growth in Nigeria. The study found that there is need for the government of Nigeria to put favorable policy that will encourage foreign investors so as to improve the exchange rate which in turn will affect the standard of living positively. More so, the study found that foreign direct investment and economic growth does not granger cause each other within the period of study.

Keywords: Economic growth, Foreign Direct investment, Standard of living and Granger causality test

I INTRODUCTION

Foreign Direct Investment (FDI) is a direct investment by a corporation in a commercial venture in another country. FDI is defined as an investment by multinational corporations in foreign countries in order to control assets and manage production activities in those countries. It plays an extraordinary and growing role in global business by providing a firm with new markets and marketing channels for their products. For a host country or the foreign firm which receives the investment, it provides a source of new technologies, capital, process, products, organizational technologies and modern management practices. All of these are presumed to contribute to economic growth and development in an economy. FDI is important not just for the developing countries but also for developed nations.

To this end, Nigerian authorities have been trying to attract FDI through various reforms. Some of the policies that were put in place to attract FDI include; the deregulation of the economy in the 1980s, the New Industrial Policy of 1989, establishment of the Nigerian Investment Promotion Commission (NIPC) in early 1990s, and the late 1990s, the



establishment of the Economic and Financial Crimes Commission (EFCC), and the Independent Corrupt Practices Commission (ICPC). The Nigerian Investment Promotion Commission, (NIPC), was established by Decree number 16 of 1995, during the administration of the late General Sani Abacha. It bills itself as 'the one-stop-shop for exploring and planning foreign investment and new business in Nigeria. The Agency's mandate is to facilitate foreign investments and advocate on behalf of foreign investors in the areas of favourable government policies. The Agency helps to create a friendly investment climate so that investors can see Nigeria as an investment haven .In the case of EFCC and ICPC, The two agencies were established to assist in fighting corruption in Nigeria. Corruption has led to loss of confidence in Nigeria by foreigners, Nigerian citizens at home and abroad due to activities of fraudsters, corrupt public officials and mis-governance. Tackling corruption by the two agencies would lead Nigeria into having valuable economic activities and forestalling foreign investment in the country.

The importance of Foreign Direct Investment cannot be overemphasized given that it directly or indirectly contributes to economic growth and development when well managed.

Over the years in Nigeria, the inflow of foreign direct investment has been very low. This can be attributed to the fact that the macroeconomic environment has not been conducive for foreign firms and investors to consider the economy suitable for investment. This is justified because they will sense high degree of uncertainty beclouding their business prospects. Specifically are the recent insurgent attacks by a group known as “boko Haram”. This insurgence has gone a long way in discouraging and weakening the prospects of foreign direct inflow into the economy.

Furthermore, the federal government has however made significant efforts to boost the level of foreign direct inflow but to no avail. There has been deficiency in the capital accumulation needed for increase in the level of investment in Less Developed Countries (LDC), Nigeria in particular. This is due to the fact that low level of savings which is caused by factors such as high level of poverty, weak financial system which cannot properly mobilized funds internally, low level of entrepreneurial spirit among local entrepreneurs, among others. public officials and mis-governance. Tackling corruption by the two agencies would lead Nigeria into having valuable economic activities and forestalling foreign investment in the country.

The sole aim of this study is to ascertain the impact of foreign direct investment on the economic growth in Nigerian economy with the following objectives: To evaluate the impact of foreign direct investment and its control variables on economic growth in Nigeria. To determine the causality relationship between the foreign direct investment and economic growth in Nigeria. For the purpose of our study, the period of (2008–2017) shall be covered.

II REVIEW OF RELATED LITERATURE

There are several studies that have articulated theoretically and empirically foreign direct investment determinants in a country but very few studies on foreign direct investment determinants in Nigerian economy. Moreover, most theoretical studies in the development of a multiple model and provide evidence that GDP that proxies for the market size and

potential is shown to be a big attraction For FDI. Labor quality and the progress of reform or the degree of openness are also important determinants of the distribution of FDI.

Addison and Heshmati (2003), in their study of FDI determinants in 182 countries explored the determinants of FDI flows in developing countries using estimation method and pooled OLS. They found that both democracy and ICT have significant and positive effects on FDI, leading them to conclude that developing countries should receive more support to democratize and set up ICT equilibrium trap. They also find that the impact of the variance of inflation is weekly significance for a pooled model. In Europe and central Asia and MENA countries, it shows negative sign but shows positive sign for Latin America.

Behreez and Mastafa (2011), by estimating a panel data econometric model, the determining factors of foreign direct investment (FDI) in 32 developing countries over the period of 1990–2007. According to the econometric results in the main model, technology and internet have positive effects on FDI inflows in developing countries.

Karunaratne and Tisdell (1998), in their study of globalization and multinational foreign direct investment in Australia, found variable like openness to be positive and significant to FDI.

Another FDI determinant is the exchange rate. It has been observed that country with weak currency attracts FDI inflows. If the exchange rate of a country depreciates, it attracts FDI since foreign firms may merge with or acquire domestic industries.

Germany, Poland, France, Mexico, Spain and so on. Heavy manufacturers remain mostly interest in the large emerging markets, such as Brazil, China, India, Mexico and Poland. Ewe-Gylee (2001) in his study finds that market size, infrastructure quality, political stability, economic stability, and free trade stability and free trade zones are important for FDI, while results are mixed regarding the importance of fiscal incentives, the business/investment climate, labour cost, and openness. Investigation of both the short run and long run locational determinants of FDI,

Bende-Nabende and Slater (2002), under the broad categories of cost related, Investment environment improving and other macroeconomic factors found out that the short-run dynamics indicate European investment in the Thai manufacturing sector has been more responsive to the macroeconomics factors. The long-run dynamics on the other hand suggest that European investment has been more responsive to the investment environment improving factors.

Dar, Presley and Malik (2004) examined the causality and long term relationship between FDI, economic growth, and other socio-political determinants and observed that there is an evidence of relationship between FDI and economic growth. Their paper considers economic growth, exchange rate and level of interest rate, Unemployment, and political stability as determinants of the FDI inflows for Pakistan over the period 1970-2002.

III STUDY METHODOLOGY AND MODEL SPECIFICATION

Research Design

For this study, the research design adopted is the Ex Post Facto. The Ex Post Facto design was used because the study is a quasi-experimental study examining how independent variables affect a dependent variable.

Source of Data.

The data required for this study are time series secondary data on RGDP at constant factor, Foreign Direct Investment, Trade openness and Exchange rate covering the period from 2008-2017. The required data will be collected from the central bank of Nigeria (C.B.N) statistical bulletin, and the national bureau of statistics (NBS).

3.3 Model Specification

The functional form of the model is specified as:

$$\text{RGDP} = f(\text{FDI}, \text{EXR}, \text{OPEN}) \quad (1)$$

The mathematical form of the model is specified as:

This econometric form of the model is specified as:

$$\text{RGDP}_t = \beta_0 + \beta_1 \text{FDI}_t + \beta_2 \text{TOP}_t + \beta_3 \text{EXR}_t + \mu_t \quad (2) \text{ Where}$$

RGDP = Real Gross Domestic Product

f = Functional relationship

FDI = Foreign Direct Investment

EXR = Exchange rate

β_0 = Constant term

β_1 , through β_2 = Regression coefficients

μ = Error term

t = time period

Method of Data Analysis

Due to the nature of data collected, the multiple Regression model as a statistical tool shall be used in analyzing the data using an econometric software E-view version 8.0.

Regression Analysis

Much of scientific studies are directed toward discovering the form of relationships between variables, and predicting the values of a variable from some functional relationship is one of the most important areas of applied statistics. Regression analysis is a statistical tool which helps to predict one variable from the other variable or variables (Oyeka, 1996). The variable being predicted is usually referred to as the unknown or dependent variable, because its values are dependent on the values of the other variables or variable, variously referred to as the independent variables, explanatory variables predictor variables, or predetermined variables. The values of these later variables are fixed and controlled only by the investor. On

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the other hand, the values of the dependent variables are determined by the values of the independent variables. In other words, the dependent variable is a function of the independent variables, a relationship that is usually represented explicitly by an equation.

In regression analysis one attempt to determine how given changes in certain variable affect some other variable. If the variables are discrete, they are treated as if they were continuous in regression analysis. If the variables are qualitative (that is, attributes) then strictly speaking the method of regression cannot be employed.

The Multiple regression models

A regression model may be simple or multiple, and linear or non-linear. It is simple if there is only one independent variable and multiple if there is more than one independent variable in the model. A regression model is linear if its parameters do not contain any exponents and are not multiples of other parameters in model, otherwise the model is said to be non-linear. In both simple and multiple regressions the power of the independent variable in the model may be of any size, and the value of the highest power is usually called the order of the model. Unless a model is specifically called non-linear, it can be assumed to be linear, irrespective of its order and the words ‘linear’, is often omitted.

Multiple linear regression attempts to model the relationship between two or more explanatory variables and a response variable by fitting a linear equation to observed data. Every value of the independent variable x is associated with a value of the dependent variable y . In the least-squares model, the best-fitting line for the observed data is calculated by minimizing the sum of the squares of the vertical deviations from each data point to the line (if a point lies on the fitted line exactly, then its vertical deviation is 0). Because the deviations are first squared, then summed, there are no cancellations between positive and negative values. The least-squares estimates b_0, b_1, \dots, b_p are usually computed by statistical software.

Coefficient of Determination

If a regression model does a good job in describing the relationship between the independent variable X and the dependent variable Y , we would expect the regression sum of square S , SSR to constitute a large proportion of the total sum of squares, SST (Cyprian .A. Onyeka,1996).

Hence a natural measure of the effect of X in explaining or determining the variation in Y would be the ration of the regression sum of Squares to be the total sum of squares. The coefficient of determination is defined as:

$$r^2 = \frac{SS_R}{SS_T} = \frac{\sum_{i=1}^n (x_i - \bar{x})^2}{\sum_{i=1}^n (y_i - \bar{y})^2}$$

(3)

But since $SS_T = SS_R + SS_E$ then we have the alternative expression for r^2 as :

$$r^2 = \frac{SS_T - SS_E}{SS_T} = 1 - \frac{SS_E}{SS_T}$$

(4)

Where r^2 lies within $0 < r^2 < 1$. Thus, the largest value r^2 can assume is one, which occurs when the observed and the predicted value are equal.

VI DATA ANALYSES AND PRESENTATION OF FINDINGS

Table 2: The regression result for analyzing the variables in Table 1

Dependent Variable: RGDP
 Method: Least Squares
 Date: 10/19/19 Time: 02:49
 Sample: 2008 2017
 Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-28320995	15740526	-1.799241	0.1221
TOP	-40721.41	63376.79	-0.642529	0.5443
EXR	169549.3	87057.85	1.947547	0.0994
FDI	1761592.	1554559.	1.133178	0.3004
R-squared	0.601641	Mean dependent var	2816317.	
Adjusted R-squared	0.592462	S.D. dependent var	3383465.	
S.E. of regression	3205443.	Akaike info criterion	33.08777	
Sum squared resid	6.16E+13	Schwarz criterion	33.20881	
Log likelihood	-161.4389	Hannan-Quinn criter.	32.95500	
F-statistic	1.342477	Durbin-Watson stat	1.943138	
Prob(F-statistic)	0.346123			

SOURCE: E-VIEW OUTPUT

Interpretation of the result in table

The coefficient of the variable (TOP) is given as -40721.41. This imply that if all other variable affecting RGDP is kept constant that a unit increase in the trade openness will lead to a -40721.41 decrease in the real gross domestic product on the average. The coefficient Exchange rate is obtained as 169549.3. This imply that if all other variable affecting exchange rate is kept constant that a unit increase in the exchange rate will lead to a 169549.3 increase in the real gross domestic product on the average. More so, foreign direct investment has 1761592 as its coefficient. This imply that if all other variable affecting foreign direct investment is kept constant that a unit increase in the exchange rate will lead to a corresponding 1761592 increase in the real gross domestic product on the average. Furthermore, the coefficient of determination R^2 is 0.601641. This imply that the variation in the real gross domestic product is been explained by a 60.16% variation in the independence variable on the average. The probability value associated to t-stat for testing how the variable

on the regression line impacts the real gross domestic product, we found that the variables are insignificant in explaining economic growth within the period of study. This is so as the p-values for trade openness, exchange rate, and foreign direct investment are more than the alpha value ($p\text{-value}=0.5443, 0.0994$ and 0.3004 are all more than $\alpha\text{-value}=0.05$).

The Result of the Granger Causality Test

Pairwise Granger Causality Tests

Date: 08/19/19 Time: 02:51

Sample: 2008 2017

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
TOP does not Granger Cause RGDP	8	798.013	8.E-05
RGDP does not Granger Cause TOP		0.05279	0.9494
EXR does not Granger Cause RGDP	8	0.83439	0.5151
RGDP does not Granger Cause EXR		14.4439	0.0289
FDI does not Granger Cause RGDP	8	0.01608	0.9841
RGDP does not Granger Cause FDI		5.98375	0.0897
EXR does not Granger Cause TOP	8	0.12413	0.8876
TOP does not Granger Cause EXR		0.21723	0.8164
FDI does not Granger Cause TOP	8	0.41827	0.6915
TOP does not Granger Cause FDI		0.45989	0.6696
FDI does not Granger Cause EXR	8	4.23049	0.1339
EXR does not Granger Cause FDI		1.02047	0.4591

Evaluating the result in the table above, based on the decision rule, we conclude that trade openness (TOP) and real gross domestic product (RGDP) granger cause real gross domestic product, openness. Real gross domestic product does not granger cause trade openness. exchange rate does not granger causes RGDP but RGDP granger causes Exchange rate. Also, Foreign direct investment and RGDP does not granger cause each other. Exchange rate and trade openness does not granger cause each other. Foreign direct investment and trade openness does not granger cause each other and foreign direct investment and exchange rate does not granger cause each other.

V SUMMARY OF FINDINGS, CONCLUSION AND

RECOMMENDATION Summary of the Findings and Conclusion

From the findings of this study, it is seen that foreign direct investment, trade openness and exchange rate has no significant impact on the economic growth within the country. The granger causality also shows that exchange rate does not granger cause economic growth in Nigeria within the period of study. The probability of f-statistic shows that the variables of interest have no joint influence on the regression plane.

The multiple regression results of analyzing the variables of interest show that all the variables have no significant contribution towards improving the standard of living within the country. The granger causality result depicts that exchange rate has no influence on the standard of living within the period of study. The result therefore, on the bases of the poor nature of the coefficient of determination found that the variables are not a good one in explaining the nature of economic activities within the country-Nigeria.

Recommendation

In the light of these findings the following recommendations are suggested having seen the nature of relationship that exists between foreign direct investment and the economic growth of Nigeria:

1. The federal government should and the monetary Authorities should design policies and program that will encourage investors to invest I n Nigeria.
2. The problem of insecurity in this country should be addressed squarely by the government and other stakeholders if Nigeria will continue to compete favorably in the globe fund market.
3. More so, an investment friendly environment: enhancing foreign investor legal protection, streamlining procedures for business visas and entry of foreign workers , reforming land policies and administration, speeding up and deepening tax reforms, should be created by the government so as to increase the inflow of FDI in to the economy.

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