Equatorial Journal of Social Sciences and Human Behaviour, 2017; 2 (4):121-134
Journal Homepage: www.erjournals.com
ISSN Online: 0184-7937

ANALYSIS OF THE IMPACT OF FOREIGN DIRECT INVESTMENT AND DOMESTIC INVESTMENT ON ECONOMIC GROWTH IN NIGERIA

ODUBOLA, Israel Oluwadamilola[1*]; DESALU, Adeyinka Oluwaseun[1]
[1]Department of Economics, Lagos State University, Ojo, Lagos
israelodubola@gmail.com; adeyinkadesalu@gmail.com

ABSTRACT

Economists have recognized inflows of investment as one of the ways to accelerate the pace of growth in emerging economies like Nigeria. This is largely due to the benefits a country stands to gain from inflows of investment. To this end, the study examined the impact of foreign direct investment and domestic investment on economic growth in Nigeria between 1985 and 2015. A model was developed to capture the effect of foreign direct investment, domestic investment, exchange rate and inflation rate on economic growth within the sampled period. Secondary data on these variables were sourced from the CBN Statistical Bulletin and Economic Watch Publications. The model was estimated using the Ordinary Least Square technique via the multivariate regression analysis. Results revealed that foreign direct investment has not contributed significantly to economic growth in Nigeria. Furthermore, it was equally discovered that domestic investment adversely affected growth within the period. The study therefore suggested that particularly vital for investment is macroeconomic stability and consistent policies. A good macroeconomic record includes high growth, a single-digit inflation rate, low rate of interest and relative stability in the real exchange rate. It is also important to have consistent and stable policies in order to engender confidence in economic agents and assure investors that government policies are credible and predictable.

Citation: Odubola, I. O. and Desalu, A. O. (2017). Analysis of the Impact of Foreign Direct Investment and Domestic Investment on Economic Growth in Nigeria. *Equatorial Journal of Social Sciences and Human Behaviour*, 2 (4):121-134

1 INTRODUCTION

The need to accelerate the pace of economic growth and development by many nations especially the less developed countries (LDCs) has propelled these under developed economies to make deliberate efforts to attract domestic and foreign investment. This is because most LDCs economies with Nigeria inclusive are characterized by inadequate savings and investment, low capital formation, low productivity, low per capita income and high import relative to export as well as high level of external debt. The Less Developed Countries (LDCs) therefore require external capital to finance their current account deficit and to speed up the pace of economic growth and development through increase in the level of productivity. In this regard, foreign direct investment augments domestic savings and investment in bridging the savings-investment gap (Aniefiok and Udensi, 2016; Fiiwe and Morrison, 2017; Alobari, Paago, Igbara and Emmah, 2016).

Foreign direct investment has become imperative to both developed and developing nations. It contributes positively to the level of output growth and gross fixed capital formation of an economy. It introduces foreign capital and skilled labour into an economy. It brings about technological know-how, raises efficiency and competitiveness, enhances

export earnings and improves international marketing activities .It has the potential to address the Less Developed Countries' (LDCs) constraint of low level of domestic investment and foreign exchange shortages.

Most neo-classical economists alluded that FDI do not only catalyze the rate of economic growth in LDCs countries, but dearth of it would lead to "economic sudden death". As a result of these, host country should ensure enabling environment for investment both domestic and foreign. Investors could help meet the country's local demands, create job opportunities and act as mobilisers of local capital and entrepreneur. Through research and adaptation, they could also help to harness and refine local raw materials as inputs of production for further expansion. They could create the necessary technological and industrial base for the country's export trade.

Domestic investment on its own part also stimulates the rate of economic growth of a nation. It incorporates and contributes to current demand of capital goods thus raising domestic expenditure. It enlarges the productive base and capacity of an economy. As seen by Shiro (2005), foreign direct investment is therefore supposed to serve as a means of augmenting Nigeria's domestic resources in order to carry out effectively her development programmes and raise the standard of living of her people. Foreign investment is needed not to substitute, but to complement domestic investment for accelerated growth and development.

To attract foreign or domestic investment, a right enabling and proper functioning environment coupled with sound investment profile must be created in the host country. The decision to invest in an economy by many investors depends mainly on the investment climate in that country. A favorable investment climate magnetizes investors and an unfavourable investment climate repels any form of investment both domestic and foreign. A good investment climate must possess the following attributes which include:

- Availability of functioning infrastructural facilities e.g. roads, electricity, port networks, telecommunications and the likes.
- Property right protections.
- Enticing tax incentives e.g. pioneer status, tax relief for research and development and tax free dividends.
- Sound fiscal, monetary and exchange rate policies.
- Political stability.
- Available market for product.
- Sound legal regulatory body.
- Adequate credit provision by the banking sector for investment purposes

In order for Nigeria to improve her investment climate for foreign direct investment and domestic investment, government must appreciate the fact that the basic element in any development strategy should be the encouragement of domestic investors first before going after foreign investors. Scott (1997) opined that in the current global environment, developing nations are in need of foreign and domestic investment if they are to maximize their economic potentials to the stage where they can compete internationally. Without such investment a country will be unable to develop her human and material resources effectively and its access to transferred technology will be more restricted than what would otherwise have been.

In recognition of its vitality and role in economic growth process, the government has put into place various policies, incentives and strategies to attract investment perhaps FDI to Nigeria. For example, to supplement the domestic shortfall of capital resources for the attainment of sustainable level of growth and development, the government has entered into an investment protection agreement with foreign governments and private organizations wishing to invest in Nigeria as well as discussing additional incentives with prospective investors. In this connection, the government inaugurated the Nigerian Investment Promotion Commission (NIPC) which replaced the Industrial Development Coordination Committee (IDCC), as one-stop agency that would facilitate the inflow of FDI. The Nigerian Investment Promotion Decree No. 16 of 1995 reflects the new enhanced liberal foreign investment policies of the government. There was also tax related incentives such as pioneer status, tax relief for

research and development which provides graduated amount of tax allowances to be deducted from profit. Company income tax, which has been amended to encourage potential and existing investors tax free dividends as well as tax relief for investment in economically disadvantaged local government areas are other measures to attract FDI.

1.1 Statement of Problem

Captivated by the high rates of returns, investors from all over the world have now set their eyes on the Federal Republic of Nigeria. As Africa's most populous nation, the country boasts of a large pool of labour force, abundant natural resources and an extensive domestic market that has promising growth outlook. With respect to these attributes, Nigeria is becoming a rather worthy recipient of foreign investment receiving anywhere from US$10-US$12 billion per annum and is among the top three FDI receiving economies in Africa.

Despite the huge inflow of FDI into Nigeria, it has not significantly impacted on the level of economic growth. It has not been able to improve the quality of life of an ordinary Nigerian. Rising poverty level, declining per capita income, high rate of unemployment and low level of human capital all attested to fact that Nigerians are yet to reap the full benefits of foreign direct investment.

Furthermore, due to the country's long history of economic mismanagement, weak judicial process, political instability, poor infrastructures, inconsistent government policies, corruption and non-transparency of government operations, Nigeria has numerous obstacles that collectively prevents FDI from establishing its significance on output growth.

1.2 Objectives of the Study

The study attempts to examine the impact of foreign direct investment and domestic investment on economic growth in Nigeria between 1990 and 2015.

2 Literature Review

2.1 Concept of Foreign Direct Investment

Foreign direct investment has been given different definitions by academic scholars and institutions but the bottom line remains the same. The United States Department of Commerce defines FDI to include 'all foreign business organizations in which a US citizens, organizations or affiliated group own an interest of ten percent or more'. The International Monetary Fund (IMF) defines foreign direct investment has an investment made to acquire a lasting interest in an enterprise operating outside the economy of the investor. It requires a minimum of ten percent of equity rights to qualify as a foreign investor.

The United Nations (UN)defines foreign direct investment as "investment in an enterprise located in one country and being effectively controlled by residents of another country". This definition does not only consider FDI as mere investment, it also stresses on the status of corporate control. World Bank (1996) sees FDI as investment made to acquire a lasting management interest (normally ten percent of the voting stock) in a business operating in a country other than that of the investor defined according to residency". In line with this, the United Nations Conference on Trade Agreement and Development (UNCTAD) defines FDI as "an investment involving management control of a resident entity in one economy by an enterprise resident in another country".

Odozi (1995) ascertained that foreign direct investment is a form of lending or finance in the area of equity participation. It generally involves the transfer of resources including capital, technology, marketing and management expertise. Such resources usually extend the production capabilities of the recipient country. Krugman and Obstfeld (1997) defined foreign direct investment as international capital flows in which a firm in one country creates or expand a subsidiary in another country. It involves not only transfer of resources, but also the acquisition of control. In this case, the subsidiary does simply have a financial obligation to the parent company; it is part of the same organizational structure.

The above ideas, though not identical show the clear conventional definition which explains that foreign direct investment is putting money or other resources with the intention of producing goods and services in a foreign country and control that business to a certain degree.

2.2 Foreign Direct Investment and Domestic Investment

A body of empirical evidence suggests a strong positive relationship between foreign direct investment and domestic investment. Ndikunwa and Verick (2008) stated that the relationship is bi-directional. They further asserted that a high private domestic investment is a signal for high returns to capital, while adequate public infrastructures (high public investment) reduce the cost of doing business, which raises the marginal returns of FDI. Hence, high domestic investment helps in attracting FDI.

Anyanwu (1998) alluded that massive flow of FDI into the first world countries did not occur by chance, rather it occurs by them having the absorptive capacities to attract FDI. This is what literature calls the determinants of FDI. A close inspection highlights the magnificent public utilities development ranging from the state of art transportation system, energy and telecommunication facilities in the developed countries, which is attributed to the massive public investment in those sectors. World evidence reveals that China is becoming the best destination of FDI flows due to its friendly investment climate, backed by huge domestic resources, low wage and a transition to a market economy (Wei, 2008). Other developing countries that have attracted significant inflows of FDI through upgrading their public utilities are the Asian Tiger economies, such as Hong-Kong, Taiwan, South Korea and Singapore.

The linkage between domestic investment and FDI is understood through the *Cost Reducing and Heighten Competition Hypothesis*. The hypothesis postulates that domestic investment mitigates cost and strengthens competition. Juxtaposing the two national economies (China and the Asian Tiger Countries) with relative differences in domestic investment, it is plausibly reasonable to argue that the country with well-developed public utilities would experience reduced operational cost by firms operating in it relative to the other. These facilities in form of social infrastructures aid firms in the production and distribution processes. In the absence of these production aids, firms have the alternative of providing for themselves, thus increasing the cost of doing business and lack of entrepreneur incentives. Given the unviability of business engagement in this economy, foreign investment and capital are less attracted, vice versa. This relationship is strongly correlated with public domestic investment.

However, the effect of private domestic investment on FDI is more complex. Private domestic investment could encourage or discourage FDI flows in an economy. It depends on the specific relationship between private and foreign firms and how developed the domestic private sector is. In a situation where most private firms in a sector is operating in an utmost technical and economic efficiency and have high rated international standings, the potentials of market competition is almost exhausted, foreign firms view such sectors as unprofitable and thus driving them away. But in a situation of less competition among private firms, FDI is attracted. A dramatic example is the aviation sector in USA, where Air Bus dominates the commercial airplanes production. Other firms, says, Boeing in the same line of trade has been discouraged in setting up plant in USA because of the hotly competition from Airbus.

In different lens, foreign capital flows into domestic economies where substantial private investment has been made in the downstream sector. This is referred to as the *Backward Linkage Effect* between FDI and private investment. Because foreign investments are long-term capital projects, foreign firms take into consideration local sourcing of materials before siting their plants. If adequate investment is not been made in the downstream sector, and foreign firms are supposed to import almost every component of their production process, it would be worthwhile for them to set-up production plants in home economy and exports finished products to them. This scenario-absence of a developed downstream sector is FDI-inhibiting.

2.3 Foreign Direct Investment, Domestic Investment and Economic Growth

The inflow of foreign capital in the form of foreign direct investment (FDI), has considerably increased in developing countries with Nigeria inclusive over the last few decades. FDI inflows fulfill the rising investment requirements to boost economic growth at higher pace and help for macroeconomic stability in the economy. These non-debt inflows ease the pressure on balance of payment distortion. Technological transfer from developed countries to LDCs like Nigeria occurs through foreign direct

investment which paves way for economic development. Garba (1998) argues that FDI affects the economic development of recipient countries like Nigeria at macro and micro level. At the macro level, it is beneficial to the real sector such as investment, exports and economic growth and also at the micro level; it creates technological spillovers, training of manpower and enhancement of management skills.

Interaction between foreign direct investment and domestic investment is of paramount importance in any host country. Odozi (1995), Akinlo (2004) and Garba (1998) all adduced that there exist a bi-directional causality between foreign direct investment and domestic investment. Both cause each other in an economy. The increase in private investment signals high returns on investment in the domestic economy whereas public investment shows the improvement in infrastructures and reduction in the cost of doing business. These roles of domestic investment motivate the foreign investors to reap the benefit of high returns. However, foreign capital inflow may also be beneficial for the domestic investors in an economy. The impact of FDI on domestic investment is ambiguous; FDI may have crowding out or crowding in effect. The crowding out impact of FDI means it is meaningless in the FDI receiving country but crowding in impact of FDI on domestic investment is beneficial for the host country.

Like other developing countries, Nigeria is also a recipient country of bulky FDI inflow since more than two decades. This is an important source of external finance considering the mediocre position of the balance of payment, Moreover, FDI minimizes the dependence on foreign debt. Although remarkable, Nigeria is among the three largest recipients of FDI in Africa. The crucial implication of FDI has vital importance for developing economies like Nigeria because if it crowds out domestic investment, it will squeeze the growth of the domestic capital stock. Alternatively, if it crowds in domestic investment, it will enlarge the domestic investment and the size of the economy.

2.4 Theoretical Review on Investment and Growth

There is preponderance of theories on the FDI-growth nexus. Early works on the FDI-growth nexus modified the growth accounting method introduced by Solow (1957). This approach defined an augmented Solow model with technology, capital, labour, inward FDI and a vector of ancillary variables such as imports and exports volume. However, several theories and model have been able to link foreign direct investment and output growth. Relevant among these theories are:

Endogenous Growth Model

The advent of endogenous growth, Barro and Salai (1995) has encouraged research on the transmission channels of FDI on economic growth in the long run. According to the neoclassical growth models, the long run growth in per capita income is zero or equal to the rate of technical progress, which is exogenous. FDI can only affect economic growth in the short run given that the decrease in the marginal productivity of capital of the host economy converges to a steady state and FDI has no permanent impact on growth. It is only through permanent technology shocks that FDI affects economic growth of the host economy.

An additional feature of the endogenous model is their importance. According to these models, the long term growth may be affected by economic policies. Policies of openness on the outside world and thus promoting FDI which is justified by leading to a permanent increase in growth rates. Thus, if the determinants of growth are exogenous and FDI is a composite of capital, technology know-how, Balasubramyam et al (1996), there are several channels through which FDI contributes to economic growth in the host country. In general, FDI affects growth through technology transfer and accumulation of capital.

Gap Theory

According to Todaro (1994), foreign direct investment has been typically seen as a way of filling in gaps between domestically available savings, foreign exchange revenue, skills and the planned level of resources necessary to achieve developmental targets. One of the most popular theories of the ‘Gap Thesis’ is the Harrod-Domar model. The model was developed by Harrod (1948) and Domar (1957) quoted by Todaro (1994). The model posits that investment is pivotal in the process of economic growth. The belief is based on the fact that investment

creates income and accelerates the productive capacity of an economy by increasing capital stock. The model also states that as long as investment increases, real income and output will increase. The Harrod- Domar model emphasizes the need for investment in form of additional capital stock which FDI readily supplies. According to the model, there is a direct relationship between a country's savings rate (s) and the rate of output growth (g). Algebraically, g=s/k where k is the nation's capital output ratio, s and g are defined above. Assuming a country's has a growth rate of 8 percent per annum and the capital output ratio (k) is 3, then the savings growth rate (s) is g.k which is 24 percent per annum. If the country's savings rate is 20 percent per annum, then there is a gap of 4 percent. The gap can only be filled by obtaining foreign aids through foreign direct investment.

Solow-Swan Growth Model

Solow-Swan model is an exogenous growth model, an economic model of long run economic growth set within the framework of neoclassical economics. It attempts to explain long run economic growth by looking at capital accumulation, labour or population growth and increases in productivity, commonly referred to as technological progress. The model postulates a continuous production function linking output to the input of capital and labour which leads to the steady state equilibrium of the economy. The model was developed by Robert Solow and Trevon Swan in 1956. The model is based on the following assumptions:

- There are constant returns to scale.
- There is perpetual full employment of labour and the available stock of capital
- Savings is equivalent to total investment.
- The two factors of production- labour and capital and are paid according to their marginal physical productivities.
- Saving ratio is constant.
- Prices and wages are flexible.
- Output is regarded as net output after making allowance for depreciation.

Given these assumptions with unchanging technical progress, the production function is

$$Y=f(K,L) \qquad 2.1$$

Where Y is income or output, K is capital and L is labour. The condition of constant returns to scale implies that if the production function is divided by L, the production function is written as:

$$Y/L= f(K/L)=L,f(K) \qquad 2.2$$

Where y= Y/L is output or income per worker, k= K/L is the capital labour ratio and the production function can be expressed as

$$Y = f (k) \qquad 2.3$$

In the Solow-Swan Model, savings is a constant function of income. So savings per worker is sy, since income equals output

$$sy= s f (k) \qquad 2.4$$

The investment required to maintain capital per worker k, depends on population growth rate and the depreciation rate d, since it is assumed that population grows at a constant rate n, the capital stock grows at the rate n.k to provide capital to the growing population. Since depreciation is constant, d percent of the capital stock d.k. is the investment needed to replace worn out capital. The depreciation investment per worker d.k is added to n.k. The investment per worker to maintain capital-labour ratio for the growing population,

$$(nk+dk)= (n+d)k \qquad 2.5$$

Which is the investment required to maintain capital per worker. The net change in capital per worker (capital-labour ratio) k overtime is the excess of savings per worker. Over the required investment to maintain capital per worker;

$$k= sf(k)- (n+d)k \qquad 2.6$$

This is the fundamental equation for the Solow-Swan model, where the steady rate correspond to k= 0. The economy reaches a steady state when

$$sf(k)= (n+d)k \qquad 2.7$$

The major implication of this model is that it predicts conditional convergence. All countries having similar characteristics like savings rate, population growth rate and technology that affect growth will converge to the same steady level. It means that poor countries having the same savings rate and the level of technology of the rich countries will reach the same steady growth rates in the long run.

2.5 Review of Empirical Studies

Some studies on the effect of foreign direct investment have showed varying results depending on the country under study and other determinants of foreign direct investment. Positive and negative effects have been reported for foreign direct investment and economic growth in several countries.

Saqib, etal, (2013) did an empirical study on the impact of foreign direct investment on the economic growth of Pakistan for the period 1980-2010. They used six variables where GDP was specified as the dependent variable while FDI, total debt service, gross domestic savings, trade balance and inflation as the independent variables. The findings indicated a negative and significant relationship between FDI and GDP. Also, debt, trade and inflation exhibited a negative relationship with GDP. In conclusion, they stated that domestic investment would be more beneficial and that dependency on FDI should be limited. They recommended that government should encourage domestic savings and investment. They suggested that further studies should incorporate variables relating to technology transfer and human capital. Their view is that some unnamed variables like human capacity and technology transfer, appear to have moderated the relationship between FDI and the host economy.

Tang, Selvanathan and Selvanathan (2008) explored the casual link between FDI, domestic investment and economic growth in China from 1988 to 2003. Using multivariate auto-regression and error correction model (ECM), their results indicate that there is a bi-directional causality between domestic investment and economic growth while there is a unidirectional causality from FDI to domestic investment and to economic growth. They concluded that there is a higher level of complementarities between FDI and domestic resources.

Athukorala (2003)'s study on the impact of FDI on economic growth in Sri Lanka between 1959-2002, agreed that the regression results do not provide much support for the view of robust link between FDI and growth in Sri Lanka. He posited that the situation is due to lack of improved climate such as good governance, accountability, political instability and disturbance, bureaucratic inertia among other reasons. Kumar and Pradham (2002) analyzed the relationship between FDI, growth and domestic investment for a sample of 107 developing countries for the periods 1980-1999. Their model used the flow of output as the dependent variable and domestic and foreign owned capital stock, labour, human skills and total factor productivity as their independent variables. Their results showed that panel data estimations in a production function framework suggested a positive effect of FDI on growth, although FDI appeared to crowd out domestic investment in net terms, in general, some countries have had favourable effects of FDI on domestic investment in net terms, suggesting a role for host country policies.

De Gregorio (2003) in his contribution to the debate on the importance of FDI noted that FDI may allow a country to bring in technologies and knowledge that are not readily available to domestic investors and in this way increases productivity growth in the economy. In his study, he found that increasing aggregate investment by 1 percent point of GDP increases economic growth of Latin America countries by 0.1 to 0.2 percent a year, but increasing FDI by the same amount increased growth by approximately 0.6 percent a year during the periods of 1980-1985, thus indicating that FDI is three times efficient than domestic investment.

Olise, Therasa, Moses and Anyanwu (2011) investigated the impact of domestic investment on FDI inflow in Nigeria. They adopted single-linear econometric model estimated by OLS methodology within four decades (1970-2009). In their model, FDI was the explained variable used, public domestic investment, private domestic investment, market size, stock of natural resources, trade openness and human

capital were employed as the explanatory variables. From their results, it was discovered that if public and private domestic investment increases by 1 percent, FDI would fall by 51.7 percent and 41.9 percent respectively. Moreso, a percent rise in market size and human capital will result into a 315 percent and 16 percent decline in FDI respectively. Also, a percent rise in natural resource and degree of openness will produce a 7.2 percent and 18.5 percent rise in FDI respectively. In short, public domestic investment, private domestic investment, market size and human capital were inversely related with FDI while natural resource and degree of openness have impacted on FDI positively during the reviewed period.

Aseido (2003) conducted a study to examine the impact of political risks on FDI for 22 Sub-Saharan African countries for the periods 1984 to 2000. The dependent variable was the rate of net FDI flows to GDP while the independent variables used were natural resource intensity, attractiveness of the host country's market, openness to FDI, host country's institution, macroeconomic instability and political instability. The results showed that macroeconomic stability, efficient institution, political stability and good regulatory framework have positive impact on FDI. An important implication of the result showed that FDI in Africa is not solely driven by natural resource endowment and that government plays a vital role in promoting FDI to LDCs region.

Imodu (2012) inquired the exact determinants of foreign direct investment in Nigeria using data for the periods 1980 to 2009 using the Johansen Co-integration approach and the error correction model (ECM). In his model, foreign direct investment was the dependent variable while the explanatory variables were level of infrastructure proxied by the ratio of secondary and tertiary enrollment to the population, government spending proxied by the ratio of government expenditure in the GDP, degree of openness proxied by the ratio of import and export to the GDP, inflation rate and political risk proxied by coup d'état, hostage takings and bomb blasts. His results showed that the degree of openness and political situations does not provide friendly investment environment and have constrained FDI in Nigeria. Furthermore, the past level of FDI which he got by lagging FDI, inflation rate, level of infrastructure and government spending have impacted positively on FDI in Nigeria. In particular, past level of FDI and level of infrastructure were highly significant in explaining FDI during the reviewed period.

Salisu and Sapsore (1996) analyzed how FDI affect economic growth in developing economies. Using cross-sectional data and OLS regression analysis, they found out that FDI has a positive effect on countries with an export promotion strategy, but not in countries adopting import substitution strategy. Akinlo (2004) investigated the impact of FDI on economic growth in Nigeria using data for the period of 1970 to 2001. His error correction model (ECM) results showed that both private capital and lagged foreign capital have small and insignificant impact on growth. Financial development which he measured as M_2/GDP has negative impact on growth, this he attributed to capital flight. In another manner, labour force and human capital were found to have significant impact on growth. Osinubi and Amaghionyeodiwe (2010) did a study on foreign private investment and economic growth in Nigeria. Foreign private investment covers foreign direct investment in real terms and foreign portfolio investment in financial assets. They concluded that FDI in real assets augments domestic resources and thus enhances economic growth. Since FDI gives positive and significant effect on growth, issues concerning FDI should not be ignored and inflows of FDI should be encouraged.

Umeora (2013) investigated the effect of FDI on some selected macroeconomic variables such as GDP, inflation and exchange rate. He used the ordinary least square (OLS) technique to examine the relationship between the dependent variable (FDI) and the independent variables: GDP, inflation and exchange rate. The study revealed that the independent variables are affected to the extent of 46.5 percent by FDI. He concluded that FDI does not make GDP to grow, raises inflation and has negative impact on exchange rate. Ayanwale (2007) employed an augmented growth model via the ordinary least square and the 2SLS method to ascertain the relationship between FDI, its components and economic growth. His results suggested that the determinants of FDI in Nigeria are size of market, infrastructure development and stable macroeconomic policies. Openness to trade and available human

capital are, however not FDI inducing but FDI was found to contribute to economic growth in Nigeria.

3 Research Methodology

3.1 Model Specification

In an attempt to capture the empirical relationship between foreign direct investment, domestic investment and economic growth in Nigeria, a model was developed to show the functional relationship. Economic growth proxied by the real gross domestic product was employed as the dependent variable while foreign direct investment and domestic investment were adopted as the explanatory variables. Macroeconomic indices such as exchange rate and inflation rate are were incorporated as explanatory variables in the model. Expressing the model in a functional form becomes:

$$RGDP = f(FDI, DI, EXR, INF) \qquad 3.1$$

Where:
RGDP= Real gross domestic product.
FDI= Foreign direct investment (proxied by the percentage value of FDI to GDP).
DI= Domestic investment (proxied by the percentage value of DI to GDP).
EXR= Exchange rate (proxied by the real effective exchange rate).
INF= Inflation rate (proxied by the GDP deflator).

Expressing the above functional relationship into an econometric model, it becomes

$$RDP = \beta_0 + \beta_1 FDI + \beta_2 DI + \beta_3 EXR + \beta_4 INF + \mu \qquad 3.2$$

Where:
β_0= Constant term of the regression model.
β_1= Regression coefficient of foreign direct investment.
β_2 = Regression coefficient of domestic investment.
β_3= Regression coefficient of exchange rate.
β_4= Regression coefficient of inflation rate.
μ= Error Term.

In order to avoid having spurious and misleading results, the above econometric model is transformed into a log-linear econometric model, it becomes:

$$Log(RDP) = \beta_0 + \beta_1 Log(FDI) + \beta_2 Log(DI) + \beta_3 Log(EXR) + \beta_4 Log(INF) + \mu \qquad 3.3$$

Based on economic theory is expected that $\beta_1; \beta_2; \beta_3 > 0$ and $\beta_4 < 0$.

3.2 Sources of Data

Data used in the study were secondary annual time-series data obtained from the Central Bank of Nigeria Statistical Bulletin and Economic Watch Publications. The data covered a thirty-one (31) year period ranging from 1985 to 2015.

3.3 Estimation Technique

The Ordinary Least Square (OLS) technique via the multivariate regression analysis was used to estimate the impact of foreign and domestic investment on economic growth in Nigeria. The OLS technique was employed because of its desirable properties of linearity, unbiasedness, efficiency and consistency. In addition to this, the OLS technique was considered because it measures the cause-effect relationship among variables and is widely used in economic researches. The Econometric Views was used to electronically analyze the data.

4 Presentation of Result and Discussions

Multivariate Regression Result

Dependent Variable: Log(RGDP)

Method: Least Squares

Date: 06/10/17 Time: 03:00

Sample: 1985 2015
Included observations: 31

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2776.021	1143.011	2.428692	0.0224
Log(FDI)	16.52450	15.42119	1.071546	0.2938
Log(DI)	-10.30015	48.38353	-0.212886	0.8331
Log(EXR)	44.60177	9.370290	4.759913	0.0001
Log(INF)	2.047846	12.55673	0.163088	0.8717

R-squared	0.786950	Mean dependent var	6854.683
Adjusted R-squared	0.754173	S.D. dependent var	3732.372
S.E. of regression	1850.545	Akaike info criterion	18.03104
Sum squared resid	89037451	Schwarz criterion	18.26233
Log likelihood	-274.4811	Hannan-Quinn criter.	18.10643
F-statistic	24.00927	Durbin-Watson stat	1.941241
Prob(F-statistic)	0.000000		

Source: Eviews Software Output

The regression equation derivable from the model is:

Log(RGDP)= 2776.02 + 16.52 Log(FDI) -10.30 Log(DI) + 44.60 Log(EXR) + 2.04 Log(INF) + u .4.1

The constant term of the regression model is N2776.02. This implies that real gross domestic product will be N2776.02 billion when all the regressors are subjected to zero.

The regression coefficient of foreign direct investment is 16.52, indicating a positive relationship between FDI and real GDP. A percent rise in FDI inflows will lead to about 16.52% rise in real GDP on the axiom that other regressors are held constant. However FDI is not a significant regressor as its probability value is less than 0.05 (p> 0.05). This implies that FDI has not contributed substantially to the growth of the Nigerian economy.

The regression coefficient of domestic investment is -10.30, indicating an inverse relationship between domestic investment and real GDP. A percent rise in domestic investment will translate to about 10.3% decline in real GDP on the premise that other regressors are held constant. Also, domestic investment is an insignificant regressor (p>0.05). This implies that domestic investment has hampered on the growth of the Nigerian economy over years. The negativity of domestic investment can linked to factors such as unfavorable investment environment, inconsistent macroeconomic policies of the government, political instability, low level of savings, high rates of interest and taxation. These factors prevent some Nigerians from investing in their own country rather they opt to invest in other countries to earn the highest possible return from their investment.

Exchange rate and inflation rate was found to be positively related to real GDP. A naira rise in exchange rate would produce an increase in real GDP by 44.6% on the notion that other regressors are constant. On the other hand, a percent rise in inflation rate would generate about 2.0% rise in real GDP on the axiom that other explanatory variables are held constant. Exchange rate is a significant regressor in

the model ($p<0.05$) while inflation rate is an insignificant regressor in the model ($p>0.05$). Inflation rate is positive simply because a low rate of inflation between 2-4% is needed to sustain growth in an economy.

The coefficient of determination stood at 0.787. This implies that 78.7% variation in real GDP is accounted for by the regressors included in the model. The coefficient of determination remains strong at 75.4% when adjusted for degrees of freedom. This connotes that the regressors stated in the model, have strong predictive power on real GDP. The Durbin-Watson statistics stood at 1.94. This value falls within the range of acceptable limit of non-autocorrelation in econometrics, which ranges between 1.80-2.15. Thus, the model is free from the problem of autocorrelation.

The F-statistics stood at 24.0, with a probability value of 0.00 ($p<0.05$). This implies that the joint influence of foreign and domestic investment, exchange and inflation rates on economic growth is statistically significant.

Conclusion and Recommendations

The findings of the study represent an emphatic conformity with economic theory postulations about the potentialities of foreign direct investment to capital-scarce developing economies. Foreign direct investment contributes to growing the economy, develops the external sector, bridges the savings-investment gap as well as provides the economy with the much needed modern technology and entrepreneurial and managerial capabilities.

However, going by the research findings, inflow of foreign direct investment positively relates to output growth, but its effect on output growth in Nigeria has not been significant and pivotal. On the other hand, domestic investment has retarded and adversely affected output growth in Nigeria within the years estimated.

Successive governments in Nigeria including the present Jonathan's administration have recognized that the growth and development of the Nigerian economy hinges on the foreign direct investment inflow coupled with domestic investment. The present administration has thus taken steps to create an environment that encourages increased foreign investment. The government plans to liberalize the investment climate by removing various bottlenecks to the free flow of foreign investment. These plans include repealing restrictive laws, improving security, signing investment protection treaties, providing additional fiscal incentives, privatizing utilities and fully equipping the export processing zones. Nevertheless, poor infrastructure, political violence and regional disturbances in various parts of the country have continued to discourage investment (foreign and domestic) in Nigeria.

The following recommendations are strongly suggested on how to boost investment activities in Nigeria:

Particularly vital for foreign direct and domestic investment is macroeconomic stability and consistent policies. A good macroeconomic record includes high growth, a single-digit inflation rate and relative stability in the real exchange rate. It is also important to have consistent and stable policies in order to engender confidence in economic agents and assure investors that government policies are credible and predictable.

The importance of security of life and property cannot be overemphasized as a condition necessary to attract foreign investment. This is because no meaningful investment can take place in an environment of civil strife and lawlessness. Investors, both foreign and domestic would need to be assured that the rights over their property are secured and cannot be changed with changes in government.

The need for adequate and efficient infrastructure is necessary to stimulate foreign and domestic investment. Infrastructures and utilities that do not work efficiently and effectively are as bad as those that are non-existent. The aim should be to have adequate clean water supply, adequate and reliable power supply, adequate and efficient telecommunication system and a good road network system.

The country's education system should be science and technology oriented which would provide

the economy with the required skills that investment requires.

Efforts should be made to encourage production for exports by implementing all export schemes and also the activities of export processing zones (EPZ) should be tailored towards promoting exports.

Foreign direct and domestic investment inflow into the economy should be evenly distributed to all sectors of the economy in order to achieve balanced development. Most foreign investment inflow into the Nigeria economy have majorly been into already developed sectors like petroleum and manufacturing which has led to a lopsided form of development.

REFERENCES

Abdur, C. and George, M. (2003); 'Foreign Direct Investment and Growth: What causes What', A Paper Presented at the WIDER Conference on 'Sharing Global Prosperity' WIDER, Helsinki, 6-7 September.

Adelegan, J. O. (2000); 'Foreign Direct Investment and Economic Growth in Nigeria: A Seemingly Unrelated Model', African Review of Money, Finance and Banking, Supplementary Issues of 'Savings and Development' 2000. Milan. pp.5-25.

Adams (2009); 'Do Domestic Firms benefit from Direct Foreign Investment?' Evidence from Venzuala', American Economic Review, Vol. 89, pp. 605-618.

Akinlo, A.E. (2004); 'Foreign Direct Investment and Growth in Nigeria: An Empirical Investigation', Journal of Policy Modeling, Vol. 26, No. 5, pp. 627-639.

Anyanwu, J.C. (1998); 'An Econometric Investigation of the Determinants of Foreign Direct Investment in Nigeria': Selected Paper for the Nigerian Economic Society Annual Conference, 1998.

Anyanwu, Kingsley N. (2011); 'The Impact of Foreign Direct Investment on Nigeria's Economic Growth', (Unpublished Thesis) ,Anambra, Nigeria: NnamdiAzikiwe University.

Alobari, C., Paago, J. K., Igbara, F. N. and Emmah, D. (2016). Exchange Rate and Foreign Direct Investment (Fdi): Implications for Economic Growth in Nigeria. Equatorial Journal of Finance and Management Sciences. 1(1):10-23.

Althukorala, (2003); 'The Impact of Foreign Direct Investment on Economic Growth in Sri Lanka', Proceedings of the Paradeniya University Research Sessions, Vol. 8, No. 4, pp. 44-57.

Aniefiok and Udensi (2016). Socio-Economic Development and Self-Help Projects in Mkpat-Enin Local Government Area of Akwa-Ibom State, Nigeria. Equatorial Journal of Social Sciences and Human Behaviour, 1(1): 84-94.

Asiedo, E. (2003); 'On the determinants of Foreign Direct Investment to LDCs: Is Africa Different?' World Development, Vol. 30, pp. 107-119.

Aremu, J.A. (2003); Foreign Direct Investment: Determinants and Performance; National Center for Economic Management and Administration (NCEMA), Macroeconomic Policy Analysis and Management Programme, designed for Research Staff of the Central Bank of Nigeria.

Ayanwale, A.B. (2007); 'Foreign Direct Investment and Economic Growth in Nigeria': Evidence from Nigeria'. AERC Research Paper 165. African Research Consortium, Nairobi.

Balasubramanyam, V.N., Salisu, M. and Sapsore, D. (1999); 'Foreign Direct Investment is an Engine of Growth', Journal of International

Trade and Economic Development, Vol. 8, pp. 27-40.

Barro and Salai (1978); 'Capital Flows to Developing Countries Long and Short-Terms Determinants': The World Bank Economic Review. Vol. 11, No. 3, pp. 44-45.

Blomstrom, M. and Wolf, E. (1994); 'Mulitnational Corporations and Productivity Convergence in Mexico'. In W. Baumol, K. Nelson and E. Wolf (Eds.) Convergence of Productivity: Cross-National Studies and Historical Evidence, Oxford: Oxford University Printing Press.

Blomstrom, M. and Kokko, A. (1995); 'Multinational Corporations and Spillovers', Journal of Economic Survey, Vol. 12, pp. 247-277.

Borensztein, E. DeGregorio and Lee J. (1998); 'How does Foreign Direct Investment affect Economic Growth', Journal of International Economics, Vol.45, pp.115-135.

Campos, Kinoshita and Zhang (2001); 'How does Foreign Direct Investment affects growth in South East Asian Countries, Journal of Applied Economics, Vol.2, No.3, pp. 678-692.

Dauda, R.O. (2007); 'The Impact of Foreign Direct Investment on Nigeria's Economic Growth: Trade Policy Matters', Journal of Business and Research. Vol. 3, No.2, pp. 11-26.

DeGregorio, Jose (2003); 'The Role of Foreign Direct Investment and Natural Resources in Economic Development'.Working Paper No. 196, Central Bank of Chile, Santiago.

De-Mello, L. (1997); 'Foreign Direct Investment in LDCs and Growth': A Selective Survey, Journal of Development Studies, Vol. 34, pp. 1-34.

Dunning, J. (1994); 'Endogenous Growth in Developing Countries with Government Induced Distortions'; Unpublished World Bank Report.

Edeogu, C.B. (2009); 'Determinants of Foreign Direct Investment in Nigeria and Empirical Extensions' Journal of Banking and Finance, Vol.8, No.1, pp.44-58.

Fabayo, J.A. (2003); 'Foreign Direct Investment and Manufacturing Industries in Nigeria: Performance, Prospects and Problems' in Nnanna, O.J., Okafor, C.M. and Foreign Private Investment in Nigeria; Proceedings of the 12th Annual Conference of the Regional Research Units, Central Bank of Nigeria.

Fiiwe, J. L. and Morrison, T. (2017). A Comparative Analysis on the Role of Crude Oil and Non-oil Exports on Nigerian Economy. Equatorial Journal of Marketing and Insurance Policy, 2 (2): 1-20.

Gabmi, I. I. (2000); 'The Impact of Government Policies on the Flows of Foreign Direct Investment in Nigeria'; (Unpublished M.Sc Research Proposal), Department of Economics, Ahmadu Bello Univeristy, Zaria.

Garba, S. T. (1998); 'Direct Private Foreign Investment and Economic Growth in Nigeria (1980-1996): An Empirical Investigation'; (Unpublished Ph.D. Thesis) Submitted to the Postgraduate School, ABU, Zaria.

Imodu, E.C. (2012); 'Impact of Foreign Direct Investment on Economic Growth in Nigeria: Evidence from Johansen Co-integration approach', International Journal of Business and Social Science, Vol. 6, No.3, pp.90-98.

Koutosoyiannis, A. (1997); 'Theory of Econometrics', Second Edition, Palgrave Publishing Press Ltd, NewYork.

Krugman, P. and Obstfeld, M. (1997); 'International Economics 3rd Edition, Harper Collins, New York Education Ltd, England.

Kumar and Pradam (2002); 'The External Reserve Factor in Pakistan Economic Development'; The Pakistan Journal of Economics and Social Studies; Vol.10; pp. 151-160.

Ngowi, H.P. (2001), 'Can African Increase its Global Share of Foreign Direct Investment?' West Africa Review (2001) ISSN: 1525-4488, Vol. 2, No.2, pp. 23-25.

Globerman, U. and Shapiro, D. (1999); 'Causality Test for Cross Country Panels': A New Look at Foreign Direct Investment and Economic Growth in LDCs, Oxford Bulletin of Economics and Statistics, Vol. 63, pp. 153-177.

Odusola, O.E. (2002); 'Diversification of Nigeria's External Finances through Strategic Foreign Direct Investment'. Nigerian Economic Society Annual Conference Proceedings, Jos, 13th-16th May.

Odi, A.M. (2000); 'Foreign Direct Investment to Low-Income Countries': A Review of Evidence. (www.odi.org).

Odozi, V.A. (1995); 'An Overview of Foreign Investment in Nigeria: 1960 to date'; A Paper Presented at the National Conference organized by Security and Exchange Commission, Abuja; May 30th- June 1st.

Okomoh, P.F. (2004); 'The Role of Business in the Society: foreign Direct Investment and their Impact on Sustainable Development, World Bank Institute.

Olise , Theresa, Moses and Anyanwu (2011); 'Foreign Direct Flows and Domestic Investment in Nigeria', Journal of Humanities and Social Science, Vol. 13, No.6, pp.1-12.

Osinubi, T.C. and Amaghionyeodiwe, L.A. (2010), 'Foreign Direct Investment and Economic Growth in Nigeria, Review of Economics Business Studies, Vol. 3, No.1, pp105-127.

Otepola, A. (2002); 'Foreign Direct Investment as a Factor of Economic Growth in Nigeria', Africa Institute of Economic Development and Planning (IDEP), Dakar, Senegal.

Oyinlola, O. (1995); 'External Capital and Economic Development in Nigeria (1970-1991)'. The Nigerian Journal of Economic and Social Studies, Vol. 37, No.3, pp.205-222.

Salako, H.A. and Adebusuyi, B.S. (1998), 'Determinants of Foreign Direct Investment in Nigeria: An Empirical Investigation' pp.21-38.

Saqib, Mansoon and Rafique(2013), 'Impact of foreign Direct Investment on Economic Growth in Pakistan' Advances in Management and Applied Economics Journal, Vol.3, No.1, pp. 35-45.

Scott, P. (1997); 'Determinants of Foreign Direct Investment and its Impact on Economic Growth'', Journal of Economic Development, Vol. 19, pp.137-163.

Shiro, A.A. (2005); 'The Impact of Foreign Direct Investment on the Nigerian Economy' www.unilag.edu.ng/publication/opendoc.php.

Soludo, Charles C. (1998); 'Investment in the Growth Process' Selected Paper for the Nigerian Economic Society Annual Conference, 1998.

Tang, S., Selvanathan, S. and Selvanathan, E.A. (2008); 'Foreign Direct Investment, Domestic Investment and Economic Growth in China'.UNU-WIDER Research Paper, No. 2008/19.

Todaro, M.P. (1994); Economic Development, 5th Edition, Longman, New York and London.

Umeora, C.E. (2013); 'The Effect of Foreignof Foreign Direct Investment on Economic Growth in Nigeria', International Journal of Business and Management; Vol. 7, No. 24, pp. 123-145.

Zein, K. (2006); 'NEPAD: Drawing Lessons from Theories of Foreign Direct Investment', Indian Journal of Economics and Business.