

Foreign Direct Investment and Poverty Reduction in Nigeria

Celina Udude Chinyere, Nkwagu Chibuikwe Christian, Agbafor Michael
Ogbonna and Oruta Lawrence Igwe

Department of Economics Faculty of Social Services and Humanities, Ebonyi State University, Abakaliki.

ABSTRACT

The work investigated the relationship between foreign direct investment (FDI) and poverty in Nigeria between 1981 and 2018 using Johansen cointegration test approach. The ADF tests revealed that all the variables were nonstationary at level but stationary at first difference. The Johansen Cointegration depicted evidence of long run relationship among the variables specified while the result of vector error correction mechanism (VECM) shows that FDI significantly result in decline in poverty rate in the long run but exhibited no pact in the short run. The result further indicates that exchange rate and government expenditure have positive impact on poverty while unemployment rate has negative impact on poverty. Therefore, the study recommends that a priority should be given on the attraction of FDI into the country, improving ease of doing business in order to open the economy for the world and relaxation of policies that inhibits inflow of foreign direct investment. These measures will stimulate foreign direct investment which will eventually translate to decline in poverty in Nigeria.

KEYWORDS: *FDI, Poverty, Cointegration, Nigeria.*

Date of Submission: 06-05-2021

Date of Acceptance: 20-05-2021

I. INTRODUCTION

The importance of foreign capital, most especially FDI, to developing countries cannot be over emphasized. It serves as a supplement to their domestically mobilized savings and it is often accompanied with technology and managerial skills which set the pace for economic development. Foreign direct investment (FDI) can contribute in various ways to economic development in developing nations, most importantly breaking the vicious circle of poverty. The trends of the flows of Foreign Direct Investment (FDI) globally and the distribution of its attendant effect across the regions of the world have been a subject of empirical decisions over the past decades [1]. Several studies have provided evidence of upsurge and increasing degree of the international capital mobility among the developed and developing economies of the world.

Despite how desirable the inflow of FDI to developing nations is, many critics of this capital inflow also allege that multinational companies tend to locate production in countries or region with low wages, low taxes and weak environmental and social standards. They argue that FDI thus contributes to a “race to the bottom”, where countries are forced to lower their standards so as not to lose investments and jobs. It is certainly true that these features of the business environment play a significant role in the decisions of multinationals. However, these items are all first part of the cost side of a business. In the end it is not cost that matter, but profit [2]. Foreign investors balance cost considerations with others that determine the productivity of operations in a particular country. Overall, FDI flows to places where costs are lowest. This is reflected in the basic fact that about three-quarters of FDI flows to developed countries and not to low cost developing nations. It is the priority of investors to locate business where productivity is high, thus FDI will only flow into countries with low productivity when wages and other costs are low enough to offset the productivity disadvantage.

FDI had done so much to many nations considering their efforts in Korea after Korean War, Japan after the destruction of Hiroshima and Nagasaki by United State during the World War II, China and India the two most populous countries in the world with poor economy to sustain their people. These countries had economy development by incorporating their local investment with the use of foreign skills, technologies, experts and management through FDI. The need for Nigerian government to follow this trend came to be very important considering the various efforts of the government to bring foreign investors into the country. Nigeria as a country has been regarded to be Giant of Africa due to her leading roles in the continent but the country remains to be poor and underdeveloped. The inability of the country to develop economically necessitates the need to invite the efficacies FDI inflow into the country. But it is quite unfortunate that African countries in general had not been attracting much attention of foreign investors due to the struggling economies of the region, as well as lack of various determinants of FDI inflow in host countries.

Foreign Direct Investment (FDI) is an investment that is made to acquire a lasting management interest (usually 10% of voting stock) in an enterprise and is operated in a country other than that of the investors [3]. According to [4], such investments may take the form of either “Greenfield” investment (also called “mortar and brick” investment) or merger and acquisition (M&A), which entails the acquisition of existing interest rather than new investment. According to [5], Countries and continents (especially developing ones) now see attracting foreign direct investment as an important element in their strategy for economic development. This is most probably because foreign direct investment is seen as an amalgamation of capital, technology, marketing and management. These is one of the reasons why [6] see FDI as a tool for poverty reduction because it serves as supplements to domestic savings and it is often accompanied with technology and managerial skills which are indispensable in economic development. Foreign direct investment (FDI) is significant for economic growth in the developing countries because it affects the economic growth by stimulating domestic investment, capital formation expansion and also, enhancing the technology transfer in the host countries [7].

Many African countries are improving their business climate in order to attract FDI and hence reduce the ugly scourge of poverty in their countries. Nigeria as a country, given its vast natural resource and large market size is a major recipient of FDI in Africa and indeed is one of the top three leading African countries that consistently receive FDI [8]. According to [9], FDI inflows more than quadrupled, increasing from N2.3 million in 1975 to N10.4 million in 1990, and thereafter, FDI inflows have been rosy and increasing at a modest rate. Presently, the country is the most favoured destination of foreign capital in Africa, gulping more than 15% of total FDI flows into the continent (UNCTAD, 2015). However, the poverty situation in Nigeria is quite disturbing. Both the quantitative and qualitative measurements attest to the growing incidence and depth of poverty in the country. This situation however, presents a paradox considering the vast human and physical resources that the country is endowed with. It is even more disturbing that despite the huge human and material resources that have been committed to poverty reduction by successive governments in Nigeria, no noticeable success has been achieved in this direction. Access to adequate shelter, water and sanitation facilities as well as communication had been very low while income inequality had also worsened during the same period. The worsening situation had affected vulnerable groups and women in rural areas the most in particular are the individuals with limited or no formal education, large families’ farm communities and groups engaged in informal sector activities. Therefore, It is based on these the study tends to examine the impact of foreign direct investment on poverty reduction in Nigeria.

II. THEORETICAL REVIEW

The dependency theory states that the dependence of less developed countries (LDCs) on developed countries (DCs) is the main cause for the underdevelopment of the former. Some scholars of this theory believed that, distortive factors include the crowding out of national firms, rising unemployment related to the use of capital-intensive technology, and a marked loss of political sovereignty [10]. It has also been argued that FDI are more exploitative and imperialistic in nature, thus ensuring that the host country absolutely depends on the home country and her capital [11]. This theory from its points of analysis could be discovered that it creates negative relationship between FDI and economy growth of the developing countries. The theory is of great belief that the economy involvement of developed countries into developing nations under multinational companies and FDI will surely resort to economy disadvantages of developing nations.

The intervention or integrative school attempted to analyze FDI from the perspective of their host country as well as that of the investor, i.e. from the point of view of both the host country and the investor. It blends arguments from both the classical and dependency schools. The theory calls for a mixture of intervention and openness in dealing with foreign investment. It supports neither too much openness nor excessive regulation/intervention [12]. The theory recognizes that there are instances where the market is better placed to act and other instances where government intervention is essential. What is needed therefore is a balancing act between those activities that can best be handled by the market and those that can best be done by the government. It conjectures that foreign investment must be protected but only to the extent of the benefits it brings the host state and the extent to which foreign investors have behaved as good corporate citizens in promoting the economic and social objectives of the host country [13]. In many ways, the middle path/integration theory represents a convergence between Adam Smith's case in favor of a laissez-faire approach and Keynes' argument in favor of government intervention in the market. Whilst Adam Smith in his *Wealth of the Nations* believed that except for intervention in providing public works and institutions, the role of the state in the market must be minimized [14], Keynes, who was greatly influenced by the effects of the US Great Depression of the 1930s, strongly believed that government participation in the market was crucial to stimulate the economy.

Empirical Review

Empirical evidence regarding what impact FDI has had on poverty reduction in developing countries is limited, only a few studies tried to analyze empirically this relationship. However, an expanding empirical literature exists on the growth-elasticity of poverty. Thus, this sub-section focus on reviewing empirical literatures that link FDI to economic growth, growth to poverty reduction and FDI to poverty reduction. To do this, only current literatures will be considered, specifically from 2000 to date.

[15] investigated the relationship between FDI and poverty reduction using secondary data spanning through the period 1980-2012. The model was estimated using the Ordinary Least Square Estimation Approach. The results showed that FDI has a positive but not significant impact on real per capita income and hence does have the potential of reducing poverty in the country.

[16] examined the impact of Foreign Direct Investment inflow and economic growth in a pre and post deregulated Nigerian economy from 1970 - 2010 using a Granger causality test. The result of the causality test showed that there is causality relationship in the pre-deregulation era that is (1970-1986) from economic growth (GDP) to foreign direct investment inflow (FDI) which means GDP causes FDI, but there is no causality relationship in the post-deregulation era that is (1986-2010) between economic growth (GDP) and foreign direct investment inflow (FDI) which means GDP causes FDI. However, between 1970 to 2010 it showed that is causality relationship between economic growth (GDP) and foreign direct investment inflow (FDI) that is economic growth drive foreign direct investment inflow into the country and vice versa.

[17] investigated the relationship between Foreign Private Investment, Capital Formation and Poverty reduction in Nigeria using co-integration and Error correction Mechanism (ECM) and Granger Causality tests with annual time series data covering the period between 1978 and 2008. The various tests demonstrated that the inflow of foreign Private Investment in Nigeria has not significantly contributed to poverty alleviation in Nigeria. The study also showed that government investment on health and education has not helped to reduce poverty in Nigeria.

[18] investigated the impact of domestic investment on FDI inflows in Nigeria. Adopting a decomposed, single-linear econometric model estimated by the OLS methodology within four decade 1970-2009, the findings revealed that private and public domestic investments as well as human capital and market size were negatively related to FDI inflows, while trade openness and natural resource were positively linked to FDI.

[19] examined the effects of foreign private investment on poverty in Nigeria using regression analysis for the period 1975 to 2003. The test demonstrated that the inflow of foreign private investment and foreign loan into Nigeria significantly alleviates poverty. The paper maintained that government expenditure and the continuous increase in petroleum profit tax would aggravate the poverty level in Nigeria.

[20] assessed the magnitude, direction and prospects of Foreign Direct Investment (FDI) in Nigeria. They noted that while the foreign direct investment (FDI) regime in Nigeria was generally improving, some serious deficiencies remain. These deficiencies are mainly in the area of the corporate environment (such as corporate law, bankruptcy, labour law etc). And institutional uncertainly, as well as the rule of law. The establishment and the activities of the economic and financial crimes commission (EFCC), the independent corrupt practices commission, and the Nigerian investment promotion commission are efforts to improve the corporate environment and uphold the rule of law. Has there been any discernible change in the relationship between foreign direct investment (FDI) and economic growth in Nigeria in spite of these policy interventions?

[21] investigates the impact of foreign direct investment (FDI) on economic growth in Nigeria using data for the period 1970 to 2001. His error correlation model (ECM) results show that both private capital and lagged foreign capital have small and insignificant impact on economic growth. The study however established the positive and significant impact of export on growth. Financial development has significant negative impact on growth. This he attributed to capital flight. In another manner, labour force and human capital were found to have significant positive effect on growth.

[22] carried out a study to examine the long-run and the short-run relationships between foreign direct investment and economic growth in Ireland. Using an augmented aggregate production function growth model and bounds testing approach to cointegration, the results indicate that foreign capital (FDI), domestic capital, and trade are statistically significant in both the long-run and the short-run, having positive effects on economic growth in Ireland. The causality analysis also suggests that there is a bi-directional Granger causality between GDP and FDI, and thus, they conclude that the FDI-led growth hypothesis is valid for the Irish economy.

In a more recent study, [23] conducted a study aimed at identifying the impact of foreign direct investment on poverty reduction and whether there exists a causal relationship between FDI and economic growth and poverty reduction in Ethiopia. The study was based on time series data which were collected from secondary sources and cover the period from 1970-2009. Co integration and Vector Error Correction approaches have been applied for the growth model. Estimated results reveal that real per capita GDP responds negatively to FDI in the long run in Ethiopia. He pointed out that it may be a result of profit repatriation of foreign firms,

crowding out of domestic investment because of FDI or low level of human capital in the country. However, in the short run, FDI was found to be insignificant in explaining real per capita GDP

[24] conducted a study to explore empirically the relationship between FDI and GDP growth in Nigeria and also to ascertain the long-run sustainability of the FDI-induced growth process. Using the ordinary Least Square estimation technique and an augmented Solow production function, his results revealed that FDI in Nigeria induces the nation's economic growth. Although the overall effect of FDI on the whole economy may not be significant, the components of FDI positively affect economic growth and therefore FDI needs to be encouraged.

[25] also conducted a similar study to investigate the impact of FDI on poverty reduction in Nigeria. Using per capita GDP as a proxy for poverty and an ordinary least square regression method, their findings revealed a satisfactory performance of FDI on per capita GDP in Nigeria.

However, there has been argument against some of the empirical studies which may have affected its policy application. Some of the previous studies relied on a two-variable model for its analysis and excluding some of the vital variables that may have huge impact on the subject matter. Such studies may likely suffer from specification bias. Some other studies grossly ignored the interdependence that may exist between the dependent and independent variables. Running analysis without due regards to the interdependence that may exist among the variables may led to spurious result. It is based on this arguments, the study extends the period of this study to 2018 to according accommodate recent government policies that may have direct impact on FDI inflow. Also, the study adopted a five-variable model and vector error correction to avoid the problem of specification bias and to take care of interdependence among the variables respectively.

III. METHODOLOGY

Model Specification

The specification of the model is based on the work reviewed and the leading model specified by [26] who investigated FDI on poverty reduction in Nigeria and who modeled Poverty Reduction (POVT) as a function of Foreign Direct Investment (FDI), External Earning (EXE), Trade Openness (TOP), Market Seize (MKZ) measured by market growth rate, Exchange Rate (ERT) External Debt (XDT), Foreign Aids (FAD), Technology (TEC), However, this present study was modified to specifically incorporate to this study the following variables, real per capita income, foreign direct investment, unemployment rate, government expenditure and exchange Rate where RPCI is a proxy for poverty rate serving as the dependent variable. The complete model is specified as follow:

$$POV = F(FDI, URP, GEX, EXR) \dots\dots\dots 1$$

In order to capture the influence of the stochastic or random variable, the equation is explicitly transformed as follows:

$$POV_t = b_0 + b_1FDI_t + b_2URP_t + b_3GEX_t + b_4EXR_t + e_t \dots\dots\dots 2$$

$$b_1 > 0, b_2 < 0, b_3 > 0 \text{ and } b_4 < 0$$

Where;

POV = Poverty,

FDI = Foreign direct investment

URP= Unemployment Rate

GEX= Government expenditure

EXR = Exchange Rate

b₀ = Constant

b₁, b₂, b₃, b₄ =Parameter Estimates

U_t= Error Term.

Poverty is measured as real per capita income (RPCI). This is calculated by dividing the area's total income by its total population. Foreign Direct Investment (FDI), it is the inflow of foreign direct investment in the country. FDI is expected to exhibit negative relationship with poverty. Unemployment rate (UR), this is the share of the labour force that are jobless, expressed as a percentage. It is a measure of unemployed and it is calculated as a percentage by dividing the number of unemployed individuals by all individuals currently in labour force. Increase in unemployment increases poverty rate. Government Expenditure (GEX), this includes all government consumption, investment, and transfer of payments. Government acquisition of goods and services intended to create future benefits, such as infrastructure or research spending. Rise in government expenditure is expected to result in decline in poverty rate. Exchange Rate (EXR), it is the price of a nation's currency in terms of another currency expressed in naira. Exchange rate depreciated is expected to lead to decline in poverty in the long run.

To achieve the objectives of the study, annual time series data on Foreign Direct Investment, poverty, Exchange Rate, Unemployment Rate and Government Expenditure, were collated from 1981 and 2018. The

choice of this period is remarkable in that the scope is wide enough to access impact of FDI on the wellbeing and also examine governments' policies aimed at promoting FDI in Nigeria.

Estimation Procedure

The specified multiple regression models will be estimated using the Ordinary Least Squares (OLS) technique. The following econometric and statistical diagnostic tests will be performed in order to ascertain the validity of the regression results:

Unit Root Test: It is used to test for the stationary of the time series data. This involves testing of the order of integration of the individual time series under consideration. These tests are initially performed at levels and then in first difference form. Three different models with varying deterministic components are considered while performing the tests. These are (1) model with an intercept which assumes that there are no linear trends in the data such that the first differenced series has zero mean (2) model with a linear trend which includes a trend stationary variable to take account of unknown exogenous growth and (3) a model which neither includes a trend nor a constant. The most popular ones are Augmented Dickey-Fuller (ADF) test due to Dickey and Fuller (1979, 1981). Augmented Dickey Fuller (ADF) test statistics shall be compared with the critical values at 5% level of significance. A situation whereby the ADF test statistics is greater than the critical values with consideration on absolute values, the data at the tested order will be said to be stationary. Augmented Dickey-Fuller test relies on rejecting a null hypothesis of unit root (the series are non-stationary) in favour of the alternative hypotheses of stationarity. The tests are conducted with and without a deterministic trend for each of the series.

The general form of ADF test is estimated by the following regression:

$$\Delta y_t = \alpha_0 + \alpha_1 y_{t-1} + \sum \alpha \Delta y_t + e_t \tag{3}$$

$$\Delta y_t = \alpha_0 + \alpha_1 y_{t-1} + \sum \alpha \Delta y_t + \mu_1 t + e_t \tag{4}$$

Where: Y is a time series, t is a linear time trend, Δ is the first difference operator, α₀ is a constant, μ is the optimum number of lags in the dependent variable and e is the random error term.

If the null hypothesis is α₁ = 0, we conclude that there is no unit root in the series under consideration and therefore stationary. If the null hypothesis α₁ = 1, then we conclude that the series under consideration Δ (yt) has unit root and is therefore non-stationary. If the ADF test fails to reject the test in levels but rejects the test in first differences, then the series contains one unit root and is of integrated order one I(1). If the test fails to reject the test in levels and first differences but rejects the test in second differences, then the series contains two unit roots and is of integrated order two I(2).

Cointegration Test: Johansen cointegration is applied to determine if there is evidence of long run relationship between FDI and poverty in Nigeria. [27] state that if several variables are all I(d) series, their linear combination may be co-integrated, that is, their linear combination may be stationary. This means that the variables exhibit long-run relationship.

Vector Error Correction Mechanism (VECM): Having ascertained whether or not co-integration exist, then the next step requires the construction of error correction model to model dynamics relationship. The purpose of the error correction model is to indicate the speed of adjustment from the short-run equilibrium to the long-run equilibrium state. If co-integration is accepted, it suggests that the model is best specified in the first difference of its variables with one period lag of the residual {VECM (-1)} as an additional regressor. To this effect a regressions will be done on their first difference. By taking the first difference, we may lose the long run relationship stored in the data which suggests that we have to use the variables at both their levels and first differences. The advantage of using error correction models (VECM) is that it incorporates the variables at both side levels and first differences and thus VECM captures the short run disequilibrium situations as well as the long-run equilibrium adjustments between variables [28]. Co-integration is a test for equilibrium between non-stationary variables integrated of the same order.

IV. RESULTS

Unit Root Test Results

One of the implicit assumptions that underlie regression analysis involving time series data is that such a data series is stationary. In this context, testing for stationarity or otherwise of the employed data sets becomes of essence in this analysis. The Augmented Dickey-Fuller (ADF) formular was employed to test for the existence of unit roots in the data using trend and intercept. The test results are presented in table 1- 2 below:

Table 1: Augmented Dickey Fuller Unit Root Test Results

Series	At level	5% critical values	1 st Diff	5% critical values	Order of integration
	ADF Test Statistic		ADF Test Statistic		
RPCI	-1.853720	-3.552973	-3.864750*	-3.552973	I(1)

FDI	-3.142473	-3.548490	-7.325394	-3.552973	I(1)
UR	-1.320437	-3.548490	-4.687904*	-3.552973	I(1)
GEX	0.166960	-3.557759	-4.443668*	-3.557759	I(1)
EXR	-1.857271	-3.548490	-3.940554*	-3.552973	I(1)

Note: * denotes significance at 5% level

Sources: Researchers' compilation from E-view (version 9.0)

Table 1 shows the summary of unit root test results using Augmented Dickey-Fuller methods. The result shows that none of the variables is stationary at level. This is because the absolute value of ADF test statistics of all the variables is less than their critical value at the 5 percent level of significance. However, all the variables considered became stationary after first difference since their ADF test statistics were greater than their critical values in absolute value. The results show that the series are integrated of the same order; I (1) with the application of ADF test. Therefore, the variables are fit to be used for the analytical purpose for which they were gathered.

Co-integration Test Results

[29] argue that although the individual series may not be stationary, a linear combination of the series will produce a cointegrated series. The linear combination of series integrated of the same order are said to be co-integrated. The level of their integrations indicates the number of time series have to be differenced before their stationary is induced. For this purpose, the Johansen co-integration test was adopted. The model with lag 1 was chosen with the linear deterministic test assumption and the result summary is shown in table 2:

Table 2: Johansen Cointegration Tests Results

Hypothesized	Trace			Max-Eigen		
	0.05% Critical			0.05% Critical		
No. of CE(s)	Statistic	Value	Prob.**	Statistic	Value	Prob.**
None *	103.4354	69.81889	0.0000	39.73658	33.87687	0.0089
At most 1 *	63.69877	47.85613	0.0008	33.09812	27.58434	0.0088
At most 2 *	30.60065	29.79707	0.0403	14.71532	21.13162	0.3093
At most 3 *	15.88533	15.49471	0.0437	11.14053	14.26460	0.1473
At most 4 *	4.744799	3.841466	0.0294	4.744799	3.841466	0.0294

Note:* denotes significant at 5% level

Sources: Researchers' compilation from E-view (version 9.0)

Under the Johansen Cointegration test, Cointegration is said to exist if the values of computed Eigen values are significantly different from zero or if the trace statistics is greater than the critical value at 5 percent level of significance. The results of the co-integration in table 2 indicate 5 and 2 cointegrated equations respectively. This is because trace statistics is greater than the critical value at 5 percent level of significance in 5 of the hypothesized equations. Similarly, the computed Eigen values are significantly different from zero in only two out of the 5 hypothesized equations. Hence, this satisfies the condition for long run relationship and therefore the null hypothesis of no cointegration among the variables is rejected in at least two equations. The test result shows the existence of a long-run equilibrium relationship among the variables.

Vector Error Correction Model (VECM) Results

Having satisfied the condition for long run relationship as was revealed by the Johansen co-integration which indicated five and two cointegrating equations in accordance with the result of trace statistics and Eigen value test, the next step is to construct a vector error correction mechanism (VECM) in order to estimate the speed of adjustment from short run disequilibrium to long run equilibrium condition. The choice of VECM is informed by the fact that it has cointegrating relation built into the specification so that it restricts the long run behaving endogenous variables to converge to their cointegration relationship while allowing for short run adjustment dynamics. The VECM result is presented in table 3 below:

Table 3: Vector Error Correction Mechanism (VECM) Results

Variables	Long run	Impact		
Coefficients	LFDI(-1)	URP(-1)	LGEX(-1)	REXR(-1)
	-57.22572	-23.36595	78.86232	0.950930
t-stat	(9.67958*)	(2.55111*)	(16.2058*)	(0.19199)
				ECT(-1)
				-0.048621
				(-3.12841*)

R-squared	0.712649	0.469399	0.350777	0.781318	0.697943
Adj. R-squared	0.584248	-0.137001	-0.391191	0.531395	0.352736
F-statistic	3.170055	0.774075	0.472766	3.126240	2.021808

Note: * denotes 5% level of significance

Sources: Researchers' compilation from E-view (version 9.0)

Table 3 above shows the VECM result obtained when real gross domestic product (RGDP) is regressed against Foreign Direct Investment (FDI), Unemployment Rate (URP), government expenditure (GEX) and Exchange Rate (EXR). As shown in the empirical results, both foreign direct investment, unemployment rate and government expenditure conforms to the a priori expectation while exchange rate does not conform to a priori expectation. Accordingly, a small increase in foreign direct investment (FDI), government expenditure (GEX) and exchange rate (EXR) increases real per capita income (RPCI) by 57.22572, 78.86232 and 0.950930 respectively. That is to say that foreign direct investment (FDI), government expenditure (GEX) and exchange rate (EXR) are positively related to per capita income (PCI) while unemployment rate with a coefficient of -23.36595 is negatively related to per capita income equally in line with a priori expectation [30] [31].

On whether the estimated coefficients are statistically significant or not, the standard error values of the estimated coefficients were used such that if the estimated standard error is smaller than half of the estimated coefficient value, we accept that the coefficient is statistically significant and vice versa. From result estimate, FDI has a standard error value of 9.67958, while URP, GEX and EXR have standard error values of 2.55111, 16.2058 and 0.19199 respectively. With estimated coefficients of 57.22572, 57.22572, 78.86232 and 0.950930 for FDI, URP, GEX and EXR respectively, it could be seen that when the coefficients are divided by two, the resultant value would still be greater than the standard error. Therefore the estimated coefficients are all statistically significant.

The above result indicates that the R² is 0.712649 indicating that the explanatory variables explain about 71% of the total variations in RPCI during the period under consideration. This implies that about 71 % variation in Nigeria's real per capita income is explained by changes in foreign direct investment (FDI), government expenditure (GEX) and exchange rate (EXR), while the remaining 29 % is caused by other factors not included in the model.

Furthermore, the ECM (-1) coefficient equals -0.048621. This shows that the speed of adjustment between the short-run and long-run equilibrium is approximately 4 percent annually. This means that the system corrects its previous period disequilibrium at a speed of 4 % annually. The sign of cointegrating coefficient is negative and a standard error value of 0.04309 which is greater than 0.048621/2 shows that the coefficient is not statistically significant. Hence, Granger Representative Theorem (GRT) which holds that a negative and statistically significant error correction coefficient is a necessary condition for the variables to be co-integrated is not completely satisfied. The negative speed of adjustment satisfies the first condition but unfortunately the second condition of statistical significance was not satisfied.

V. CONCLUSION

The main objective of this research work is to evaluate the long run impact of foreign direct investment on poverty reduction in Nigeria, from 1981-2015. Empirically, this study succeeds in providing further analysis of these objectives in Nigeria. Considering various theories with postulates that foreign direct investment has either positive or negative impact on poverty in Nigeria, the VECM estimate of the true impact and relationship between foreign direct investments in Nigeria was developed. Following from the findings stated above, this study concludes that for a nation, irrespective of its economic ideology, to achieve meaningful and sustainable development, adequate attention must be given to a wide spread of economic activities through various means with its foreign sector activities given a priority consideration. The study therefore recommends thus:

1. To ensure the inflow and sustenance of FDI in Nigeria, government should leverage on the market size of the economy and imbibe trade openness. This will attract more inflow of FDI in the economy.
2. Government and policy makers in Nigeria should ensure proper channelling of foreign aids, stabilize its exchange rate, reduce unemployment rate and increase her expenditure. This is because these variables have been found to be statistically significant in reducing poverty in the country.
3. The government of Nigeria should as a matter of priority consider the interest of the economy in making policies that guide the activities of the foreign investors rather than the interest of the politicians.

REFERENCES

- [1]. Adelegan, J. O. (2000). Foreign direct investment and economic growth in Nigeria: A seemingly unrelated model. African Review of Money, Finance and Banking, Supplementary issue of Savings and Development.
- [2]. Adeoye, A. (2009). Macro-economic level corporate governance and FDI in emerging markets: Is there a close Relationship? Journal of economic and international finance, 1(12), 030-043.

- [3]. Aitken, B. J. & Harrison, A. E. (1999). Do domestic firms benefit from direct foreign investment? Evidence from Venezuela, *American Economic Review*, 89 (3), 605 - 618.
- [4]. Ajayi, S. I. (2006). The determinants of foreign direct investment in Africa: Survey of the Evidence. In Ajayi, S. Ibi (Eds) *foreign direct investment in sub-Saharan Africa: Origins, Targets, Impact and Potential*. African Economics Research Consortium: Nairobi.
- [5]. Akinlo, A. E. (2004). Foreign direct investment and economic growth in Nigeria. An Empirical Investigation. *Journal of Policy Modeling*, 10 (26), 627-39.
- [6]. Akinmulegun S.O. (2012). Foreign direct investment and standard of living in Nigeria. *Journal of Applied Finance & Banking*, 2(3), 295-309.
- [7]. Akinyele, S.T. (2011). Foreign direct investment and poverty in Nigeria. *Global Journal of Management And Business Research*, 3(2), 15 – 32.
- [8]. Alfaro L., Chanda A., KalemliOzcan S. & Sayek S. (2006). How does foreign direct investment promote economic Growth? Exploring the effects of financial markets on linkages. NBER working Paper no. 12522, National Bureau of Economic Research, Cambridge, MA.
- [9]. Aremu, J. A. (2005). Foreign direct investment and performance. A Paper delivered at a workshop on foreign Investment Policy and Practice organized by the Nigeria institution of Advanced Legal Studies, Lagos on 24 March.
- [10]. Asiedu, E. (2002). On the determinants of foreign direct investment to developing countries: is Africa Different? *World Development* 30(1), 107-19.
- [11]. Ayanwale, A. B & A. S. Bamire (2007). The influence of FDI on firm level productivity of Nigeria’s Agro/Agro-Allied sector. Final report presented to the African Economic Research Consortium, Nairobi.
- [12]. Bruton, H. J. (1992). International aspects of the role of government in economic development. In L. Putterman and D. Rueschemeyer (eds), *State and market in development: Synergy or Rivalry?* Lynne Rienner Publishers, Colorado, USA.
- [13]. Collier, P. (2007.) *The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It* (Oxford and New York: Oxford University Press).
- [14]. Daude, C. & Stein, E. (2007). The quality of institutions and foreign direct investment. economic and politics. *Journal of Applied Finance & Banking*, 19(3), 317-344.
- [15]. Dauti, B. (2008). Determinants of foreign direct investment is now in South East European Countries – Panel Estimation, Proceedings of the International Conference: Economic & Social Challenges and problems, 1, 87-112.
- [16]. Deepak M., Mody A. & Murshid A. P. (2001). Private capital flows and growth. finance and development. Vol. 38, June, No. 2. Retrieved on June 18, 2012 at www.imf.org/external/pubs/ft/fandd/2001/06/mishra.htm.
- [17]. Dunning, J. H., & Rugman, A. M. (1985). The influence of Hymer's dissertation on the Theory of foreign direct investment. *American Economic Review*, 75(2), 228-32.
- [18]. Dutse, A. Y. (2008). Nigeria's economic growth: emphasizing the role of foreign direct investment. <http://www.imf.org/external/pubs/ft/wp/2009/wp09218.pdf>. Retrieved on November 30, 2012.
- [19]. Ehimare, O. A. (2011). Foreign direct investment and its effect on the Nigerian economy. *Business Intelligence Journal*, 4(2).
- [20]. Fernandez-Arias, E. & Montiel, P. J. (1996). The surge in capital inflow to developing countries: An Analytical Overview. *The World Bank Economic Review*, 10(1), 51-77.
- [21]. Ford, N. (2007). Nigeria: Pouring oil on Delta’s Troubled Waters? *African Business*, Wednesday, August 1, 2007; available at: <http://www.allbusiness.com/government/elections-politics-politics/8909190-1.html>.
- [22]. Garcia, R. M.; Richard K.; Ruengsorn. A.; & Julia Z. (2006) Nigeria: Economic performance assessment (Washington, DC: United States agency for international development (USAID), February); available at: http://pdf.usaid.gov/pdf_docs/PNADF350.pdf.
- [23]. Gottschalk, R. (2001). Lenders and investors’ international portfolio allocation decisions: What Do We Know? Sussex: Institute of Development Studies.
- [24]. Hill S. M. L. & Nordas, H. K. (2008). Trade and labour market adjustment. OECD trade policy working papers, No.64. Paris: Organization for Economic Co-operation and Development. *Global Business and Economics Research Journal*, 2(4), 56 – 72.
- [25]. Hollander, P. (1972). Determinants of foreign direct investment and its impact on economic growth. *Journal of economic development*, 19, 137-63.
- [26]. Nnadi, S. E. (2008). The impact of globalization on the Nigerian economy. Minneapolis, Minnesota: Walden University, Dissertation; available at: <http://gradworks.umi.com/33/36/3336742.html>.
- [27]. Oluwatayo, I. B. (2008) “Explaining inequality and welfare status of households in rural Nigeria: Evidence from Ekiti State”, *Humanity & Social Science Journal*, 3(1)70-80; available at: [http://www.idosi.org/hssi/hssj3\(1\)08/9.pdf](http://www.idosi.org/hssi/hssj3(1)08/9.pdf).
- [28]. Oyekale, A. S.; T. O. Oyekale; & A. I. Adeoti (2007). Regression-based approach to income inequality decomposition in rural and urban Nigeria. *International Journal of Economic Perspectives*, 1(2), 45-54.
- [29]. Rodrik, D. (1997). Savings transitions. *The World Bank economic review*, 14, 481–507.
- [30]. Sornarajah, M. (1994). *The international law on foreign investment*. UK: Cambridge University.
- [31]. Whiteley, M., (1986). Foreign direct investment as a catalyst for industrial development. *European Economic Review*, 43(4), 335-356.

Celina Udude Chinyere, et. al. “Foreign Direct Investment and Poverty Reduction in Nigeria.” *International Journal of Humanities and Social Science Invention (IJHSSI)*, vol. 10(05), 2021, pp 28-35.
Journal DOI- 10.35629/7722