Globalization and Poverty Rate in Nigeria: An Empirical Analysis

Okungbowa, Florence. O. Ewere

Eburajolo, Ose Courage

Benson Idahosa University Department of Economics, Banking and Finance Benin-City Nigeria

Abstract

This study investigated the relationship between globalization and Poverty rate in Nigeria. The study employed the two basic channels theory to explain the relationship that exists between globalization and poverty rate within the Nigeria context. The study adopted a co-integration and error correction modeling techniques on an annual time series data within the periods of 1981 – 2009. A unique co-integration between poverty rate and the explanatory variables in the study is found. In order to determine the short-run dynamics around the equilibrium relationship, we estimated an error correction model (ECM). The empirical findings in this study shows that an increase in openness by (1) one unit will bring about a decline in poverty rate by 0.46209 percent in the current period showing a negative relationship. However, openness has a positive and significant impact on poverty in Nigeria during the period under study. Domestic investment (INV) was statistically significant and has a positive impact on poverty reduction, the current value of FDI responded negatively in terms of relationship and insignificantly to poverty in Nigeria, whereas, the first lagged FDI was statistically significant and also negatively related to poverty. This however shows delayed response. The results of the study suggest the need for Government to encourage globalization, by embarking on trade liberalization policies in order to accelerate and sustain industrial growth and in turn reduce poverty also bearing in mind the growth and development of home industries which is also paramount to development, government should make sure that the globalization process is implemented in a gradual pace. As rapid globalization could be disadvantageous to industrial growth and this can in effect or breed more poverty.

Keywords: Globalization, Poverty rate, Openness, FDI, Poverty reduction, Nigeria

1. Introduction

Over some past decade most economies of the world have become connected due to advancement in transportation, communication, and also trade liberalization that has removed all forms of trade barriers between countries of the world. Lola (2009), stated that the connection can also be linked to expansion in portfolio investment such as international loans, foreign aids, purchases of stocks and increased inflows of foreign direct investment (FDI) especially through multinational corporations whose basic interest is in the hi-tech industries; like the telecommunications, oil and gas, capital intensive manufacturing industries, and banking industries in the developing countries. These linkage whereby the whole world becomes a single market or global village such that goods and services, resources both capital and labour are traded on the worldwide bases is regarded by economists as globalization.

Umo (2007) refers to globalization as the 'growing integration of the world economies. It is the intermingling of cultures, policies, economies, technologies. He also stressed that the intermingling can create structural interdependence, that is, the act of making one system or entity dependent on the other for better or for worse. Based on this, globalization can be seen as a coin with two sides being that it can impact on lives of the citizenry either negatively or positively depending on the level or rate at which a nation embraces the global transition.

Globalization being a contemporary issue has attracted a handful of studies, most of them revealed that globalization can trigger economic development, sustain growth, increase trade as well as alleviate poverty to a very large extent.

This is in line with the initial intention that openness which is a proxy for globalization should encourage improvement in international trade, labour mobility, FDI, technology improvement, policy transfer and also capital inflow. All these would in turn foster economic development as well as a reduction in poverty level of the people. Globalization being a coin with two sides as mentioned earlier, can either benefit or cost a nation. In line with this statement, Lola (2009) stated that globalization carries benefits and opportunities as well as risks and costs. She further noted that developed countries like United State of America (USA), Japan and United Kingdom (UK) are benefiting greatly thereby leaving the less developed countries particularly African countries with the costs and risks of globalization.

These risks and costs includes income inequality, environmental degradation, brain drain, external indebtedness, dominant and dependent on industrialized countries, sharpen dualism, unrealistic trade policies, high rate of price instability, increase in exchange rate devaluation to mention but a few. All these lead to a wide spread margin between the rich and the poor which eventually results to global poverty.

In Nigeria, a large proportion of the population is still living below \$1 (one dollar) per day, faced with poor health conditions, high infant and maternal mortality rate with mortality rate of 191 per 1000 births. This placed us at 148th among 173 countries in 2006, low life expectancy which stood at 46 and 47 years for male and female in 2006 based on this, Nigeria was ranked 155th out of the world's 177 countries, high rate of illiteracy etc.. (World Bank, 2008); (CIA, 2009). All these are the features of massive underdevelopment and poverty. (Okungbowa, 2011

The relationship between globalization and poverty level has been a subject of prolonged and unresolved debate both in the developed and developing nations. Many scholars are of the opinion that globalization has actually reduced poverty in the developed countries, but one may not be categorical in the case of the less developed countries. Oyewale and Amusat (2013) viewed globalization as a borderless world with greater economic integration that is meant to enhance the living standards of people across the globe, but most developing countries in Africa, Asia and Latin America have been victims rather than beneficiaries of the globalization process especially as poverty and income inequality increased in the last two decades.

A curious look at the Nigerian economy shows that despite the high rate of openness, poverty is still highly visible.

To buttress the above assertion, Omotola (2008), notes that as endowed as Nigeria economy and the country's wealth potentials which manifest in the forms of natural, geographical, and socioeconomic factors, Nigeria is suppose to rank among the richest countries of the world that should have no business with extreme poverty. In reality, the reverse is the case. No wonder Nwaobi (2003) viewed Nigeria's case as paradoxical; being that the country is rich, while the people are poor. Thus one begins to wonder the impact of economic globalization on poverty level in Nigeria. This paper therefore aims at investigating empirically the impact of economic globalization on the poverty level in Nigeria using the co- integration and error correction modeling technique. This paper is organized into five sections, immediately after the introduction (section one) comes section two the review of related literature while section three covers the theoretical framework and model specification, section four contains the presentation of result and the empirical analysis and section five concludes the study.

2. Literature Review

2.1 Conceptual Framework

Globalization which is a multidimensional concept has been viewed and defined by various scholars in recent times as follows:

Umo (2007), defines globalization as the intermingling of culture, politics, policies, economic, technologies of the world. In this light, globalization speaks of interdependence of economies on each other. Yusuf (2003), referred to it as a process of creating global market place in which increasingly all nations are forced to participate. He further outlined some features that characterized globalization to be interconnection of sovereign countries through trade and capital flow; harmonization of the economic rules that governs the interaction or relationship between these sovereign nations and creation of the global market place. Fafowora (1998:5) refers to globalization as the process of the intensification of economic, political, social and cultural relations across international boundaries. It is principally aimed at transcendental homogenization.

It also focuses on making global being present worldwide at the world stage or global arena; through the "increasing removal of trade barriers as well as increasing world market integration.

Contemporary globalization can be traced back to the point after the collapse of the Soviet Empire which brought about capitalism. Its emergence also follows the trade liberalization policies of GATT and WTO of 1994/1995.

In this sense globalization is said to have emerged from the need for market orientation in economic affairs after the collapse of communism due to its inability to efficiently provide incentives to drive economic production, allocation, distribution and growth.

The following are the economic underpinning of globalization:

- 1. The collapse of communism and the subsequent consolidation of liberal capitalism as a dominant economic system.
- 2. The liberal cross- border flows of trade, finance and labour
- 3. The real time exchange of technology and information system across the entire globe.
- 4. Consolidation of economic liberalism.
- 5. Information and communication technology (ICT).

Poverty on the other hand, is also a complex and multidimensional phenomenon which results from a combination of economic, cultural, climatic, ecological and environmental factors. According to World Bank (1990), poverty is "the inability to attain a minimum standard of living". Ajakaiye and Olomola (1999), refers to poverty as 'a living condition in which living entities are faced with economic, social, political, cultural and environmental deprivations'.

Poverty comprises of several aspects and can be viewed in its relative or absolute form.

In light of the above, Nzekwu (2006) viewed poverty in its relative terms as the 'inability to buy a pre- specified consumption basket of food and in its absolute term as 'living below one (1) US dollar per day per person'. In looking at the different types of poverty, Nzekwu further stressed that while poverty in the developed countries is basically income determined i.e. relative poverty, that of the developing countries is in addition, the result of deprivation and lack of access to basic services or needs such as safe drinking water, health care, education and housing, i.e. (Absolute poverty).

Viewing poverty from its absolute angle also, Balogun (1999), referred to poverty as a situation where a population or section of population is not able to meet out its bare subsistence essentials such as food, clothing, shelter in order to maintain minimum standard of living. In that same light, Dicken (2003) maintains that poverty is ones inability to take care for the basic necessities of life or in an extreme case of life.

From the above, absolute poverty means a situation whereby somebody or a group of individuals are poor both in their pockets and minds.

According to FOS in Nzekwu (2006), the basic causes of this unprecedented scourge (poverty) can be attributed to several factors such as: poor and inconsistent macroeconomic policies, weak diversification of the economy, gross economic mismanagement, high rate of import dependence, long absence of democratic rule and usurpation of political power by the military elite, lack of transparency in government, high level of corruption, declining productivity in the face of ever growing population, over dependence on oil export, low morale in the public sector and poor governance as well as ineffective implementation of relevant policies and programmes.

Poverty can reveal itself in various forms which include: high rate of unemployment, high rate of inflation, high level of illiteracy, inadequate infrastructure, poor health system, high debt burden, high rate of food shortage, high rate of maternal/ infant mortality, low life expectancy rate, etc.

2.2 Relationship between Poverty and Globalization

Although there appears to be a vast literature on the relationship between globalization and economic growth in Nigeria, but much work has not been done in the area of globalization and Poverty. However, there seem not to be consensus in the few literature of the relationship that exists between globalization and Poverty rate in developing countries, Nigeria to be precise. While some studies revealed a positive relationship meaning negative impact of globalization on poverty alleviation, others show a negative relationship i.e. positive impact on poverty reduction. To buttress the above assertion, Ogbuaku et al (2006), reveals that trade openness has a significant adverse effect on poverty, showing a positive relationship between globalization and poverty.

Whereas financial openness had positive effect on poverty i.e. negative relationship. They therefore concluded that the positive effect of financial openness is not strong enough to offset the negative effect of trade openness on Poverty. Meaning that the impact of trade openness on poverty appears to be more compare to financial openness.

In the same vein, Ghimire (2006), in his work on the effect of globalization on poverty stated vehemently that globalization creates tensions especially within nations and companies between those who have the skills and resources to compete in the global market and those who do not. He stressed further that this disparity is capable of creating high unemployment rate which therefore drives the people further into poverty. This however, implies that globalization breeds poverty in countries that are striving to meet up in the global market of which Nigeria is included.

Nnadi (2010) concludes that globalization has significantly affected Nigeria's Economic growth through the decline in Foreign Direct Investment (FDI). This according to him can result to high rate of unemployment, poverty and inequality and that for such aforementioned problems to be alleviated there will be need for a change in the dominant economic policies of the country. So by implication the work reveals a positive relationship between globalization and poverty in Nigeria because a decline in the inflow of foreign investors can trigger or even breed poverty.

According to Oyewale and Amusat (2013), there is a non linear relationship between globalization and poverty reduction in Nigeria. They further noted that the impact of globalization on poverty hinges on the extent to which the poor participate in the income-growth process, and this is something that cannot be guaranteed. In such a situation whereby the rich are more involved in income-growth i.e. globalization process, its impact on poverty reduction will be minimal.

Contrarily, Salimono (1999) stated that globalization offers economies with potentials of eradicating poverty. This by implication shows a negative relationship between globalization and poverty. Supporting the above also, Awake (2002) noted that family's income since the inception of globalization has increased three times more than it was 50 years ago. This situation is not so in Nigeria because real income is seen to have decreased in this same period.

3. Methodology

3.1 Theoretical Framework

According to literature, globalization offers opportunities and at the same time poses some risks and problems to developing countries of which Nigeria is inclusive. Some scholars such as Dani(1999), David (1999) and Salimono (1999) opined that globalization creates opportunities for developing countries and also offers such economies with potentials of eradicating poverty. Whereas others such as Ghimire (2006), Nnadi (2010), Ogbuaku et al (2006) and Oyewale and Amusat (2013) reveal that globalization has adverse effect on poverty in Nigeria. This implies that there exist a positive relationship between globalization and poverty rate in Nigeria.

This work is pinned to the two basic channels theory which can be used to explain the relationship that exists between globalization and poverty reduction. They are referred to as causal mechanisms or channels. The two basic channels are:

- 1. The social provision channel: this implies that the resources generated from globalization are utilized by such an opened society to provide social amenities or services to the poor in order to enhance their standard of living.
- 2. The national income channel: here globalization of an economy tends to translate such an economy into higher income nation, and when these incomes are properly utilized it helps to enhance the capabilities of such a nation.

Although, there appear to be variations in the workings of the two channels, for instance the extent to which countries utilizes the income or resources they generate from globalization for the provision of social amenities can vary from country to country and this is also applicable to the national income channel.

From the above channels it is easy to observe the kind of relationship that may exist between globalization and poverty reduction. If the extent to which the resources from globalization is use to provide social amenities and the rate at which globalization translates to higher national income is high, then the relationship will be positive vice versa.

3.2 Model Specification

The measurement of poverty is still controversial as there is no unique measurement yardstick.

But for the purpose of this study Poverty rate was captured by the human development index (HDI) the combined poverty measurement method (CPMM) is used to compute the human poverty index which is the dependent or endogenous variable. The following are the variables used in the compilation of (HDI):

- a. Life expectancy at $birth(Y_1)$
- b. Education level (weighted average) Y_2
- i. Adult literacy (weight 2/3)
- ii. Combined enrolment rate (weight 1/3)
- c. GDP per capita (Y_3) The arithmetic mean of the three indicators is the HDI i.e. HDI = $1/3 (Y_1 + Y_2 + Y_3)$

The second key variable is globalization and it is captured as degree of openness.

Degree of openness = $\frac{Export + Import}{Gross \ Domestic \ Product}$

The Model

This model is a modify version of Aisien (2007) in Waamene (2010). It is specified as follows: POV=f (OPN, FDI, EXRT, INV, XDBT,)------ 1

Where;

The dynamic analysis specification is stated below.

The Error correction Model appearing in a dynamic manner which includes changes, time, the random term and the error correction mechanism, is expressed as:

$POV_{t} = \alpha_{0} + \alpha_{1} \Delta OPN_{t} + \alpha_{2} \Delta FDI_{t} + \alpha_{3} \Delta EXRT_{t} + \alpha_{4} \Delta INV_{t} + \alpha_{5} \Delta XDBT + ECM_{t-1} + U_{it} \dots 3$

The explanatory variables and their expected or a priori signs based on existing theory are provided below.

Variables	Descriptions	A Prior expectation
OPN	Openness	-
FDI	foreign direct investment	-
EXRT	Exchange Rate	+
INV	Domestic Investment	-
XDBT	External Debt	-
ECM	Error Correction Mechanisms	_
U	Stochastic error term	

3.3 Estimation of Model

This study adopts the OLS, co-integration and error correction techniques in estimating the Poverty rate model. The reason behind the co-integration analysis is the fact that most macro variables may drift together; if there is a tendency for some linear relationship between them overtime, the co-integration analysis helps to discover it. Usually, the parsimonious error correction representation which happens to be the final result is preceded by a number of tests which includes:

Unit root test; this is to ascertain whether the variables are stationary or not, and the co integration test is also needed because it has been observed most times that time series data are stationary only after first or second differencing and this mostly result to loss of some valuable information about the long-run equilibrium relationship between the variables. Thus there is need to integrate short-run dynamics with long-run equilibrium. Co-integration test is useful in identifying whether the long term economic relationship existing among variables is stable. The test is carried out using Johansen co-integrated test (1991). To get this result, the unit root test for residuals (i.e. residual stationarity test) was adopted, and the time series are said to be co-integrated if the result is stationary

The stationarity test is needed also, to determine the order of integration of each of the series employed. The order of integration is also necessary for co-integration and indeed, for error correction modeling. This is because each series involved in the estimation of a model must be integrated at the same order (Engle and Granger, 1987).

Dickey Fuller (DF) and Augmented Dickey Fuller (ADF) unit root test was adopted in this study to test for order of integration. Under the stationarity test, we tested the null hypothesis against the alternative hypothesis.

The null hypothesis of the unit root states that the coefficient of β_1 is not statistically different from zero (i.e. $\beta_1 = 0$). But if on the other hand, there is a unit root implying that $\beta_1 \neq 0$, but differencing the series ones makes it stationary, then OPN is said to be integrated at order one i.e. I(1).

The co-integration test is used to test if the variables in the model are co-integrated. The residual stationarity test (i.e. unit root test of residual) was adopted. The idea here is that the error term U_t must convert to Gaussian white noise (Guobadia and Asien, 2009). If OPN is a first order auto regressive scheme (ARCI), then the simple value of the variable will be sufficient to ensure this conclusion. But, if the process is not AR (1), then an additional difference term will be added to the equation to make the error term (U_t) white noise hence the need for the ADF test.

Note that the variables in the model are said to be co-integrated if the t-statistics for the ADF is greater than the critical value in absolute terms and it is not co-integrated if the reverse is the case.

The error correction mechanism by OLS (ordinary least squares) is adopted to obtain coefficients of the parameters in the model and to check if they meet the a priori signs. The result also shows the significance of the empirical model through the F-statistics test (i.e. Ho: $\alpha_1 = \alpha_2 =, \ldots, = \alpha_N = 0$ testing the overall significance of the regression or the model) and the level of significance of the parameters of the independent variables to the dependent variable through the T-statistics test. This is done by stating that there is no significant difference between the independent variable and the dependent variable (i.e. Ho: $\alpha_1 = 0$). Note that if the parameter is not equal to zero the null hypothesis would be rejected and the alternative will be accepted. The result also shows the goodness of fit of the model with the help of the adjusted R-square which shows the percentage of variation in the dependent variable that is occasioned by the independent variables. The Durbin- Watson statistics (D-W) result indicates whether there is serial correlation in the model or not.

Error Correction Mechanism (ECM) is preferred due to its ability to overcome the problem of spurious regression, its ability to induce flexibility by combining the short –run and long run dynamics in a unified system, and also, the fact that its estimates are generally consistent and efficient.

The ECM shows that the change in a dependent variable at time t (i.e current period) is not only dependent on the current values of the independent variables, but also on the lagged changes in the independent variables, as well as on its own lagged period. Hence, it therefore shows both the short and the long-run equilibrium relationship between the dependent and the independent variables.

4. Analysis/ Discussion of Results

4.1 Time series Property of Data (Stationarity Test) in testing for stationarity of the variables, the Dickey Fuller (DF) and Augmented Dickey Fuller (ADF) unit root was adopted. From the test only one variable which is Poverty (POV) was stationary at level the other variables (OPN, FDI, EXRT, INV, XDBT) became stationary after differencing them ones.

These results are shown in appendix 1 below.

4.2 Co-Integration Test (Unit Root Test for Residuals)

To get this result, the unit root test for residuals (i.e. residual stationarity test) was performed. The result shows that there is no unit root in the residual variable. This implies that the dependent variable (POV) and the explanatory variables (POV(-1,DOPN,OPN(-1,DOPN(-2),DFDI,

DFDI(-1),DFDI(-2),DXRT,DXRT(-1),DXRT(-2),DINV,DINV(-1),DXDBT) are co-integrated. The result is show in appendix 2 below:

4.3 The ECM Result

This can be found in appendix 3 below.

5. Discussion of the ECM Result

An over parameterized Autoregressive Distributed lag (ARDL) model was estimated using a 2 period lag. But, revealed that some of the variables were significant at 5% and others at 10% level of significance.

From the results, some of the variables both in their current and lagged values met the expected signs while some others did not meet the a priori sign. The current value of OPN met the expected sign and was found to be statistically significant at 10% level of significance. Whereas, the first lagged period of OPN showed a positive relationship with Globalization as against the a priori expectation although it was significant at 5% level of significance. This therefore implies that an increase in openness by (1) one unit will bring about a decline in poverty rate by 0.46209 percent in the current period.

The result shows that the current and first lagged FDI values met the expected sign; which implies that, at there is a negative relationship between FDI and poverty. This means that an increase in the inflows of foreign direct investment both in the first year and after two years, will lead to a fall in the poverty rate in Nigeria. This is so because, employment by the foreign investors of two years back will have effect on the current poverty rate. Judging by the t- ratios, FDI in its current period was statistically not significant but the 1st lagged period was statistically significant at 10 % level of significance. This however shows delayed response. The statistical significance of FDI in its 1st lagged period is probably an indication that the foreign capital in the Nigerian economy within the period of study could have played a major role in the reduction of poverty rate after two years. And the fact that it was not significant in the current year could mean that the effect was delayed or this could be as a result of channeling of the FDI to non- productive sectors or due to the mass closure of business own by foreigners as a result of the political and social unrest in the country such as the activities of the militants in Niger Delta area. (Okungbowa, 2011). It could also be attributed to the fact that local labours were not employed because the foreign investors brought in their labour.

The result also shows that domestic investment (INV) in its Current value met a priori expectation showing that an increase in domestic investment by one unit will reduce poverty by 0.000050 and was significant at 5% level of significance. From the result also, external debt (XDBT) had a negative relationship with poverty rate, which implies that an increase in the amount of external debt incurred will lead to a decline in poverty rate but however, it was not statistically significant. The reason may be that a larger proportion of money borrowed was not properly utilized for economic development that could translate into poverty reduction in Nigeria.

The statistical significance of the parameters estimated can be verified by their standard errors or T-statistics, the adjusted R-squared and the Durbin-Watson statistics. The result has an impressive goodness-of-fit considering the adjusted R-squared value of 0.6894 i.e. 68%. It implies that the independent variables OPN, FDI, XRT, INV and XDBT (both in their current and lagged periods) explained about 68% systematic variations in the rate of poverty over the observed years in the Nigeria economy while the remaining 32 % variations are explained by other determining variables outside the model.

The Durbin Watson (D.W) showed 2.1 for the model. This shows that the D.W falls within the acceptable region which is approximately 2 and this implies that there is no indication of serial correlation among the explanatory variables in the model.

The goodness of fits statistics shows a good performance for the model. The F-statistics is significant at 1% significant level for the model. Thus, we accept that a linear relationship exists between the dependent variable and all the independent variables combined in the model.

The result also revealed a well defined error term (ECM) indicating a feedback of 73% of its previous year's disequilibrium from the long-run explanatory variables elasticity of POVERTY

This shows that the speed of adjustment is 73%, meaning, the model adjust about 73% of the short-run disequilibrium per period. This also shows that the model is dynamically stable.

Therefore, the strong significance of the coefficient of $ecm\pm -1$ and the right sign supports the earlier assertion that POV (Poverty) indeed co-integrates with the explanatory variables.

5.1Findings

The study adopted a co-integration and error correction modeling techniques in an attempt to examine empirically the impact of globalization on poverty rate in the Nigeria economy.

The result shows that there exists an inverse relationship between OPN i.e. the degree of openness of the Nigerian economy on the level of poverty in the economy with statistically significant result judging by the t-ratio. This simply implies that during the periods under study, the degree of trade openness resulted to a reduction in poverty rate in Nigeria. This is in line with economic theory. This thus supports Salimono (1999) and Awake (2002) and negates Aisien (2007), Ghimire (2006), Nnadi (2010), Ogbuaku et al (2006) and Oyewale and Amusat (2013). The study also revealed a negative relationship between domestic investment and external debt on poverty rate,)

5.2 Conclusion/ Policy Implications

This study investigated mainly the relationship between trade openness (globalization) and poverty rate in Nigeria. In the empirical investigation of aggregate function of poverty in Nigeria, co-integration and error correction estimation were done. In order to determine the short-run dynamics around the equilibrium relationship, we estimated an error correction model (ECM). The empirical findings in this study have it that there is an inverse and significant relationship between trade openness and poverty rate in Nigeria, poverty responds positively, but insignificantly to external debt in Nigeria, poverty reacts positively and significantly to domestic investment in Nigeria.

Even though the result of the study shows that globalization brought about a reduction in poverty rate in the period under study while poverty is still visible in the country, the policy implications that the result suggest are:

The need for Government to encourage globalization, by embarking on trade liberalization policies in order to accelerate and sustain industrial growth and in turn a reduce poverty. they should also monitor the movement of factor inputs as well as imported and exported goods both in and out the country by way of creating a well secured boarders across the country and a strong and efficient Custom Officials.

Government also bearing in mind the growth and development of home industries which is also paramount, should make such that the globalization process is implemented in a gradual pace. As rapid liberalization could be disadvantageous to industrial growth and this can in effect breed more poverty.

To the financial institutions, they should put measures in place to encourage more financial openness. Although study has revealed that financial globalization plays vital role in the reduction of poverty. (Ogbuaku et al 2006). But the positive impact of financial openness is not strong enough to bring about a massive reduction of Poverty in the country. Meaning that the impact of trade openness on poverty appears to be more compare to financial openness.

In sum, globalization can bring about a reduction in poverty if we embark on it with a focus of our industrial sector growth in mind.

References

- Ajakaiye ,D.O and Olomola, A.S (1991) Conceptual and Methodological issues in Poverty Alleviation. Bullion of Central Bank of Nigeria Vol 23, No 4.
- Aisien, N.L. (2007) Impact of Public Expenditure on Poverty Reduction in Nigeria in Sustainable Development Looking Ahead. Benin-City.
- Awake, (2002), Globalization: Course or Cure Journal of Awake. May 22, pp.1-4
- CIA (2009). The World Fact Book. Washington, DC.
- Dani, R. (1999). Has Globalization Gone Too Far? Washington, D.C. Institute for International Economics.
- David, V.(1999). Barrier or Benefit? Regulation Transatlantic trade: Washington, D.C. Brookings Institute Press.
- Dicken, P (2003) Global Shift: Reshaping the Global Economic Map in the 21st Century, Fourth Edition, London: Sage
- Engle, R.F and Granger .C. (1987) "Co-integration and error correction representation, estimation and testing" Econometrical Vol. 55

Fafowora, O.O (1998) Management Imperatives of Globalization Management in Nigeria: Journal of Nigeria Institute of Management vol. 34, Nov 2-4 April – December, pg 5-9.

- Ghimire S. (2006) Effect of Globalization on Poverty. The world's Resources Sustainable Economics to end global poverty.www.stwr.org/poverty –inequality
- Guobadia .S and Aisien .L, (2009), Economic Globalization and the size of the public sector: Evidence from Nigeria, paper presented in conference on Rethinking African Economic Policy in light of the Global Economic and Financial Crisis, 6-8 December, NAIROBI, Kenya
- Lola, G. Kafilah (2009), Globalization and Poverty: Comparative Analyses of Bangladesh and Nigeria. ASBBS Vol.16 No 1.
- Nnadi, E. Stanley (2010) The impact of Globalization on the Nigerian Economy. Udini proquest. Research unleashed stores
- Nwaobi, G.C. (2003). Solving the Poverty Crisis in Nigeria: An Applied General Equilibrium approach. Quantitative Economic Research Bureau. Gwagwalada, Abuja
- Nwaamene, S. (2010). An empirical analysis of the impact of globalization on poverty in Nigeria. Unpublished B.Sc. project, department of Economic, Banking and Finance, Benson Idahosa University, Benin- City.
- Nzekwu Greg (2006) Exchange Rate Stability and Poverty Reduction in Nigeria. CBN Bullion July- Sept, Vol. 30, No 3
- Ogbuaku,N. Henry, Adebesi, A. and Feridun Mete (2006) Does Globalization lead to increased Poverty in Africa? Empirical Evidence from Nigeria. Economia Internazional Cmera di commercio di Genova, Vol. 59, pg 63-82
- Oyewale I.O and Amusat W.A (2013) "Impact of Globalization on Poverty Reduction in Nigeria Interdisciplinary Journal of Contemporary Research in Business Vol. 4, No.11.
- Okungbowa, F.E.(2011). The impact of Foreign Direct Investment and Domestic Investment on the Nigeria Economy. West African Social and Management Sciences Review (WASMSR)Vol. 2, No.2
- Omotola, J.S. (2008). Combating Poverty for Sustainable Human Development in Nigeria: The Continuing Struggle. Journal of Poverty. Vol.12, No.4, Pg. 496-517
- Salimono,A.(1999), Globalization and Challenges. A paper presented at the international Summit on Globalization as problem of development in Harana Cuba.
- Umo, U. Joe (2007) Economics. An African Perspective Millennium. Text Publishers ltd Lagos.
- World Bank. (2008). World Development Report 2009
- Yusuf, A. Raheem(2003) Globalization and Nigerian Economic Development. A paper presented at the 4th Annual Conference of the Social Studies Association of Nigeria held at the Faculty of Education, University of Ibadan

Appendices

VARIABLES	ADF	CRITICAL	ORDER INTEGRATION	REMARK
POV	-3.59585	-3.5671	I(0)	Stationary
DOPN	-5.2482	-3.5731	I(1)	Stationary
DFDI	-4.9408	-3.5731	I(1)	Stationary
DEXRT	-3.5901	-3.5731	I(1)	Stationary
DINV	-4.1388	-3.5731	I(1)	Stationary
DXDBT	-3.7873	-3.5731	I(1)	Stationary

Appendix 1: Unit Root Result of the Variables

Source: The Authors n = 29, D = First order difference

Appendix 2: Unit root test for Residual

Variable	DF	ADF	Critical Value
RESIDUALS	-6.7949	-4.3018	-3.5731

Source: The Authors

Regressor	Coefficient	Standard Error	T Ratio[Prob]
dDOPN	46209	.26252	-1.7602[.094]
dDOPN1	.74410	.31103	2.3924[.027]
dDFDI	.6997E-6	.2334E-5	.29977[.768]
dDFDI1	.6023E-5	.3482E-5	1.7297[.100]
dDXRT	059460	.024232	-2.4538[.024]
dDXRT1	.061429	.029378	2.0910[.050]
dDINV	5065E-5	.2137E-5	-2.3698[.029]
dDXDBT	1023E-3	.1197E-3	85415[.404]
dCONSTANT	32.9656	7.1507	4.6101[.000]
ecm(-1)	73019	.15780	-4.6274[.000]

Appendix: 3 ECM Result

Source: The Authors

R-Squared .83361 R-Bar-Squared .68941 DW-statistic 2.1454 F-stat. F (9, 19) 8.3502[.000]