**International Journal of Economics, Business and Management Research**

Vol. 4, No. 10; 2020

ISSN: 2456-7760

# ECONOMIC GLOBALIZATION, EXTERNAL TRADE AND THE NIGERIAN ECONOMY

Nteegah, Alwell

Department of Economics, University of Port Harcourt, Nigeria.

**Abstract**

The merging of all the countries' economies into a global village due to information technology and trade make it imperative to examine how the Nigerian economy had benefited from economic globalization and external trade. To achieve the objectives of this paper, the Nonlinear Autoregressive and Distributed Lag (NARDL) approach was used to ascertain the long run dynamics and the degree of asymmetry among globalization, external trade and economic growth in Nigeria. The result shows that all the explanatory variables in this model both in the short and long run were insignificant in explaining shocks in economic growth in Nigeria. This implies that economic globalization and external trade have less impact on economic growth in Nigeria over the period of this study. The result further shows that asymmetric or balanced relationship exists between economic globalization, trade and economic growth in Nigeria. This implies that the Nigerian economy does not adjusts speedily to changes in long run dynamics. Which connotes that policy change in economic globalization and external trade has less implications on the growth of the economy. Based on this findings, the paper suggests: a review of conditions for foreign investment, restrictions of import, the diversification of export base of the economy by creating value addition for goods produced for export and building of critical infrastructures like human capital base and power.

**Keywords:** Globalisation, FDI, Imports, Exports and Real GDP growth rate.

## 1. Introduction

Globalization is promoted by the continuous integration of world market with unrestricted trade barrier, unconditional mobility of capital and labour, and with the application of laissez-faire economy, (Merriam-Webster, 2012). This shows that globalization exists in economies were government intervention in international trade is minimal. The importance of globalization and trade to the GDP index cannot be underestimated as many writers have positively emphasized on the contribution of globalization in relation to growth and development of the world economies over the years. Fitzgerald (2000) generally notices that trade is pertinent to poor economies if they have any hope of brighter future and desire to develop like others. Trade openness is strictly influenced the economic progress and growth rate through competitive increase in the level and rate of business activities and speed the rate of transfer of inputs and outputs across from one economy to another. The integration of the world economy through the progressive globalization of trade and finance has reached unprecedented level most especially in the recent times, surpassing the pre-world war I peak (Lall, et al. 2007).

The scholars who wrote and argued on globalization positioned that globalization granger cause increase in the income level and raises economic prosperity and reduces poverty and inequality,

Vol. 4, No. 10; 2020

ISSN: 2456-7760

the opposing group argues and insisted that globalization raises the general or overall volume of income but its benefits are not equally shared amongst individual economies of the globe. For instance, Adesoye, Ajike and Maku (2015) argued that many highly globalized developing countries have not been able to profit from globalization and are still facing the problems of poverty, stunted growth, unemployment and general underdevelopment despite opening or embracing international trade. Since the period of welcoming globalization in 1980s in Nigeria with the highly expectations such free trade enhancement, foreign investment competitiveness and financial integration and technological advancement and also to enhance the growth rate of the economy.

Contrary to the above expectations and view, the pattern of growth since that period have been totally discouraging and with high incidence of poverty escalating on the yearly basis. According to the World Bank (2018) report, about 86.9million Nigerian representing 50 percent of the total population of about 180 million live in extreme poverty in spite of the country's vast economic, natural and human resources potentials.

However, there is a strong belief that developing economies like Nigeria can still gain and grow her economy through trade liberalization and globalization given the example of China and other Asian Tigers. It is on this premise that the paper seeks to examine the implication of trade and globalization on the Nigerian growth trajectory. The paper continues by reviewing relevant literature on trade, globalization and growth, this is followed by the methodology for the study, results and findings and the concluding remarks.

**ii. Literature Review**

Myriad of both theoretical and empirical literatures exist on how globalization and trade affect economic performance. Theoretically, countries trade because resources are not evenly distributed among the countries of the World. The position was justified in the argument by early trade theorists like: AdamSmith's Theory of Absolute Advantage and David Richardo's theory of comparative advantage. Other trade theories build their arguments on the foundations of Smiths and Richardo. For instance, in the Heckscher-Ohlin-Samuelson (H-O-S) model of foreign trade, Samuelson made some strategic simplifications to the already existing Hechscher-Ohlin thesis by specializing it to only two nations, two products and two productive factors, yielding the so-called 2 x 2 x 2 model or vector. The Heckscher-Ohlin theorem asserts that a country endowment or abundant in a specific resource exports the product that intensively uses that factor in exchange with other products. The Stolper-Samuelson model revealed that continuous increase in the prices of wage and prices of factor employed in course of production will intensively increase the goods and wage of the factor. Given the further assumption that neither economy specialized in its export, the equalization price factor theory states that trade equalizes the real factor prices in the two nations.

This continuous interaction among various countries due to uneven resources distribution has turn the world into a global village (globalization). Hence it could be argued that trade created the root for globalization. However, the benefits trading countries derive from trade and

Vol. 4, No. 10; 2020

ISSN: 2456-7760

globalization seem to differ, the empirical works by some of the early scholars shall be examine in this section.

Aisahath and Zubair examined the impact of political, social, cultural and economic globalization on the economic development and growth of the 86 developing nations of the world in the year 2015 with the adoption of the multiple regression tool. The analysis was conducted with the cross-sectional analysis with the 86 countries. The result indicated that overall globalization, that is political and social globalization have a negative and non-significant impact on economic growth. However, economic globalization had a positive and very important influence on the direct foreign investment and through it, a negative and insignificant effect exist between economic globalization and gross domestic product thereby revealing a partial effect on growth. This revealed that through globalization and economic integration, FDI is encouraged and expanded. Based on these results, the study therefore suggests that policymakers should emphasize on economic integration that enables Foreign Direct Investment inflows to create more job opportunities and economic growth.

Ahamad in his study on how international transaction affected the Bangladesh economic performance used data that ranged between the period of 2008 and 2017 recorded that import and export contributed significantly to the country's growth. Using Pearson Correlation and Multiple regression models, the study further revealed that trade (that international trade- export and import) have serious and vital impact on the growth level of Bangladesh economy and also shows that international trade is purely and firmly positive to growth (GDP) in Bangladesh. Based on the above findings, the study put together the following suggestions, that the Bangladesh government should formulate export-leading policies so to increase the export and also the GDP level.

Gurgul and Lach researched on the level and role of globalization in different aspect on the growth level of 10 economies of CEE. Using the globalization indexes by the Swiss Economic Institute publication, the study found strong and robust evidence of growth-stimulating effect of globalization processes, especially in social and economic dimensions. Differently, the political perspective role on globalization is said to be strictly statistically vital and significant to any research variant. The result, that was of interest to the researchers is that of social development dimension of globalization (Internet, television and trade in newspapers) are at least on their first two decades of their transition have strong and positive impact on the development of the observed CEE nations and that rise in the economic dimension (that is international trade foreign investment increase, import barriers and development of taxes policy) tend to increase development and growth. The study therefore recommended that those who are in charge of policies in the country should evolved policies that will sustain globalization as it clearly does more good than harm to the growth of the studied countries' economic transition.

Majid and Behzad used the well-reliable econometric tool of the OLS to examine the causal effect of trade and human capital on the development and growth of the Indian economy from 1980 - 2011. The empirical findings revealed that significant and positive relationship exist

Vol. 4, No. 10; 2020

ISSN: 2456-7760

between foreign trade, human capital and economic growth. The analysis from the study further show that any vital progress on the pursue of human capital growth will definitely lead to economic growth and in turn, inclusive economic progress will have a positive balance with employment, profit and income level.

Javed et al carried out a study on the influence of total exports to the ratio of the GDP, imports to GDP, terms of trade, trade openness, investment to GDP ratio, and inflation on the economic growth of Pakistan from 1973 – 2010. The result indicated that the independent variables included in the analysis have a direct and significant influence on growth of the Pakistan economy. The result further show that increase in the import of raw material will boost the level or rate of production, employment, income and total output of the Pakistan economy. In the same direction, trade openness possesses a positive and significant influence on the growth of the economy under study. The study recommended based on the findings that; economy of Pakistan can be boosted if government adopts multipurpose policies like that of improvement in tax and revenue structure, improving fiscal and monetary policies and structural adjustments policies and eradicate anticompetitive market practices.

Meraj work was centered on the analysis of globalization and economic trade openness on the Bangladesh growth and development within the spanned period of 1971 and 2011 with the application of ARDL (autoregressive distribution lag) model and also the variables were put forward to the granger causality test. The error correction model (ECM) test and that of the granger test revealed that a causal relation exists between the level of export and import and GDP growth. The result also shows a bidirectional causality between the export component and the rate of the GDP growth but import component do not granger caused export and GDP. This indicates a positive impact for globalization over trade and economic growth in the least developed countries (LDCs) such as Bangladesh. The findings also revealed a positive bidirectional relationship within the component of export and GDP, which implies that the effect of globalization is well felt on the growth level (GDP). To this end, more export policy strategies were listed from the study's recommendations with a strong review of import.

Samimi and Jenatabadi work intensively on the impact of economic globalization and growth on the Organization of Islamic Cooperation(OIC) countries. Specifically, the study examined whether the growth effects of globalization depend on the complementary polices as well as income level of OIC countries. With the application of the GMM (generalized method moments) estimator and a dynamic panel data method between 1980 and 2008, the evidence provided in the worked revealed that globalization is statistically important and a determinant of economic growth within the OIC economies. It was also noticed from the analysis that the positive effect is granger caused more on economies with better education and skill workers together with a well-developed financial system. Thirdly, the findings also indicated that economic globalization effect is strictly determined and influenced by countries with better or higher income, as it showed that high or medium income economies have better chance to benefit from globalization than those countries with lower income. As it was stated from study that economic globalization does not only directly granger cause growth but it complements it through reform. The study

Vol. 4, No. 10; 2020

ISSN: 2456-7760

therefore recommended amongst others, that plans have to put forward to improve the level and degree of educated workers and financial development sector enhancement is also necessary if a country desire to reap the gains of globalization.

In Nigeria, scholars have also examined how trade and globalization affect economic outcomes. Konyeaso worked on the impact of globalization on the Nigerian economic performance between the years 1986 and 2014. It was put forward by the study that a positive relationship exists between globalization and growth. the findings led the author to come to the conclusion that Nigerian economy is gaining from globalization mainly due to Foreign Direct Investment (FDI) and trade openness. Nigeria had achieved a better economic growth since it opens and embrace international trade and foreign direct investment. However, for the country to gain more on globalization, the study suggested that there is needs to integrate the economic into international trade through diversification of export. A business friendly environment is also prerequisite for more direct foreign investment which enhance globalization.

Utuk used descriptive research method to investigate the causal effect of globalization on the performance of the economy of Nigeria in relation to the capital flow and trade volume between the time period of 1970 and 2011. The study found from the empirical findings that increased trade and capital flows engendered by the trade volume can accelerate the performance of economic growth. However, if Nigeria government wishes to gain from the globalization and trade arrangements, the study recommended that many issues facing global integration need to be addressed. The study emphasized that implementation of appropriate and well-structured policies are paramount to minimized the risk of destabilization and marginalization, as well as encouraging and facilitating a desired growth and achieve substantial poverty reduction.

Adeleye, Adeteye and Adewuyi examined the impact of international trade on economic growth in Nigeria. The authors used the simple regression techniques, the error correction mechanism (ECM) and the cointegration to modelled the variables so as to check their long-run effect on the economic growth. Total export (TEX) was the only variables that was positive and significantly related to economic growth while others were insignificant. This means, that Nigeria is presently operating a mono-cultural economy where only oil act as the sole support of the economy without tangible support from other sectors such as industrial/manufacturing and agriculture. The study therefore suggested that the federal government needs to pursue an aggressive plans and policies that are anchored on diversification of the productive sectors and import substitution program.

Feridun, Olusi & Folorunso explained the impact of economic globalization on the performance of the Nigerian economy with time series data that ranged from the period of 1986 to 2003 with the application of the econometric technique of cointegration and Error Correction Model (ECM). The result confirmed that economic openness has positive influenced on the level of GDP in Nigeria but financial reforms has a negative and insignificant impact on the Nigerian economic progress. They put forward that Nigeria will benefit more from globalization if the

Vol. 4, No. 10; 2020

ISSN: 2456-7760

economy can fully integrate with the economies of the world. Therefore, the study suggested that trade barriers should be totally removed and capital inflow be encouraged

Agbo, Agu & Eze analyzed the causal effect of foreign trade on the economic progress of the Nigerian economy within the time frame of 1980 and 2012 with the application of the multiple regression technique. From the result, the authors recorded that there is significant effect of export on the growth of Nigeria's GDP but import has less impact on the growth of the economy over the time of study. The study put together the following advice to government on the ground that conscious effort need to be made so as to fine-tune the various macroeconomic variables in order to provide safe environment to stimulate foreign trade by engaging in more of export trade and on the other side imports need to be curtailed as it has a negative impact on the economy. Also the unaccounted activities in the national income accounting process like smuggling, bunkering, trafficking both child and drug and other illegal related activities need to be totally checked. The study also suggested the diversification of Export base as measure of stimulating economic growth in Nigeria.

The review of related literature indicates that most of the works consulted centred on either trade liberalization and growth or globalisation and economic growth. Hence the studies were silent on the concurrent implications of trade and globalization on economic growth in Nigeria. This paper seeks to provide evidence of the impact of trade and globalization on growth of the Nigerian economy.

**III. Methodology**

Globalisation and trade are inseparable because they bring together different countries of the world and involve the exchange of ideas or products. All the trade theories (both traditional and modern) e.g AdamSmith's Theory of Absolute Advantage, David Richardo's theory of comparative advantage and Heckscher-Ohlin-Samuelson (H-O-S) model of foreign trade, recognized the surplus and deficit of all countries of the world in term of their productive capacity and efficiency of resource use. This implies that no country has the resources it needs for production and consumption. Trade and globalization arise in order to bridge the gap between production and consumption.

Nigeria is a net producer and exporter of crude oil and other agricultural products but a net importer of mechanized goods hence it earns income and consume those goods it cannot produced efficiently through trade and economic globalization. Based on this scenario, the paper examines how economic globalization and trade have affected the economy of Nigeria by specifying a functional relationship between economic globalization, external trade and economic growth thus:

$$GDPR_t = \mathrm{f}\left(FDI_t^{\beta_1}\ IMPR_t^{\beta_2}, \mathrm{EXPR}_t^{\beta_3}, FRES_t^{\beta_4}, \mathrm{EXCR}_t^{\beta_5}\right) \quad 1$$

Where: $GDPR_t$ = growth rate of real GDP in Nigeria; $FDI_t$ = foreign direct investment inflow into Nigeria and the proxy for economic globalisation; $IMPR_t$ = total import trade; $EXPR_t$ = total export trade; $FRES_t$ = foreign exchange reserve; $EXCR_t$ = Exchange rate of the Nigerian Naira to

Vol. 4, No. 10; 2020

ISSN: 2456-7760

the USD. During estimation, parameters are introduced and a disturbance term 'u' to take care of variables not included in the model, but those that affect economic growth. Hence, equation 1 above is transformed into a semi-log form thus:

$$GDPR_t = \beta_0 + \beta_1 LnFDI_t + \beta_2 LnIMPR_t + \beta_3 LnEXPR_t + \beta_4 LnFRES_t + \beta_5 LnEXCR_t + u_t \quad 2$$

**Dynamic Specification of the Non-Linear Autoregressive Distributed lag (NARDL) Model for the Economic Growth in Nigeria**

The unit root tests result shows that the variables investigated have different levels of stationarity. That is the variables were stationary at either level i(0) or first difference i(1) hence the used of NARDL method. The nonlinear ARDL model is a method developed by Shin et al. (2014). It is different from the non-linear ARDL model by Pesaran et al. (2001). The NARDL explains for imbalances (asymmetries) in the movements of variables. Its simultaneously performs well in small samples and it is applicable in mixed order integrated variables. It also deals effectively with pre-testing bias in a model. It should be noted that most economic relationships are non –linear, hence NARDL tends to account for such relationship in its analysis.

In order to estimate the implication of globalisation and trade on economic growth, the NARDL model of economic growth and the interacting variables is stated below.

$$\Delta GDPR_{t-1} = \sum_{i=1}^{n} \beta_0 \Delta GDPR_{t-1} + \sum_{i=1}^{n} \beta_1 \Delta LnFDI_{t-1} + \sum_{i=1}^{n} \beta_2 \Delta LnIMPR_{t-1} + \sum_{i=1}^{n} \beta_3 \Delta LnEXPR_{t-1} + \sum_{i=1}^{n} \beta_4 \Delta LnFRES_{t-1} \quad 3$$

$$\sum_{i=1}^{n} \beta_4 \Delta LnEXCR_{t-1} + \chi_0 \Delta GDPR_{t-1} + \chi_1 \Delta LnFDI_{t-1} + \chi_2 \Delta LnIMPR_{t-1} + \chi_3 \Delta LnEXPR_{t-1} + \chi_4 \Delta LnFRES_{t-1} + \chi_5 \Delta LnEXCR_{t-1} + u_t$$

Importantly, so many economic relationships tend to follow a non-linear path as opposed to the more common linear assumptions. The speed at which macroeconomic variables move in the downward direction is often not the same as that of the upward side, thus suggesting non-linear behaviour. Consequently, the information content embedded in linear relationships may not be appropriate in enhancing strong inference and findings (Shin, Yu and Greenwood; 2014). The implication of the foregoing is that the movement of positive and negative components of independent variables around an assumed zero threshold have serious implication in establishing long run dynamics among the variables under investigation.

The asymmetric ARDL of Shin, Yu and Greenwood (2014) derive from the expansion of the linear ARDL formulation of Pesaran, Shin and Smith (2001). Following the works of Schoderet (2003), Shin, Yu and Greenwood (2014) and Huang and Lin (2009), the non-linear long run equation is specified as:

$$y_{it} = \alpha^{+} x_{it}^{+} + \alpha^{-} x_{it}^{-} + \varepsilon_{it} \quad 4$$

Where $x_{it}$ is a k x 1vector of regressors. Given that $x_{it}$ is defined to be a random walk, such that:

$$x_{it} = x_{(it-1)} + e_{it}, \quad 5$$

$$e_{it} \sim \mathrm{N}(0, \delta_e^2)$$

When equation 1 is linked to the symmetric ARDL of Pesaran Shin and Smith (2001), the following non-linear variant of the unrestricted ECM is obtained;

$$\Delta GDPR_t = \beta_0 + \rho GDPR_{t-1} + w_2^+ x_{t-1}^+ + w_2^- x_{t-1}^- + \sum_{i=1}^{\rho-1} \theta_i \Delta GDPR_{t-1} + \sum_{i=0}^{q-1} \lambda_i^+ \Delta x_{t-1}^+ + \sum_{i=0}^{q-1} \lambda_i^- \Delta x_{t-i}^- + u_t \quad 6$$

Where $w_2^+ = -\rho\alpha^+$ and $w_2^- = -\rho\alpha^-$ and $\theta_i$ is the autoregressive parameter $\lambda_i^+$ and $\lambda_i^-$ are the symmetric distributed lag parameters; $u_t$ is the random error term that is independently and identically distributed with zero mean and constant variance. Hence equation 6 could be rewritten thus:

$$\Delta GDPR_t = \beta_0 + \rho GDPR_{t-1} + w_2^+ x_{t-1}^+ + w_2^- x_{t-1}^- + \sum_{i=1}^{\rho-1} \theta_i \Delta GDPR_{t-1} + \sum_{i=0}^{q-1} \lambda_i^+ \Delta x_{t-1}^+ + \sum_{i=0}^{q-1} (\lambda_i^- \Delta x_{t-i}^-) + u_t \quad 7$$

The restricted ECM could be written thus:

$$\Delta GDPR_t = R_1 ecm_t + \sum_{i=1}^{\rho-1} \theta_i \Delta GDPR_{t-1} + \sum_{i=0}^{q-1} (\lambda_i^- \Delta x_{t-i}^-) + u_t \quad 8$$

The rationale for testing for asymmetric cointegration is based on the general form of non- linear ARDL model:

$$\begin{aligned} &GDPR_{t-1} + w_2^+ LnFDI_{t-1}^+ + w_2^- LnFDI_{it-1}^- + w_2^+ LnIMPR_{t-1}^+ + w_2^- LnIMPR_{t-1}^- + \\ &w_2^+ LnEXPR_{t-1}^+ + w_2^- LnEXPR_{t-1}^- + w_2^+ LnFRES_{t-1}^+ + w_2^- LnFRES_{t-1}^- + w_2^+ LnEXCR_{t-1}^+ + w_2^- LnEXCR_{t-1}^- + \\ &\sum_{i=1}^{\rho-1} \lambda_i \Delta GDPR_{t-1} + \sum_{i=0}^{q-1} (\lambda_i^+ \Delta LnFDI_{t-i}^+ + \lambda_i^- \Delta LnFDI_{t-i}^- + \lambda_i^+ \Delta LnIMPR_{t-i}^+ + \lambda_i^- \Delta LnIMPR_{t-i}^- \\ &+ \lambda_i^+ \Delta LnEXPR_{t-i}^+ + \lambda_i^- \Delta LnEXPR_{t-i}^- + \lambda_i^+ \Delta LnFRES_{t-i}^+ + \lambda_i^- \Delta LnFRES_{t-i}^- + \lambda_i^+ \Delta LnEXCR_{t-i}^+ + \lambda_i^- \Delta LnEXCR_{t-i}^-) + u_t \end{aligned} \quad 9$$

Where $GDPR_t$ = growth rate of GDP; $FDI_t$ = foreign direct investment; $IMPR_t$= import trade; $EXPR_t$ = Export trade; $FRES_t$ = foreign exchange reserve and $EXCR_t$ = Exchange rate of the naira to USD.

Also, $FDI_{t-i}^+, FDI_{t-i}^-; IMPR_{t-i}^+, \text{IMPR}_{t-i}^-; \text{EXPR}_{t-i}^+, \text{EXPR}_{t-i}^-; \text{FRES}_{t-i}^+, \text{FRES}_{t-i}^-; \text{EXCR}_{t-i}^+; EXCR_{t-i}^-$ are partial sums of positive and negative changes in the independent variables while p and q present the lag selection order for the dependent and independent (exogenous) variables in distributed lag.

The Asymmetric Cointegration Test: the following null hypothesis of no cointegration which involve the coefficients of the level form of: $GDPR_{t,} FDI_t^+, \text{FDI}_t^-, \text{IMPR}_t^+, \text{IMPR}_t^-; \text{EXPR}_t^+, \text{EXPR}_t^-, \text{FRES}_t^+, \text{FRES}_i^-; \text{EXCR}_t^+, \& \text{EXCR}_t^-$ were tested using Pesaran et al. (2001), and Atil et al (2014) procedure.

$$H_0 = p = w_2^+ = w_2^- = 0 \quad 6.9$$

Vol. 4, No. 10; 2020

ISSN: 2456-7760

The decision rule follows that: if the empirical value of the F-statistics exceeds the upper bound critical value at 5 percent level of significance, it provides evidence on the existence of long run relationship between the variables but if the computed value is below the lower bound, it means there is no cointegration. The test is considered inconclusive if the calculated F-statistics lies between the two bounds. If the above hypothesis is rejected, then an error correction model must be formulated to account for the short run and long run relationships simultaneously.

The Wald test was used to test for both short run and long run symmetry. A non-rejection of the hypotheses of short run and long run symmetric effects means that the original symmetric ARDL formulation of Pesaran et al. (2001) will hold.

## IV. Results

**Table 1. Descriptive Statistics**

| Variable | Mean | Standard Deviation | Minimum | Maximum |
|---|---|---|---|---|
| GDPR | 4.82 | 5.71 | -10.75 | 20.84 |
| FDI | 2.65 | 2.56 | 0.19 | 8.84 |
| IMPR | 23.85 | 23.59 | 2.16 | 88.38 |
| EXPR | 34.47 | 36.98 | 2.76 | 144.92 |
| FRES | 17.65 | 18.27 | 0.93 | 53.59 |
| EXCR | 86.29 | 87.14 | 0.55 | 306.1 |

The descriptive statistics result reported in table 1 indicate a wide fluctuation in all the variables under investigation. This is evidenced in the minimum and maximum statistic values. Though the standard deviation values are close implying that deviations from the mean values were marginal, the wide margin between the minimal and maximum values for all the variables revealed serious instability and inconsistency in their trend over the period under investigation. This also suggests that the growth of the economy is not consistent with the growth in economic globalization and external trade.

**Table II. Unit Roots Test Result Using Augmented Dickey Fuller (ADF) Procedure**

| Variable | ADF Statistic | 5 % critical level | 10 % Critical level | Order of integration |
|---|---|---|---|---|
| GDPR | -4.731 | -2.964 | -2.614 | I(o) |
| Ln(FDI) | -7.152 | -2.966 | -2.616 | I(1) |
| Ln(IMPR) | -6.559 | -2.966 | -2.616 | I(1) |
| Ln(EXPR) | -6.463 | -2.966 | -2.616 | I(1) |
| Ln(FRES) | -3.514 | -2.966 | -2.616 | I(1) |
| Ln(EXCR) | -4.253 | -2.966 | -2.616 | I(1) |

The unit roots test result reported in table II shows that growth rate of real gross economic growth (GDPR) was stationary at level which implies that it attains stationarity without differencing. On the other hand, foreign direct investment (FDI), import (IMPR), export (EXPR) foreign exchange reserves (FRES) and exchange rate (EXCR) were stationary at first difference.

Vol. 4, No. 10; 2020

ISSN: 2456-7760

This indicates that the independent variables attain stationarity by differencing them once. The attainment of stability is a precondition for fitting a long run relationship. However, the different order of stationarity among the variables necessitates the use of Non-linear ARDL (see Shin et al. 2014). To verify if a long run relationship exists among the variable abound test was carried out. The result is reported in table III below

**Table III. Short run NARDL Growth Model – Dependent Variable GDPR, Model Selection-order criteria (1,4, 1, 1, 3, 1)**

| Variable | Coefficient | T- Statistic | Probability |
|---|---|---|---|
| GDP $R_{t-1}$ | -2.01 | -3.58** | 0.02 |
| $FDI^{+}_{t-1}$ | -2.29 | -0.17 | 0.88 |
| $FDI^{-}_{t-1}$ | -22.01 | -0.92 | 0.41 |
| $IMPR^{+}_{t-1}$ | -1.33 | -0.54 | 0.62 |
| $IMPR^{-}_{t-1}$ | 0.08 | 0.03 | 0.98 |
| $EXPR^{+}_{t-1}$ | -0.48 | -0.59 | 0.59 |
| $EXPR^{-}_{t-1}$ | -0.84 | -0.89 | 0.42 |
| $FRES^{+}_{t-1}$ | 8.31 | 1.14 | 0.32 |
| $FRES^{-}_{t-1}$ | 12.44 | 1.11 | 0.33 |
| $EXCR^{+}_{t-1}$ | -0.08 | -0.44 | 0.68 |
| $EXCR^{-}_{t-1}$ | 7.37 | 0.89 | 0.43 |
| $\Delta GDPR_{t-1}$ | 0.66 | 1.88 | 0.13 |
| $\Delta FDI^{+}$ | 6.92 | 1.40 | 0.24 |
| $\Delta FDI^{+}_{t-1}$ | 13.35 | 1.21 | 0.29 |
| $\Delta FDI^{-}$ | -7.82 | -0.65 | 0.55 |
| $\Delta FDI^{-}_{t-1}$ | 2.38 | 0.24 | 0.82 |
| $\Delta IMPR^{+}$ | -1.01 | -0.52 | 0.63 |
| $\Delta IMPR^{+}_{t-1}$ | -2.22 | -1.17 | 0.31 |
| $\Delta IMPR^{-}$ | -0.57 | -0.38 | 0.72 |
| $\Delta IMPR^{-}_{t-1}$ | -2.05 | -1.32 | 0.26 |
| $\Delta EXPR^{+}$ | -1.00 | -1.36 | 0.25 |
| $\Delta EXPR^{+}_{t-1}$ | -0.83 | 0.67 | 0.54 |
| $\Delta EXPR^{-}$ | 0.58 | 0.65 | 0.55 |
| $\Delta EXPR^{-}_{t-1}$ | 1.01 | 1.20 | 0.30 |
| $\Delta FRES^{+}$ | 1.94 | 0.86 | 0.44 |
| $\Delta FRES^{+}_{t-1}$ | -10.33 | -1.17 | 0.30 |
| $\Delta FRES^{-}$ | 5.93 | 0.86 | 0.44 |
| $\Delta FRES^{-}_{t-1}$ | -3.08 | -0.75 | 0.50 |
| $\Delta EXCR^{+}$ | -0.62 | -1.29 | 0.27 |
| $\Delta EXCR^{+}_{t-1}$ | -0.45 | -0.81 | 0.46 |
| $\Delta EXCR^{-}$ | 7.24 | 0.68 | 0.53 |
| $\Delta EXCR^{-}_{t-1}$ | 18.44 | 1.19 | 0.30 |
| Cons | 92.15 | 1.20 | 0.30 |

Vol. 4, No. 10; 2020

ISSN: 2456-7760

**Table IV. Long-run Effect Result - Growth model**

| Long-run effect [+] | | | | Long-run effect [-] | | |
|---|---|---|---|---|---|---|
| Exog. Variable | Coefficient | F-Stat. | Prob. | Coefficient | F-Statistic | Probability |
| FDI | -1.14 | 0.03 | 0.87 | 10.97 | 0.98 | 0.38 |
| IMPR | -0.67 | 0.31 | 0.61 | -0.04 | 0.00 | 0.98 |
| EXPR | -0.24 | 0.36 | 0.58 | 0.42 | 0.88 | 0.40 |
| FRES | 4.14 | 1.35 | 0.31 | -6.20 | 1.16 | 0.34 |
| EXCR | -0.04 | 0.18 | 0.69 | -3.67 | 0.72 | 0.45 |

**Table V. Long –run, Short-run asymmetry and Cointegration Test Results – Growth Model**

| Long-run asymmetry | | | Short-run asymmetry | | Cointegration test statistics for Zenith Bank Model | |
|---|---|---|---|---|---|---|
| Wald Test | F – Statistic | Probability | F – Statistic | Probability | T_BDM | F_PSS |
| FDI | 2.17 | 0.21 | 1.49 | 0.29 | -3.58 | 1.7 |
| IMPR | 0.16 | 0.71 | 0.06 | 0.82 | | |
| EXPR | 0.88 | 0.78 | 1.04 | 0.37 | | |
| FRES | 0.39 | 0.57 | 0.93 | 0.39 | | |
| EXCR | 0.71 | 0.45 | 1.09 | 0.36 | | |

**Table VI. Diagnostic Test for Economic Growth Model**

| Test | Statistic | Prob | Decision |
|---|---|---|---|
| Portmanteau test up to lag 16 (chi2) | 23.43 | 0.10 | Accept $H_0$ |
| Breusch/Pagan heteroscedasticity test (chi2) | 2.18 | 0.14 | Accept $H_0$ |
| Ramsey RESET test (F) | 2.44 | 0.43 | Accept $H_0$ |
| Jarque-Bera test on normality (chi2) | 14.01 | 0.00 | Reject $H_0$ |

The diagnostic test result reported in table vi shows no evidence of autocorrelation given the Portmanteau test value (see Ljung and Box, 1978). Also, the result indicated that the error term is normally distributed, while the test for heteroscedasticity shows that it is absent in the model (see Engle, 1982; & Jarque and Bera, 1980). Furthermore, the Ramsey RESET test indicated that no variable is missing in the model. The normality test revealed that the variables are normally distributed. These results provide evidence that variables/data conform to the basic assumptions of ordinary least squares estimation.

Vol. 4, No. 10; 2020

ISSN: 2456-7760

**(a) Short run result**

In the short run both positive and negative changes in FDI bring a negative and insignificantly impact on economic growth in Nigeria. This result corroborates the long run result that foreign direct investment (economic globalization) is growth retarding.

In the short run, positive shock in import trade leads to a negative effect on economic growth which is consistent with finding in the long run but negative shock in import leads to positive impact on economic growth. This implies that imports is like a double-edge sword which can make or mar an economy. Excessive import of finished goods can mar an economy while import of raw materials and semi-finished goods can grow an economy via it value addition. Both positive and negative shocks in export trade have negative consequence on economic growth in Nigeria in the short run. This result agreed with the long run result that export is not growth friendly in Nigeria. The mono-product nature of the country's export base, low value addition of export resources and the continuous shocks in the international price of oil may have accounted for this result.

The positive and negative change in foreign exchange reserve have positive impact on economic growth in the short run. This implies that foreign exchange reserve stimulated economic growth. This result is in tandem with the long run result. Improvement in foreign reserve is a booster to trade, investment and growth as it facilitates trade and build confidence in both domestic and foreign investors in an economy.

In the short run also, positive shock in exchange rate leads to a negative impact on economic growth while a negative shock in exchange rate leads to a positive effect on economic growth. This implies that exchange rate can boosts or retards an economy growth capacity. An exchange rate regime that reflects that productive capacity of an economy can be growth friendly but an exchange rate regime that does not take into consideration the productive capacity of its economy could be counterproductive.

**(b) In the long run**

The result of the long effects reported in table iv, indicates that a positive shock in economic globalization (FDI) has a negative and insignificant effect on economic growth which implies that any positive shock to foreign direct investment retarded the performance of the Nigerian economy. It also shows that increases in foreign direct investment have marginal role in reducing the economic growth in Nigeria over the period under investigation. This revealed that FDI has not been growth friendly in Nigeria. This result conforms with that of Aisabath and Zubair (2017). They found a negative relationship between economic globalization and economic growth.

The positive shock in import trade retarded economic growth in Nigeria insignificantly. This implies that import trade is not growth friendly. This result conforms to economic theory. High import especially for finished product stifled investment and growth. Most scholars have attributed the stunted growth witnessed in Nigeria to overdependence on import. This result

Vol. 4, No. 10; 2020

ISSN: 2456-7760

agreed with that of Agbo et al 2018 which found a negative and insignificant impact of import on economic growth in Nigeria.

Also from the long run effect, a positive shock in export trade diminished economic growth in Nigeria insignificantly. This implies that export does not really stimulate economic growth in the country. Nigeria is a major exporter of crude oil and primary products with very low or zero value addition. This had reduced the expected gain from available resources and export trade. Though the result is at variance with the works of Adeleye et al 2015 which reported a positive and significant effect of export on economic growth, the mono product nature of Nigeria's export seems to support the present outcome.

The positive shock in foreign exchange reserve consequently stimulated economic growth in Nigeria. This implies that increases in foreign reserves spurred economic growth. Foreign reserve helps to boost creditworthiness of a country with her trading partners, thus build confidence in investors in the domestic economy. The level of foreign reserve is also a yardstick for assessing the productive capacity of an economy. Though Nigeria had witnessed very high foreign exchange reserve during trade boom (oil boom), her foreign reserve has been dwindling over the years due to fluctuating oil price and excessive import of finished goods.

The long run effect result further shows that positive shock in exchange rate reduced economic growth in Nigeria. This indicates that rise in exchange rate of the USD to the Naira retarded economic growth in the country. An overvalued domestic exchange rate discourages export and encourages import. Though the Nigerian currency has witnessed devaluation/depreciation over the years due adverse balance of trade and payment, such strategy has not improved export because the country exports mostly primary products with low or no value addition. This development has hampered the performance of the economy.

The Wald tests show the no significance of asymmetry in both short and long run for all the explanatory variables. In addition, NARDL F-statistic from Shin et al. (2014) confirms the existence of symmetric cointegration among the variables, which indicates that economic globalization and external trade have neither short nor long-run asymmetric association with economic growth in Nigeria.

**(v) Concluding remarks and Recommendations**

The insignificance of all the explanatory variables in this model both in the short and long run indicate that economic globalization and external trade have less impact on economic growth in Nigeria. It further shows that a symmetric or balanced relationship exists between economic globalization, trade and economic growth in Nigeria over the period of this study. This implies that the Nigerian economy does not adjusts speedily to changes in long run dynamics. Which connotes that policy change in economic globalization and external trade has less implications on the growth of the economy. Based on this findings, the paper suggests: a review of conditions for foreign investment, restrictions of import, the diversification of export base of the economy by

Vol. 4, No. 10; 2020

ISSN: 2456-7760

creating value addition for goods produced for export and building of critical infrastructures like human capital base and power.

**References**

Adeleye, J. O., Adeteye, O. S., & Adewuyi, M. O. (2015). Impact of international trade on economic growth in Nigeria. International Journal of Financial Research, 163 - 172.

Adesoye, A., Ajike, E. & Maku, O. (2015). Economic globalization and economic growth in the developing economies: A case of Nigerian economy. International Journal of Economics,340 – 355.

Agbo, E. I., Agu, E. R., & Eze, O. L. (2018). Impact of international trade on the economic growth of Nigeria. European Journal of Business and Management, 22 - 30.

Ahamad, H. (2018). Impact of international trade on economic growth in Bangladesh. International Journal of Science and Research, 1624 - 1627.

Aisahath, R., & Zubair, H. (2017). Impact of globalisation on economic growth among developing countries. International Journal of Accounting & Business Management, 164 - 179.

Feridun, M., Olusi, J. O. & Folorunso, B. A. (2006). Analysis of the impact of globalization on economic development in developing economies: An application of error correction modeling (ECM) to Nigeria. Applied Econometric and International Development, 173-182.

Fitzgerald, E.B. (2000). Globalization: Economic development's best friend, The PacNet Newsletter.

Gurgul, H., & Lach, L. (2014). Globalisation and economic growth: Evidence from two decades of transition in CEE. MPRA Paper, 1 - 18.

Heckscher, E. (1919). The effect of foreign trade on the distribution of income. Ekonomisk Tidskrift, 497–512

International Monetary Fund (2007). World economic and financial surveys. Washington, D. C: IMF Multimedia Services Division.

Javed, Z. H., Qaiser, I., Mushtaq, A., Saif-ullaha, & Iqbal, A. (2012). Effect of international trade on economic growth: The case study of Pakistan. International Journal of Academic Research in Progressive Education and Development, 103 - 113.

Konyeaso, F. U. (2016). Impact of globalisation on Nigerian economy. Pyrex Journal of Business and Finance Management Research, 109 - 121.

Krugman, Paul R. (1990). Rethinking International Trade. Cambridge, MA: MIT Press.

Lall, S. (1975). Is ‘dependence’ a useful concept in analysing underdevelopment? World Development, 799-810.

Lall, S., Jaumotte, F., Papageorgiou, C. & Topalova, P. (2007). Globalization and inequality. IMF: World Economic Outlook, 135-169.

Majid, K., & Behzad, K. (2013). Impact of trade and human capital on economic growth of India: An empirical analysis. The Romanian Economic Journal, 201 - 214.

Meier, G. (1988). International economics. New York: Oxford University Press.

Meraj.M. (2013). Impact of globalization and trade openness on economic growth in Bangladesh. Ritsumeikan Journal of Asia Pacific Studies, 40-50.

Vol. 4, No. 10; 2020

ISSN: 2456-7760

Ohlin, B. (1933). Interregional and International Trade. Cambridge: Harvard University Press.

Pesaran, M.H., Y. Shin and R.J. Smith, (2001). Bounds testing approaches to the analysis of level relationships. Journal of Applied Econometrics, 16(3): 289-326.

Pesaran, M. H., & Shin, Y. (1998). Generalized impulse-response analysis in linear multivariate models. Economics Letters, 58(1), 17-29.

Robinson, W. (2011). Globalization and the sociology of Immanuel Wallerstein: A critical appraisal. International Sociology, 723-745.

Samimi, P. & Jenatabadi, H. (2014). Globalization and economic growth: Empirical evidence on the role of complementarities. Retrieved from http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0087824

Samuelson, P. A. (1949), International factor price equalization once again, Economic Journal, 181-197.

Samuelson, P. A. (1948). International trade and the equalisation of factor prices. Economic Journal, 163-184.

Shin, Y;.B Yu & M. Greenwood-Nimmo (2014). Modelling asymmetric cointegration and dynamic multipliers in a nonlinear ARDL framework. Festschrift in Honor of Peter Schmidt pp 281-314

Stolper, Wolfgang F., & Samuelson, Paul A. (1941) Protection and real wages. Review of Economic Studies, 58–73.

Utuk, I. O. (2015). Globalization and economic growth: The Nigerian experience. Journal of Law, Policy and Globalization, 18-28.

World Bank (2002). Globalization, Growth, and Poverty: Building an inclusive world economy. Washington, DC: Oxford University Press.