

Globalization and Agricultural Productivity Paradigm: The Nigeria Perspective.

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ABSTRACT

The research was carried out to provide empirical information on agricultural productivity in Nigeria with focus on the impact of globalization. This is necessitated on the agricultural revolution resulting from the elongated recession the nation is passing through. The study made use of annual time series data spanning from 1986 to 2015 of globalization proxied by foreign direct investment (FDI) to agriculture, degree of openness, foreign exchange rate and consumer price index to assess the impact of globalization on agricultural productivity proxied by the output of agriculture. The study adopted Error Correction Model to test for the short run relationship having employed Augmented Dickey Fuller and Phillips-Perron unit root tests to verify stationarity of the variables used. While bounds Autoregressive distributed lag testing approach was employed to account for the long run relationship of the explanatory variables on the dependent variables. The result of the data analysis indicated that foreign exchange, degree of openness and foreign direct investment were not statistically significant in influencing the favorable trend of agricultural productivity in Nigeria, thus, its growth potential. However, consumer price index impacted positively on agricultural productivity to a larger extent. The study concluded that globalization has no significant impact on the growth of agriculture productivity in Nigeria. The study thus recommended that government should demonstrate proactive will in redirecting economic policies that would make the economy to be agricultural driven system through aggressive diversification of the economy in order to key into global world system. This must be reflected in increased investment and FDI into agricultural sector of the economy..

Keywords: Globalization, Agricultural productivity, foreign exchange, Co-Integration, Error Correction.

INTRODUCTION

The imperative of agriculture in an agrarian nation like Nigeria as one of the major means of recovering from the menace of economic recession is a subject of empirical investigation. To the extent that the implication of opening up of the economy,(globalization), on such a nation to the outside world cannot be overemphasized.

A globalized economy is expected to have higher comparative advantage in terms of wider market and patronage in relation to their non-globalized counterparts. However, Shuaib, Ekeria and Ogedengbe, 2015 posited that globalization is not without negative effects in spite of its positive effect and acceptance, most especially on developing nations of the world.

Literature has it that developing and emerging economies suffer significantly from the negative effects of globalization while the developed countries do not (Aluko, Akinola & Sola 2004, Clark 2000, Bhagwati 2004, Adams 2004, Adenikinju 2006, Akinmulegun, 2011, Shuaib, Ekeria and Ogedengbe, 2015, Konyeaso, 2016, Felix, 2016). This school of thought argued from the perspective that the developed countries benefit more from globalization due to their

ability to diversify, employ good managerial skills and advanced technology, good structural changes, high degree of information communication technology, etc while the less developed economies (Nigeria inclusive), suffered from globalization due to their poor technological know-how, weak diversification process, political instability, corruption, lack of political will, mismanagement to mention but few. The reasons that actually reduced the strength and capacity of these countries to successfully compete in the global trend.

Nigeria, a nation that has been a protectionist system opened up her border fully to the world in 1986 with the adoption of Structural Adjustment Programme (SAP)(Olowe & Ibrahim, 2015, Agu, Achebe & Maduagwu, 2016). The goal of which was to improve the country foreign investment climate by eliminating trade and investment regulations, boost foreign exchange earnings by promoting exports, improve production base, reduce government deficits through cuts in spending and to promote economic growth. It is worthy to note that agriculture has been a main stay of Nigeria economy before the adoption of SAP, providing a good proportion of the nation's foreign exchange inflow and Gross Domestic Product. Thus, after the adoption of SAP, the sector continue to experience consistence growth until dramatic shift of focus to crude oil exploration and the attendant oil boom, hence, agriculture was displaced as the nation's main foreign exchange earnings; consequently, agriculture contribution to the nation's GDP declined to 34 per cent, food insecurity and poverty also set in (Lawal, 2011).

However, the importance of agricultural productivity growth potential as manifested in the developed nations of the world cannot be overemphasized. This assertion is supported in the literature (Mcmillian and Rodrick, 2011; Johnston and Mellor,1961), concluding that economic policy ought to favour agriculture as a vehicle for starting growth in poor economies such as those of sub-Saharan Africa. Thus, the nation Nigeria embarked on Agricultural Revolution as one of the major steps of recovering from economic recession that was noticed in 2009 with the mortgage crisis in the USA which eventually started in 2014 as a full blown menace.

Therefore, the need to turn the searchlight on globalization and all that accompanied it and examine its impact on the agricultural productivity in Nigeria. Many existing studies' views on globalization had been on the aggregate economy and lacked disaggregated stance. It is on this basis that this study examines the impact that globalization has on agricultural productivity in Nigeria within the period of 1986 to 2015 by looking at components of globalization like Foreign Direct Investment, Trade Openness, and Foreign Exchange Rate and consumer price inflation on the agricultural productivity in Nigeria.

LITERATURE REVIEW

The conceptualization of the terms; agriculture and globalization with all its components had been a subject of discuss among authors over the years, with diverse approaches to the subject matter,{Akinmulegun, (2011); Moughele and Ismaila (2014); Udeh and Nwanchukwu (2015)}. However, the theories underlying these subjects have always found common base.

There are several theories of globalization which clearly explain the concept of globalization; however, this study will only review three out of such theories. The Realist, the Liberalism and the Marxist theories. Realists explain that globalization has not altered or changed the territorial division of the world, that is, nation-states, although the increased interconnectedness between economies and societies might make them more dependent on one another. Meaning, globalization poses threat to our social, economic and cultural lives but it does not surpass the international political system. Liberalists' perspective of globalization is a product or an end result of a long-running transformation of world politics. Liberals particularly focus upon the factor of revolution in technology, information and

communications represented by globalization and suitable legal and institutional arrangement to enable markets and liberal democracy to spread on trans-world scale. This school is of the view that interconnectedness between societies for economic and technological advancements results in new pattern of world political relations. Marxists viewed globalization as nothing new but the latest version of international capitalism. To them it is a western-led phenomenon which basically promotes the development of international capitalism.

Conceptually, globalization is defined by Islam (1999) as the intensification of cross border trade and increased financial and Foreign Direct Investment (FDI) flows among nations, promoted by rapid advances in trade and liberalization of communication and information technology. Kwanashie (1998), described the phenomena as the process of integrating economic decision making all across the world and creating a global market place in which increasingly all nations are forced to participate. Thus, globalization entails a borderless world and ensures increased international trade and capital flows among countries of the world. Globalization is seen as an important factor that influences macroeconomics variables in an economy (Agu, Achebe & Maduawu (2016). It is described as the rapid rise and ease of movement of humans, products and capital through many international boundaries. It is aimed at eliminating racial, ethnic, gender and all other forms of discrimination as well creating a "global free market" by removing all boundaries through accelerated relocation and reorganization of the production process (Acker, 2004). Described as a means of high rate of interdependence and inter-linkages among nations of the world occasioned by high speed economic, social, political, technological and cultural interactions (Eboh and Ogbu, 2010).

According to Keohane and Nye (2000), the thick countries otherwise known as developed countries are the most influential and neck deep in the globalization process, as they are economically advanced world powers while the thin ones are the less influential African and Asian countries who only partially participate in the globalization process. The relationship between the thick and thin countries however, is said to be "mutual" to the extent that the thick ones rely heavily on the labour, raw materials and even market of the thin ones while the thin ones in turn rely heavily on the manufactured products, technology and capital of the thick ones (Olatoyegun, 2005). Thus, benefits and challenges abound in globalization stance, nonetheless, developing countries have been enormously faced with challenges. According to the World Development Indicators (2007), "globalization has created opportunities and challenges for developing countries. While the experience of China, India, Indonesia, Thailand and some other countries have demonstrated that integration into the global economy is necessary for long term growth and poverty reduction, concerns have been expressed over equality of opportunity and unequal distribution of benefits". This is so to the extent that globalization can undermine industrial growth in developing nations, Nigeria inclusive, as their industries are expose to global competitiveness whose corporations are better financed with advanced technology and markets. Foreign direct investment and growth in international trade have always been the forces of globalization and have united the world, enhancing trade relations between countries with increased dependency ratio among nations of the world, thereby making the world to become a global village. This allows for a greater capital flows with tremendous effect on the trade balance of the countries of the world.

AGRICULTURE PRODUCTIVITY PARADIGM IN NIGERIA

Agricultural productivity as described by FAO, (2015) is the ratio of the index of total agricultural output to the index of total input used in farm production. Hanumanthapa (2014), conceptualized agricultural productivity as the varying relationship between agricultural output and one of the major inputs, such as land, labour, capital and other complementary factors. It measures the efficiency with which inputs are utilized in production, other things

being equal. The measures of productivity in agriculture as cited by Udeh and Nwanchukwu (2015) are agricultural gross domestic production (output), aggregate index of agricultural production, output of major agricultural commodities (staples) and other output of major agricultural commodities excluding staples.

According to FAO, (2015), these measures of productivity are subdivided into partial or total measures. Partial measures are the amount of output per unit of a particular input. Commonly used partial measures are yield (output per unit of land), labour productivity (output per economically active person (EAP) or per agricultural person-hour). Yield is commonly used to assess the success of new production practices or technology. Labour productivity is often used as a means of comparing the productivity of sectors within or across economies. It is also used as an indicator of rural welfare or living standards since it reflects the ability to acquire income through sale of agricultural goods or agricultural production. Nonetheless, partial measures of productivity can be misleading, as there is no clear indicator of why they change. For example, land and labour productivity may rise due to increased use of tractors, fertilizer or output mix (move to high value crops). To account for at least some of those problems, a total measure of productivity, the Total Factor Productivity (TFP) was devised. TFP is the ratio of an index of agricultural output to an index of agricultural inputs. The index of agricultural output is a value-weighted sum of all agricultural production components. These components generally include land, labour, physical capital, livestock and chemical fertilizers and pesticides. Growth in TFP is referred to as the Solow residual. It is generally considered as a measure of technological progress that can be attributed to changes in agricultural research and development (R&D), extension services, human capital development, such as education and physical, commercial infrastructure, as well as government policies and environmental degradation (Ahearn, Yee, Ball and Nehring, 1998). Change in TFP can also be due to unmeasured inputs or imperfectly measured inputs.

In Nigeria, there were pre-SAP and post-SAP policies embarked upon by the government in the quest to increasing agricultural productivity in order to boost the sector. Pre-SAP policies include the National Accelerated Food Production Programme of 1972, Operation Feed the Nation in 1976, River Basin and Green Revolution Programme of 1980, while some of the post-SAP policies include NEEDS, Comprehensive African agricultural development programme, National Food Security to mention but a few. Despite all these policies, agricultural sector has not been able to achieve the expected result, as food supply has not kept pace with demand (Udeh and Nwachukwu, 2015; Diao, Hazell and Thurlow, 2010). The resultant low productivity was adjudged to have been caused by certain constraints. These constraints in the words of Ogbe (1984) as cited by Imahe and Alabi (2005), include massive rural-urban migration caused by the advent of oil and the concomitant boom in the construction and services sectors. In the same vein, Ojo, (1994) asserted that the Nigeria agricultural sector was indeed rendered less competitive over time through the over-valued currency, inappropriate pricing policies and dearth of farm labour caused by the migration of the youth to the urban centers in pursuit of wage employment in the non-agricultural sectors. In addition, there is glaring evidence of youths living in rural areas resisting any encouragement to take farming as a profession. This may hitherto be as a result of undervalued agricultural products in the economy. A situation whereby the producers have little or no input in the determination of the price of their products.

EMPIRICAL REVIEW

Empirical findings on the subject of the impact of globalization on agricultural productivity in Nigeria have been mixed and not direct, with majority of the findings showing insignificant contribution of globalization to the growth of agriculture sector in Nigeria(Anowor, Ukwani

and Ikeme, 2013; Ayodeji and Ying, 2013). More so, Okpopo, Ifelunini and Osuyali, (2014) examined the impact of globalization as a potent driver of economic growth in Nigeria, employing data from 1970 -2011 and Ordinary Least Square regression as an instrument of analysis. They consequently made use of non-oil (Agricultural and Manufacturing export) as reference point. The study found that globalization had no significant impact on non-oil export, agriculture inclusive, within the period of study.

With the use of co-integration and Error Correction Mechanism (ECM) to determine the relationship between globalization components; FDI, its components and economic growth, Moughele and Ismaila (2014) in their study found that continuous inflow of foreign direct investment in mining and quarrying, telecommunication, building and construction, trading and business and agricultural sectors have a robust impact on Nigeria's economic growth. Olagunju, Adebayo and Oguntegbe (2015) examined the impact of foreign trade on the growth of agricultural output. The study used annual time series data from 1978 to 2008. The correlation analysis showed that there is existence of strong relationship between the variables. However, the results also revealed that petroleum export, food import and population growth rate were the significant factors that influence the growth of agricultural output in Nigeria. This would not be unconnected with the mono-product nature of the Nigeria economy and the fact of the overdependence on imported goods by the populace. Usenobong, (2015) in his study found that globalization has a positive impact on Agriculture, including other variables such as Manufacturing and International trade using error correction framework. Udah and Nwanchukwu, (2015) on the determinants of agricultural growth in Nigeria revealed that agricultural labour, infrastructural development and total factor productivity had positive relationship with agricultural GDP (AGR); thus, they were the factors that contributed majorly to Agricultural GDP in Nigeria.

Kabir (2015) examined the impact of foreign direct investment on agricultural output in Nigeria from 1970-2012 using an autoregressive distributed lag (ARDL) model. Results from the analysis revealed that Foreign Direct Investment, Government expenditure and Exchange rates in the period under study have significant positive effects on Agricultural output, whereas Interest rates and Inflation variables have negative effect on Agricultural output. This corroborates the findings of previous authors on the subject matter (Moughele and Ismaila, (2014); Olagunju, *e tal* (2015) and Usenobong, (2015)). Yusuff, Afolayan and Adamu (2015) examined the level of foreign direct investment on agricultural sector and the consequential effect on the contribution of the sector to the country's Gross Domestic Product (GDP). The result obtained showed that the inflow of FDI to agricultural sector does not follow a regular pattern and the sector's contribution to GDP is in direct relationship with the inflow of FDI. This is so to the extent that the impact of FDI on Agriculture would only be limited to the amount of the FDI that is channeled to the sector. The study of Nahanga and Becvarova (2016) that investigates the impact of agricultural exports on economic growth in Nigeria using Vector-Autoregressive model with all its dynamic components supported the hypothesis that agricultural exports- led economic growth in Nigeria. The results, however, showed an inverse relationship between the agricultural degree of openness and economic growth in the country. In their fixed-effect model, Edeme, Ifeluni and Nkalu (2016) showed that agricultural exports have not impacted significantly on the economic growth of ECOWAS countries such as Côte d'Ivoire and Nigeria with respect to the Republic of Benin, which is the selected baseline.

ANALYTICAL FRAMEWORK

This study used the autoregressive distributed lag (ARDL) bound testing procedure to examine the co-integration (long run) relationship between agricultural growth, degree of openness, foreign exchange rate, foreign direct investment and consumer price index as well as the short

run dynamics. The bound test is basically computed based on an estimated error correction version of autoregressive distributed lag (ARDL) model, by Ordinary Least Square (OLS) estimator (Pesaran and Shin, 2001). The bound testing procedure was chosen over other approaches to co-integration due to the fact that the bound testing procedure does not require that the variables used in the study must be integrated of the same order unlike other techniques, like the Johansen co-integration approach. It is applicable irrespective of whether the regressors in the model are purely $I(0)$, purely $I(1)$ or mutually co-integrated. The bounds testing approach is suitable for small or finite sampling data, unlike other conventional co-integration approach. Its suitability for small sample study is worth noting given that the sample period of this study is limited to 30 years. The bound test in addition allows the co-integration relationship to be estimated by OLS once the lag order of the model is identified unlike other multivariate co-integration methods and the long and short run parameters of the model can be estimated simultaneously.

An F-test of the joint significance of the coefficients of the lagged levels of the variables was used to test the hypothesis of no co-integration among the variables against the presence of co-integration among the variables. The null hypothesis of no co-integration between agricultural growth, degree of openness, foreign exchange rate, foreign direct investment and consumer price index can be given as:

$$H_0: \varphi_1 = \varphi_2 = \varphi_3 = \varphi_4 = \varphi_5$$

The F-test has a nonstandard distribution irrespective of whether the variables are $1(0)$ or $1(1)$. Pesaran *et al.*, (2001) put forward two sets of adjusted critical values that provide the lower and upper bounds used for inference. One set assumes that all variables are $1(0)$ and the other assumes that they are all $1(1)$. If the computed F-statistics falls above the upper bound critical value, then the null hypothesis of no co-integration is rejected, and otherwise, if it falls below the lower bound. Finally, if it falls between the lower bound and upper bound, then the result would be inconclusive. The optimal lag length for the specified ARDL model was determined based on the Akaike Information Criterion (AIC).

MODEL SPECIFICATION

$$\text{AgricG} = f(\text{DOO}, \text{FEX}, \text{FDI}, \text{CPI}) \text{-----Eq1}$$

The explicit form of equation 1 is stated as

$$\text{AgricG}_t = \alpha + \alpha_1 \sum \text{DOO}_t + \alpha_2 \sum \text{FEX}_t + \alpha_3 \sum \text{FDI}_t + \alpha_4 \sum \text{CPI}_t + \epsilon_i \text{-----Eq2}$$

Following Pesaran *et al.*, (2001), the ARDL model specification of equation (2) is expressed as restricted error correction model (RECM) to test for co-integration between the variables under study:

$$\begin{aligned} & \text{AGRIC}_t \\ &= \varphi_0 + \sum_{i=1}^p \varphi_1 \Delta \text{LogAGRIC}_{t-1} + \sum_{i=0}^p \varphi_2 \Delta \text{LogDOO}_{t-i} + \sum_{i=0}^p \varphi_3 \Delta \text{LogFEX}_{t-i} + \sum_{i=0}^p \varphi_4 \Delta \text{LogFDI}_{t-i} \\ &+ \sum_{i=0}^p \varphi_5 \Delta \text{LogCPI}_{t-i} + \beta_1 \text{LogAGRIC}_{t-1} + \beta_2 \text{LogDOO}_{t-1} + \beta_3 \text{LogFEX}_{t-1} + \beta_4 \text{LogFDI}_{t-1} \\ &+ \beta_5 \text{LogCPI}_{t-1} \\ &+ \mu_t \text{-----Eq3} \end{aligned}$$

Once co-integration is established, the long run relationship is estimated using the conditional ARDL model specified as:

$$\text{LogAGRIC}_t = \varphi_0 + \beta_1 \text{LogAGRIC}_{t-1} + \beta_2 \text{LogDOO}_{t-1} + \beta_3 \text{LogFEX}_{t-1} + \beta_4 \text{LogFDI}_{t-1} + \beta_5 \text{LogCPI}_{t-1} + \mu_t \dots \dots \dots 4$$

The short run dynamic relationship is estimated using an error correction model specified as:

$$\Delta \text{LogAGRIC}_t = \varphi_0 + \sum_{i=1}^p \varphi_1 \Delta \text{LogAGRIC}_{t-i} + \sum_{i=0}^p \varphi_2 \Delta \text{LogDOO}_{t-i} + \sum_{i=0}^p \varphi_3 \Delta \text{LogFEX}_{t-i} + \sum_{i=0}^p \varphi_4 \Delta \text{LogFDI}_{t-i} + \sum_{i=0}^p \varphi_5 \Delta \text{LogCPI}_{t-i} + \delta \text{ecm}_{t-1} + \mu_t \dots \dots \dots 5$$

DATA ANALYSIS AND INTERPRETATION

Table 1: Unit root test

Variables	Augmented Dickey-Fuller Test Statistics	Phillips-Perron Test Statistics	Order of Integration	max No. of Lags
LogAGRIC	-3.406510	-3.275620	I(1)	7
LogDOO	-5.173259	-10.17032	I(1)	7
LogFEX	-5.392216	-5.478611	I(1)	7
LogFDI	-6.712401	-7.848519	I(1)	7
logCPI	-4.436928	-7.450439	I(2)	7

Source: Author computation using Eviews 9.5

The unit root test was carried out using Augmented Dickey Fuller (ADF) unit root test and Phillips-Perron (PP) unit root test. The result of the ADF test and PP test as shown in Table 1, indicated that AGRIC, DOO, FEX and FDI were integrated of order one while CPI was integrated of order two. Therefore, the variables are not integrated of the same order and this justifies the use of bounds approach to co-integration over other conventional approaches that require the variables to be integrated of the same order.

ARDL Bounds Test for Co-Integration

Table 2: ARDL Bounds Test for Co-integration

Critical value	Lower bound value	Upper bound value
5%	2.56	3.49
10%	2.20	3.09
Computed F-statistic: $F_{\text{LogAGRIC}} = (\text{LogDOO}, \text{LogFEX}, \text{LogFDI}, \text{LogCPI}) = 3.46$		

Note: Critical values are cited from Pesaran et al., (2001), Table CI (iii), Case 2: restricted intercept no trend for k = 4

Source: Author computation using E-views 9.5

The computed F-statistic, $F_{\text{LogAGRIC}}(\text{LogDOO}, \text{LogFEX}, \text{LogFDI}, \text{LogCPI})$ as shown on Table 2 is equal to 3.49. The value is above the upper bounds of the critical value of 3.09 at 10% level of significance. This implies that there is co-integration (long run relationship) between agricultural growth, degree of openness, foreign exchange rate, foreign direct investment and consumer price index, and therefore, the null hypothesis of no co-integration between the variables is rejected.

Estimated Long Run Relationship

Table 3: Estimated Long Run Coefficients using the ARDL Approach
Dependent variable: LogAGRIC

Regressor	Coefficient	Standard Error	t-ratio	Prob.
LogAGRIC(-1)*	0.474062	0.149597	3.168917	0.0056
LogDOO**	-0.121012	0.107274	-1.128069	0.2750
LogFEX	-0.033763	0.092061	-0.366741	0.7183
LogFEX(-1)	0.041735	0.106885	0.390460	0.7010
LogFEX(-2)	0.207866	0.098830	2.103260	0.0506
LogFDI	0.059530	0.064207	0.927154	0.3668
LogFDI(-1)	0.032052	0.064233	0.499001	0.6242
LogFDI(-2)	0.105537	0.059151	1.784203	0.0922
LogCPI	0.853017	0.299284	2.850192	0.0111
LogCPI(-1)	-0.306097	0.271920	-1.125688	0.2759
Constant	1.905751	0.609230	3.128131	0.0061

N.B: *p<0.05, **p<0.1

ARDL (1, 0, 2, 2, 1) selected based on Schwarz Bayesian Criterion

Source: Author computation using E-views 9.5

The result of the estimated coefficient of the long run relationship in Table 3 indicates that agricultural growth has a positive and significant influence in terms of its productivity when lagged by one period. The estimated coefficient of the agricultural growth (0.4741) implies that 5% increase in agricultural growth will add to its productivity increase by approximately 47.41%, all things being equal. Degree of openness and foreign exchange at current period has a negative relationship and not statistically significant with agricultural output. This is not unexpected as it depicts the negative effect of globalization on agriculture in Nigeria. To the extent that Nigerian agricultural products were not being traded on international arena during the study period. As Nigerian trade was dominated by service and oil, thus, reflecting in the unstable, undulating and unfriendly foreign exchange regime. Also, foreign exchange when lagged by one and two periods has no statistically significant relationship with agricultural output. This is also similar in the case of foreign direct investment when lagged by one and two periods and at current period as well. Consumer price index at current period has a positive and significant relationship with agricultural growth but when lagged at one period revealed a negative and not statistically significant with agricultural growth. This implies that 5% increase in consumer price index will positively influence agricultural growth by approximately 85.30%.

Table 4: Results of the ARDL Short-run Relationship
Dependent variable: LogAGRIC

Regressor	coefficient	Standard Error	t-ratio	Prob.
D(LogFEX)	-0.033763	0.066236	-0.509731	0.6168
D(LogFEX(-1))	-0.207866	0.077778	-2.672566	0.0161
D(logFDI)	0.059530	0.038106	1.562209	0.1367
D(LogFDI(-1))	-0.105537	0.047928	-2.202003	0.0418
D(logCPI)	0.853017	0.112109	7.608808	0.0000
ECM(-1)*	-0.525938	0.101413	-5.186116	0.0001

R-squared = 0.731577

Adjusted R-squared = 0.670572

S.E of Regression = 0.100196

Residual Sum of Square = 0.220861

Log-Likelihood = 28.06367

DW-statistic = 2.386061

Akaike Info-Criterion = -1.575976

Schwartz Bayesian Criterion = -1.290504

F-stat. F (4, 28) = 687.1638 (0.0000)

N.B: *p<0.05, **p<0.1

ARDL (1, 0, 2, 2, 1) selected based on Schwarz Bayesian Criterion

Source: Author computation using Eviews 9.5

The results of the short run dynamic coefficient associated with the long run relationships obtained from the error correction model are shown in Table 4. The estimated error correction coefficient of -0.5259 (0.0000) is highly significant, has the correct sign, and imply a fairly high speed of adjustment to equilibrium after a shock. Approximately 53% of disequilibria form the previous year's shock coverage back to the long run equilibrium in the current year. The value of Durbin-Watson test is 2.386061 which can be approximated to 2, which implies that there is no problem of serial correlation of the residuals. The value of R² is 0.7316, implying that approximately 73.16% of the all changes in the dependent variable are brought about by the changes in the explanatory variables.

CONCLUSION AND RECOMMENDATIONS

The assessment of the impact of globalization on agriculture productivity in Nigeria is highly imperative most especially in this period of agricultural revolution in the nation. The study finds a support to the view that globalization has not significantly impact the agricultural productivity in Nigeria because of the low inflows of foreign direct investment to the agricultural sector, high effect of exchange rate instability on the export prices of the agriculture products and huge import of agricultural products which are substitute to what is been produced in the country. Consumer price index out of the explanatory variables is highly significant as it contributed to agricultural productivity because the huge population of the country depends on consumption of crops from agriculture. Due to this fact, the study concludes that globalization has not contributed to the growth of agricultural sector as it does to other sectors in Nigeria such as service industry and manufacturing industry. This is supported by Okpopo, *et al* (2014), Ayodeji *et al*, (2013), Kabir, (2015), Anowor, *et al*, (2013). The study recommends that government should diversify the economy from crude oil production by encouraging more investment into agricultural sector which has been contributing to the growth of the economy in terms of employment generation, poverty reduction, food availability, raw materials for the industrial production and foreign exchange earnings to the economy. More importantly, there is need to canvass for increase in direct investment to agricultural sector in terms of capital inflows and high technology for agricultural production in order to boost the productivity of agricultural sector and finally, government should formulate and implement policy that will protect the country from being a dumping ground, especially on the agricultural produce that Nigeria can comparatively produce so as to encourage farmers and more people into the agricultural sector.

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