



## Globalization and economic development in Nigeria

Kenneth U Onye<sup>1\*</sup>, James Akpan<sup>2</sup>, Matthew Kolly Alliu<sup>3</sup>

<sup>1</sup> Department of Economics, University of Uyo, Nigeria

<sup>2</sup> Department of Economics and Management Sciences, Nigerian Police Academy, Wudil, Kano, Nigeria

<sup>3</sup> Department of Economics, University of Uyo, Nigeria

### Abstract

This study provides an assessment of the impact of globalization on economic development in Nigeria from 1981 to 2016. It focuses particularly on how trade and financial globalization impacts on economic outcomes such as unemployment, inequality and poverty levels (represented by PPP-adjusted GDP per Capita). The Augmented Dickey-Fuller (ADF) test was conducted to determine the level of stationarity of the variables. Using Johansen Co-integration and Ordinary Least Square (OLS) regression technique, the study found that economic globalization has a positive impact on economic development in Nigeria. The effects from trade openness and foreign direct investment are positive and insignificant, meanwhile, it was also discovered that terms of trade shock has positive and significant impact on economic development. While gross fixed capital formation is found to promote development, rises in inflation is found to impede on economic wellbeing. The co-integration test found a long-run relationship between globalization and economic development in Nigeria. The study concludes that the effects from globalization can be improved by implementing appropriate policies and reforms towards improving the terms of trade indices of Nigeria.

**Keywords:** Trade globalization, financial globalization, economic development, terms of trade

### 1. Introduction

The inter-connections between countries worldwide have been continuously on the increase due to Globalization. In recent years, our entire world appears to be an integrated network of markets that allows goods, money, and information to flow easily with a remarkably broad range of choices available for global consumers. As no country in the world can singularly consume every commodity that it produces and also produce every commodity it consumes, it therefore implies that no country can be totally independent from interacting with other countries for economic, political or technological needs. It is this process of interaction that brings countries together into a sphere which is being seen as a global village hence, the term 'globalization.'

Globalization which refers to the removal of trade barriers along international boundaries has become a very popular concept in recent times. It is used to describe the changes in societies and the world economy that result from dramatically increased international trade and cultural exchange. Shenkar and Luo (2004) [37] refer to globalization as the growing economic interdependencies of countries worldwide through the increasing volume and variety of cross-border transactions in goods and services and of international capital flows, as well as through the rapid and widespread diffusion of technology and information. Although globalization is a multi-dimensional phenomenon which embraces all aspects of life, its economic implications is of concern in this study. As noted by Obadan and Obioma (1999) [22], globalization refers to the growing international integration of markets for goods, services and capital, and is the process of exchange towards greater international economic integration through trade, financial flows, exchange of technology and information, and movement of people.

Globalization is a phenomenon that has taken roots in every country, running from the developed countries to the

developing countries. As noted by Dunning, Van Hoesel & Narula (1998) [7], the advent of modern technologies has increased the ease of relocating production facilities and have enabled buyers to understand and source products globally. Also, Naisbitt (1994) [19] observed that transportation innovations resulting from improved technology have lowered the cost of transporting and reduced the time it takes to move products, while developments in communication have resulted in improvements to consumer markets through a more effective international communication and connection, hence the perceptions of time and distance is reduced to a great extent. Apart from the ease and effectiveness of connection between countries, globalization has also made it possible for countries to better explore their natural endowments. With the international mobility of labour, it has become possible for countries to source for specific expertise that specialize in meeting with the immediate needs of the country in terms of resource development. The exposure of countries to advanced technologies also boosts efficiency in their real economic sector thereby promoting the economic output of the country (Ahmadu, 2013) [2]. Just as individuals interact together in their daily dealings in order to be better off, no country goes into a relationship with another country with the purpose of being worse off. Countries embrace globalization in order to profit from the interactions.

In a holistic manner, globalization has affected not only the physical components in African countries but also the psychology of her people. As rightly noticed by Ogohi (2014) [25], Colonialism exposed Nigeria and the rest of Africa to the world more than before and to this effect was the loss of their originality in terms of culture and values. The situation today, is that there is a very high degree of cultural and societal influence from the spate of globalization as many practices in other continents of the world are gradually taking over

African societies, cutting across the manner of dressing, work, norms, and tradition. This new trend obviously has implication for national development. It therefore implies that even though globalization may be an advantage to one area of the society, it may also be a demerit to another area of the society. As suggested by IMF (2000) <sup>[14]</sup>, it offers extensive opportunity for worldwide development but it is not progressing evenly. Some countries are becoming integrated into the global economy than others; countries that have been able to integrate are seeing faster growth and reduced poverty

Nigeria had embraced civilization a long time ago right from the pre-independence era where Nigeria was divided into colonies headed by the British. It is of no doubt that due to the prolonged colonization by the British; Nigeria has imbibed so many of her values and orientation from them. Therefore, most of the happenings in the country partly originate from interacting with other countries of the world. As Oni (2015) <sup>[29]</sup> observed, globalization had already to a good degree integrated the Nigerian economy into the world capitalist system, and yet, she still lacks autonomy in all respects except flag independence to forge an independent and sustainable development process. He added that even though being a post-colonial state, she lacks the capacity to mobilize the available resources to achieve the goal of national development. Rather than being a key player in the global system and taking proactive measures, Nigeria has always been taking reactive measures.

Since the re-birth of democratic governance in May 1999, successive governments are yet to take giant proactive measures to talk loud and take advantage of the available window of opportunities that democracy offers. As a result, the country still relies heavily on oil receipts, the goal of development is not genuinely pursued and the foreign policy infrastructure is in the negative. In sum, the argument here is that there is no paradigm shift from the dictatorial style of governance of the preceding military authoritarianism and the political space is replete with encumbrances capable of discouraging local and foreign investments (Oni, 2015) <sup>[29]</sup>.

Even with the advantages accompanying globalization, there is still a very huge developmental gap that needs to be filled in Nigeria. Ekpo (1992) <sup>[9]</sup> explained in his study that as the structural adjustment was adopted and globalization takes more of its space in the country, the development indices only got worse by the day. In the articulation of Ouattara (1997) <sup>[33]</sup>, globalization tends to intensify the costs of poor economic policies and would only reward good policies. This emphasizes the significance of flexible and well-informed policy-making, of well-governed institutions, and of transparency in governance. Countries that adopt poor or incompatible policy will certainly find themselves left behind, both from expanding trade and from private capital flows for development. These countries are then confronted with the risk of being marginalized. It, therefore, means that some countries fall on the losing side internationally, not necessarily because of the international competitions that they cannot withstand but, adopting the wrong policies and at some times adopting the right policies but with weak institutions to enforce and implement them. Nigeria as a country faces this situation where globalization is seen as having higher negative effects than the positives.

The SAP could not accomplish its purpose of addressing developmental problems confronting Nigeria. Rather than strengthening the economy, this strategy retrenched and

stagnated the pace of growth and development in the economy. Thus, Nigeria seems to have entered the global market at a competitive disadvantage as a largely mono-product economy and to this effect were the problems of continuous depreciation of the Naira in the foreign exchange market, high rate of inflation, slow growth of the real sector, huge external debt and fiscal deficit profile, increased unemployment, and high poverty level amongst others. This, however, does not mean that it is a bad choice for Nigeria to fully embrace globalization but, the approach to which it embraces it is one of the reasons Nigeria is still kept at a low development rank as compared to its other international counterpart.

The general objective of this study is to examine the impact of globalization on economic development in Nigeria. Specifically, this study seeks to examine the effect of economic globalization on the levels of (i) unemployment; (ii) income inequality; (iii) poverty; and (iv) to investigate the longrun relationship between economic globalization and economic development in Nigeria. In order to attain the above stated objectives, the study sets out to provide answers to the following questions – First, what is the effect of economic globalization on the levels of unemployment, income inequality and poverty in Nigeria? Second, is there a long run relationship between economic globalization and economic development in Nigeria?

The relevance of this study can be viewed in various ways. First, it will provide insights on the extent to which trends of trade and financial globalization have impacted activities that determine economic development in Nigeria. Ample understanding of this is very essential to achieve the developmental goals of the economy through globalization. Second, this study will offer vital information to economic policy makers for proper management and planning towards the achievement of more gains from globalization. More so, this study will serve not only as an additional stock of knowledge but it will also serve as a reference material for students and researchers who are interested in this area of study.

The remainder of the paper is organized as follows. Section 2 analytically dissects the overview of major dimensions of economic globalization – including; financial and trade globalization –with a brief literature review. In section 3, we present the empirical strategy and data description. Section 4, discusses the result of the empirical exercises and we finally conclude the paper with some lessons for policy in section 5.

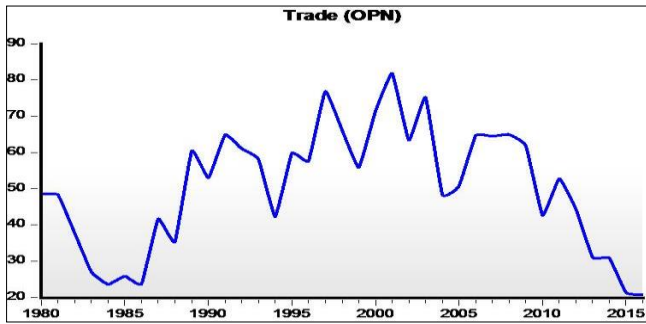
## 2. Overview of Economic Globalization and Development

### 2.1 Stylized Facts

For many decades, globalization as an economic phenomenon has been the dominant force for economic integration and the main driver of growth worldwide. However, the speed of globalization – which include trade, finance, flows of information and technology, and offshoring – is unprecedented in modern economic history. Spence and Leipziger (2010) <sup>[16]</sup> noted that one of the major reasons for the significant poverty reduction in some developing countries like China and Vietnam, are extensively attributed to the increased economic interconnections between countries, which have also enabled poorer nations of Europe to ride the European Union train to higher incomes, and gave hope to some African countries.

Analysis of the Nigerian economy shows that the nation recorded increased openness. With the introduction of the

SAP in 1986, trade openness moved from 23.72% in 1986, to 71.38% in 2000 and then to 44.38% in 2012 as shown graphically below:



Source: World Development Indicator (WDI).

Fig 1: Trade openness trend in Nigeria (1980 – 2016)

It should be noted however, that despite the recorded increase in trade, the macro-economic objective of SAP has not been achieved in Nigeria. For instance, some of the objectives pointed out by Ekpo (1992) [9] were to restore a sustainable balance between aggregate supply and aggregate demand; to expand the production of tradables; and to remove balance of payments constraints. Rather than achieving these objectives, the resultant effect on the economy was unfavourable. The adjustment period recorded discouraging indices of production for Nigeria: a GDP growth rate of 6.9% pre-adjustment drastically reduced to a negative growth rate of 1.7% during adjustment, and all sectors (agriculture, manufacturing, services and industry) drove down toward the negative. Nigeria also experienced high rates of unemployment, especially in the rural sector – This was never the case during the pre-adjustment era (Ekpo, 1992) [9]. Meanwhile, both the productive and export base of the economy were not diversified as oil still remains the engine of growth while the structure of output remains dominated by primary products as contained in the Table 1 below.

Table 1: Import and Export trend in Nigeria.

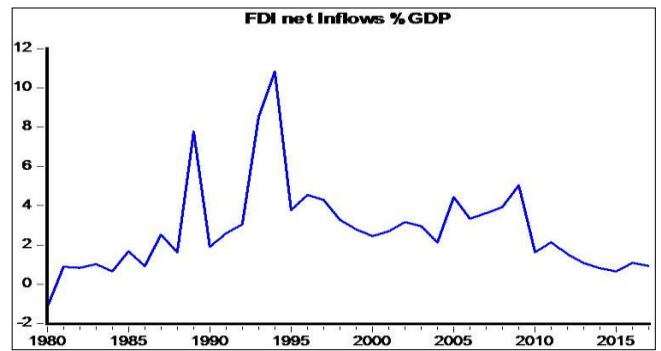
Year	Imports		Exports		Total Trade	
	Oil	Non-Oil	Oil	Non-Oil	Oil	Non-Oil
1981	0.1	12.7	10.7	0.3	10.8	13.1
1986	0.9	5.1	8.4	0.6	9.3	5.6
1991	7.8	81.7	116.9	4.7	124.6	86.4
1996	162.2	400.4	1,286.2	23.3	1,448.4	423.8
2000	220.8	764.2	1,920.9	24.8	2,141.7	789.0
2004	318.1	1,668.9	4,489.5	113.3	4,807.6	1,782.2
2008	1,315.5	4,277.6	9,861.8	525.9	11,177.4	4,803.5
2012	3,064.3	6,702.3	14,260.0	879.3	17,324.2	7,581.6
2016	2,384.4	7,096.0	8,178.8	656.8	10,563.2	7,752.7
2017	2,615.5	8,189.4	12,913.2	1,074.9	15,528.7	9,264.3

Source: CBN Statistical Bulletin (2017)

Despite the devaluation of the domestic currency, the external balance continued to remain at disarray. Utuk (2015) [41] observed that the SAP appeared to have intensified speculative and trading activities rather than production. The proliferation of Merchant Banks, de-regulation of interest rates, privatization of the economy and the new industrial policy did not bring in the needed foreign direct investment.

FDI flows in Nigeria increases marginally in absolute terms but downwardly in real terms relative to the GDP. The ratio of FDI to GDP has consistently been declining since 1986 from the 1970 figure of 19.3 to 12.9 percent in 1986 and a further decline to 9.4 percent in 1985. It further fell to 4.5 percent in 1996 and 1997, respectively as shown in Figure 2 below.

FDI flows in the economy have been in the petroleum sector of the economy rather than agriculture and manufacturing sectors that have the potential of bringing about technological revolution in industrial production and telecommunications that have made the world a global village. All these have made Nigeria the least developed nations of the world despite her position as the sixth largest producer of crude oil in the world.



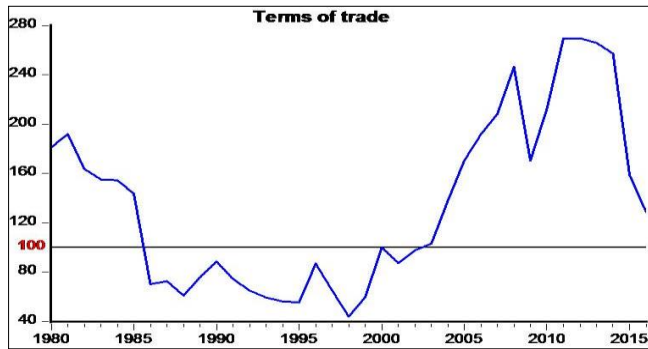
Source: World Development Indicator (WDI).

Fig 2: Foreign Direct Investment net Inflows to Nigeria

The movement in the terms of trade of a commodity exporting developing countries as Nigeria is a key determinant of macroeconomic performance and has an important impact on real national income. This movement results in terms of trade shocks which is a major source of distortion and stunted growth in the economies. The ratio of the prices of a country’s exports to the prices of its imports defines the net barter terms of trade, which measures the number of units of imports that can be exchanged for a unit of exports.

The relationship between terms of trade shocks and economic development in Nigeria needs to be taken into utmost consideration because of its implications on the resources accruing from commodity exports. It also has great impact on the economic stability and growth of the country. In fact, recent research has established that macroeconomic volatility can have an adverse impact on growth. Onye, Chuku and Ikegwonu (2018) [32] find, for example, that commodity price shock orchestrated by terms-of-trade changes is an important determinant of output volatility in West Africa. Similarly, Bleaney and Greenaway (2002) find that real growth is negatively affected by terms of trade volatility.

One of the major reasons why Nigeria is particularly vulnerable to world price fluctuations is due to the very concentrated nature of her exports relative to her well diversified imports. Nigeria’s overall commodity terms of trade (price of exports divided by price of imports), with base of 100 (2000) fell substantially, from 181.25 (1980) to 70.27 (1986) and 43.87 (1998), before rising to 246.31 (2008) and then falling to 128.70 (2016). The graph is as shown below.



Source: World Development Indicator (WDI).

Fig 3: Terms of trade (TOT) trend in Nigeria

The enormous negative terms of trade shocks are associated with dependence on single-product exports. Oil contributes over 80 percent of Nigeria's total export earnings, and according to Ezema (2009), this trend portends danger for Nigeria. From the foregoing, this study believes that terms of trade shocks may have contributed to economic instability and stunted growth in Nigeria. It is, therefore, necessary to measure the economic effects of these shocks (booms and bursts) and the impacts on real income in Nigeria. The study intends to undertake these measurements to necessitate policy responses and help in identifying past policy mistakes that could be avoided in future policy making.

As noted by Tsokata (2000), advancement in technology, human capital and education development, foreign capital inflow and investment, sound macroeconomic policies and capital formation are all benefits of globalization. However many countries are yet to benefit from globalization especially in Africa. Globalization is a very uneven process with unequal distribution of resources and human capital; it has widened the gap between the rich and poor nations. Trade policies and comparative advantages tend to favor rich and more industrialized nations. An integrated financial market tends to affect the poor nations in period of economic shock due to fluctuations in foreign exchange rate, leading to capital flight accompanied by flight of other resources (manpower inclusive) from poor nations to rich nation thereby weakening the poor nations and widening the gap.

Liberalization of trade and finance, has brought about worsening balance of payments positions so much so that since 1986 till date, the country's balance of payments (BOP) account had been predominantly negative (CBN Statistical Bulletin, 2011). Similarly, the national currency began to depreciate as its exchange rate vis-a-vis the U.S. Dollar began to rise and became more unstable in response to the unpredictable changes in the international goods and capital markets. The depreciation of the naira had deleterious effects on human development and the growth of the economy at large, bringing in its trail heightened inflation rates, owing partly to the import dependent nature of the economy. Trade openness has been blamed for the lackluster performance of the nation's industrial sector (particularly the manufacturing sub-sector), resulting in an excessive increase in unemployment rates, which has been rapidly growing from 11.9% in the year 2005 to 33.6% in the year 2016.

Furthermore, with the exception of years 2009 and 2010, the nation's capital account was in deficit between 1999 and 2011, though the balance of trade was in surplus all through the period, owing to the surpluses in the oil balance of trade. Although the growth rate of real Gross Domestic Product had

been impressive in recent times, this however, has been described as 'exclusive' since it has not translated to any real socio-economic gains in terms of employment opportunity for the large population of youth, poverty reduction and improvement in the general living conditions of the citizenry. The National Bureau of Statistics (NBS) recently reported the startling poverty rate: about 112.519 million out of a population of 163 million (over 69%) live in relative poverty conditions in 2011 (reported in The Premium Times of Sunday March 13, 2012).

Human capital development plays a pivotal role in benefiting from globalization. Human capital measures the economic value of an employee's skill set. The concept of human capital recognizes that not all labour is equal and the quality of employee can be improved by investing in them through education and health. This improves the economic value of labour thereby improving the economy as a whole. Yusuf (2003) observed that the unskilled and high uneducated countries benefit less in the global competitive market. Human capital development in Nigeria is quite disappointing. The Human Development Index (HDI) has consistently been below 0.5. According to the HDI report of 2013, despite an increase in economic growth in Nigeria by 6.99% in 2012, life expectancy in Nigeria was put at 52 years while health indicator reveal that 1.9% of the nation's budget is expended on health, indicating that the growth of the economy has not translated into improved living standards. Also, 68% of Nigerians live below 1.25 dollar PPP per day, mortality rate was put at 158 per 1000 live births in 2011, while adult illiteracy rate is as high as 61.3% (UNICEF, 2011). Fundamental development problems, therefore, loom large in the nation and there arise the need to take conscious, decisive steps to position the country to reap the benefits of being integrated in the global market, as well as shield it from the dangers arising there from. From the foregoing, it is obvious that the Nigerian Economy was integrated into the global economy before independence. But unfortunately the benefit of globalization does not trickle down to the Nigerian economy as proposed by its proponents.

## 2.2 Review of theoretical and empirical literature on globalization

This study is anchored on the Neo-Classical Model (Heckscher-Ohlin Trade Theory), however, we also examine other theories relevant to trade.

**Classical Trade Theory:** By questioning the mercantilist assumption that trade was a zero-sum game, Adam Smith proposed the theory of absolute advantage in producing that good or service. Therefore, in order to become rich, countries should specialize in goods and services in which they have absolute advantage and engage in free trade with other countries to sell their goods. This way, a country's resource would be utilized in the best possible way and leading to the maximization of national wealth.

However, the theory of comparative advantage proposed by David Ricardo in 1876 expanded on the theory of Adam Smith by asserting that nations could benefit from trade on the basis of relative efficiency even though it does not have an absolute advantage in them. Specifically, a nation should specialize on what it can produce relatively efficiently and trade the output for other goods or services that are produced more efficiently by other nations. The theory of comparative advantage is based on the assumptions of constant returns to

scale, perfect competition, single factor of production, factor immobility, full employment of resource, and undifferentiated products. These assumptions have however led to the criticism of the theory by some. The criticism of neoclassical economists such as Heckscher (1919) [13] and Ohlin (1933) [26] was that the theory totally ignores the distribution of the gains from trade between the countries which participate in trade. Traditional trade theory fails to equalize income, but rather claimed that total income would increase through trade (Elkan 1995) [10]. Further, the theory has been criticized by several economists including Myint (1955) [18], Baldwin (1955) [4], Nurske (1961) [20] and Chenery (1965) [5] as being static in nature and having unrealistic assumptions. They argued that the theory of comparative advantage looks at resource allocation and trade at a specific point in time, and does not encapsulate the dynamic and ever-changing nature of the international economy. In summary, Comparative advantage predicts benefits will arise to countries through trade, as a consequence of each country producing what it is relatively more efficient at and exchanging this output with other countries.

**The Neo-Classical Model (Heckscher-Ohlin Trade Theory):** Also referred to as the Factor Endowment Trade Theory, this theory was developed by two Swedish economists, Eli Hecksher and Bertil Ohlin as a modification to the classical trade theory As opposed to Ricardo’s theory which stresses productivity, comparative advantage arises from differences in national *factor endowments*, such as land, labor, or capital. This theory states that countries with cheap labour will have a relative cost and price advantage over countries with relatively expensive labour in commodities that make intensive use of labour. They should therefore focus on the production of these labour intensive products and export the surplus in return for import of capital intensive goods. Conversely, countries well endowed with capital, will have a relative cost and price advantage in the production of manufactured goods, which tend to require relatively large inputs of capital compared with labour. They can thus benefit from specialization in export of capital intensive manufactures in return for labour intensive products from labor abundant countries. Trade therefore serves as a vehicle for the nation to capitalize on its abundant resources through more intensive production and export of commodities that require large input of those resources while relieving its factor shortage through the importation of commodities that use large amount of its relatively scarce resources (Echekoba *et al*, 2015) [8]. To summarize with, the neoclassical model of free trade assumes that all countries benefit from trade and this consequentially leads to an increase in the world output. Countries will therefore tend to specialize in the products that use their abundant resources intensively.

Much empirical research has been conducted to investigate the effects of globalization on economic growth and development and the result of the researches have been somewhat divergent, so much so that globalization has been described as a two-edged sword that has brought benefits to some and misery to others (Zuma, 2003 as cited in Onwuka and Eguavo, 2007) [30]. In corroboration of this view, Obaseki (2000) [23] agrees that Nigeria has not benefitted enough from globalization owing to the undue dependence on crude oil exports, low manufacturing exports and the under-development of the domestic, financial markets, whereas, Utuk (2010) [41] opined that globalization can

enhance the country’s growth performance.

The studies by Omolade, Morakinyo and Ifeacho (2013) [28], Onwuka and Eguavo (2007) [30] and Obaseki (2000) revealed that Nigeria is yet to benefit from globalization due to its underdevelopment and sole dependence on crude oil export. Other researchers such as Nwakanma and Ibe (2014) [21], Onye and Iriabije (2016) [31], Sede and Izilein (2013) [36], Okpokpo, Ifelunini and Osuyali (2014) [27] in their study found that globalization has no significant impact on economic performance of Nigeria. Feridun, Olusi and Folorunso (2006) [11], Utuk (2015) [41], and Adesoye, Ajike and Maku (2015) [1] however found a significant positive effect of globalization on the growth performance of the country.

Despite these various literatures on how globalization impacts the economy, their views on the relationship is still very unclear and divided; hence the need for further study.

### 3. Empirical Methodology

The model in this study is based on the Solow Neo-Classical Growth model and the Endogenous Growth theory which identified that globalization promotes output growth and eventually leads to economic development. To investigate this, we specify a model which tries to capture globalization’s impact on economic development. As appropriated in the studies of Chen and Mittelhammer, (2008) [6], and Onye, Chuku and Ikegwonu (2018) [32], GDP per capita converted to international dollars using purchasing power parity rates is used as proxy for economic development. Schepelmann *et al.* (2010) [34] also suggests the need to adjust the basic GDP figures due to cross-country exchange rate differences and relative price levels. When GDP is adjusted for purchasing power parity, real cost of living is accounted for and it becomes an effective mirror of living standards.

Based on the study so far, various researchers are in agreement that openness to trade and financial integration are the most significant measures of economic globalization. (see Onye, Chuku and Ikegwonu (2018) [32], and Spiegel (2008) [39]. The relationship between terms of trade shocks and economic development will also be pertinent to this study as it is an important determinant of output volatility. In addition, Omolade, Morakinyo and Ifeacho (2013) [28], and Šliburytė and Masteikienė (2010) [38] identified that policy variables are also of relevance to measuring globalization. Hence, to measure globalization, this model also incorporates policy variables such as inflation, exchange rate, and gross fixed capital formation. Here the dependent variable is Economic development proxied by GDP per capital based on purchasing power parity, (PPP), while the explanatory variables include the proxy variables of globalization. The study therefore proposes to use a two-step estimation procedure. The first model relies on trade openness, foreign direct investment and other policy variables as proxy for globalization, and the second model utilizes terms of trade instead of trade openness to capture globalization effect from trade. The relationship can be represented functionally as:

$$GDPC_{PPP} = F (OPN, FDI, EXR, INF, GFCF) \dots \dots \dots (1)$$

$$GDPC_{PPP} = F (TOT, FDI, EXR, INF, GFCF) \dots \dots \dots (2)$$

Where  
 GDP<sub>PPP</sub> = Per Capital Gross Domestic Product (PPP-adjusted)

OPN = Trade Openness  
 TOT = Terms of Trade  
 FDI = Foreign Direct Investment  
 EXR = Exchange Rate  
 INF = Inflation Rate  
 GFCF = Gross Fixed Capital Formation

**Estimable Models**

The estimable models are represented econometrically in their logged form as shown in equations 3 and 4 below:

**Model 1**

$$\ln \text{GDP}_{\text{PPP}} = \beta_0 + \beta_1 \text{OPN} + \beta_2 \text{FDI} + \beta_3 \text{EXR} + \beta_4 \text{INF} + \beta_5 \text{GFCF} + \mu \dots (3)$$

**Model 2**

$$\ln \text{GDPC}_{\text{PPP}} = \beta_0 + \beta_1 \ln \text{TOT} + \beta_2 \ln \text{FDI} + \beta_3 \ln \text{EXR} + \beta_4 \ln \text{INF} + \beta_5 \ln \text{GFCF} + \mu \dots (4)$$

Where

- $\beta_0$  = The constant parameter
- $\beta_1, \beta_2, \beta_3, \beta_4,$  and  $\beta_5$  = The coefficients of the explanatory variables
- $\mu$  = The stochastic or error term

**Theoretical A-Priori Expectations**

The model above shows both positive and negative relationships among the explanatory variables. Theoretically, it is expected that trade openness, terms of trade, foreign direct investment, and gross fixed capital formation are positive and should lead to increase in GDP per capita. However, exchange rate and inflation rate is expected to be negatively related with GDP per capita. The a-priori expectations for the coefficients are therefore predicted thus;

$$\beta_0 > 0; \beta_1 > 0; \beta_2 > 0; \beta_3 < 0; \beta_4 < 0; \beta_5 > 0$$

**4. Analysis and Interpretation of Results**

In this sub-section, we first present and analyze the results of the diagnostic tests, namely, unit root test and Co-Integration test, and thereafter proceed with the interpretation of estimates of the specified models.

**Unit root test result**

The Augmented Dickey-Fuller (ADF) test enabled us to avoid the problem of spurious regression results associated with the nonstationarity of most of the time series data. Here, we test the null hypothesis, (H0) that there is a unit root against the alternative hypothesis, (H1) that there is no unit root. The decision rule is that if the computed test statistic is greater than the critical value in absolute terms, we reject H0 and accept H1 which means that the series is stationary or has no unit root. Similarly, if the test statistics is less than the critical value in absolute terms, we fail to reject H0 which means that the series is non-stationary or has a unit root. The unit root test was conducted using E-Views 9 statistical package and is summarized in Table 2 below.

**Table 2:** Augmented Dickey Fuller (ADF) Unit Root Test

Variable	ADF Test Statistic	Critical Value at 5%	Prob.	Order of Integration
GDPC_PPP	-4.901316	-2.951125	0.0003	I(1)
OPN	-8.150987	-2.951125	0.0000	I(1)
TOT	-5.125971	-2.951125	0.0002	I(1)
FDI	-3.517166	-2.948404	0.0133	I(0)
EXR	-3.644599	-2.951125	0.0099	I(1)
INF	-5.416306	-2.951125	0.0001	I(1)
GFCF	-4.048171	-2.951125	0.0035	I(1)

Source: Author’s computation with E-views 9

The unit root test above indicated that only foreign direct investment (FDI) is integrated of order one, I(1), which implies that it is stationary at level. GDP per capita (GDPC\_PPP), trade openness (OPN), terms of trade (TOT), exchange rate (EXR), inflation rate (INF), and gross fixed capital formation (GFCF) were all integrated of order 1, implying that they are stationary at their first differences.

**Co-Integration Test Result**

The Johansen Co-Integration test was used to determine if there exists a long-run relationship among the variables under study. The results are presented in Table 3 below.

**Table 3a:** Summary of Co-Integration Test Result for Equation 1

Unrestricted Cointegration Rank Test (Trace)				
Series: GDPC_PPP, OPN, FDI, INF, EXR, GFCF				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.743954	130.8998	95.75366	0.0000
At most 1 *	0.602098	84.57827	69.81889	0.0021
At most 2 *	0.586977	53.24562	47.85613	0.0143
At most 3	0.361133	23.18110	29.79707	0.2373
At most 4	0.199080	7.947066	15.49471	0.4711
At most 5	0.011674	0.399254	3.841466	0.5275

Source: Author’s computation with E-views 9

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

**Table 3b:** Summary of Co-Integration Test Result for Equation 2

Unrestricted Cointegration Rank Test (Trace)				
Series: GDPC_PPP, TOT, FDI, INF, EXR, GFCF				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.825320	146.9272	95.75366	0.0000
At most 1 *	0.664058	87.60400	69.81889	0.0010
At most 2 *	0.571884	50.51618	47.85613	0.0275
At most 3	0.306008	21.67192	29.79707	0.3171
At most 4	0.169446	9.251912	15.49471	0.3426
At most 5	0.082821	2.939390	3.841466	0.0864

Source: Author’s computation with E-views 9

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

It can be seen from the table above that for three equations, the trace statistics are greater than the critical value at 5% level of significance, indicating that there are three co-integrating equations. We therefore do not accept the null hypothesis and conclude that there exist a long run relationship between the dependent and the independent variables.

**Analysis of Estimated Equations**

The two models as specified in chapter 3 were estimated using ordinary least square estimation procedure generated with E-Views 9 statistical package and the result is as shown in the table below

**Table 4:** Summary of Estimated Equations

Estimated Model	Dependent Variable: LOG(GDPC_PPP)					
	Independent Variables	Coefficients	T-stat	R2	F-stat	DW stat
Model 1	Constant	6.691	21.764	0.838	30.989	0.919
	OPN	0.005	1.323			
	FDI	0.039	1.514			
	EXR	0.009	11.016			
	INF	-0.000	-0.111			
	GFCF	-0.004	-0.376			
Model 2	Constant	4.815	10.829	0.938	90.444	1.030
	LOG(TOT)	0.204	2.410			
	LOG(FDI)	0.051	0.802			
	LOG(EXR)	0.353	15.035			
	LOG(INF)	-0.020	-0.373			
	LOG(GFCF)	0.317	2.853			

Source: Author’s computation with E-views 9

The results of the OLS estimation for Model 1 in table 4 above shows that, trade openness has a positive influence on GDP Per Capita in Nigeria. Foreign direct investment also indicated positive. This implies that an increase in trade and financial globalization will enhance GDP per capita. Exchange rate however shows a positive relationship, which does not conform to the a-priori expectation. Inflation and gross capita formation exert negative impacts on GDP per capita. Overall, the result of Model 1 indicates that economic globalization has a positive and insignificant impact on economic development. In other words, globalization has led to improvements in Nigeria’s economic development within the period of analysis.

In the second models, our optimum interest is on the variable “terms of trade” as it only replaces trade openness in the first model. The aim was to examine the effect of trade associated with terms of trade shocks on the economy. In this model, terms of trade (TOT) is significant and positively related to the dependent variable. A unit increase in terms of trade would lead to a 20.4% increase in GDP per Capita. This suggests that terms-of-trade shock arising from shock to export and import prices, is a fundamental determinant of macroeconomic development in Nigeria. Foreign direct investment is also positive to GDP per capita. Exchange rate is positive as in the first model, while inflation is negative. Here, gross capital formation has a positive and significant effect on economic development. In sum, the result of Model 2 indicates that economic globalization has a positive and significant impact on economic development in Nigeria.

**5. Summary, Recommendations and Conclusion**

This study provides an assessment of the impact of

globalization which was measured by trade openness, foreign direct investment, terms of trade, gross fixed capital formation, inflation and exchange rates on economic development in Nigeria from 1981 to 2016. It focuses particularly on how trade and financial globalization impacts on economic outcomes such as unemployment, inequality and poverty levels (represented by PPP-adjusted GDP per Capita). The Augmented Dickey-Fuller (ADF) test was conducted to determine the level of stationarity on the variables. Using Co-integration and ordinary least square regression technique, the study found that economic globalization has a positive impact on economic development in Nigeria. The effects from trade openness and foreign direct investment are positive and insignificant, meanwhile, it was also discovered that terms of trade shock has positive and significant impact on economic development. While gross fixed capital formation is found to promote development, rises in inflation is found to impede on economic wellbeing. The co-integration test found a long-run relationship between globalization and economic development in Nigeria. We have found that the effects of trade and financial globalization are positive but insignificantly influencing economic development in Nigeria, this can be improved by implementing appropriate policies and reforms. We therefore proffer the following recommendations:

1. Over the years since the liberalization of the economy, Nigeria has concentrated primarily on the exportation of crude oil. Due to this high dependence on oil, the economy has been affected by the different international shocks such as inflation, recession etc. In lieu of this, the government should focus on the other sectors in Nigeria such as the agricultural and manufacturing sectors in order to harness the gains that come with globalization.
2. Rather than adopting more globalization reform policies, Nigeria should focus on improving its terms of trade indices as it is a major determinant of macroeconomic outcomes in a globalized economy like Nigeria.
3. Government should look forward to implementing sound macroeconomic policies that will promote physical capital formation or accumulation.
4. There is also the need to improve on the institutional quality and good governance in Nigeria. When this is in place, foreign investors will be attracted to invest large capital sums in the economy, which can lead to better economic development through financial globalization.

**References**

1. Adesoye AA, Ajike EO, Maku OE. Economic globalization and economic growth in the developing economies: a case of Nigerian economy. International Journal of Economics, Commerce and Management. 2015; 3(7):340-355.
2. Ahmadu AI. The Impact of Globalization on Africa, International Journal of Humanities and Social Science. 2003; 3(15):85-93.
3. Ajayi SI. What Africa Needs to Do to Benefit From Globalization? Finance and Development, 2001; 38(4):6-8.
4. Baldwin RE. Secular Movements in the Terms of Trade, The American Economic Review. 1955; 45(2):259-69.
5. Chenery HB. Comparative Advantage and Development Policy. In: Surveys of Economic Theory. Palgrave Macmillan, London, 1965.
6. Cheng MY, Mittelhammer R. Globalization and

- Economic Development: Impact of Social Capital and Institutional Building. *The American Journal of Economics and Sociology*. 2008; 67(5):859-888.
7. Dunning JH, Van Hoesel R, Narula R. Third World Multinationals Revisited: New developments and theoretical implications, in J. H. Dunning (ed.), *Globalization, Trade and Foreign Direct Investment*, Elsevier Science Ltd, Oxford, 1998.
  8. Echekoba FN, Okonkwo VI, Adigwe PK. Trade Liberalization and Economic Growth: The Nigerian Experience (1971-2012), *Journal of Poverty, Investment and Development*, 2015, 14.
  9. Ekpo AH. Economic Development under Structural Adjustment: Evidence from Selected West African Countries, *Journal of Social Development in Africa*. 1992; 7(1):25-43.
  10. Elkan W. *An Introduction to Development Economics*, Revised Second Edition edn, Prentice Hall, London, 1995.
  11. Feridun M, Olusi JO, Folorunso BA. 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*. 2006; 6(3):173-182.
  12. Gujarati D. *Econometrics by Example* (11th ed.). Palgrave Macmillan, Basingstoke, Hampshire, 2012.
  13. Heckscher EF. 'The Effect of Foreign Trade on the Distribution of Income', in H.S. Ellis & L.M. Metzler (eds), *Readings in the Theory of International Trade*, Irwin, Homewood, 1919, 272-300.
  14. IMF. Globalization: Threat or Opportunity? IMF Issue, 2000, doi:<https://www.imf.org/external/np/exr/ib/2000/041200to.htm>
  15. Jaja JM. Globalization or Americanization: Implications for Sub-Saharan Africa, in Deng K. G. (ed.) *Globalization – Today, Tomorrow*. Croatia: Sciyo, 2010.
  16. Leipziger D. Globalization Revisited. In Spence, M., & Leipziger, D. *Globalization and Growth - Implications for a Post-Crisis World: Commission on Growth and Development*. Commission on Growth and Development. World Bank. © World Bank, 2010, <https://www.openknowledge.worldbank.org/handle/10986/2440> License: CC BY 3.0 IGO.
  17. Martin KM. Openness and Economic performance in Sub-Saharan Africa: Evidence from the Time-series and Cross-Country Analysis. Policy Research Working Paper WPS 1025. Washington, D. C.: World Bank, 1992.
  18. Myint H. The Gains from International Trade and the Backward Countries, *Review of Economic Studies*. 1955; 22(88):129-42.
  19. Naisbit J. *Global Paradox*, Allen and Unwin, Sydney, 1994.
  20. Nurske R. International Trade Theory and Development Policy, in H.S. Ellis & H.C. Wallich (eds), *Economic Development for Latin America*, 1961.
  21. Nwakanma PC, Ibe RC. Globalization and economic growth: an econometric dimension drawing evidence from Nigeria. *International Review of Management and Business Research*. 2014; 3(2):771-778.
  22. Obadan MI, Obioma EC. Contemporary Issues in Global Trade and Finance and their Implications. *Journal of Economic Management*, 6: 1-40.
  23. Obaseki PJ. Globalization and the Nigerian Economy. *Central Bank of Nigeria Economic and Financial Review*. 2000; 38(2):17-33.
  24. Obuoforibo GU. Between Nationalism and Globalization: A Critical Analysis of Africa's Contemporary Dilemma' *Political Science Review*. 2010; 5:1.
  25. Ogohi DC. Impact of Globalization on Socio-Cultural Development in Nigeria, *Journal of Developing Country Studies*. 2014; 4(17):31-41.
  26. Ohlin B. *Interregional and international Trade*, Harvard University Press Cambridge, 1933.
  27. Okpokpo GU, Ifelunini IA, Osuyali F. Is globalization a potent driver of economic growth? Investigating the Nigerian non-oil exports. *Asian Economic and Financial Review*. 2014; 4(6):781-792.
  28. Omolade A, Morakinyo A, Ifeacheo C. Globalization and Economic Development in Nigeria. *Journal of Research in Humanities and Social Science*. 2013; 4(1):06-14.
  29. Oni KJ. Globalization and National Development: The Nigerian Experience. *Review of Public Administration and Management*. 2015; 3(7):82-91.
  30. Onwuka EC, Eguavoen A. Globalization and Economic Development: the Nigerian experience. *Journal of Social Science*. 2007; 14(1):45-51.
  31. Onye KU, Iriabije AO. Globalization and Nigeria's Economic Performance. *International Journal of Humanities and Social Science Research*. 2016; 2(2):37-54.
  32. Onye KU, Chuku AC, Ikegwuonu AF. Macroeconomic Consequences of Globalization in West Africa: Implications for Regional Economic Integration, A paper Presented at the 9th Annual Conference for Regional Integration in Africa (ACRIA 9), Banjul, 2018.
  33. Ouattara AD. The Challenges of Globalization for Africa. International Monetary Fund at the Southern Africa Economic Summit. World Economic Forum, Harare, 1997. <http://www.imf.org/en/News/Articles/2015/09/28/04/53/sp052197>
  34. Schepelmann P, Goossens Schep Y, Makipaa A. Towards Sustainable Development, Alternatives to GDP for Measuring Progress, Wuppertal Institute for Climate, Environment and Energy, Wuppertal special, 2010, 42.
  35. Schirato T, Webb J. *Understanding Globalization*. London: Sage Publications, 2003.
  36. Sede IP, Izilein EI. Economic growth and globalization in Nigeria: a causality analysis. *Asian-African Journal of Economics and Econometrics*. 2013; 13(2):145-159.
  37. Shenkar O, Luo Y. *International Business*. New York: John Willey & Sons, 2004.
  38. Sliburyte L, Masteikienė R. Impacts of Globalization on Lithuanian Economic Growth, 1999-2010.
  39. Spiegel MS. Financial Globalization and Monetary Policy Discipline: A Survey with New Evidence from Financial Remoteness. *IMF Staff Papers*. 2009; 56(1):198-221.
  40. Todaro MP, Smith SC. *Economic development* (11th ed.). Boston, Mass: Addison-Wesley, 2012.
  41. Utuk IO. Globalization and Economic Growth: The Nigerian Experience. *Journal of Law, Policy and Globalization*. 2015; 36:18-28.
  42. World Bank. *World Development Indicators*. New York: World Bank Group, 2017.
  43. Yusuf Abdul Raheem. Globalization and Nigerian Economic development. A paper presented at the 4th Annual National Conference of the Social Studies Association of Nigeria (SOSAN), Faculty of Education, University of Ibadan, 2003.