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Keywords: *international trade, economic growth, interest rate and government expenditure.*

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International Trade and Economic Growth in Nigeria

Babatunde Afolabi ^α, Jonathan D. Danladi ^σ & Muhyideen I. Azeez ^ρ

Abstract- This study examined the impact of international trade on economic growth in Nigeria, with the objective of identifying the major factors influencing economic growth through international trade and make policy suggestions. This study made use of time series secondary data obtained from Central Bank of Nigeria, National Bureau of Statistics and International Financial Statistics for a period between 1981 and 2014. Augmented Dickey-Fuller (ADF) test together with Phillip-Perron (PP) test of Unit Root Tests were employed to ascertain the stationarity properties of the variables. The Ordinary Least Square (OLS) technique was used to test for the significant relationship between the level of economic growth proxied by GDP as dependent variable and exchange rate, government expenditure, interest rate, foreign direct investment, import and export as independent variables. The result revealed that government expenditures, interest rate, import and export are all positively significant while exchange rate and foreign direct investment are negatively insignificant to the growth process of the Nigerian Economy. The econometric results suggest that Nigerian government should give more emphasis to specialization on agriculture so as to diversify her production and export base in order to enable the country benefit all the gains of trade including economic growth. The country's trade should not only be on primary and oil exports but also the promotion of non-primary exports and non-oil exports i.e. manufactured goods. Promotion of exports within the context of sub-regional and regional economic integration should be vigorously pursued to expand Nigerian international market and the importation policy of the government should be strictly adhered to in order to control dumping and to encourage the local investors.

Keywords: international trade, economic growth, interest rate and government expenditure.

I. INTRODUCTION

The significance of international trade in economic development is vital. The neo-classical and classical economists attributed so much relevance to external trade in a development process of a nation which is regarded as an engine of growth. Over the past years, the nations of the world have been immensely linked together through globalization and external trade. Foreign trade has been recognized as the most crucial and longstanding part of a nation's international economic relationships. Its role in the development process of a contemporary global economy is very crucial and central. Its effect on the growth and

development of countries has increased significantly over the years and has meaningfully contributed to the advancement of the world economy. The contributions of foreign trade on a nation's economy is not only restricted to the quantitative gains, but also foreign capital flow and facilitating structural change in the economy. Trade fosters the efficient production of goods and services via resources allocation to nations that have comparative advantage in their productions. Foreign trade has been described as a tool and catalyst of economic growth (Frankel and Romer, 1999).

The predication for foreign trade depends on the veracity that nations of the globe are different in their natural resources endowment, scale of production, capacity for growth, preferences, technology, and sustainable development. Because of these major discrepancies, the involvement in international trade is vindicated for the creation of thoroughfares for nations to exchange and consume goods and services they do not have capacity for. Differences in resources present a case where nations can only consume what they are capable of producing, but trade invigorates them to consume what other nations are able to produce. Therefore, trade motivates nations to enjoy motley of goods and services in a bid to improve their people's wellbeing.

Over the past few decades, the magnitude of external trade between nations of the world has increased significantly. In particular, Nigeria has experienced a sharp increase in the value and volume of trade with other countries of the world. Foreign trade statistics in 2014 by Economic Complexity Index (ECI) shows that Nigeria is the 119th most complex economy and the 41st largest export economy in the world. In 2013, Nigeria exported \$94.8B and imported \$53.3B, leading to favourable trade balance of \$41.6B. In the same year, the per capita GDP of Nigeria was \$5.6k and her GDP was \$521B. Further analysis of the components of export and import indicates that the top exports of Nigeria are Refined Petroleum (\$3.07B), Cocoa Beans (\$561M), Crude Petroleum (\$75.3B), Petroleum Gas (\$10.3B), and Special Purpose Ships (\$463M), while her top imports are Wheat (\$1.42B), Rolled Tobacco (\$1.34B), Refined Petroleum (\$9.5B), Cars (\$1.87B), and Special Purpose Ships (\$1.01B). Expressed in percentage, the exports are led by Crude Petroleum which stands for 79.4% of the total exports of Nigeria, followed by Petroleum Gas, which accounts for

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10.9% whereas the imports are led by Refined Petroleum which accounts for 17.9% of the total imports of Nigeria, followed by Cars, which contribute 3.51%.

Nigeria recorded a trade surplus of N197, 187.70 millions in September, 2015. Balance of Trade in Nigeria averaged N201, 370.76 million from 1981 until 2015, reaching an all-time high of N217, 7553.08 Millions in October of 2011 and a record low of N - 592200.72 Millions in March, 2011. The Nigerian Bureau Statistics (NBS) reported this Balance of Trade and this tendency is expected over the long term due to the unrelenting calls for heightened trade liberalization to foster economic growth across the globe.

The interest in the study of foreign trade has been increased because of its inherent benefits particularly to developing countries. Until now, there has been a general resolution that each nation of the world benefits from international trade. However, previous empirical investigations have shown that less developed nations have not really taken advantages from trade as much as their developed peers. Besides, the highly deplorable status of these nations' economies as regards per capita income, unemployment, gross domestic product, human capital and poverty level in spite of several decades of involvement in trade has further intensified the trade-development quiz. For instance, Nigeria's volume of trade has risen meaningfully over the years without a corresponding and major upsurge in growth and development. While the neo-classical and classical schools of thought observe international trade as beneficial to both growth and development, other schools/authors hold that external trade has only exacerbated international inequality, a situation where developed nations have become richer by taking away inherent growth from developing ones. Recent studies have also not been conclusive. For instance, Appleyard et al. (2006) asserted that there is a common misunderstanding that China's economic growth is taking new shape to the detriment of its many trading partners including Nigeria being its largest trading partner in African continent. However, contrary to the aforementioned averment, a critical outlook of the effect of Chinese investment and trade on the duo (growth and development) of Nigeria as elaborated by Nabine (2009) demonstrates that in the short run, the bilateral trade fails to impart positively on Nigeria's economic growth but the long-term relationship could promote economic growth in Nigeria.

However, it has been perceived that the Nigerian economy has grossly performed below expectation relative to its immense natural endowment and her compeer nations. Despite her numerous solid mineral resources and a population of over 170 million people, one of the largest gas and crude oil reserves in the globe, the economic performance of the country was affirmed rather weak when compared and contrasted to the emerging Asian nations such as India,

Thailand, Malaysia, China, and Indonesia. These countries were far lagged behind Nigeria in terms of GDP per capita in 1970, but later they were better able to transmogrify their economies to become stellar players on the global economic arena. Sanusi, (2010) affirmed that while China, in 1970, was ranked 114th with a GDP per capita of US\$111.82, Nigeria with a GDP per capita of US\$233.35 was ranked 88th in the world economies. Today, China takes a promising and enviable stance in the global scheme of issues largely due to her self-esteemed trade status.

The difference in opinions and empirical findings on the effect of trade on economic growth has become a pain in the neck, especially to developing countries; and necessitates further researches. This is the gap that this paper seeks to fill. The study intends to contribute to the debate on the impact of trade on economic growth with Nigeria being a case study. The main aim of this study is to investigate the impact of international trade on Nigeria's economic growth between 1981 and 2014. It also identifies other factors that prevail on economic growth in the country. There are five sections in this study; the other sections are as follows: second section deals with conceptual and theoretical issues. The third section concerns the drawing of the significance of these theories to Nigeria. The fourth section deals with methodology and finally the fifth section concludes the study.

II. EMPIRICAL, CONCEPTUAL AND THEORETICAL ISSUES

a) *A Review of Empirical Evidence*

International trade brings efficiency and welfare gains to all nations regardless of their initial conditions, technological capabilities, development level, and resources endowments (Krugman and Helpman, 1988).

Empirically, the impact of international trade on economic growth has been a crucial and disputable subject for many decades. Using various approaches, a lot of studies have discovered growth to be heightened by liberalization or trade openness (Krueger, 1978; Balassa, 1978 and 1985; Feder, 1983; Ram, 1985 and 1987; Dollar, 1992; Edwards, 1998; Ben-David et al., 2000; to mention but a few). On the other hand, Singer (1950), Prehisch (1962), Kavoussi (1985), Sachs (1987 and 1989) Singer and Gray (1988), and Taylor (1991) argued that trade expansion or trade liberalization may not be expedient for the economic growth of all nations at all times. Frankel and Romer (1999) ascertained significant contribution of trade openness to level of per capita income. They posited that trade promote growth through stock of education, greater capital stock, and higher total factor productivity. They however, cautioned explicitly against concluding for trade policies as a result of their findings as it brings various factors into play. Cooper (2001) addressed the impact of foreign trade and investment on growth via distribution of income and

inequality in less developed nations. He debated that study of empirical evidence and theory are inconclusive. He stated that there are no compelling theoretical reasons to believe, in general, that trade fosters growth and empirical works supporting a link at nation level has been heavily subjected to criticism on methodological rationalization (Rodriguez and Rodrick, 2000). He further asserted it would be difficult to learn credence to the postulations that trade has not impacted significantly on the growth of the economy of the world in the second part of the 20th century. He finalized that trade was a catalyst of growth; and that the economy of the world would have improved as quickly as it did even though trade barriers are as high as they were in 1950s signifying that other factors apart from trade also contribute to growth. Rodriguez and Rodrik (2000) provided a critique of the various surveys to resolve that trade liberality encourages growth. They discovered faults with the various, variables, specifications, data, and methodology adopted by most of these studies on the basis that they were hinged on anecdotes. However, they agreed with Dollar and Kraay (2000) that refuted the generalizations of these studies using international economic data for more than 100 nations. In another paper, Michael and Ruhwedel (2005) reviewed the nexus between economic growth and production variety with use of panel data for 14 transition nations. Their findings indicate open economies attain higher economic growth than closed ones. They ascribed the difference to the significance of co-operation and trade. Coe and Helpman (1995) used time-series data to demonstrate that trade contributes to economic growth positively via technological transfer.

With special regard to the impacts of foreign trade on average real wages, Edward, (2000) opined that there are too restricted studies to deduce much in the way of conclusion. He however stated the only notable study to deal with this prevailing issue is Lawrence and Slaughter (1993), who discovered almost no impact of liberalized trade on the wage stagnation of the post-1973 era. He affirmed there is no driving justification that the expansion of international trade since the early 1970s contributed substantially to either the decline in the real wage or in the surge of the wage differentials between unskilled and skilled labour.

Similarly, Bayoumi et al. (1999) state that research and development, its spillover and trade contribute immensely to promoting economic growth both in developing and industrial nations. The results of Coe and Moghadam (1993) postulate that trade and capital have positive impact on growth in France. Lin (2000) examined the link between trade and economic growth using China's national data for the period between 1952 and 1997, the findings disclose that growth rate of import, growth rate of the volume of trade, the growth rate of export, and labour force growth were

positively connected to economic growth. Maddison (1998) exhibited that the gradual trade liberalization and capital flows in the OECD nations stimulated Western Europe's reconstruction, catch-up growth and recovery. Also, gradual trade liberalization, the outward orientation, and inward investment in some East Asian nations like China, Hong Kong and Singapore have significantly affected their economic growth. Drabek and Laird (1998) observed that developing nations with progressively more liberal trade programmes are those with growing ratios of inward investments, trade, and national income and its growth rates. Singer (1950) and Prehisch (1962) controverted the widely held inkling that trade and free market would solve the development problem in less developed nations. They worked out the net terms of trade of developing nations and discovered that the terms of trade of these nations have aggravated over the years. They resolved that the division of labour between poor nations and rich ones has culminated in a state of underdevelopment in poor nations.

International trade also affects the economic growth of nations via the attraction of FDI. Lall (2000) and Te Velde (2001) stated that the main boulevards through which FDI impacts positively to economic growth are access to international market, job creation, technology transfer, capital accumulation, marketing and managerial practices. Blomstrom and Kokko (2003) contributed that trade and FDI can only enhance growth after the minimum level of technology, infrastructure and human capital have been satisfied (Karbasi et al., 2005). Karbasi et al. (2005) analyzed the significance of FDI and trade in fostering economic growth in 42 selected developing nations. They stated that human capital, trade, FDI, and domestic investment are vital sources of economic growth for less developed nations. They ascertained a positive significant correlation between trade and growth. They agreed that the contribution of FDI to economic growth is facilitated by its positive interaction with sound macroeconomic policies, human capital and institutional stability. Jude and Pop-Silaghi (2008) also investigated this point and concluded that the FDI inspired a false impact on growth in the Romanian economy when other factors of growth are disregarded. In the same vein, Fogel (2006) asserted that for China to attain the desired target of quadrupled rate of GDP by 2020, improvement in political stability, institutional quality and quality of education should be prioritized. Fosu and Magnus (2006) studied the long-run effect of FDI and trade on economic growth in Ghana for the period 1970 and 2002. They discovered a long-run relationship between determinants of economic growth and economic growth itself in their model. The findings indicated a negative and positive growth impact of trade and FDI respectively. This finding is in consonant with Jude and Pop-Silaghi (2008) for Romania.

b) *Conceptual Issues*

International trade is described as an exchange of goods and services between the residents of a given country and those of the rest of the world (Mannur, 1995). It is, therefore, a tool which links the nations of the world via service flows, commodity trade, and factor movements. As noted earlier, international trade is based on the reality that no country is self-reliant in the production of all goods and services, which are required by her citizens for survival owing to the constraint and differences of resources (Mannur, 1995). Therefore, Morgan and Katsikeas, (1997) cited Coutts and Godley, (1992) as well as McCombie and Thirlwall, (1992) who asserted that this trade relationship paves way for an avenue for nations to exchange their goods and services for the generation of revenue to finance the goods and services imported whose production are impossible domestically.

On the other hand, economic growth commonly and interchangeably used for sustainable development is described as growth of economic development that meets the hungriens of the present generation without compromising the yearnings of the future ones (WCED, 1987 cited in Ite, 2003 and Ikeme, 2000). It is an engine of catalyst in which the direction of investments, institutional change, exploitation of resources, and the orientation of technological development are made pertinent to future as well as present needs (Bonn, n. d.). It is also an alternative development mechanism for fostering the living conditions of the human without undermining the merit of the society. The concept thus came into being following the realization that economic development and environment are closely related, Boon, (n. d.) affirmed that, by the year 2000 and beyond, even though it was popularized by the Brundtland Commission's report of which the United Nations General Assembly was assigned to utilize as long-term strategically environmental planning for the attainment of sustainable development.

The comprehension that economic growth consists of a number of aspects is very factual but the three most essential elements are: economic, social equity and environmental; and hence they are regarded as the Sustainable Development Triangle (Daud and Nor Azam, 2011). Economic sustainability is concerned about sound poverty alleviating growth, macroeconomic management, role of the state, appropriate agricultural policies, and cost. Sustainable social development is concerned with equity in the allocation of wealth, opportunity and resources to all citizens at all levels and it implies amongst other things access to minimum human rights, social benefits including food, education, health, standards of security, shelter and self-development opportunities. Environmental sustainability on the other hand is concerned with environmental protection and thus demands the employment of environmental goods and services in a way that their

productive capacity are not countermined, nor their overall contribution to human wellbeing subverted (Ite, 2003). Based on the target of this study, all three dimensions are relevant but emphasis is laid on economic sustainability used interchangeably for economic growth.

c) *Theories of International Trade*

i. *Classical Theory of Trade*

Classical theory of trade postulated that countries are better capable to gaining and sustaining development if each commits resources to the generation of goods and services in which economic advantage is being enjoyed by them (Smith, 1776; Ricardo, 1817 cited in Morgan and Katsikeas, 1997). The theory elaborates the scenario where a nation produces goods and services in which it has an advantage not only for exporting the surplus but also domestic consumption and imports the goods and services they have an economic disadvantage in. Economic advantages and disadvantages usually emanate from country differences in factors such as capital, labour, technology resource endowments, or entrepreneurship. The theory, therefore, contends that the fundamentals for sustainable development and international trade can be traced to differences in resource endowments and production characteristics founded on domestic differences in naturally inherent economic advantages (Morgan and Katsikeas, 1997). Specifically, the theory was predicated on the principles of specialization and comparative cost advantage, which lead to benefits for the trading collaborators (Umo, 2007). One of the weak points of this theory is that investment resources are not internationally mobile, i.e. only commodities are movable and investment decisions are undertaken on a national basis (Caballero et al., n. d.). Capital, in today's world, is very mobile across national frontiers, and so also technology (Caballero et al., n. d.).

ii. *The Theory of Factor Proportion*

The theory of factor proportion on the other hand is capable of giving an explication for discrepancies in advantage demonstrated by trading nations. As lucubrated by the theory, nations have the tendency to produce and exchange internationally goods and services that exploit large amounts of abundant production factors that they have, while they import those that require large amounts of production factors which are comparatively and scarcely unavailable (Heckcher and Ohlin, 1933 cited in Morgan and Katsikeas, 1997). The theory fleshes out the concept of economic advantage in the context of costs of factors of production and endowment.

iii. *The Product Life Cycle Theory*

The Product Life Cycle Theory was propounded in relation with some developments to deal with the

ever-changing commercial facts like the role executed by multinational enterprises and technological advancement in sustainable development and trade of their nations. The theory stipulates that a trade cycle occurs where a product is generated by a parent company, then by its alien subsidiary firms and lastly anywhere in the world where costs are at their minimum possible (Wells, 1968, 1969; Vernon, 1966, 1971; Morgan and Katsikeas, 1997). It also expounds how a product may emanate as a nation's export and work through the life cycle to at long last transform to an import (Morgan and Katsikeas, 1997). As noted by the theory, market size and innovations in technology are very crucial for leveraging in external trade and naturally economic growth.

iv. *Challenges of Economic Growth and Trade Theories in Nigeria*

Almost nothing is efficiently operating in Nigeria and so also the tenets of trade theories are not much valued in the nation. For instance, the classical trade theory had emphasized on attaining economic growth via international trade on the foundation of comparative economic advantages and disadvantages. Harnessing the principles of this trade theory, Nigeria was expected to major in agriculture, especially taking cognizance of her enormous abundant labour resources and unexploited cultivatable land. Regrettably, since the oil price windfall of the early 1970s, the nation jettisoned the industrial and agricultural sectors of the economy. The economic agents of both public and private sectors of the economy devote their resources in the oil and gas sector so much that the key sectors of the economy are deprived of funding, managerial capabilities and even required investment. Thus, the keystone economy has been rendered uncompetitive internationally while the nation has become a trading settlement for foreign firms (Sanusi, 2010). The petroleum sector in Nigeria is bedeviled by wastage, low productivity, unchecked dominance of foreign multinationals and corruption (Hassan et al., 2002). The nation has been kicked downstairs to a mono-product economy with the lion share of government income emanating from oil exports which is vulnerable to volatility and shocks in the oil market internationally. Besides, several other solid minerals with which the nation is abundantly blessed remain generally undeveloped. More fundamentally, the economy has disproportionately focused on the primary sector (extractive industry and subsistence agriculture) with the dearth of any significant value addition. In view of this, the growth recorded in the economy is negligible which has thus far been devoid of corresponding positive attitudinal change, employment, equitable income distribution, and value re-orientation, to mention but a few.

Based on the theory of factor proportion, Nigeria, for many decades, has stupendously been expending on the importation of technologically oriented goods mainly from Western Europe, even though the nation was not aggressively exporting agricultural and industrial output. A scrutiny of the Nigeria's profile regarding imports during the period 1981-2015 (see appendix) for instance, revealed that due to high international oil prices, Nigeria's import trade has the capability of balancing export revenue. According to Nigeria's National Bureau of Statistics, 2016, imports to Nigeria decreased by 24.7 percent year-on-year to N507.4 million in December 2015. In the last quarter of the year, purchases declined 22.4 percent. Imports in the country averaged N164,266.67 millions from 1981 until 2015, reaching an all-time high of N1,554,732.90 millions in March of 2011 and a record low of N167.88 million in May, 1984. Nigeria imports mainly from: industrial supplies (27% of total in 2014), fuel and lubricants (14%), food and beverage (17%), consumer goods (7%), capital goods (23%), and transport equipment and parts (12%). 43% of total imports come from Asia; 34% from Europe; 15% from America and 7% from Africa.

As a technologically backward and weak nation, the product life cycle theory is to some level irrelevant to Nigeria, even though the nation used to be preeminent exporter of rice in the 60s but now relegated to be a prima importer of same product. For example, Nigeria consumes about five million metric tons of rice annually. Over the years, the local production, however, has not kept pace. The difference between what is produced and what is consumed is supplied via importation of about 2.1 million metric tons, at such huge annual import expenses of about N356 billion. This is devastating for an economy like Nigeria. Now, compare that with what can be produced locally at a cheaper cost, with a number of associated benefits. (Oyeleye, 2014).

Nigeria is as well incapable to attaining economic growth via international trade owing to factors such as lack of good governance, poor policy and hostile external environment, corruption, insecurity, poverty, infrastructural development and poor human capital among others. In Nigeria for instance, few people possess the requisite skills and technological knowhow in the productive sector and owing to the unsuitable match between productive training and education; the country has for long been witnessing an alarming rate of unemployment (Ogbimi, n. d.). It is disheartening to observe that after 55 years of independence, Nigeria is not even being near to gratifying the hungriness of needful economic development despite her vision 20-2020 (Abdullahi et al., 2012).

III. METHODOLOGY AND MODEL SPECIFICATION

This study focuses on the international trade in Nigerian economy from 1981–2014. Time series secondary data were used for the analysis. The secondary data were obtained from such publications as Nigerian Bureau Statistics (NBS), Central Bank of Nigeria 2014 Statistical Bulletin, International Financial Statistics, World Bank Datasets, etc. The secondary data used for the study were processed using E-view 7 for descriptive statistics, unit root tests and ordinary least square statistics technique.

a) Model Specification

This study adopted an economic model previously used by Edward (2000) with slight transmutation to estimate the determinants of economic growth. However, study tried to modify his work by employing additional independent variables. The new model is of the general form. Thus, economic growth

Therefore:

$$GDP = \pi_0 + \pi_1 EXC_RATE + \pi_2 EXPORT + \pi_3 FDIGDP + \pi_4 GOV_EXP + \pi_5 IMPORT + \pi_6 INT_RATE + U$$

Where:

$\pi_0, \pi_1, \pi_2, \pi_3, \pi_4, \pi_5$ and π_6 are the parameters to be estimated.

U = stochastic error term

In log linear, the model becomes:

$$\text{LogGDP} = \pi_0 + \pi_1 \text{LogEXC_RATE} + \pi_2 \text{LogEXPORT} + \pi_3 \text{LogFDIGDP} + \pi_4 \text{LogGOV_EXP} + \pi_5 \text{LogIMPORT} + \pi_6 \text{LogINT_RATE} + U$$

IV. DATA ANALYSIS AND INTERPRETATION OF RESULTS

Below are presented the descriptive statistics, unit root tests and ordinary least squares analysis. The unit root tests provide information on the stationarity properties of the variables and they were examined employing the Augmented Dickey-Fuller (ADF) and

trend model for Nigeria can be specified in a functional form as:

$$gdp = f(\text{exc_rate}, \text{export}, \text{import}, \text{fdigdp}, \text{gov_exp}, \text{int_rate})$$

Where:

gdp	=	Real Gross Domestic Product
exc rate	=	Exchange Rate
export	=	Export
import	=	Import
fdigdp	=	Foreign Direct Investment, net inflows (% of GDP)
gov exp	=	Government Expenditure
int rate	=	Interest Rate

Economic growth is proxied by Real Gross Domestic Product. While Exchange Rate, Export, Import and Foreign direct investment (net inflows as % of GDP) represent international trade.

Government Expenditures and Interest rate stand for other determinants of economic growth

Phillip-Perron (PP) tests. The ordinary least squares technique was used to examine statistical significance between the logarithm of real gross domestic product, log of exports, log of foreign direct investment as percentage of GDP, log of exchange rate, log of interest rate and log of government expenditures in Nigeria.

Table 1: Summary of Descriptive Statistics of the Variables

	EXC RATE	EXPORT	FDIGDP	GDP	GOV EXP	IMPORT	INT RATE
Mean	1.376670	2.766811	0.388301	3.456371	2.486548	2.592334	1.228526
Median	1.341799	3.084587	0.423169	3.613845	2.659646	2.925084	1.249611
Maximum	2.200173	4.183612	1.034628	4.949603	3.714775	4.041229	1.474216
Minimum	-0.214652	0.875206	-0.180456	1.974627	0.983919	0.776963	0.889302
Std. Dev.	0.839612	1.154166	0.301608	0.973062	0.945145	1.104431	0.131319
Skewness	-0.683368	-0.374214	-0.014619	-0.121095	-0.292553	-0.335386	-0.739642
Kurtosis	2.116693	1.736151	2.521907	1.733123	1.658671	1.701286	3.417379
Jarque-Bera Probability	3.751613 0.153231	3.056401 0.216926	0.325022 0.850007	2.356815 0.307768	3.033806 0.219390	3.026839 0.220156	3.346858 0.187603
Sum	46.80678	94.07159	13.20223	117.5166	84.54264	88.13937	41.76988
Sum Sq. Dev.	23.26327	43.95924	3.001933	31.24606	29.47885	40.25235	0.569070
Observations	34	34	34	34	34	34	34

Source: Author's Computation using E-view 7, 2016

Table 1 show that the series are in high level of consistency as all the mean and median values are within the max and min values of the series. In addition, the low standard deviation of all the data shows that the deviations of the actual data from their mean values are small. The skewness and Kurtosis statistics provide vital

information regarding the symmetry of the probability of the data and the thickness of the distribution respectively. Furthermore, it is apparent that the hypothesis that all the variables are normally distributed cannot be rejected since all the probabilities are less than the Jarque Bera chi-square distributions.

Table 2: Unit Root Tests and Interpretation

Variables	ADF Unit Root Test		Phillips-Perron Unit Root Test		Integration Status
	Level Data	1 st Diff Data	Level Data	1 st Diff Data	
Exc Rate	-2.038658	-4.841457	-2.190202	-4.841457	I(1)
Export	-0.955560	-6.268794	-0.989514	-6.462581	I(1)
FDIgdp	-2.770023	-9.683442	-2.614087	-9.840369	I(1)
GDP	-0.197626	-5.378235	-0.183326	-5.393858	I(1)
Import	-0.690447	-6.648456	-0.461138	-6.621346	I(1)
Int_Rate	-3.336539	-5.162442	-3.317407	-8.459708	I(1)
Gov_Exp	-2.040153	-6.304524*	-0.992727	-6.887444	I(1)
Test critical values:	1% level		-3.646342		
	5% level		-2.954021		
	10% level		-2.615817		

Source: Author's Computation using E-view 7, 2016
* non stationary at level & 1st diff. but 2nd diff.

Table 2 also demonstrates that the variables, that is, Gross Domestic Product (GDP), Export, FDI % of gdp, Interest rate, Import, Exchange Rate, and Government Expenditures are not significant at levels

but are significant at first difference thereby stationary. However, only government expenditure is stationary at 2nd difference.

Table 3: Least Squares Result and Interpretation

Dependent Variable: LGDP
Method: Least Squares
Date: 03/17/16 Time: 13:42
Sample: 1981 2014
Included observations: 34

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.537068	0.355683	1.509962	0.1427
EXC_RATE	-0.257239	0.138337	-1.859508	0.0739
EXPORT	0.277169	0.151317	1.831708	0.0780
FDIGDP	-0.214214	0.067882	-3.155670	0.0039
GOV_EXP	0.808078	0.223812	3.610516	0.0012
IMPORT	0.087331	0.169314	0.515793	0.6102
INT_RATE	0.288173	0.234978	1.226384	0.2306
R-squared	0.992777	Mean dependent var		3.456371
Adjusted R-squared	0.991172	S.D. dependent var		0.973062
S.E. of regression	0.091429	Akaike info criterion		-1.765272
Sum squared resid	0.225699	Schwarz criterion		-1.451021
Log likelihood	37.00962	Hannan-Quinn criter.		-1.658103
F-statistic	618.4859	Durbin-Watson stat		1.287566
Prob(F-statistic)	0.000000			

Source: Author's Computation using E-view 7, 2016

Table 3 concentrates on the data analysis, interpretation of results and discussions. The results show the impact of econometrics of some explanatory variables such as: exchange rate, government

expenditures, foreign direct investment, interest rate, import and export on GDP in Nigeria. The regression analysis was presented in this section with a test for ordinary least square (OLS).

Furthermore, table 3 depicts various statistical tests such as standard error, t-statistics, adjusted R2, Durbin-Watson (DW) and F-statistics were used to validate the results. That; GDP, exchange rate, government expenditure, foreign direct investment, interest rate, import and export were stationary at 1 percent, 5 percent and 10 percent respectively.

a) *The Significance of the Parameter Estimates*

From table 3, the significance of the parameter estimates can be verified by the adjusted R2, standard error test and the DW statistics. This shows that the values of parameters estimated are all significant statistically. The value of the adjusted R-squared (R2) for the model is very high, pegged at 99 percent. This implies that GDP, foreign direct investment, exchange rate, government expenditure, interest rate, import and export explained more than 99 percent systematic variations in the level of GDP over the observed years in the Nigerian economy with the indication of strong goodness of fit while the remaining less than 1 percent variation is explained by other determining variables represented by white noise in the model.

The value of Durbin Watson is 1.28. This resides within the determinate region and connotes the existence of a positive first order serial autocorrelation among the explanatory variables in the model. The result of the coefficients shows that GDP, government expenditures, interest rate, import and export are positively significant to country's GDP. An increase in these variables eventually leads to increase in total volume of GDP and economic growth of the country. Meanwhile, the result also reveals that exchange rate and foreign direct investment are negative and insignificant to GDP. This is consistent with Fosu and Magnus (2006) for Ghana and Jude and Pop-Silaghi (2008) for Romania.

V. CONCLUSION AND RECOMMENDATIONS

We conclude from the foregoing that Nigeria has been unable to attain economic growth through international trade owing to obvious violations of trade doctrines particularly in the area of specialization on factor proportion and endowment.

a) *Policy Recommendations*

This research thus recommends that Nigerian government should give more emphasis to specialization in agriculture for diversification of her production and export base so as to enable the country gain all the benefits of trade including economic growth. This would go a long way to harness the Nigeria's abundant resources; land and labour inclusive which in turn would help in reducing prevalent menace of unemployment and poverty in the country. Similarly, government should take aggressive measures with the

intent to overcoming the trade related challenges of economic growth identified by the study.

We also recommend that the country's trade should not only be on primary and oil exports but also the promotion of non-primary exports and non-oil export i.e. manufactured goods. International trade strategy must be hinged on the recognition that government is necessitated to take needful steps for the fostering of competitiveness and productivity of enterprises in the export sector, i.e. upgrading infrastructures, enhancing human capital development, developing and improving technology via an upsurge in allocation of resources to research and development via government spending.

In addition, Central Bank of Nigeria should intensify the deregulation policy of the exchange rate sector of the country by making available foreign currency to exporters and investors. Promotion of exports within the context of sub-regional and regional economic integration should be vigorously pursued to expand Nigerian international market and the importation policy of the government should be strictly adhered to in order to control dumping and to encourage the local investors.

Finally, the monetary authority of the country should maintain a double digit interest rate for now to motivate foreign investors and the commercial banks until development level of Nigerian economy reaches a significant level where interest rate can be reduced to single digit or zero free.

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Appendix

Nigeria Trade	Last	Previous	Highest	Lowest	Unit
Balance of Trade	26385.50	174765.00	2177553.08	-592200.72	NGN Millions
Exports	533774.30	695652.40	2648881.76	322.93	NGN Millions
Imports	507388.90	520887.40	1554732.90	167.88	NGN Millions
Current Account	-2013.91	-5695.27	9455.37	-5695.27	USD Million
Current Account to GDP	2.60	3.90	37.90	-18.70	percent
Terms of Trade	100.61	102.28	160.25	49.48	Index Points
Foreign Direct Investment	501.83	1213.98	3084.90	501.83	USD Million
Capital Flows	-1125.67	406.61	20302.97	-15439.95	USD Million
Gold Reserves	21.37	21.37	21.37	21.37	Tonnes
Crude Oil Production	1787.00	1505.00	2475.00	675.00	BBL/D/1K
External Debt	10718.43	10617.35	10718.43	3627.50	USD Million
Terrorism Index	9.21	8.20	9.21	3.86	

Source: Nigeria's National Bureau of Statistics, 2016