



Economic Development, Technological Change, and Growth

Trade Policy and Economic Growth in Nigeria

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Abstract: This study examines the effect of trade policy on Nigeria economic growth and used annual data that spanned from 1983 to 2018. The Augmented Dickey-Fuller test revealed that the variables employed have mixed order of integration $(i(0),i(1))$. Thereafter, An Autoregressive Distributed Lag (ARDL) technique was employed because it suits the outcome of the pre estimation test. A cointegration test among the variables is conducted using the ARDL bound test technique. The ARDL estimates show that adjusted trade ratio impacted positively on GDP both in the short and long run and price based variables impacted positively on GDP both in the short and long run. We computed impulse response function for the estimated ARDL model to confirm the accuracy of Bound testing result. Interestingly, the finding remained robust when the potential effect of the trade policy is accounted for using IRF. The IRF show dynamically that GDP responded positively to trade policy at a higher horizon contrary to the short run estimate thereby given more credibility to the result of the ARDL which was been transformed to IRF. The dynamic responses allow us to find out that GDP responded positively and negatively to trade policy but the accumulated (long run) effect is positive. The study conclude that adjusted trade ratio is procyclical while price based mechanism is countercyclical in Nigeria during the scope of study. The study suggests that the policy makers should adopt policies that can promote innovations and shut out any form of black market premium that can cause distortions.

Keywords: Trade Policy; Economic Growth; ARDL; IRF

JEL Classification: A01; M27; A82

1. Introduction

Trade policy is often considered as an essential step for promoting economic growth in the global economy. Despite that the impact of trade policy on economic growth has not been satisfactorily determined, it has been claimed that trade is an important

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engine of growth for countries at different circles of development, because it contribute to a more efficient allocation of resources and transmission of growth from one part of the country or continent or world to another (Thirlwall, 2002). Githanga (2015) is of the view that trade liberalization permits inflow of goods, labour, technology, ideas, investment and human capital from one country to another.

Theoretically, the impact of trade on economic growth is that country become more efficient and comparatively more productive by focusing on the production of goods that has comparative advantage. Trade gives room for countries to export goods that were produced from the resources that are domestically surplus and import goods that cannot be efficiently produced from domestic resources because of the scarcity of resources. International trade also permits countries to concentrate and specialize in producing selected ranges of goods and services that give them greater efficiencies of large-scale production.

Krugman (2011) opines that the world is efficient and richer because international trade permits countries to specialize in production of goods or services where countries have comparative advantages and thus reap the gains from external economies. International trade encourages market integration which makes it possible to offer consumers a variety of goods or services at cheaper prices. Trade can occur as a result of increasing returns or economies of scale.

Trade liberalization as an economic policy refers to every attempt that aims at reducing or removing restrictions on international trade and this may include but not limited to the reduction or removal of tariffs, abolition or enlargement of import quotas, abolition of multiple exchange rates and removal of requirements for administrative permits for imports or allocations of foreign exchange. Trade liberalization (openness) promotes foreign direct investment, technology transfer, transfer of goods, services and transfer of capital among countries of the World. No doubt that participation in global markets provides wide range of opportunities for financing investments.

Krugman (2011) says that countries engage in international trade for two cogent reasons, and each of the reasons contributes to their gains from trade. Firstly, countries trade because they are differed in so many ways. Therefore, countries, like individuals, can gain from their differences by reaching a consensus in which each country engages in activity that such country can do comparatively well. Secondly, countries engage in trade in order to achieve economies of scale in production.

Anderson and Babula (2008) postulates that economic theory distinguishes between two sources of gross domestic product (GDP)-per-capita growth: capital accumulation (physical and human) and productivity growth. However, openness may affect both the capital accumulation and productivity growth. Firstly, openness to international flows of capital may speed up the rate at which physical capital and

human capital are accumulated domestically (at least temporarily). Secondly, openness may increase productivity growth through faster technological breakthrough.

In Nigeria, the industrial sector growth of 1970s is as a result of a policy of import substitution (Olayinka, 2012). The policy impacted export partly because domestic currency was overvalued and the return on investments was low due to preferential credit policies. The essence of trade policy in any country is to stimulate production, improve efficiency and help to minimize the cost of production which would in turn increase international confidence in market mechanism of theeconomy.

Without any exception, the Nigerian economy considers trade as an engine for growth because trade would create jobs, expands markets, facilitates competition, disseminates knowledge and raises the income of individuals and the government (WTO, 2005; Briggs, 2007). The immense benefits from trade, has been a principal factor that motivate the Nigerian government to engage in trade over the past decades. The effect of trade liberalization on growth has become a much debated and controversial issue. Grossman and Helpman (1991) argue that countries stand to benefit from spillover effect generated by investments in knowledge and technology from their trade partners but may also suffer a setback due to lack of ability to appropriate all benefits from their own investments. It is the view of the experts that participation in international markets provides opportunities for financing investments in all forms of capital, including knowledge capital.

Edmond, Midrigan and Yi Xu (2015) observe that trade improve the extent of competition among producers in the market. In their view, they argue that if domestic and foreign producers produce similar goods or render similar services within a given sector, then; trade liberalization exposes them to stiff head-to-head competition that reduces market power vis a vis reducing mark-ups and mark-up dispersion. Thus, the unclear nature of the exact relationship between trade policy and economic growth propels this study.

The expected impact of trade policy on economic growth in Nigeria is constrained by some diminishing factors which constitute the major problems of international trade. One of the constraints that impact on trade internationally is fiscal and monetary policy put in place by the regulatory authorities. Most of the time, the policies are ineffective, counter-productive and investments made are not viable or amount to waste of resources. Participants in international trade are expected to benefit from lower prices, variety of products and so on. Firms and businesses that participated in international trade are faced with challenge of the world's best practices and this help them to achieve higher productivity because such firms learn from the best practices and also able to create new products and processes as a result of these exposure but reverse is the case in Nigeria. Global trade has left industries in Nigeria in a state of comma as most domestic infant industries are negatively

affected due to consumers' preference for the foreign product than that of local industries (Echekoba, Okonkwo & Adigwe 2015).

Moreso, hoarding and secrecy is another major challenge. The essence of trade liberalization is to open up economies in order for the participating countries to learn from themselves and improve product quality and output yet most developed countries are not ready to expose their methods of production and technologies simply for the fear of domination by other countries.

Another major challenge to international trade in Nigeria is that most of the countries that are trade partner to Nigeria hoard important commodity and resources which are needed in Nigeria, yet they get everything they need from Nigeria (Echekoba et. al. 2015). This therefore is an indication that trade is not liberalized in action but only in words. Nigeria as one of the developing countries learn close to nothing when it comes to improved ways of doing things, developing countries like Nigeria appeared to be dumping grounds for foreign goods.

Aside from the aforementioned, multiple exchange rates is a big challenge in Nigeria, where official exchange rate by the Central Bank of Nigeria (CBN) and the black market (parallel market) rate by the Bureau De Change exist side by side and this discourage foreign trade and *investment* into the country. This existence of the multiple exchange rates obviously has an adverse effect on Nigeria economic growth. Unless all the above challenges are addressed, trade liberalization may not strengthen economic growth in Nigeria.

To the best of the researcher's knowledge, there are numerous studies on trade policy and economic growth nexus in Nigeria Nwafor, Ogujiuba and Adeola (2006), Yahya, Dantama and Abdullahi (2013), Olaifa, Subair and Biala (2013), Ehinomen and Dasilva (2014), Sunday and Ganiyu (2015), Ezeuchenne (2017), Ajayi and Araoye (2017) and Elijah and Musa (2019).

Many of the studies if not all, report a positive relation among import, export and economic growth. These researchers has claimed that the major concern is that the adoption of import-export ratio as a measure of openness is atheoretical because these variables have no link with theory.

Other scholars argued that the choice of trade ratio as a measure of openness is due to availability of data, however, the result of their studies cannot be relied upon without qualification because their work suffer methodological lapses. Few of the researchers argued that import and export ratio do not consider trade policy lag and that the trade ratio can be easily affected by business circle or fluctuation.

Study by (Nwafor, Ogujiuba and Adeola (2006), Yahya, Dantama and Abdullahi (2013), Olaifa, Subair and Biala (2013), Ehinomen and Dasilva (2014), Sunday and Ganiyu (2015).

are deficient in the area of modeling, for instance all the authors mentioned above used OLS, ARDL, VECM without any justification emanating from pre estimation test and also failed to report the dynamics of the relationship between trade policy and economic growth.

Our study make progress in the following areas;

Firstly, the study take into account the effect of structural break on the study of trade policy and economic growth in Nigeria and adopt an ARDL because of its suitability for 1(0) and 1(1) order of integration after all the necessary pre-estimation test, and its capability to test for hidden long run relationship and perform better when the sample is small is appealing to the researcher.

Finally, this study is of the view that it would be unfair to continue to argue that including a theoretical measure such as import – export ratio is difficult to justify in the presence of large body of trade theory without empirically justifying such claims

Based on this, this study will examine the effect of free trade on economic growth using time series data that spanned from 1983-2018. This period was chosen because it was able to capture the effect trade policy has on the economy both before and after (1986) the trade policy reform in Nigeria.

2. Literature Review

Ogunrinola, (2013) define trade as the exchange or buying and selling of goods and services while foreign trade can be defined as commercial transactions (in goods and/or services) across international frontiers or boundaries. Trade Liberalization according to Githanga, (2015) is the removal or reduction of restrictions or barriers on exchange of goods and services between nations. This include removal or reduction of both tariff and non-tariff obstacles. International trade allows the international flow of goods and services, labour and human capital flow from one part of the country to another through immigration. There are also flows of technology, ideas and investment. The effect of trade on productivity is that a country become more productive by allowing the country to produce the things it is good at producing and selling them to other countries in return for other things. Trade Policy implies export promotion and import policy reform.

Growth on the other hand is defined as an increase in the output that a country produces over a period of time. This is usually denoted by the gross domestic product. Gross domestic product (GDP) is the total monetary value of all the finished goods and services produced within a country over a period of time period (Echekoba *et al* 2015). It is noteworthy that GDP is usually calculated on an annual basis but it can be calculated on a quarterly basis as well. GDP includes all private and public consumption, government outlays, investments and exports minus

imports that occur within a defined territory.

Economic Growth is the increase in the inflation-adjusted market value of the goods and services produced by an economy over time. Growth in GDP entails growth in the economy.

Many theoretical models and theories have been developed and support the fact that international trade and openness in any economy enhances its growth.

Trade policy can be traced back to mercantilism, the classical economists (theory of Absolute Advantage by Adam Smith (1776) and Comparative cost Advantage by David Ricardo) and Heckscher-Ohlin trade theories. The theorists on economic growth include Harrod-Domar model, the Solow model, and the New Endogenous Growth Model (NEGM).

Theoretical framework in this study is based upon Harrod-Domar theory and New Endogenous growth model. The theories explained that trade policy leads towards economic growth through various channels. Trade liberalization increases capital inflow which takes several forms like foreign direct investment (FDI). Capital inflow increases investment level in the economy which leads to more production, more output and increases market size. Further increase in production process will cause increase in employment level which reduce poverty.

Empirically, the impact of trade liberalization has been researched into globally with mixed results. In the work of Rodriguez and Rodrik (1999) on Trade Policy and Economic Growth using Cross-National Evidence from different authors, it is observed that both positive and negative relationship exist between trade policy and economic growth. In a study conducted by Chaudhry, Malik and Faridi in 2010 using Co-integration and Granger causality techniques and time series data for the period of 1972-2007, they found out that trade openness and human capital are crucial for Pakistan's long-term economic growth and development.

Another study by Brafu-Insaidoo and Obeng in 2012 which focused on import liberalization and import tariff yield in Ghana for the pre-reform (1965 to 1982) and post-reform (1983 to 2007) period using regression analysis found that import liberalization has improved tariff revenue yield and efficiency in Ghana's import tax system. In a study conducted by Edwards (1998) on the relationship between openness and total factor productivity growth using comparative data for 93 countries (developed and developing). It is found that countries that are more opened have indeed experienced faster productivity growth in their economy.

Sakyi (2011) conducts a study on trade openness, inflow of foreign aid and economic growth in post-liberalization in Ghana and use Autoregressive Distributed Lag (ARDL). The study reports that the effect is positive and statistically significant in both the short-run and the long run, although reduced by their interaction. Dantama and Abdullahi, (2013) investigates the link between trade liberalization and

economic growth in Sub-Saharan Africa and use a panel data from 1970-2010. Pool ordinary least square (OLS) method is used for their analysis and the study discovers a positive significant link between trade liberalization and FDI on economic growth and a negative significant nexus among financial development, inflation and economic growth while population growth has no significant impact on economic growth of Sub-Saharan Africa.

Similarly, Olaifa, Subair and Biala, (2013) estimate the effects of trade liberalization on economic growth adopting OLS technique for a time series data of 1970-2012 and the result from the study reveals that liberalization supports economic growth in Nigeria with an evidence of a long run relationship. Ehinomen and Dasilva (2014) investigates the impact of trade openness on economic growth in the Nigeria using OLS method and the result reveals that trade openness has significant effect on the Nigeria economy. Sunday and Ganiyu (2015) assess the impact of trade liberalization on Nigeria economic growth between 1970 to 2012 using OLS method, the result reveals that trade liberalization does not affect the growth of Nigerian economy significantly.

In the study of Ezeuchenne (2017) on impacts of international trade in Nigeria's economic growth for the period of 1985 to 2015, it reveals an insignificant relationship between import and openness of the economy in the long run and an existence of a unidirectional relationship between economic growth and openness. Ajayi and Araoye (2017) in their research on the effect of openness on economic growth of Nigeria from 1970 to 2016, finds out that trade openness and economic growth shows a positive relationship and a negative relationship between economic growth and exchange rate.

Elijah and Musa (2019) investigate the dynamic impact of trade openness on economic growth in Nigeria between 1980 to 2016 using ECM, the result depicts that trade openness have a negative impact on economic growth in both the short and long run.

3. Methodology

Given the nature of this study, we source for data on Nigerian economy to test the impact of trade policy on real gross domestic product. The data series covered the periods of 1983- 2018. These historical data were obtained from the central bank of Nigeria annual statistical bulletin. The study makes use of experimental design which helps to provide both greater certainty and greater efficiency by making possible the simultaneous gathering of various lines of evidence. So, the experimental research design is used to establish and describe the relationship between the study variables while ARDL was used to investigate the relationship between trade policy and economic growth.

4. Model Specification

An empirical model suitable for the derivation of output or production function in which economic policy is included is formulated using a Cobb Douglass production function. The model specification for the Cobb Douglass production function is:

$$Q = AK^aL^b [A(0)E^{it}](i)$$

Where Q is the output, K is the capital, L is labour and A is efficiency and productivity growth which is linearly related to trade policy and economic policy in general.

However, for this study, some slight adjustments were incorporated into this model to suit the scope within which this study covers as well as availability of data. The Q in equation (i) is substituted with economic growth (GDP) in equation (ii) because economic performance is synonymous with output while capital and other factor in Cobb Douglass model in equation (i) is substituted with foreign direct investment, openness, exchange rate and per capital income in equation (ii) because of the significant role of FDI, exchange rate and per capital income on labour productivity, capital formation and efficiency.

Thus, the modified or expanded model for this study is specified as follows: $GDP_t = \beta_0 + \beta_1 FDI_t + \beta_2 OPENES_t + \beta_3 EXH_t + \beta_4 PCI_t + e_t$ eq(ii)

β_0 is an intercept, $\beta_1 FDI_t + \beta_2 OPENES_t + \beta_3 EXCH_t + \beta_4 PCI_t$ are parameters while e_t is error term

β_0 = estimate of the true y intercept or autonomous variable.

$\beta_1 \beta_n$ = estimate of the true parameters of the independent variable i.e. FDI, EXCH,

OPENES and PCI.

Gross domestic product (GDP) variable is included to capture the growth and activity of the economy. This also helps to determine how well an economy is performing, how rich an economy is, as well as the condition of general well-being in an economy.

Foreign Direct Investment (FDI) from abroad to the country is included in the model since the contribution of foreign direct investments to an economy may affect long run growth on the economy.

Openness is measured as the ratio of the sum of total export and total imports to the GDP. This is used to measure the degree of globalization within the economy and the extent of a country's growth.

Import is removed because it is believed to have been incorporated in openness.

Exchange Rate (EXCH) is measured by the official naira to US dollar exchange rate

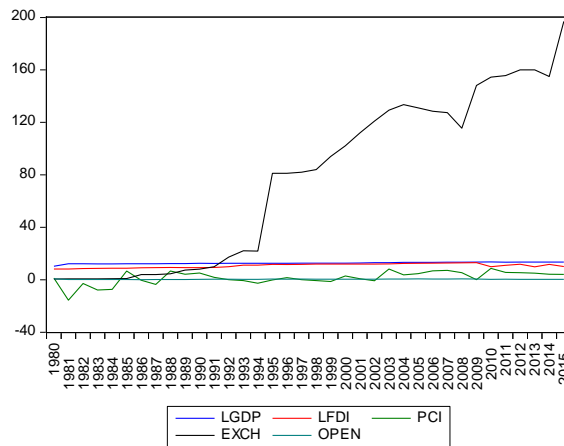
available in the Central Bank of Nigeria Statistical Bulletin. When this number increases, depreciation of local currency occurs while when reduces, appreciation of local currency also occurs. This also helps in determining the growth rate of an economy. Per capita income measures the income earned per person in a given country in a specific year. This is calculated by dividing the country's total income by its total population. It is also used to measure the growth rate in an economy. The data used for this study are secondary data obtained from CBN Statistical Bulletin and National Bureau of Statistics (NBS) annual reports.

Estimation Technique

ARDL technique will be used to test the hypothesis of this study. The advantages of this model are that, it will enable the researcher to investigate both the short and long run (gains) impact of the four variables on the economy, It will also help to investigate the mean-median lag of response to effect and it will give room for the computation of the dynamic response (step response function) of the economy of the four variables including the structural break.

5. Empirical Analysis

From the graph below, the structural break does not occur at just a single point in time. Particularly, there was structural break in 1986, 1988, 2004, 2010 and 2015. The researchers therefore constructed a dummy variable (break) that takes the value of one for these observations and zero everywhere else. It was observed that there was a change in the level and trend of the data that evolves over several years which the study referred to “innovational outlier”.



Authors' computation using Eview

Unit Root Test

The table below show that the probability value for the unit root test accept the null hypothesis for GDP and PCI at level and alternative hypothesis for FDI, exchange rate and openness at first difference. Hence, the study concludes that the variables in question have mixed order of integration and this suit the assumption of ARDL.

Table 1. Unit Root Test (Aurgumented Dickey Fuller)

Variable	Levels	First Difference	Order of Integration
GDP	-2.9484	-	1(0)
FDI	-3.5481	-3.5628	1(1)
OPEN	-1.9506	-3.5484	1(1)
PCI	-1.9510	-	1(0)
EXCH	-3.5442	-1.9510	1(1)

At 5% significance level

Authors' computation using Eview

Since it is necessary to select lag for ARDL based on information criteria, the study use Alkaike information criteria (see the Appendix) to select optimal lag instead of Schwarz information criteria because it is better to have an over fitted model than under fitted model. The select a lag of 1 because; it is a yearly data, the observation is small and selection of too much lag will reduce the available data for estimation and this will severely hampered the degree of freedom which can make the regression result spurious orshaky.

ARDL (1,1,1,0,1) model (1 lag for log GDP, 1 lag for log FDI, 1 lag for PCI, 1 lag for openness and 0 lag for exchange rate) is selected based on AIC. From the model, the researchers computed the long-short run test as well as the dynamic response of the GDP to trade policy. The table 2 below shows the estimated ARDL (1,1,1,0,1) model, the researchers accounted for structural break in the year 1986, 1988, 2004, 2010, and 2015. It can be seen that GDP(-1), PCI(-1), exchange rate, open (-1) and Constant (market forces) are positively significant at 1% level while log FDI(-1), LFDI(-1), PCI, openness and government control represented by (break) are not significant. Foreign direct investment and openness have negative effect and will be subjected to further test to see whether the effect occurs in the short run or long run.

Table 2. ARDL (1,1,1,0,1) Estimated Parameter Dependent Variable: GDP

Adjusted Sample: 1983 – 2018 (36) observations

Variable	Coefficient	Standard	T-stat	P-value
LGDP (-1)	0.359541	0.071324	5.040921	0.0000
LFDI	-0.051683	0.027364	-1888736	0.0706
LFDI (-1)	-0.046319	0.029653	-1.562013	0.1309
PCI	0.005134	0.005398	0.951032	0.3507
PCI (-1)	0.011880	0.004433	2.679844	0.0128
Exchange	0.004281	0.000645	6.636640	0.0000
Open	-0.054358	0.245541	-0.221382	0.8266
Open (-1)	0.954320	0.185342	5.148969	0.0000
Break	0.018979	0.072611	0.261379	0.7959
Constant	8.570792	0.853750	10.03906	0.0000

*Authors' computation using Eview*R²- adjusted: 0.959000

F-stat: 89.36421(0.0000)

S.E= 0.01

RSS: 0.250554

The study proceeded to test for the presence of long run relationship between the variables so as to actually confirm that 1 (1) are cointegrated. The table below shows the bound test result. The calculated F-stat is far greater than the critical values. It is therefore concluded that the long relationship between the variables is valid.

Table 3. ARDL F-Bound Test Result Null Hypothesis: No level Relationship F-Bound Test

Test stat	Value	Significance	1 (0)	1 (1)
F-stat	18.78308		Asymptotic	
1 < (D.O.F)	4		:n=1000	
		10%	2.45	3.52
		5%	2.86	4.01
		2.5%	3.25	4.49
		1%	3.74	5.06
Actual sample size	32	Finite sample: 36		

Authors' computation using Eview

The table below shows the estimated long run parameter. The result shows that the accumulated effect of FDI is negative which point to the fact that Nigeria has failed to internalized innovation and technology and that Nigeria economy absorptive capacities is poor. The effect of PCI, openness, structural changes and exchange rate

are positive. All the variables are statistically significant except the Break. A 1% change in FDI reduces GDP by 15% and is statistically significant; a 1% change in PCI increases GDP by 0.026% and 1% change in openness increases GDP by about 100% and is also statistically significant in the long run.

Table 4. Long Run Parameter Estimation ARDL (1,1,1,0,1)

Dependent variable: GDP Adjusted sample: 1983 – 2018(36)

Variable	Coefficient	Standard error	T-stat	P value
LFDI	-0.153018	0.058232	-2.627747	0.0145
PCI	0.026566	0.009788	2.714216	0.0119
Exchange	0.006684	0.000783	8.540513	0.0000
Openness	1.405183	0.474715	0.2960058	0.0066
Break	0.029634	0.113527	0.261026	0.7962
Constant	13.382267	0.473764	128.246680	0.0000

Authors' Computation using Eview

The table 5 below shows the estimated short run model. The result shows that the instantaneous effect of FDI on GDP is negative and significant. The instantaneous effect of exchange rate is positive and significant at 1% P-value.

Interestingly, one will be convinced that FDI impacted negatively on GDP both in the short run and long run while PCI and exchange rate has positive effect in the short run. However, in the short run, openness has negative effect but its effect is positive in the long run. The error correction mechanism (-0.64) is statistically significant at 1%. This implies that the economy revert back to its equilibrium at a speed of 64% whenever there is disequilibrium.

Table. 5.

Variable	Coefficient	Standard error	T-statistics	p-value
D(LFDI)	-0.051683	0.027364	-1.888736	0.0706
D(PCI)	0.005134	0.005398	0.951032	0.3507
D(EXCHN)	0.004281	0.000645	6.636640	0.0000
D(OPEN)	-0.054358	0.245541	-0.221382	0.8266
D(BREAK)	0.018979	0.072611	0.261379	0.7959
ECT(-1)	-0.640459	0.071324	-8.979908	0.0000

Authors' Computation Using Eview

On graph A in the Appendix, we can see that the negative effect of exchange rate on GDP never outweighs the positive effect of other variables hence the cumulative (long run) effect will be positive. Also, from figure A, we can see that GDP respond positively to trade policy between the initial horizon till the forth horizon and the response is positive throughout the period although GDP growth was characterized by fluctuation after the forth horizon and the effect dies off in the eight horizon.

6. Conclusion

This study reveals that a conclusive decision cannot be taken using the short run estimates. Policy recommendation should therefore be based on the long run results. The study found that GDP responded negatively to the FDI both in the short run and the long run while openness, PCI and exchange rate have positive effect on growth. However, the effect of exchange rate was negative in the short run which may be due to exchange rate volatility but in the long run, this appear to have disappear due to the market forces (see table 4). The negative effect between FDI and GDP is not surprising because the country has poor absorptive capacities. Therefore, the policy maker should adopt a sound foreign exchange policy and improve on innovation and technology to maximize the positive effect of trade liberalization in Nigeria.

List of Abbreviation:

ARDL: Auto-Regressive Distributed Lag

GDP: Gross Domestic Product

IRF: Impulse Response Function

FDI: Foreign Direct Investment

PCI: Per Capita Income

EXCH: Exchange rate

CBN: Central Bank of Nigeria

NBS: National Bureau of Statistic

Declaration

Availability of Data and Material

The data for this study was sourced from NBS and CBN. Curious read should consult CBN Statistical Bulletin (various years) and NBS statistical reports (various years).

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References

Ajayi, E. O. & Araoye, F. E (2019). Trade Openness and Economic Growth in Nigeria. *International Journal of Economics and Financial Management*, 4(2), pp. 2545-5966.

Akmal, M. S.; Ahmad, Q. M.; Hussian, M. & Muhammed, S. B. (2007). An empirical investigation of

the relationship between trade liberalization and poverty reduction: A Case for Pakistan. *The Lahore Journal of Economics*, 5(5): pp. 99-118.

Anderson, L. & Babula, R. (2008). The link between openness and long-run economic growth. *United States trade commission journal of international commerce and economics*, 6(8), pp. 1-20.

Ayorinde, F. & Olayinka, O. (2012). Trade liberalization and technology acquisition in the manufacturing sector: Evidence from Nigeria. *AERC Research Paper*, No. 117, August.

Baldwin, R. E. (2002). Openness and growth: what's the empirical relationship? *National Bureau of Economic Research (NBER)*, University of Chicago Press, Chicago.

Brafu-Insaidoo, W. G. & Obeng, C. K. (2012). Import liberalization and import tariff yield in Ghana: Estimating tariff buoyancy and elasticity. *American Journal of Economics*, 2(2), pp. 20-25.

Briggs, I. N. (2007). Nigerian mainstream trade policy into national development strategies. *ATPC work in progress: Economic Commission for Africa*, UNDP, No 52.

Chaudhry, I. S.; Malik, A. & Faridi, M. Z. (2010). Exploring the causality relationship between trade liberalization, human capital and economic growth: Empirical evidence from Pakistan. *Journal of Economics and International Finance*, 2(8), pp. 175-182.

Dimitriou, A & Stephen, G.H. (2007). *Applied Econometrics: A Modern Approach Using Eviews and Microfit*, Revised Edition First Edition.

Dowrick, S. & Jane, G. (2004). Trade openness and growth: Who benefits? *Oxford Review of Economic Policy*, 20(1), pp. 38-56.

Echekoba, F.N.; Okonkwo, V. I., & Adigwe, P.K. (2015). Trade liberalization and economic growth: The Nigerian experience (1971-2012). *Journal of poverty, investment and development*, 14, pp. 51-72.

Edmond, C.; Midrigan, V. & Yi Xu, D. (2015). Competition, mark-ups, and the gains from international trade. *American Economic Review*, 105(10), pp. 3183-3221.

Edwards S. (1998). Openness, productivity and growth: What do we really know? *Economic Journal, Blackwell Publishing for the Royal Economic Society*, 108 (447), pp. 383-398.

Ehinomen, C. & Dasilva, D. (2014). Impact of trade openness on the output growth in the Nigerian economy. *British Journal of Economics, Management & Trade*, 4(5), pp. 755-768.

Elijah, S. & Musa, A. B. (2019). Dynamic Impact of Trade Openness on the Economic Growth in Nigeria. *International Journal of Engineering and Advanced Technology (IJEAT)*, 8(5): pp. 609-616.

Ezeuchenne, K. (2017). International Trade and Economic Growth in Nigeria. *IOSR Journal of Humanities and Social Science* 22(6): pp. 33-43.

Ferrantino, B.; Michae, A.; Babula, R. & Ingersoll, D. (1997). *The dynamic effects of trade liberalization: An empirical analysis*. Washington, DC 20436: United States International Trade Commission, Publication 3069.

Fiestas, I. (2005). *The effects of trade liberalization on growth, poverty and inequality*. CILAE Foundation.

Githanga, B.W. (2015). *Trade liberalization and economic growth in Kenya. An empirical Investigation (1975-2013)*. Department of Economics, Soderteron University, Kenya.

Grossman, G. & Helpman, E. (1991). *Innovation and growth in the world economy*. Cambridge: MIT Press.