

# Analysis of the Potential Impact of the African Continental Free Trade Agreement (AfCFTA) on the Nigeria Economy.

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DOI: <u>https://dx.doi.org/10.47772/IJRISS.2023.71023</u>

Received: 04 September 2023; Accepted: 12 September 2023; Published: 16 October 2023

# ABSTRACT

This paper assesses the potential impact of the Africa Continental Free Trade Agreement (AfCFTA) on the Nigeria economy. Autoregressive Distributed Lag (ARDL) Model were employed on quarterly data variables, including export and import trade for the period, March 2010 – June 2020. The result validates the trade-led growth hypothesis in the case of AfCFTA and Nigeria economic growth. Showing export trade as positively related with gross domestic product in the long run, agreeing with economic theory, that export impact positively on gross domestic product. Import indicates negative effect on gross domestic product in the long run. The error correction term (ECT) coefficient indicates that at 29.14% the disequilibrium due to the shock in the previous quarters is adjusted back to the long run equilibrium in the current quarter. The study suggests that for Nigeria to truly benefit from the AfCFTA, an outward-oriented strategy should be adopted, through trade composition by switching from exports of raw materials and semi-manufactured goods to high valued-added goods. Also, the government should scale up issues of productivity in the real sector of the economy and shift from being a net importer to a net exporter of non-oil products. Our results contradict earlier observers of Nigeria, who have argued that the implementation of the AfCFTA could reduce the tariff, revenue accruals, frustrate industrialization, and promote the dumping of products on the Nigerian economy.

Key Words AfCFTA, Autoregressive Distributed Lag, Economic Growth.

# INTRODUCTION

The decision to establish the Africa Continental Free Trade Agreement (AfCFTA) was made in January 2012 at the 18th ordinary Session of the Assembly of AU Heads of State and Government in Addis Ababa, after they recognized that intra-African trade advancement is a critical factor for sustainable economic development, job creation, and powerful integration of Africa into the global economy. They then decided to create the Continental Free Trade Area (CFTA) by 2 January 2012. As a result, they adopted a system guide and design for maximizing the CFTA's creation, as well as an action plan for boosting intra-African trade (BIAT). In 1991, Nigeria launched the decision to construct AfCFTA at the Economic and Trade Policy Leadership, "Abuja Treaty."

It went into effect on May 12, 1994. The AfCFTA discussions were initiated during the 25th Ordinary Session of the AU in 2015 as part of the implementation framework of the "Abuja Treaty" to build an African Common Market. Some goals have been established, including the completion of the East African Community (EAC), the Eastern and Southern African Development Community (COMESA), and the Southern African Development Community (SADC) Tripartite FTA (TFTA) plan by 2014. Fulfillment of FTAs by Non-Tripartite (RECs) between 2012 and 2014, through equitable arrangements like the EAC-COMESA-SADC Tripartite initiative or by mirroring the inclinations of their member states, strengthening of the tripartite and other regional FTAs into a CFTA initiative between 2015 and 2016.

The CFTA's main goals are to create a single continental market for goods and services, with free



movement of businesspeople and investments, and thus pave the way for the faster establishment of the Continental Customs Union, the African customs union; it was also aimed at expanding intra-African trade through better harmonization and coordination of trade liberalization and facilitation regimes and instruments across RECs and Africa in general; as we have seen. The AU summit in 2015 ordered two stages of CFTA discussions. Stage 1 will see the creation of a single market for products and services, while Stage 2 will see the formation of laws governing investment, intellectual property, and competition policy.

CFTA was adopted by 44 African countries on March 21, 2018, and 5 countries signed the agreement, except for Nigeria and five other countries. The agreement establishing CFTA entered into force on May 30, 2019, for the 24 countries that had deposited their instruments of ratification, as stipulated in Article 23 of the agreement, while many countries are expected to have deposited their instruments of ratification before the 12th Extraordinary Session of the Assembly of the AU on the AfCTA in Niamey, Niger Republic on July 7, 2019.

Proponents of CFTA believe that the market coverage of this development in Africa will include around 1.2 billion people and a combined GDP of more than US\$3.4 trillion, as well as a burgeoning middle class. According to a UNECA analysis, the AfCFTA has the potential to increase intra-African commerce by 52.3 percent. Despite the early jubilation that welcomed her signing into the agreement, there have yet to be any well-articulated studies on the impact of AfCFTA on Nigeria.

Observers of Nigeria have argued that the implementation of the AfCFTA could reduce the tariff, revenue accruals, frustrate industrialization, and promote the dumping of products on the Nigerian economy. Being the largest economy in Africa, with a thriving oil sector and decent external reserves, some analysts believe that the implementation of the AfCFTA would create a situation whereby smaller African economies would be used by advanced industrial economies to re-export their products to Nigeria, thereby frustrating the ongoing industrialization drive in the country. Others also believe that the revenue loss from the abolition of tariffs would be significant for a country that is grappling with persistent budget deficit and poor infrastructure.

These arguments, although seemingly plausible, have not been subjected to rigorous empirical analysis to test their validity. In addition, a formal empirical analysis will present the policy authorities with arguments to justify or review their position, as may be necessary.

Based on the foregoing, this study intends to empirically assess the potential impact and implications of the AfCFTA on the Nigeria economy. It is expected that the outcome of this study could help Nigeria's ongoing effort at implementation of the AfCFTA, indicating areas for policy adjustments or new initiatives to address potential challenges.

# LITERATURE REVIEW

There seems to be a general agreement on the significant contributions of trade to sustainable growth. Several empirical studies have attempted to assess regional integration for developing economies without necessarily achieving logical and definite conclusion vis-a-vis cost and benefits as it relates to both trade creation and diversion, and the result for Africa in this regard is mixed (Kituyi, 2016)

Yang & Martinez-Zarzoso, (2014) with data between 1996 and 2000 re-examines the efficacy of the Linder Hypothesis in the Asian Continental Free Trade Area (ACFTA). The Linder Hypothesis assumption implies that the nations with similarity in the GDP per capita and demand patterns enjoy more trade flow with each other. In essence, trade is assumed to have been boosted through ACFTA with Linder effect. However, this study fails to establish the impact of Linder hypothesis as relevant coefficient parameters exhibit



statistical insignificance.

Darku & Appau (2015) adopts the dynamic gravity model (DGM) to investigate the effects of regional trade agreements on Sub-Sahara African region. The results showed that the establishment of Common Market for Eastern and Southern Africa (COMESA), Economic Community of West African State (ECOWAS) and South African Development Commission (SADC) result in massive jump in trade volume and value among member countries while the formation of Economic Community of Central Africa State (ECCAS) impacted on both extra-ECCAS and intra-ECCAS bilateral trade flows negatively in the year under review.

Tanyi (2015) also adopts the gravity model with beta-estimated coefficients from the Association of Southeast Asian Nations (ASEAN) Free Trade Area (FTA) to benchmark potential trade in Africa's five regions on the strength of their colonial heritage, languages, political and socio-economic characteristics, infrastructure, among others. In his conclusion, the author found that the coming of CFTA in the continent would lead to positive gains and propel the economies to a greater height. The study also affirmed that those gains may not be evenly or equitably distributed among the regions owing largely to their divergence in the degree of losses in tariffs revenue, size of economies, infrastructure, and differences in exports.

Balistreri et al. (2015) applies the Dixit-Stiglitz elasticities of substitution for goods in Africa. His findings revealed that the trade cost of non-tariffs are more critical barriers to the free flow of trade in Africa than tariffs. The study showed how substantial gains would be accrued from deep integration especially in the Multilateral Free Trade Area (FTA), which incorporated decreasing non-tariff barriers, facilitation of trade, business service cost, as well as tariffs abolition. The estimated deep integration cumulative welfare benefits ranged0from 1.4 per cent to 1.4 per cent in terms of consumption for East African Community (EAC) Common Market for East and Southern Africa (COMESA) and South Africa Development Commission (SDDC) respectively, and the consumption benefits for member states is to the tune of between 1.8 per cent and 2.9 per cent. The author further established a significant disparity across the countries individually in terms welfare gains.

Lorenzo & Fernando (2015) improves sectoral linkages of Ricardian model, heterogeneity of sectoral production and intermediate traded goods to measure the welfare impacts from tariff variations and trade. The authors calculated the elasticities to assess NAFTA effects on tariff cut. The results show welfare improvement of about 1.31 percent in Mexico, 0.08 per cent in the US but a decline in welfare of 0.06 per cent was recorded in Canada. They also found overwhelming expansion in intra-bloc trade of 11 per cent for Canada, 41 per cent for the US and about 118 per cent for Mexico. It was established that the impacts of welfare occasioned by a cut in tariff are lower when attention on input and output linkages are not based on production structure. The study identified the significant role of intermediate goods, sectoral linkages and heterogeneity in measuring the reduction in tariff to ascertain welfare benefits.

Kituyi, (2016) and Urata & Okabe (2014) in separate studies examine about Sixty-Seven (67) countries with different models of Free Trade Area (FTA) on a specific level of products between 1980 and 2006 with the use of gravity equation method. The findings revealed that developing economies with FTAs are more susceptible to trade diversion based on empirical evidence than 23 advanced countries in similar trade agreement, because the developing countries have the tendency to slam higher tariffs on non-member countries which often result in trade diversion. Moreover, trade creation is less likely to occur with bilateral FTAs than custom union and multi-lateral Trade Agreement according to the study.

Urata and Okabe (2014) analyze various types of free trade agreements (FTAs) including 67 countries on a product specific level. The study focused on the period from 1980-2006 using the gravity equation model. Investigations from the study indicate that the probability of FTAs in developing economies leading to trade diversion is higher than that of FTAs involving developed economies. This is so because in developing countries, the primary determinant to trade diversion is the higher tariffs that are imposed on non-member



states. Furthermore, the findings suggest that multilateral FTAs and custom unions are more likely to result in trade creation than bilateral FTAs. In addition, the authors imply that for an FTA to result in trade creation, reducing external tariffs is also an important variable in avoiding trade diversion. variables other than reducing tariffs.

Emagne (2017) investigated the impact of trade liberalization on Ethiopian economic growth. Based on the Solow-Swan model, the study particularly indexed trade liberalization by trade openness and economic growth by real gross domestic product. The empirical investigation covered a datum of 36 years from 1980 to 2016 and utilized the Vector Error Correction Model (VECM). The choice of the method of estimation was attributable to integration process of the variables as result from the stationarity test carried out using the augmented Dickey-Fuller showed evidence of an integration process of one I(1). The empirical outcome of the investigation revealed that trade liberalization significantly and positively impacted on the economic growth of Ethiopia.

Hamad, Mtengwa & Babiker (2014) examined the effect of trade liberalization on the economic growth of Tanzania using the ordinary least squares (OLS) method of estimation from 1970 to 2010. The ordinary least squares (OLS) technique was used because of its Best Linear Unbiased Estimate (BLUE) properties. The study examined two main periods: the close economy period which ran from1970 to 1985 and the open economy period from 1986 to 2010. Generally, the result of the investigation divulged that trade openness exercised a positive and significant influence on Tanzania's total output. Howbeit, the impact of trade openness was found to be greater during the closed economy period when juxtaposed with the open economy period.

The study undertaken by Aiyedogbon & Ohwofasa (2016) sought to examine the relationship between trade liberalization and economic from 1980 to 2013 by analyzing data using the Vector Error Correction Model (VECM). The adoption of the restricted vector auto-regression (VAR) was due primarily to the outcome of the Phillips-Perron stationarity test as the latter revealed that all the series were stationary in their first difference. The study estimated two models with the index of industrial production and real gross domestic product examined individually with respect to Nigerian terms of trade and degree of openness. The empirical findings following the estimated model revealed that economic growth in Nigeria is impacted upon by openness of the foreign sector and trade liberalization.

Oladipo (2017) examines the impact of trade liberalization on long run economic growth in Mexico using quarterly data from 1980q1 to 2008q4. Growth was measured using per capita gross domestic product (GDP) and trade liberalization proxy by trade openness. The secondary data obtained from Branco de Mexico and the International Financial Statistics were analyzed using the Error Correction Model following evidence from the ADF and Philip-Perron (PP) unit root test that the series had identical order of integration of one I(1). The outcome of the analysis conducted revealed that trade liberalization drives long run economic growth of the Mexican economy, however, the contribution of human capital and labor force to growth was found to be minimal.

Iheanacho (2017) x-rayed the trade impact of trade liberalization in developing economies with specific focus on Nigeria from 1981 to 2014 as the study employed the Autoregressive Distributed Lag (ARDL) method of estimation. The choice of the estimation technique bothered on the integration process of the interested variables as the ADF and Philip-Perron unit root test showed integration process of one I(1) and zero I(0). For the study, growth was measured using gross domestic product per capita and trade liberalization indexed using trade openness which is total trade (export plus imports) to GDP. Financial development was captured using three indicators: credit to private sector by deposit money bank as a percentage of GDP, ratio of liquid liability of bank and non-bank financial development to GDP and deposit money bank assets to GDP. The empirical findings of the study revealed a negative and significant impact



of trade liberalization on growth in the long run as financial development was found not to impact on the economic growth of Nigeria.

Some scholars had dwelt on the contribution of trade openness to economic growth, for instance Mireku, Animah-Agyei & Domeher (2017) empirically examined the effect of trade openness on economic growth volatility of Ghana the autoregressive distributed lag (ARDL) method of estimation covering the period length extending from 1970 to 2013. The study employed the use of the ARDL bounds test approach to cointegration due to Pesaran et al. (2001). The authors justified the use of the ARDL approach because of the advantages over the conventional cointegration technique and its ability to fit well for small samples (see Pesaran et al., 2001). The study examined variables such as trade openness, financial sector development volatility (indexed by cyclical component of domestic credit to private sector expressed as a percentage of GDP), average exchange rate, inflation and financial openness (measured using intensity of capital controls). Largely, the outcome of the estimation divulged that trade openness positively influenced short and long run volatility in the economic growth of Ghana. The study also found that fluctuations in domestic credit to private sector, impulses resulting from economic liberalization and financial openness negatively results in short run volatility in the economic growth of Ghana. The implications of the findings are that developing economies need to properly assess their own realities in their trade policies to limit economic growth volatility.

Keho (2017) included the role of capital stock and labour in the nexus between trade and growth and examined the impact of trade openness on the economic growth of Cote d'Ivoire. The author utilized the autoregressive distributed lag (ARDL) and Toda and Yamamoto Granger causality method (T-Y) of estimation from 1965 to 2014, using a multivariate framework including capital stock, labour and trade openness as regressors. The empirical findings following the estimation of the ARDL model showed that economic growth was influenced positively by trade openness in the long and short run, thus, validating the trade-led growth hypothesis in the case of Cote d'Ivoire. This infers that a substantial portion of the economic growth of the case study is external.

Ngepah & Udeagha (2018) in a study on African Regional Trade Agreements and Intra-African Trade, use panel data from 1995-2014. The paper investigates the effects trade creation and diversion through a gravity model estimation using the Eicker-White robust covariance Poisson pseudo-maximum likelihood method. The findings of the study revealed that regional trade agreements may enhance trade, however, depending on how effective member countries are in implementation. The trade gains of regional trade agreements do not come at the expense of trade with non-members. By controlling for the duration within a regional trade agreement, we also show that a very small but significant share of the benefits occurs over time in the Economic and Monetary Community of Central Africa, Southern African Development Community, Southern African Customs Union, and West African Economic and Monetary Union. Trade benefits seem to decline over time in the East African Community.

Considering the effects of trade liberalization on economic growth, Ejike, Arinze & Chidi (2018) focused on the effect of trade liberalization on economic growth in Nigeria from 1980 to 2015 using secondary data sourced from the World Development Indicators (WDI) of the World Bank and Statistical Bulletin of the Central Bank of Nigeria (CBN). The study indexed trade liberalization using trade openness measured using the ratio of import plus export to gross domestic product, with economic growth proxied by real gross domestic product and utilized the Ordinary Least Square (OLS) method as the estimation approach or econometric technique produces the best, linear, unbiased estimator. Generally, the empirical findings of their study divulged that trade liberalization positively influences economic growth and development in Nigeria and recommended the creation of enabling environment in the country to boost domestic production and revitalize ailing industries.

The work by Yakubu & Akanegbu (2018) concentrated on the impact of trade openness on economic



growth of Nigeria using the ordinary least square method and granger causality approach from 1981 to 2017. The basis for the choice of these estimation techniques was borne out of the fact that the OLS method minimizes the sum of the squared errors, with the property of BLUE (Best, Linear Unbiased Estimator). The study measured growth using real gross domestic product (RGDP) with control variables such as foreign exchange rate and per capita income used. The empirical findings of the study disclosed a positive and significant impact of degree of openness on real GDP as a unidirectional causality was found running from RGDP to degree of openness.

From our reviews it is imperative to note that RTAs are likely to transform the establishment of international trade, however, their actual impact on trade flows remains controversial. Literature shows that poor implementation of RTAs has led to tensions between countries, and it has also increased the risk of inter-state conflict. At the same time, the economic and political adjustment in pursuing RTAs have undermined domestic livelihoods and this has created winners and losers, hence encouraging competition among member countries Brown et al (2005). The actual consequences of shifting to regionalism for global trade show that RTAs generate large trade flows between the member states, although often at the cost of third countries (Caliendo & Parro 2015).

# METHODOLOGY

Trade and economic growth remain a major concern for countries, as a result many studies have adopted the use of different methodologies to capture the implication of regional trade on economic growth in developing and developed countries. Based on the foregoing, we attempt to empirically assess the potential impact of the AfCFTA on the Nigeria economy, using Autoregressive Distributed Lag (ARDL) Model.

### **Model Specification**

The general idea of the model is derived within the context of the theoretical link between trade openness and economic growth as noted in the literature. Therefore, we have formulated a multiple linear regression model to assess the effect of trade openness on economic growth, which is specified as follows.

 $GDPpc_t = f(INF_t EXR_t GEXP_t, EXP_t, IMP_t) \dots (1)$ 

Where, Gross Domestic Product per capita=f (Inflation, Exchange Rate, Government Expenditure, Export as percentage of GDP, Import as percentage of GDP).

The mathematical form for model 1, can be expressed as.

 $GDPc_{it} = \beta_0 + \beta_1 INF_t + \beta_2 EXR_t + \beta_3 GEXP_t + \beta_4 EXP_t + \beta_5 IMP_t \qquad \dots (2)$ 

However, equations above are exact or deterministic in nature. To allow for the inexact relationship among

the variables as in the case of most economic variables, the stochastic error term " $\mu_t$ " is added to the three equations. Thus, the study expresses the econometric form of the models as:

$$GDPc_{it} = \beta_{i,t} + \beta_{1,t} INF_t + \beta_{2,t} EXR_t + \beta_{3,t} GEXP_t + \beta_{4,t} EXP_t + \beta_{5,t} IMP_t + \mu_{t...}$$
(3)

Where, GDPc<sub>it</sub> = is Gross Domestic Product (GDP) per capita,

INF = Inflation

EXR = Exchange Rate



GEXP= Government Expenditure

EXP= Export as Percentage of GDP

IMP = Import as Percentage of GDP

t, denote number time,

 $\beta_t$  coefficient of the variables

 $\mu_t$  = stochastic error term.

To properly estimate the parameters of the postulated models, we rescale some of the variables by logging them, as follows.

 $Log(GDPc_{it} = \beta_{i,t} + \beta_{1,t} INF_t + \beta_{2,t} EXR_t + \beta_{3,t} LOG(GEXP_t) + \beta_{4,t} LOG(EXP)_t + \beta_{5,t} LOG(IMP_t) + \mu_t \dots (4)$ 

Estimating the potential impact of African Continental Free Trade Area (AfCFTA) on Nigeria Economic Growth, we employ the Autoregressive distributed lag (ARDL) bound testing approach developed by Pesaran et al., (2001). Before estimating it, necessary tests would be carried out which include both unit root and cointegration tests. It is also necessary to test for the long-run relationship among the variables through the cointegration among variables.

The data utilized for the study were sourced from the Central bank of Nigeria; National Bureau of statistics; Economic and Financial Review and Annual reports; World Bank and IMF International and Financial statistics, amongst others.

## ESTIMATIONS AND RESULT ANALYSIS

Statistics	LGDP	LGOVT_EXP	LEXRATE	LINFL	LEXPORT	LIMPORT
Mean	7.207984	2.672160	223.8041	11.82027	3.725071	3.603057
Median	7.208374	2.634354]	196.9500	11.40182	3.762853	3.623163
Std. Dev.	0.046127	0.190664	75.17462	2.668470	0.176380	0.124259
Skewness	-0.378800	-0.024200	0.397864	0.453322	-0.484592	-0.281093
Kurtosis	2.600723	2.515166	1.406135	2.600382	1.933754	2.637699
Jarque-Bera	1.283416	0.415462	5.553778	1.717973	3.633345	0.782801
Probability	0.526393	0.812426	0.062232	0.423591	0.162566	0.676109
Observations	42	42	42	42	42	42

Table I. Descriptive statistics

Source: researchers' computation using E-views 9.

Table 1 shows the result of descriptive statistics of the study, it indicates that the standard deviations of the variables employed are far away from their means. The Skewness of the distribution shows negative values of gross domestic product, government expenditure, export and import, this indicates that are normally distribution, because their values are less than zero and also negative while exchange rate and inflation rate shows positive values but less than one, it implies that are normally distributed. For Kurtosis, all the



variables are not normally distributed because they are greater than 3.

The Jarque-Bera test for normality is also estimated. It indicates that all the variables employed are normally distributed as their p-values are greater than 5%. We can conclude that the model is strong enough.

Table II. Unit Root Test

	Test at level		Test at first difference	
Variables	ADF test	PP test	ADF test	PP test
LGDP	-0.561864	-1.094700	-6.608540	-8.843587
LGOVT EXP	1.318259	0.712973	-9.243425	-17.82861
LEXRATE	-1.954731	-2.041881	-5.592967	-5.544606
LINFL	-2.675292	-0.480810	-3.529632	-2.323225
EXPORT	-0.803192	-1.896755	-5.276096	-5.276096
IMPORT	-3.817204	-3.887529		

Source: researchers' computation using E-views 9.

Following the unit root test, it clearly shows that all the variables employed are stationery at first difference, that is they follow are (I) process in both ADF and PP test except for import which is stationery at level i.e. (0) process. Therefore, there is mixture of order of integration among the variables employed.

Table III. Result of cointegration Bound test

Statistics	Value		Critical bound			
<b>F-statistics</b>	37.22795		1%	2.5%	5%	10%
		I(0) Bound	3.73	2.7	2.39	2.08
		I (1) Bound	4.15	3.06	3.38	3

Source: researchers' computation using E-views 9.

From table 3, the result of cointegration bound test indicates a higher value of F-statistics than any of the critical values of all bounds 37.22795. Therefore, there is strong evidence of cointegration in the model. This provides evidence of adopting Autoregressive Distributive Lag model (ARDL) in the study.

Autoregressive Distributed Lag (ARDL) Result

The results of the unit root and bound tests conducted in the study suggest the use of the ARDL model. The appropriate model (number of lags) is selected automatically using Akaike Information Criterion (AIC) which is seen as a more robust model. Below, both short run and long run parameters of the model are presented.

#### Short run Relationship

Below the result of short run parameters of the ARDL model is presented. AIC suggests a (4, 2, 4, 1, 3, 4) model after testing for up to 12500 different models.



Variables	Coefficient	Std. Error	t-Statistic	Prob.
LGDP(-1)	0.159926	0.051878	3.082713	0.0081
LGDP(-2)	0.048859	0.058583	0.834012	0.4183
LGDP(-3)	0.047500	0.059606	0.796894	0.4388
LGDP(-4)	1.035181	0.057449	18.01906	0.0000
LGOVT_EXP	-0.026141	0.010059	-2.598909	0.0210
LGOVT_EXP(-1)	-0.013071	0.008780	-1.488623	0.1588
LGOVT_EXP(-2)	-0.012865	0.008360	-1.538966	0.1461
EXCHANGE_RATE	0.365605	0.408905	0.453965	0.6568
EXCHANGE_RATE(-1)	-0.000162	8.752405	-1.850316	0.0855
EXCHANGE_RATE(-2)	0.052305	0.000101	0.699018	0.4960
EXCHANGE_RATE(-3)	0.484505	0.000106	0.803269	0.4352
EXCHANGE_RATE(-4)	-0.000108	7.916705	-1.368978	0.1926
INFLATION	-0.001400	0.002272	-0.616327	0.5476
INFLATION(-1)	0.002625	0.002171	1.209137	0.2466
LEXPORT	0.049417	0.015593	3.169239	0.0068
LEXPORT(-1)	0.65E-05	0.016737	0.002178	0.9983
LEXPORT(-2)	0.040499	0.018346	2.207482	0.0445
LEXPORT(-3)	-0.037382	0.017440	-2.143487	0.0501
LIMPORT	0.005254	0.011025	0.476549	0.6410
LIMPORT(-1)	0.021403	0.011116	1.925421	0.0747
LIMPORT(-2)	0.011485	0.011502	0.998588	0.3349
LIMPORT(-3)	-0.000367	0.012076	-0.030410	0.9762
LIMPORT(-4)	-0.015696	0.010634	-1.476071	0.1621
R-squared	0.995505			
Adjusted R-squared	0.988119			
Serial correlation	0.2838			
Heteroscedastics	0.7865			
Normality	0.486414			
Ramsey test	0.2021			

Source: researchers' computation using E-views 9.

The results from Table 4 indicate positive and significant autoregressive dependent variable, that is GDP at lag 1 and lag 2 in the short run, while insignificant at lag 2 and 3. it shows that gross domestic product depends largely on itself in the short run. Government expenditure itself indicates negative and statistically significant effect on gross domestic product in Nigeria in the short run. Exchange rate shows positive but statistically insignificant effect on gross domestic product in Nigeria in the short run, at lag 1 it is negative and insignificant, at lag 2 and 3 positive but insignificant while lag 4 shows positive and insignificant.

The inflation rate itself shows a negative effect on gross domestic product in the short run at lag 1 indicates positive effect.

Export from Table 4 depicts positive] effect on gross domestic product in the short run, at lag 1 and 2 indicates positive effect also while lag 3 indicates negative relationship. Import shows positive effect on gross domestic product in Nigeria in the short run, at lag 1 and 2 shows positive effect while lag 3 and 4 indicates negative effect on gross domestic product in Nigeria in the short run.



The R-squared and its adjusted value are very high 0.995505, this implies that 99% change in gross domestic product is explained by government expenditure, exchange rate, inflation rate, export and import Nigeria. The model passed all post estimation tests such as serial correlation, Heteroscedasticity, Ramsey and normality test, as their probability values are greater than 5%, the model is robust.

#### Long run and Error Correction Result

Owing to the bound test, which confirms the existence of long run relationship among the variables of interest, the ARDL Cointegration and Long run form results are presented below.

Variables	Coefficient	Std. Error	t-Statistic	Prob.
LGOVT EXP	0.178673	0.075954	2.352375	0.0338
LEXRATE	-0.000279	0.000154	1.810646	0.0917
LINFL	-0.004200	0.002702	-1.554349	0.1424
EXPORT	0.180365	0.053451	-3.374372	0.0045
IMPORT	-0.075751	0.066885	-1.132554	0.2764
CointEq(-1)	-0.291466	0.015106	19.294547	0.0000

Table V. Estimated ARDL Cointegration and Long run form Results

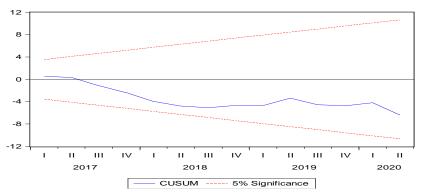
Source: researchers' computation using E-views 9.

The result from table 5 shows that government expenditure has a positive and statistically significant effect on gross domestic product in Nigeria in the long run, which is in line with a-priori expectation that government expenditure impacted positively on gross domestic product in Nigeria. Contrarily, Exchange rate shows negative but statistically insignificant effects on gross domestic product in Nigeria in the long run. Economically it affects GDP in a negative manner, and inflation rate depicts negative effects on gross domestic product in Nigeria in the long run. Export shows positive relationship with gross domestic product in Nigeria in the long run, this is in line with economic theory that export impacts positively on gross domestic product. Import indicates negative effect on gross domestic product in Nigeria in the long run.

The beautiful thing in the model is that error correction term (ECT) meets all the theoretical and statistical requirements both in the sign and size. The ECT coefficient is -0.291466 and significant at 5%, this indicates that at 29.14% the disequilibrium due to the shock in the previous quarters is adjusted back to the long run equilibrium in the current quarter.

#### **Model Stability Diagnostics**

The Cusums test below show the stability of the model.



Source: researchers' computation using E-views 9.



From figure 1 the cusum plot is within 5% level of significant, indicating no chance of having spurious regression.

## CONCLUSION AND POLICY RECOMMENDATIONS

The purpose of this study is to empirically assess the potential impact and implications of the AfCFTA on the Nigeria economy. It is expected that the outcome of this study could help Nigeria's ongoing effort at the implementation of the AfCFTA, indicating areas for policy adjustments or new initiatives to address potential challenges. We employed Autoregressive Distributed Lag (ARDL) Model to achieve the objectives of the study.

Based on the empirical analysis conducted, the results validate the trade-led growth hypothesis in the case of AfCFTA and Nigerian economic growth. Therefore, the study suggests that for Nigeria to truly benefit from the AfCFTA, an outward-oriented strategy should be adopted through trade composition by switching from exports of raw materials and semi-manufactured goods to high valued-added goods. In addition, the government should scale up issues of productivity in the real sector of the economy and shift from being a net importer to a net exporter of particularly non-oil products. Thus, enough, and urgent genuine diversification of the economy is very important to enable the country to reap the potential benefits from the AfCFTA arrangement. The CBN is to continue its intervention schemes especially on the agricultural interventions as well as manufacturing sector.

## REFERENCES

- 1. Aiyedogbon, J. & Ohwofasa, B. O. (2016). Effect of Trade Liberalization on Development in Nigeria, 1980-2013. International Journal of Developing and Emerging Economies, 4(2), 15-27.
- 2. Balistreri, E. J., Tarr, D. G., & Yonezawa, H. (2015). Deep integration in Eastern and Southern Africa: what are the stakes? Journal of African Economies, 24(5), 677-706.
- 3. Caliendo, L., & Parro, F. (2015). Estimates of the Trade and Welfare Effects of The Review of Economic Studies, 82(1), 1-44.
- Darku, A. B., & Appau, A. B. (2015). Analyzing sub-Saharan Africa trade patterns in the presence of regional trade agreements-the case of COMESA, SADC, ECCAS, and African Finance Journal, 17(1), 41-66.
- 5. Ejike, D. C., Arinze, A. S., & Chidi, O. F. (2018). Trade Liberalization and Economic Growth in Nigeria: A Cointegration Analysis (1980-2015). GPH-Journal of Business Management,1(1), 68-81
- 6. Emagne, Y. (2017). Exploring the relationship between trade liberalization and Ethiopian economic growth. Ethiopian Journal of Economics, 26(2), 109-141.
- 7. Hamad, M. M., Mtengwa, B. A., & Babiker, S. A. (2014). The impact of trade liberalization on economic growth in Tanzania. International Journal of Academic Research in Business and Social Sciences, 4(5), 514-532.
- 8. Iheanacho, E. (2017). ARDL approach to trade liberalization and economic growth in the developing country: Evidence from Nigeria. African Research Review, 11(2), 138-159.
- 9. Keho, Y. (2017). The impact of trade openness on economic growth: The case of Cote d'Ivoire. Cogent Economics & Finance, 5(1), 1-14.
- 10. Kituyi, M. (2016, May). This African trade deal could improve lives across the whole In World Economic Forum.
- 11. Mireku, K., Animah Agyei, E., & Domeher, D. (2017). Trade openness and economic growth volatility: An empirical investigation. Cogent Economics & Finance, 5(1),
- 12. Ngepah, N., & Udeagha, M. C. (2018). African regional trade agreements and intra-African Journal of Economic Integration, 33(1), 1176-1199.



- 13. Oladipo, O. S. (2017). Does trade liberalization cause long-run economic growth in Mexico? An empirical investigation. International Journal of Economics and Finance, 3(3), 63.
- 14. Tanyi, K. T. (2015). Assessing Africa's two billion populated markets by 2063: The facts and
- fallacies of a Continental Free Trade Area (CFTA). Business and Economics Journal, 6(3), 1.
- 15. Urata, S., & Okabe, M. (2014). Trade Creation and Diversion Effects of Regional Trade Agreements: A Product-level Analysis. The World Economy, 37(2), 267-289.
- 16. Yakubu, M. M., & Akanegbu, B. N. (2018). Trade Openness and Economic Growth: Evidence from Nigeria. European Journal of Business, Economics, and Accountancy,6(4),30-44.
- 17. Yang, S., & Martinez-Zarzoso, I. (2014). A panel data analysis of trade creation and trade diversion effects: The case of ASEAN–China Free Trade Area. China Economic Review, 29, 138-151.