Effects of International Trade on Economic Growth of Nigeria

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ABSTRACT
This study empirically analyzed the effects of international trade on the economic growth of Nigeria from 1981-2018 using the Ordinary Least Squares (OLS) technique. The fundamental factors limiting Nigeria's trade include the country's narrow production and export base dominated by low value products such as raw materials and primary commodities, very high trade cost, tariff and non- tariff barriers to intra-Nigeria trade. The specific objectives are to ascertain the effects of; exchange rate, trade policy changes and to examine how trade liberalization affects Nigeria's economic growth. In line with the objectives of the study, five research questions and hypotheses were formulated to guide the study. Literature was reviewed under the following headings; conceptual framework, and empirical review. The study was anchored on the theory of comparative cost and the Factor Endowment theory. Independent variables such as, policy changes (dummy), exchange rates and liberalization/openness were regressed on real Gross Domestic Product (GDP) of Nigeria using secondary data from Central Bank of Nigeria Statistical Bulletin 2018. The econometric diagnostics for presence of unit roots in the series was conducted using the Augmented Dickey-Fuller technique and the tests indicate that the variables were integrated in order of 1(1). The Johansen co-integration test was conducted in determining the cointegration among the variables in the various equations which confirms the absence of long-run equilibrium. Findings from the study revealed that exchange rates in the country had negative and insignificant relationship with economic growth. However, the several trade policies in Nigeria have been seen to retard growth in economic prosperity of Nigeria's economy since the impact is negative and significant on GDP growth. Consequently, the study recommends that since import and export trade have no significant effects on growth in Nigeria, the federal government should embark on programmes and policies to promote local production and discourage importation of certain essential products for trade to have the desired impact on the growth of Nigeria's economy.
Keywords: Exchange Rates, Trade, Policy, Trade Liberalizaion and Economic Growth

INTRODUCTION
International business or trade has been an area of interest to policy makers and economists. The importance of international trade lies in the ability to obtain goods which cannot be locally produced in the country or which can only be produced at a greater expense. It also enables a nation to sell its domestically produced goods to other countries of the world. However, the performance of an economy in terms of growth rates of output and income per capita has not only been based on the domestic production and consumption activities but also on international transportation of goods and services. The classical and neo-classical economists attached so much importance to international trade in a country's development in that they regarded it as an engine of growth (Jhingan, 2006). It is necessary to note that trade globally is recognized as an important catalyst for economic growth and development. For a developing country like Nigeria, the contribution of trade to her overall economic growth is immensely

enormous owning largely to the obvious fact that most of the essential elements for development such as raw materials, capital goods and technical know-how, are mostly imported because of inadequate domestic supply. However, it is very necessary to note that internal trade complements external trade, since domestically produced goods are collected for export whereas imported goods are distributed within the country, sometimes into interior areas of the country. Ngige (2018) citing Anyanwuocha (1993) inferred that the higher the level of internal trade the greater the level of specialization which raised the level of efficiency and productivity of the people in their various economic units, which enhance rapid economic growth.

Nigeria's economic growth is measured by the gross domestic product (GDP). Therefore, GDP is perceived as a sum total of the market value of a country's output of goods and services, which are exchanged for money or trade in a market system over certain periods. This indicates that trade is an important aspect of economic growth. It was observed that the gross domestic product (GDP) of Nigeria is $186 billion in 2017. This indicates that the economy has over dependence on the capital intensive oil sector, which provides 45 per cent of GDP, 95 per cent of foreign exchange earnings and about 65 percent of government revenue for 2017. The largely subsistence agricultural sector was unable to meet up with the rapid population growth of the nation, and Nigeria which was once a large net exporter of food now imports some of its food products. The over dependence on oil produce by Nigerians not only lead to unbalanced trade but has resulted in economic fluctuations. Nigeria was severely affected by the global economic meltdown partly due to the collapse of global oil price from (2014-2016), and two consecutive recessions in Nigeria oil prices set by the Organization of Petroleum Exporting Countries (OPEC) can be influenced by political reasons that might not be favorable to Nigerian economy and the recent Niger Delta crisis which had a big role to play in slowing down Nigeria's economic growth. Economic and trade diversification may serve as a strategy for reducing the exposure of Nigeria's economy to external shock associated with commodity production and trade.

Furthermore, it must be established that before any significant benefits from trade can be gained, the domestic economy will have to diversify away from overdependence on oil produce and concentrate on the production and exportation of primary commodities.

Statement of the Problem

Before the discovery of crude oil in commercial quantity in Nigeria, the country depended largely on the proceeds of agriculture primary products for the generation of foreign exchange or earnings. The country Nigeria is one of the major agrarian countries in Africa. By the mid-1960s, production and export of crude oil had become very important in Nigeria's export structure, ironically, the ascendancy of petroleum production and export was accompanied by a simultaneous decline of agricultural products in the nation's economic activities. At the tail end of the 1970s, crude oil accounted for as much as 90 per cent of the country's export trade. Notably, Nigeria's non- oil production structure is still basically of the import-substitution variety, being largely dependent on foreign technology, industrial machinery and raw materials, and negligible exports of finished products. Nigeria's export trade abi-initio has served as the prime engine for economic growth. Several key factors were observed to have hampered trade performance in Nigeria. For instance, the United Nation Economic Commission for Africa identified the fundamental factors limiting Nigeria's trade to include the country's narrow production and export base dominated by low value products such as raw materials and primary commodities, very high trade cost, tariff and non- tariff barriers to intra-Nigeria trade and Nigeria's limited access to international market, and overdependence on a mono-culture products. For about two decades of commercial production, Nigeria produced and exported crude oil in its natural state with minimal processing into higher stages of product development. While other oil producing African countries such as Libya and Algeria have diversified operation, into more technology- intensive areas such as the liquefied natural gas (LNG) and petro- chemicals. Nigeria is still locked essentially in the primary stages of petroleum development. The most important implication is that there is adverse effect of making the Nigeria's export sector dependent on external factors outside the control of Nigeria's economy. Hence, this research focused on the effects of international trade using proxies such as import trade, export trade, exchange rate, trade policy and

trade liberalization on economic growth adopting proxies such as gross domestic product (GDP) of Nigeria.

Objectives of the Study

The broad objective of this study is to examine the effect of international trade on the economic growth of Nigeria. The specific objectives are to:

1. Evaluate the effect of exchange rates on the Economic growth of Nigeria.
2. Examine the effect of trade policy changes on the economic growth of Nigeria.
3. Investigate the effect of trade liberalization on the economic growth of Nigeria.

Research Questions

In an attempt to achieve the objectives stated above, the following research questions were designed to probe into the effect of international trade on the economic growth of Nigeria.

1. To what extent does exchange rate influence Nigeria's economic growth
2. To what extent do trade policy changes affect Nigeria's economic growth?
3. How does trade liberalization affects Nigeria's economic growth

Hypotheses

The following hypotheses were formulated to guide the study.

Ho_1. Exchange rate does not significantly influence the economic growth of Nigeria.

Ho_2. Trade policy changes do not significantly influence the economic growth of Nigeria.

Ho_3. Trade liberalization does not significantly influence Nigeria economic growth.

Significance of the Study

The study is quite significant as it concentrates on those who will benefit from it and how they will benefit.

Nigeria educational policy makers-Policy makers in the nation will benefit because it provides an avenue to broaden the knowledge base for economic growth.

The government-The study will help to enlighten the government on how to go about promoting international trade to ensure that the ailing problems of unemployment and economic fluctuation are addressed.

Research institutes, academics and students will benefit from the work because it provides opportunity for further study.

International business community-will find this study invaluable as it will expose them to lots of available governmental assistance in their numerous needs e.g. rebate on import and export duties and financial support.

The general public-The public will benefit from the finding of this study because when the policy issued for international trade are fully addressed, the number of importers and exporters will increase, unemployment will reduce and national output will increase, which will together improve the welfare of Nigerians.

Scope of the study

Content scope: effects of International Trade on economic Growth in Nigeria.

Geographical scope: Central Bank of Nigeria. Therefore, data that were considered are those relating to international trade effect of trade on economic growth of Nigeria while the independent and the dependent variables are:import trade, export trade, exchange rate, trade policy changes and trade liberalization and Nigeria's economic growth measured using gross domestic product. The study variable data collected basically covered a period of 37 years (1981-2018). Time scope: This research was conducted from the year 2018-2020

REVIEW OF RELATED LITERATURE

Conceptual Framework

Concept of International Trade

Ngige (2018) stated that international trade has been and is still today an economic force that has spurred commerce, promoted technology and growth, spread cultural pattern across the global village, which

stimulates exploration, colonization and frequently fanned the flames of war. The history of international trade has gone hand in hand with the development of civilization. From ancient times, international trade brought about the exchange of products and raw materials between one nation and another. However, such trade was often conducted in barter form and was of small volume when compared to today's standard. This interchange of products was very critical in economic and historical development of every nation. International trade in it early beginnings was very important, not just because it provided one society or country with products it does not have, e.g cowries from West Africa were taken to other areas. International trade also led to cultural interchange, thus diversifying trading not only on product, but also on lifestyles, customs and technology.

Yakubu & Akanegbu (2018) are of the view that international trade can promote the development of monetary systems of record keeping and accounting and the entire vocation of commerce. One can safely say that the economic and political development of the entire western world was spurred and enhanced by international trade. Idemobi (2011) defines external/international trade or international business as a term used collectively to describe all commercial transactions (private and government, sales, investments, logistics and transportation) that take place between two or more nations. Usually, private companies undertake such transactions for profit; governments undertake them for profit and political reasons. It refers to all those business activities which involve cross border transactions of goods, services, resources between two or more nations. Adeleye, Adeteye & Adewuyi (2015) is of the view that, international trade which is also referred to as foreign or external trade is defined as a business activities existing between two or more countries. When exchange of goods and serves take place between two countries that international trade has taken place. Adeleye *et al* (2015) held that the role of foreign trade in economic development is considerable. Agu, Amuka & Ugwu (2016) defines export trade as a good or service sold by residents of one country to residents of another in return, usually for foreign exchange. They also defined international tradeas an activity that essentially involves willing exchange of goods and services across national boundaries. Bakari (2017) defines international trade as the exchange of capital, goods, and services across international borders or territories. In most countries, such trade represents a significant share of gross domestic product (GDP). Pritchett & Smith (2016) said that a growing body of work argues that dismantling labour market segmentations internationally would be wealth generating and pro-poor and lead to more egalitarian distributional outcomes. Egbulonu (2015) citing other economic scholars infer that external trade or exports is a function of international trade whereby goods produced in one country are supplied to another country for future sale or trade. Ajayi & Araoye (2019) averred that international trade/regional integration appears to be a logical way to enable an economy to produce at lower unit costs fora larger (regional) market.

Theoretical Framework
The study anchored on two theories; Theory of Comparative Cost propounded by David Ricardo (1817) and Factor Endowment Theory by Eli Heckscher (1919) and Bertil Ohlin (1933).
Hecksher-Ohlin Theory
The theoretical foundation of this study is anchored on the Factor Endowments Theory, profound by Heckscher –Ohlin. This theory carries along thethree major trade theories such as; theory of Absolute Advantage, theory of Comparative Advantage and the Factor Endowment theory by Eli Heckscher (1919) and Bertil Ohlin (1933). This theory known as the Heckscher-Ohlin theory of Factor Endowment postulate that countries will export those goods that make intensive use of those factors that are locally abundant, while importing goods that make intensive use of factors that are locally scarce. The H.O theory also known as (the factor proportions) model, is recognized as one of the most important models of international trade. It was developed upon the Richardian model largely by introducing a second factor of production. In its two-by-two-by two variant, meaning two goods two factors, and two countries, it represents, one of the simplest general equilibrium models that allows for interactions across factor markets, goods markets and national markets simultaneously. These interactions across markets are one of the important business lessons displayed in the results of this model. With the H.O model, we learn

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how changes in supply or demand in one market can feed their way through the factor markets and with trade, the national markets can influence both goods and factor markets at home and abroad.

In other words all markets are everywhere interconnected. Therefore, since the H.O theory is of the view that all the markets are interconnected, that means that the trade relationship between Nigeria and other countries of the world in one way or the other adds value to the world's economic growth through market activities.

Theory of Comparative Cost

Comparative cost assumes that trade will be beneficial to a country if it concentrates in the production of those goods in which it has the greatest relative advantages over its trading partners. The law is how ever an extension of the absolute paradigm in industry. That is gain will be available to a given country so long as it transfers resources towards the industry in which its absolute or comparative advantages is greater. The country then sells the surplus to other countries that in their turn channel resources towards those industries in which their deficiency is least. The theory discussed above depends on the existence of certain conditions for international trade, and complications arise if these conditions are not met. These conditions include;

Existence of free trading environment that enables a country to concentrate on the production of the good or goods for which its comparative advantage is greatest. There should be free movement of factors from one industry to another. The production opportunity cost ratios in different countries must differ. The exchange rate of currency must lie between the limits set by the international (non-trading), price ratio for different product. Transport cost should not be so high to out reign the price advantage enjoyed by exporter over domestic producers. Trade should not be seriously inhibited by artificial barrier to trade (Dereck, 1974 and Livesey, 1978).

Empirical Review

Babatunde, Emmanuel, Okoduaand Oluwasogo (2020) empirically examine the effect of FDI inflows into Nigeria on real gross domestic product (RGDP) growth and how these external inflows can bring about achieving Goal-17.3 of mobilizing additional financial resources for developing countries from multiple sources. The study found that labour quality has a positive and significant effect on RGDP in line with theory. Omodero and Alpheaus (2019) carried out a study on the effect of foreign debt on the economic growth of Nigeria. The regression results indicate that foreign debt exerts a significant negative influence on economic growth while foreign debt servicing has a strong and significant positive impact on economic growth.

Oladimeji and Muhammed (2017) investigated the effect of international business on SMEs growth in a competitive environment particularly Nigeria. It was also revealed that the exchange rate has a significant effect on SMEs growth in Nigeria, and the level at which exchange rateaffects SMEs growth is relatively high.

Elijah and Ahmed (2019) examined trade liberalization as one of the drivers of economic development between 1986-2016, according to World Development Report, irrespective of under unfavourable or favourable environment open economies perform better compared with closed economy. The study findings revealed that trade liberalization did not cause growth during the period of the study. Osabohien, Akinpelumi, Matthew, Okafor, Iku, Olawande and Okorie (2019) investigated the impact of agricultural export on Nigeria's economic growth. The results from the ARDL technique revealed that agricultural exports significantly affect Nigeria's economic growth this suggests that, a 1percent increase in - agricultural export will boost economic growth in Nigeria by approximately 25percent.

Onuorah (2018) examined trade liberalization and economic growth in Nigeria.. The results/findings revealed that the independent variables: DOP. INF. FDI. BOT and NEXP have positive significant impact on GDP while EXR and BOP shows a negative impact. Osidipe, Onuchukwu, Otto and Nenbee (2018) assessed the impact of Trade Liberalization on some selected manufacturing sectoral groups:. The results of analysis led to the conclusion that trade liberalization does not have significant impact on FBT, CKM, and BM in Nigeria. FDI is positively signed and thus have direct impact on the three- sub-sectors.

Okeowo and Aregbeshola (2018) reviewed a study on trade liberalization and performance of the Nigerian textile industry. Findings revealed that the effect of simple tariff rate on textile industry is negative and statistically significant in the long-run while trade liberalization policy measure through simple tariff rate has a lag effect before it can be effective in the textile industry. In both short and long run, real effective exchange rate depreciation worsens the performance of the textile industry in Nigeria. Agbo, Agu & Eze (2018) reviewed the impact of international trade on the economic growth of Nigeria in Enugu, Nigeria. The results of the study showed that there is a significant impact of export trade on the Nigerian economic growth. The study also revealed that there is no significant impact of import trade on the Nigerian economic growth.

METHODOLOGY
Research Design
The research design used for this study was time series data. Thus, time series research design was used for the study.
Sources of Data Collection
This research employed annual time series data on the variable under consideration covering a total period of 37 years (1981-2018) in the estimation of functions. These data were sourced from the Central Bank of Nigeria (CBN) statistical Bulletin annual report and statement of Account; and the National Bureau of Statistics (NBS).
Time Series Properties
In this part of the work, we are interested in examining the time properties of our data, since we are dealing with times-series data.
Unit Root Test:
The unit root test is necessary in this study so as to verify if our time series data is stationary or non-stationary. This is because non-stationary time series data will be unreliable in making economic predictions. This may lead to incorrect and spurious regression results from which further inferences becomes meaningless using the Dickey fuller (1981) tests (Gujarati et *al*, 2012).
The Johansen Co-integration Test
After checking univariate time series, properties of each of the variables in the specified model are found to be integrated of same order, then the study will proceed with testing of co-integration among the variables of interest. As pointed out by Harris (1995:52), if two series are integrated of order I(1) and the residuals from regressing the mare I(0), then the two series are co-integrated, this implies that although both series may individually be non-stationary, their linear combination can be stationary. A co-integration relationship may however only be observed in the long run, as it is possible that the series deviate in the short run but in the long run regain their trends (see Gujarati 1995). Therefore, this motivates the use of co-integration approach in this study as it aims at investigating the possibility of long run relationship between trade and economic growth in Nigeria. The verification of this long run relationship is crucial because most economic relationship are said to hold true in the long run, therefore modelling variables without verifying the existence of such long run relationship is indeed a rob on the supporting theory.
Granger Causality Test:
We shall conduct the Granger Causality test to observe the direction of cause-effect relationship among the variables in the analysis by considering the F probabilities in the result. This provides the basis for determining which variable provide the lead for responses by other variables.
Method of Evaluation
The basic standard for evaluation will include:
The Economic a priori criteria:
This evaluation technique is guided by the principle of economic theory. It centers on verifying the conformity of our result to economic a priori expectations in terms of size and signs. Only results which conform to a priori expectations are accepted. In regressing this variable on there sportive dependent

variables to show the impact of trade on economic growth in Nigeria, a positive relationship is expected save, for exchange rates which is expected to yield either a positive or negative nexus.

Statistical Criteria

This evaluation technique is guided by the principle of statistical theory and applies to the following test statistics:

R^2: The R^2 is a coefficient of determination. It is a statistical measure of how well the regression line approximates the real data points (goodness of fit). An R^2 of 1 indicates that the regression line perfectly fits the data or explains 100% variation in the dependent variable (Gujarati, 2012). In real sense R^2 can only yield a value range of 0 to 1 when used to measure the agreement between an observed and modeled values, Wikipedia (2015).

Adjusted R^2 (R^2): R^2 attempts to take into consideration the phenomenon where R^2 automatically and spuriously increase when additional explanatory variable are brought into the model. It is a modification due to the ill of R^2 which adjusts for the number of explanatory variable in a model when compared to the number of data points. The adjusted R^2 is either equal to or less than R^2. In practice it is expected to be less than R^2 (Gujarati, 2012)

F-test: This was named after Ronald A. Fisher who was a statistician. F-test is a test commonly used to check the overall significance of the included explanatory variables in a regression model. It will help us check on the overall significance of our model mainly at 5% significant level.

T-test: To know the individual effect of each explanatory variable on the dependent variable, our t-statistics will be a useful tool. This will enable us know in certainty those variables which significantly affect the dependent variable using 5% level of significance.

Econometrics Criteria

Second order test: This is guided by the principle of econometrics theory and aims at the investigation of how consistent our model is with econometrics assumptions.

As a rule of thumb, if does found to be 2, in application one may assume that there is no first-order autocorrelation, either positive or negative. But if $p = +1$, perfect positive serial correlation exist. On the other hand when the value of $p = -1$, there exist perfect negative correlation among successive residuals. Hence the closer d is to 4, the greater the evidence of negative serial correlation (Gujarati, et. al., 2012)

Model Specification

In line with the above framework we estimate the empirical model for our study according to the stated objectives as follows;

Relationship between trade and economic growth in Nigeria

$$RGDP = F\{ XPT, PLC, EXR\} \qquad (3.4)$$

The mathematical form of the model is given as:

$$RGDP = \beta_0 + + \beta_1 XPT_t + \beta_2 PLC_t + \beta_3 EXR_t \qquad (3.5)$$

This is because mathematicians believe that all the dependent variable in the model is explained by the independent variables. But econometricians believed that the independent variables do not explain all the variations in the dependent variables. Thus, they include an error term (stochastic disturbance term) that captures the other variables not included in the models.

The log and econometric form of the model is given as:

$$lnRGDP = \beta_0 + \beta_1 lnXPT_t + \beta_2 PLC_t + \beta_3 EXR_t + \mu_t \qquad (3.6)$$

Where:

RGDP= Real Gross Domestic Product;

XPT = Total Export trade;

TOP = Trade Openness (Proxy for Trade Liberalisation)

PLC = Policy Change (dummy variable proxied by changes in trade policies from 1981-2018 where Free trade = 0; restricted trade = 1)

EXR = Real Exchange Rate;

DATA ANALYSIS AND PRESENTATION OF RESULTS
Unit Root Test
The analytical techniques discussed in the previous chapter are applied to the models of the study and the results are presented in this section. We begin with the result of the stationarity tests, since empirical analysis based on time series data would be biased if the underlying data are non-stationary. As earlier noted, the tests used for observing the stationarity of the time series data used for analysis in this study is the Augmented Dickey Fuller (ADF) test as shown in the table below:

Table 1 Unit Root Test Result

Variables	ADF T-Stat	Critical Value @ 5%	PP T-Prob	Order of Integration
ln(RGDP)	-5.428913	-2.951125	1 (1)	5%
ln(TOP)	-4.270249	-2.951125	1 (1)	5%
ln(IMP)	-5.989688	-2.951125	1 (1)	5%

Source: Author, 2021

The time series properties of the variables were conducted using the Augmented Dickey Fuller (ADF) Test and the results from this test showed that all the indicators are stationary at I(1). This therefore implies that this model can be relied upon for suitable and non spurious policy making since the means and variances of the data follow a constant trend.

Lag Length Selection
Below is the tabular summary of the lag length selected for the study
Table 2: Lag length selection for the study.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-48.64324	NA	1.61e-05	3.155485	3.379950	3.232034
1	143.1678	315.9241*	9.01e-10*	-6.656930*	-5.310142*	-6.197637*
2	164.8925	29.39221	1.21e-09	-6.464264	-3.995152	-5.622226

To determine the optimum lag length, we begin with a lag of twenty but finally selected an optimum lag of one. We employed the sequential modified LR test, the final prediction error (FPE) test, Akaike information criterion (AIC) test, Schwarz information criterion (SIC) test and Hannan Quinn (HQ) information criterion at 5 percent level of significance to carry out the selection. All the test results indicate a lag order of one.

Co-Integration Test
Johanson Co integration Test Result (TRACE and Maximum Eigenvalue)
Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None	0.579814	76.14098	79.81889	0.0543
At most 2	0.388531	23.20586	29.79707	0.2361
At most 3	0.117984	6.481593	15.49471	0.6386
At most 4	0.063017	2.213063	3.841466	0.1368

Trace test indicates nocointegratingeqn (s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None	0.579814	29.47995	33.87687	0.1532
At most 1	0.498353	23.45517	27.58434	0.1549
At most 2	0.388531	16.72427	21.13162	0.1854
At most 3	0.117984	4.268530	14.26460	0.8300
At most 4	0.063017	2.213063	3.841466	0.1368

Max-eigenvalue test indicates no cointegration at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Source: Authors compilation, 2020

The result of the Johansen co-integration presented above in tables 4.2 and 4.3 was carried out assuming linear deterministic trend in co-integrating equation. The trace test indicates one co-integrating equation at 5% significance level likewise. In line with this, there is no long-run equilibrium relationship that exists between international trade and economic growth in Nigeria. From this findings, we move ahead to present our regression result.

PRESENTATION OF REGRESSION RESULT
Table 3: Regression Result (Dependent Variable: LRGDP)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.168460	0.156730	20.21598	0.0000
D(EXP)	-0.084684	0.059202	-1.430417	0.1629
D(EXR)	0.178401	0.094988	1.878143	0.0701
D(PLC)	-0.140708	0.061792	-2.277131	0.0301

R-squared	0.586599	Mean dependent var	3.785083
Adjusted R-squared	0.517699	S.D. dependent var	0.115707
S.E. of regression	0.080356	Akaike info criterion	-2.053690
Sum squared resid	0.193712	Schwarz criterion	-1.789771
Log likelihood	42.96643	Hannan-Quinn criter.	-1.961575
F-statistic	8.513769	Durbin-Watson stat	1.510602
Prob(F-statistic)	0.000042		

Source: Authors compilation from eviews 9 (2020)

** significant at 5% * significant at 1%

Analysis of Regression Results for the three models

The interpretation of our regression result shall be based on the following criteria:

- Economic criteria
- Statistical criteria

- Econometric criteria.

DISCUSSION OF RESULTS
Evaluation Based on Economic Criteria
We shall check for the conformity to economic theory of the variables using the table below:
Table 4: A priori expectation (LRDGP)

Variables	Expected sign	Obtained sign	Conclusion
EXR	+	+	Conform
PLC	+	-	Not Conform
TOP	+	+	Conform

Source: Author's computation, 2021

In the model, the intercept term of -1.681803 implies that the mean value of the real GDP growth for the period would be put at -1.681803 when all the variables determining RGDP are also held constant. In the model however, the positive coefficient of 0.0456 for IMP means that an increase in importation into Nigeria, will increase economic growth by about 5%. This implies that importation for Nigeria is an influence of growth in her real GDP. This however may have resulted due to the import substitution policies of the federal government in tackling shortages of important commodities in the country for the betterment of the economy. For trade openness, the TOP coefficient of 0.185056 implies that a unit increase in trade openness across the country will further increase growth in the economy by a rate of about 19%. By implication, the policy of trade openness has shown to be a positive growth determinant in Nigeria's economy. This further implies that as Nigeria continues to engage more in international trading with little or no barriers to trade, her economy will be better for it.

The export trade coefficient of 0.016700 means that an increase in export will increase economic growth by a rate of about 2%. This is in conformity with several trade theories (Absolute cost advantage, Hecksher Ohlin theory, Comparative cost advantage, etc) which stipulates that export influences economic growth positively. In the same vein, a unit change in the transactions across EXR payments will change increase growth by about 45% given the coefficient of 0.449085. Nigeria as an import dependent economy, has most of its import bill and international trade transactions settled in dollars. This practice has heavily impacted the foreign currency earnings and reserve of the country positively thereby translating into economic growth for Nigeria. However, this impact is not significant on growth in Nigerian economy.

Lastly, with the dummy policy change variable (PLC) having a negative and significant coefficient of -0.027194, it implies that the various trade policy change in Nigeria has not shown to help Nigeria's economy greatly. From the result shown in table 4.3, a unit change in trade policy, Nigeria's economy will significantly contrast by about 3% (all other things being equal).

Evaluation Based on Statistical criteria
Coefficient of Determination {R^2}:
The R^2 {R-Squared} measures the overall goodness of fit of the entire regression, for the result obtained, it shows the value of 0.586599 (approximately 59%) for the model. This indicates that the independent variables accounts for about 59%of the variations in the dependent variable – real GDP, whereas the remaining variations are accounted for by variables outside of the model but taken care of by the error term. The implication of the findings is that LRGDP is strongly determined bytrade and that any other factors outside of the model are negligible and considered not significant.

The Student's T-test:
The test is carried out, to check for the individual significance of the variables. Statistically, the t-statistics of the variables under consideration is interpreted based on the following statement of hypothesis.
H0: The individual parameters are not significant.
H1: The individual parameters are significant.

Decision Rule:
If t-prob< 0.05 at 5% level of significance, we reject the null hypothesis {H0} and accept the alternative hypothesis {H1}, and if otherwise, we accept the null hypothesis {H0} and reject the alternative hypothesis {H_1}.
Level of significance = at 5% = 0.05
The t-test is summarized in the table below:

Table 5: Summary of the t-test result

Variables	{t-prob}	Critical t- prob value at 5% level of significance	Remark
D(XPT)	0.1629	0.05	Not Significant
D(EXR)	0.0701	0.05	Not Significant
D(PLC)	0.0301	0.05	Significant

Source: Author's computation, 2020
The t-statistics is used to test for individual significance of the estimated parameters {β1, β2, β3.
This further implies that imports, exports, trade openness and exchange rates do not have significant impact on economic growth in Nigeria. This is revealing especially as it relates to the import dependent nature of the Nigerian Economy. However, the various trade policies of the federal government of Nigeria has helped the country's GDP with respect to the growth of her economy.

F-Statistics:
The F-statistics is used to test for simultaneous or overall significance of all the estimated parameters.
The hypothesis is stated;
H0: β1 = β2 = β3 = 0
H1: β1 ≠ β2 ≠ β3 ≠ 0
Level of significance: α at 5%

Decision Rule:
If the f-probability is less than the 0.05 at 5% level of significance, we reject the null hypothesis {H0} that the overall estimate is not significant and conclude that the overall estimate is statistically significant; if otherwise, we accept the null hypothesis.
From the results, the F-prob = 0.000042. This is less than the critical value (0.05) at 5% level of significance. Hence, we reject the null hypothesis {H0} and accept the alternative hypothesis that there is a joint significance of the whole variables. This further goes to tell that the models are robust and can be used to capture the impact of trade on economic growth of Nigeria.

Evaluation Based on Econometric Criteria
Test for Autocorrelation:
This sub section shall treat only the serial correlation test given that test for stationarity and co-integration as stated in the chapter three of this study has been carried out in the pre-mortem analysis. To accomplish the aim of testing for autocorrelation, we shall employ the Durbin-Watson test.
Using the rule of thumb, we shall compare the DW statistics with an approximation of two (2) to accept or reject the hypothesis of presence or absence of autocorrelation.
The Durbin-Watson stat. of 1.510602 for model one indicates evidence of no autocorrelation.

Evaluation of Research Hypotheses
After a careful analysis of the various econometric tests employed in the study and based on our results, we now proceed to validate the hypothesis of this study.

Hypothesis One:
H_o: Exchange rate does not significantly influence the economic growth of Nigeria
H_1: Exchange rate has significantly influence the economic growth of Nigeria
Further findings from our OLS result in table 4.3, indicates that the variable representing exchange rate (EXR) does not have significant impact on Real Gross Domestic Product (RGDP) in Nigeria. Hence, we accept the null hypothesis and reject the alternative hypothesis indicating that Exchange rate does not

significantly influence the economic growth of Nigeria. This finding is in alignment with the postulations of Akpansung (2013) who held that the main thesis of the monetary approach to exchange rate is that a country's exchange rate dynamics is essentially a monetary phenomenon, and that any observed disequilibrium in the balance of payments can be eliminated through an adroit manipulation of monetary variables especially domestic credit, under controlled exchange rate, absence of sterilization by the monetary authorities, and stable demand for money function. Therefore, the economic performance of any country should be neutral to the exchange rate mechanism in the country.

Hypothesis Two:

H_o: Trade policy changes do not significantly influence the economic growth of Nigeria

H_1: Trade policy changes have significantly influenced the economic growth of Nigeria

In line with the findings from our OLS result in table 4.3, the variable representing trade policy changes (PLC) have significant impact on Real Gross Domestic Product (RGDP) in Nigeria. Hence, we reject the null hypothesis and accept the alternative hypothesis indicating that trade policy have significantly influenced the economic growth of Nigeria. This finding is in alignment with the postulations of Yohanna, Irfan and Huseyin (2019) who held that Nigeria will sustainable grow faster with policies aiming at improving external balance of payments or reducing the import components of demands, increasing export share to products with high elasticity of demand as well as keeping budget, deficit within the universally acceptable limits.

Hypothesis Three:

H_o: Trade liberalization does not significantly influence Nigeria economic growth

H_1: Trade liberalization has significantly influence Nigeria economic growth

In line with the findings from our OLS result in table 4.3, the variable representing trade liberalization (TOP) does not have significant impact on Real Gross Domestic Product (RGDP) in Nigeria. Hence, we accept the null hypothesis and reject the alternative hypothesis indicating that trade liberalizationdoes not significantly influence the economic growth of Nigeria. This finding is in alignment with the views of Oluwaleye (2014) who held that trade liberalization policy has not had a positive impact on Nigeria's economic growth and development.

Summary of Findings

The study is on the effects of international trade on Nigeria's economic growth from (1981-2018). The OLS multiple regression model was used to test the impact of the subject of our interest using three models. However, before applying the regression analysis, we stated the stationary of the various variables using the Augmented Dickey Fuller test. The summary of the findings are itemized below:

All the variables were stationary at first difference. In addition the Johansen co-integration test was used to determine the presence or otherwise of a co-integrating vector in the variables. The trace statistics indicated noco-integrating equations at 5 percent level of significance likewise the maximum eigen test, pointing to the fact that the variables do not have long run relationships in the selected model.

More so, from our estimated results; trade openness has a positive and insignificant impact on economic growth in Nigeria. The result further indicated that a unit increase in trade openness also increase in economic growth of Nigeria. Import trade and exchange rates also has a positive relationships with economic growth in Nigeria However, their impact on growth has been minimal land insignificant over the years.

The study also revealed that export trade in the country has had negative and insignificant relationship with economic growth. However, the several trade policies in Nigeria has been seen to retard growth in economic prosperity of Nigeria's economy since the impact is negativeand significant on LRGDP growth

Further findings revealed that international trade does not have long run relationship with economic growth in Nigeria. The strength of the model as measured by the R^2 showed that the variations in economic growth is determined up to 59percent whereas the remaining variations are determined by the factors outside of the model.

CONCLUSION
International trade has been observed to be a good tool in influencing economic growth of Nigeria, especially in relation to the various trade policies in the country over the years. In conclusion, findings from the study indicate that a shift towards free trade policy will help grow the economy and emancipate us from the economic recession in which the country has found herself. The research his revealing that international trade would enhance Nigeria's economic growth through the effect of some variables associated with external trade. This is so because trade openness which is expected to influence economic growth both in the long run and short run have been seen to possess only short run relationship one economic growth in Nigeria. This is worrisome owing to the fact that since trade liberalization is not significant on Nigeria's economic growth despite all the efforts of the present and past governments, there is now need to suspect the pattern of trade between Nigeria and her trading partners. Conclusively, trade has no significant impact on economic growth in Nigeria.

RECOMMENDATIONS
In the wake of the above findings, the following recommendations were suggested:
1. Following the significant nature of trade policies in Nigeria's economic growth, there is great need for the federal government to diversify her trade pattern. This can be one by placing emphasis not only on the petroleum sector (which has shaped the trade policy of Nigeria), but on other non-oil sectors so as to really reap the full benefit of trade in the country.
2. In line with the findings, since Nigeria's naira exchange rate is usually determined by the availability and utilization of the US dollar, it is however recommended also that the federal government should maintain trade ties with several other countries like China, Taiwan, Japan, and other buoyant Asian economies, this will help to deemphasize on the dollarization of the Nigeria economy and help reduce the high demand for dollar for the betterment of naira's value.
3. The co-integrated behavior of our explanatory variables suggests that in the short-run, movement in trade liberalisation could be used to raise the GDP of Nigerian economy. For this reason, efforts must be made to ensure that there is efficiency in all areas that have something to do with the liberalising trade so that full benefit will be reaped on the economy in the short-run.

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