FOREIGN TRADE AND ECONOMINC GROWTH IN NIGERIA

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Abstract *The study investigated the extent at which foreign trade affects economic growth in Nigeria using an annual time series data between 1990 – 2019. The variables used in the study are Gross domestic product (GDP), Balance of trade (BOT), Import (IMP), Export (EXP) and Balance of Payment (BOP). it was established from the study using Error Correction model (ECM) analysis that total export and total import has significant impact on the gross domestic product in Nigeria; also, trade openness has positive and significant impact on Gross domestic product (GDP) in Nigeria. The underlying principle for such result is rooted in the Comparative Advantage theory which is applicable to the trade liberalization in Nigeria and its impact on gross domestic product (GDP) in Nigeria that is recovering from economic recession. The result showed that foreign trade has been improving economic growth in Nigeria. Several recommendations are put forward: Since openness is only beneficial when there is a balanced exchange, improving infrastructural facilities in Nigeria would alleviate challenges in domestic production, thereby boosting exports to align with imports. Additionally, a regulated approach to economic liberalization is advised to prevent the country from becoming a dumping ground for inexpensive Western and Asian products, which could undermine local industries. However, another actionable recommendation is to implement policies to stabilize the exchange rate and reduce inflationary pressures on imports. Furthermore, support local industries by providing foreign exchange access for the importation of necessary industrial inputs.*

Keywords Foreign trade, Economic growth, Import and Export

1.0 Introduction

International trade has long been recognized as a fundamental driver of economic growth and development (Krugman & Obstfeld, 2021). The exchange of goods, services, and capital across borders allows countries to access resources, technologies, and markets that are otherwise unavailable within their domestic economies. Classical economic theories, including the works of Adam Smith and David Ricardo, emphasize the importance of comparative advantage, where nations specialize in producing goods and services that they can produce most efficiently (Ricardo, 1817). In a globalized world, trade liberalization and economic integration have further strengthened the role of foreign trade in boosting productivity, enhancing competition, and fostering innovation (World Trade Organization, 2022). Over the past few decades, global trade has expanded significantly due to advancements in transportation, communication, and trade agreements. Organizations such as the World Trade Organization (WTO), the International Monetary Fund (IMF), and regional economic blocs have facilitated trade negotiations and reduced barriers, allowing developing nations to participate more actively in international markets (UNCTAD, 2021). However, while some economies have experienced rapid growth and industrialization through trade, others, particularly in sub-Saharan Africa, have struggled to achieve sustainable economic benefits from their trade engagements (World Bank, 2023). Nigeria, Africa's largest economy and a key player in global trade, has historically relied on foreign trade as a major contributor to its economic development (National Bureau of Statistics, 2023). As a resource-rich country, Nigeria is a leading exporter of crude oil, which accounts for over 90% of its total exports. The country's trade performance, however, has been characterized by volatility due to fluctuations in global oil prices, limited export diversification, and a high dependency on imported goods, particularly manufactured products (Central Bank of Nigeria, 2022). These structural weaknesses have resulted in trade imbalances, inflationary pressures, and currency depreciation, posing significant challenges to sustainable economic growth (IMF, 2023).

The participation of a nation in international trade activities influences the country's growth rate by impacting upon the level of economic activities and facilitating the transfer of resources across borders. Therefore, Nigeria is basically an open economy with international transactions constituting a significant proportion of its output (Emeka, Fredrick & Peter, 2012). Nigeria's trade openness has increased the participation of foreigners in the economy, by allowing the inflow of foreign capital and expertise, thereby impacting on its economic growth. In Nigeria, international trade has dated back to the era of the pre-colonial time, where kingdoms and empires traded surplus commodities they had to other neighbouring countries in the west African region. However, international trade became popular with the advent of colonial rule that brought their wares and made Nigerians their middle men (Nick, 2008). From the theoretical perspective, both the classical and the neo-classical have attached so much importance

to international trade in an economy's growth, that they regard it as an engine of economic growth (Jhingan, 2006). The main reason why countries engage in international trade is to obtain all the goods and services they cannot produce or commodities that are not available at their various countries, which its cost of production is relatively too high (Wikipedia, 2016). Therefore, David Ricardo suggested that countries should specialize on the production and exportation of goods, whose cost of production is low and import the products whose cost of production is high for the country. This is what Ricardo referred to as the theory of comparative advantage (Ricardo, 1817). Adam Smith, another classical economist, with the use of principle of absolute advantage demonstrated that a country could benefit from trade, if it has the least absolute cost of production of goods. That is per unit input yields a higher volume of output (Smith, 1776). The term international trade has been defined as trade across the frontiers; that is, with the rest of the world. It has been argued that it plays a prominent role in promoting economic growth and productivity in particular, and these debates have been ongoing since several decades ago. Furthermore, it has been revealed that internationally active countries tend to be more productive than countries which only produce domestic products. As a result of liberalization and globalization a country's economy would become much closely related with external factors such as openness.

This study's research problem involves understanding the dilemma of Nigeria's trade economy versus economic growth. The economy has trade, yet Nigeria still suffers slow GDP growth, high unemployment, and poverty. The country is reliant on oil exports, which make it vulnerable to external shocks and the system is oriented towards imports, which leads to depletion of foreign reserves and destruction of domestic industries. Furthermore, weak trade policy, underdeveloped trade-related infrastructure, and weak trade institutions limit the benefits of trade for the country. These problems require trade structure and economic growth in Nigeria to be analyzed, something this research wants to undertake. Domestic production and consumption activities, as well as foreign transactions of goods and services, have all influenced the Nigerian economy's growth performance. Before the political independence, the Nigerian economy was well recognized for its export-driven growth, notably prior to the discovery of oil, when the country excelled in the export of non-oil products, mainly agricultural production. Non-oil exports in Nigeria have clearly been taken over by the oil sector for a long time now, notwithstanding the economy's remarkable performance over the last decade. This is due in part to the developed and rising economies, particularly following the change to civilian rule in 1999, and in part to the recent global economic and Niger Delta crises, which have put the oil sector at a disadvantage in terms of the sector's contribution to economic growth. This highlights the importance of diversifying the economy and targeting the country's rate of growth through agriculture and non-oil exports. Prior to the discovery of oil in the 1960s, however, the Nigerian government was able to carry out investment projects using domestic savings, earnings from agricultural product exports, and foreign help. Since the introduction of oil as a major source of foreign exchange revenuesin1974, agricultural exports have nearly stagnated

(Awoluse,2008). As a result, Nigeria lost its status as a major producer and exporter of palm oil, groundnut, cocoa, and rubber (CBN annual report, 2006). Between 1960 and 1980, agricultural and agro-allied exports contributed for an average of 60% of total Nigerian exports, which is presently compensated for by petroleum oil export.

This research examines Nigeria's trade alongside its economic progress and seeks to provide empirical insights into Nigeria's relationship with foreign trade. This would assist in trade analysis by constructing relationships among variables, such as trade indicators, exports, imports, trade balance, policy, and Nigeria's trade performance. The results will assist decision makers, economists, and other concerned parties who want to promote trade oriented economic development. Hence, this research was designed to examine the influence of global trade on economic growth using real GDP in Nigeria covering the period 1990 to 2019.

2.0 Literature Review

Samuelson and Nordhaus (2002) see international trade as the system by which, nations export and import goods, services, and capital. They identify three differences between domestic and international trade as: expanded trading opportunities, sovereign nations and exchange rates adding that these have important practical and economic consequences. The forces that lie behind international trade are that trade promotes specialization; and specialization increases productivity (Ingram and Dunn 1993, Sarnuelson and Nordhaus 2002) as quoted by (Ezirim, Aloy, Okeke, Titus, Akpobolokerni and Patrick 2011). In the simplest form, international trade means exchange of goods and services across international borders. In other to know what is happening in the course of international trade, governments keep track of the transactions among nations. The records of such transactions are made in the balance of payment accounts. International trade and balance of payment are therefore two important aspects in the relationship between nations international trade has been and is today an economic force that has spurred commerce, promoted technology and growth, spread cultural patterns, stimulate exploration and colonization.

Economic growth is a fundamental concept in understanding the development and progress of an economy, and it has been extensively studied and explored in Nigeria (Essien et al., 2019). It refers to the sustained increase in the production and consumption of goods and services within an economy over time (Akeju & Olanipekun, 2014). Economic growth is a key indicator of an economy's health and prosperity and is closely linked to improvements in the standard of living and overall well-being of the population (Ndekwu, 2021). Several economic theories have been proposed to explain the drivers and determinants of economic growth. The neoclassical growth theory posits that economic growth is primarily driven by factors such as capital accumulation, technological progress, and human capital development (Akeju & Olanipekun, 2014). According to this theory, increased investments in physical and human capital lead to higher productivity and economic growth. Another prominent theory is the endogenous growth theory, which emphasizes the role of innovation, knowledge, and technological advancements in driving economic growth (Essien et al.,

2019). In this theory, investments in research and development, education, and technology lead to sustained economic growth and improvements in living standards.

Economic growth is measured using various indicators, including gross domestic product (GDP) and gross national income (GNI). GDP is the total value of all goods and services produced within a country's borders, while GNI includes GDP along with net income from abroad (Essien et al., 2019). These indicators provide a comprehensive view of an economy's overall performance and its contribution to the global economic landscape. Other indicators of economic growth include per capita income, which measures the average income per person in a country, and the Human Development Index (HDI), which assesses a nation's progress in health, education, and income (Akeju & Olanipekun, 2014). These indicators provide valuable insights into the distribution of economic benefits and the overall well-being of the population.

2.1 Theoretical framework

2.1.1 Trade as an Engine of Growth

The origins of the theoretical literature between trade and growth are the absolute and comparative advantage as well as the Hecksher–Ohlin theories (Jayme, 2001). Kaldor (1970) developed an export–led growth model built on the notion of cumulative causation and takes into consideration the fact that exports are the main components of demand. Keynesian models in Kaldorian lines, such as Thirlwall's balance of payments constrained growth model, find the channel between trade and growth by means of demand-pull characteristics of exports. Static trade models suggest movements toward openness can temporarily increase the rate of growth due to short-run gains from the reallocation of resources, which would imply a positive relationship between changes in openness and GDP growth. The new growth literature identifies some avenues of such technological change and technological gaps through which openness might affect long-run growth. The relationship between export performance and economic growth has been a subject of considerable interest to development economists, especially those who believe that economic growth should be sustained and maintained. Chenery and Strout (1994) asserted that for a long time, there was hardly any country which exhibited sustained growth rate higher than its growth of exports. They also claim that growth rates of individual developing countries since 1950 correlate better with their export performance than with any other single economic indicator. Thirlwall (1997) in his work, explained the possibility that export growth may set up a vicious cycle of growth such that once a country is launched on the path, it maintains its competitive position in world trade and performs continually better relative to other countries. He also contended that export growth relieves a country of balance of payments constraints so that the faster exports grow, the faster output growth can be without running into balance of payments difficulties. His findings suggest that an export-based strategy of development offers the best prospects for economic growth. Triggered by the endogenous growth theories, there have been several models that stress the importance of trade in achieving a sustainable rate of economic growth. Some of such models focused on different variables such as the degree of openness, real exchange rates, tariffs, terms of trade and export

performance to verify the hypothesis that open economies grow more rapidly than those that are closed. While the nexus between trade and growth lies with growth models, it was also stressed that trade is only one factor of the variables which enter the growth equation. The advocates of the export-led growth hypothesis state that trade was actually the main engine of growth among the Asian Tigers; Hong Kong, Taiwan, Singapore and South Korea (Medina – Smith, 2001 and Obadan, 2008).

2.2 Empirical Evidence

Agbo, Agu and Eze (2018), evaluated the impact of international trade on the Nigeria economic growth with sole objective of ascertaining the impact of export trade on the Nigerian economy and to determine the impact of import trade on the Nigerian economy. The researchers among other things recommended that conscious efforts should be made by government to finetune the various macroeconomic variables in order to provide an enabling environment to stimulate foreign trade by engaging in more of export trade and in effect curtail on import trade which has a negative effect or strain the economy.

Afolabi, Danladi and Azeez (2017), examined the impact of international trade on economic growth in Nigeria, with the objective of identifying the major factors influencing economic growth through international trade. The econometric results suggest that Nigerian government should give more emphasis to specialization on agriculture so as to diversify her production and export base in order to enable the country benefit all the gains of trade including economic growth.

Arodoye and Iyoha (2014), examined the nexus between foreign trade and economic growth in Nigeria. The results show that there is a stable, long-run relationship between foreign trade and economic growth. The variance decomposition results show that the predominant sources of Nigeria economic growth variation are due largely to own shocks and foreign trade innovations. The study therefore recommends adoption of trade expansion policies as a means of accelerating economic growth in Nigeria.

Atoyebi, Jubril, Adekunjo and Edun (2012), examined the impact of international trade on economic growth in Nigeria from 1970-2010. The study demonstrates that increase participation in global trade helps Nigeria to reap static and dynamic benefit of international trade despite non conformity of the coefficient of the openness. Both international trade volume and trade structure towards high technology export result in positively effect on Nigeria economy.

Oviemuno (2007), looks at international trade as an engine of growth in developing countries taking Nigeria (1960-2003) as case study, he uses four important variables which are export/import, inflation and exchange rate. The result shows that Nigeria exports value does not act as an engine of growth in Nigeria.

Azeez, Dada, &Aluko, 2014) used Ordinary Least Square (OLS) estimation technique to analyse the measures of foreign trade - imports, exports, and trade openness, and gross domestic product. The numeric values of these variables were obtained from the CBN statistical bulletin from 2000 to 2012. The study reported that all the explanatory variables have a linear and

significant impact on economic growth in Nigeria.

2.3 Gaps in the Literature

Despite extensive research on foreign trade and economic growth, significant gaps remain in understanding how trade policies specifically impact Nigeria's long-term economic sustainability. Many previous studies have focused on short-term trade effects without considering structural factors such as infrastructural deficiencies, policy inconsistencies, and global economic fluctuations. Additionally, existing research often fails to address the role of non-oil exports and the diversification of Nigeria's trade base beyond crude oil dependence. This study seeks to bridge this gap by providing an updated empirical analysis using recent data and a more comprehensive methodological approach. By incorporating an ECM model, the study captures both short-run and long-run dynamics of trade and economic growth, offering a nuanced perspective on policy interventions. The findings will contribute to policy discourse by providing evidence-based recommendations for improving Nigeria's trade competitiveness and fostering sustainable economic growth.

3.0 Methodology

This study adopts an ex-post facto research design which is a type of non-experimental research method, in which a researcher measures two or more variables, to understand and assess the statistical relationship among them. Based on the foregoing, the study adopts the use of quantitative method of analyses which provide an elaborate study and result on the relationship between foreign trade and economic growth. The dependent variable for this study is Gross Domestic Product as a proxy to economic growth while the independent variables are import, export and balance of payment.

This study estimation involves two stages. The first stage account for descriptive statistics as well as the unit root test which is done through the Augmented Dickey Fuller test (ADF). This test is used to ascertain stationarity in the data. At the second stage, this study uses the heteroscedasticity test, Breusch-Godfrey Serial Correlation LM Test and the Error Correction Model to investigate the relationship between foreign trade and economic growth. The justification for this, is that the researcher wants to deductively ascertain the impact among the subject variables and such workability will be observe alongside the occurrences in these variables over the observable periods (1990-2019).

2.4 Model Specification

The model specified to test the hypotheses of the study is presented below:

$Y = a + bx$

$GDP = a0 + a1\ BOT + a2IMP + a3EXP + a4BOP + et$

Where:

GDP – Gross Domestic Product, BOT – Balance of trade, IMP – Import, EXP – Export, BOP – Balance of payment and e – Stochastic variable (Error term). a0 – Regression Constant and a1–a3 – Coefficient of explanatory variables.

2.5 Discussion of Variables Measurement

i. **Gross Domestic Product (GDP):** GDP represents the total economic output of a country and serves as a primary measure of economic growth (World Bank, 2020). Analyzing GDP allows us to assess the extent to which foreign trade contributes to economic performance. Given Nigeria's dependence on oil exports, fluctuations in trade policies, global commodity prices, and international demand significantly impact GDP growth.

ii. **Balance of Trade (BOT):** BOT measures the difference between exports and imports. A trade surplus (positive BOT) indicates that exports exceed imports, contributing to economic growth, while a trade deficit (negative BOT) suggests economic dependency on foreign goods. Nigeria's trade balance has been volatile, largely influenced by oil exports, currency fluctuations, and import dependency (CBN, 2021).

iii. **Import (IMP):** Imports reflect a country's dependency on foreign goods and services. While imports can provide access to critical resources, excessive reliance on imports can weaken domestic industries and create trade imbalances (Todaro & Smith, 2015). Nigeria's heavy reliance on imported manufactured goods has contributed to economic challenges, including inflation and unemployment.

iv. **Export (EXP):** Exports are a key driver of economic growth, particularly in resource-rich countries like Nigeria. Higher export volumes contribute to foreign exchange earnings, increased production, and employment generation (Krugman, 2018). However, Nigeria's export structure remains concentrated in crude oil, with limited diversification into non-oil sectors.

v. **Balance of Payment (BOP):** BOP provides a comprehensive measure of a country's financial transactions with the rest of the world, including trade, foreign investment, and remittances. A healthy BOP indicates a stable economy with sustainable foreign exchange reserves. Nigeria has faced persistent BOP deficits due to declining oil revenues, capital flight, and external debt obligations (IMF, 2021).

4.0 Results and Discussion

To achieve the objective of this chapter emphasis is on both the pre-test and post-test which includes the descriptive statistics, and the unit root tests. For the stationarity test, the augmented Dickey Fuller test (ADF) and Phillips-Perron (PP) tests were used.

4.1.1 Descriptive Statistics

Table 4.1 presents the descriptive result for the variables used in this study. The variables are Gross Domestic Product (GDP), Balance of Trade (BOT), Total Import (IMPT), Total Export (EXPT) and

Balance of payment (BOP). The results of the descriptive analysis which include sthe mean, average, maximum, minimum and standard deviation were presented in table 4.1 above. Also, the results were presented in numerical values to show the exact value of the result. As in Table 4.1, the gross domestic product of Nigeria takes a value between 3.70 and 8.53 with an average of 4.52 and a standard deviation of 1.46. This suggests that the aggregate mean of Gross domestic product is 4.52 indicating that on average; the Gross domestic product was able to generate significant increase relative to their total value even though the minimum and maximum values show that the Gross domestic product (GDP) varies during the period of this study. Also, Balance of trade had an average value of 37.23 with a minimum and maximum of 16.0 and 53.0 and a standard deviation of 8.54. The values showed the amount of uncertainty related to the size of changes in the average Balance of trade (BOT). The average value of 37.23 is relatively high indicating that the trade openness changed dramatically during the period of this study. Furthermore, the total import (IMPT) takes a value between 1.52 and 4.05 with an average of 2.99 and a standard deviation of 0.84. This suggests that the total import's aggregate mean is 2.99 indicating that on average; the total import was able to generate about 2.99% increase relative to their total value even though the minimum and maximum values show that the total export varies during the period of this study. Similarly, total export (EXPT) in Nigeria takes a value between 1.26 and 3.67 with an average of 2.72 and a standard deviation of 0.75. This suggests that the aggregate mean of total export (EXPT) in Nigeria is 2.72 indicating that on average; the total export (EXPT) was able to generate a significant increase relative to their total value even though the minimum and maximum values show that the total export varies during the period of this study. Also, the Balance of Payment (BOP) takes a value between 1.52 and 4.05 with an average of 2.99 and a standard deviation of 0.84. This suggests that Balance of Payment aggregate mean is 2.99 indicating that on average; Balance of Payment was able to generate about 2.99% increase relative to their total value even though the minimum and maximum values show that the total export varies during the period of this study.

Table 4.1: Descriptive Result

	Gross Domestic Product (GDP)	**Balance of Trade (BOT)**	**Total Import (IMPT)**	**Total Export (EXPT)**	**Balance of Payment (BOP)**
Mean	4.52	37.23	2.99	2.72	47.23
Median	3.995	37.5	3.04	2.86	36.5
Maximum	8.53	53.0	4.05	3.67	52.0
Minimum	3.70	16.0	1.52	1.26	14.5
Std. Dev.	1.46	8.54	0.84	0.75	6.53
Skewness	2.3004	-0.0671	-0.3552	-0.5949	-0.0571
Kurtosis	3.8220	-0.3854	-1.2660	-0.8727	-0.2854

Probability	0.0023	0.0001	0.0032	0.0016	0.0006
Observations	30	30	30	30	30

Source: Researcher's Computation on E-views 12, 2024

4.1.2 Unit root test

In table 4.2, an Augmented Dickey Fuller (ADF) test was performed on by the Gross Domestic Product (GDP), Balance of Trade (BOT), Total Import (IMPT) and Total Export (EXPT) and Balance of Payment (BOP). In all cases, a constant and a linear trend were included since this represents the most general specification. Following the Dickey Fuller unit root tests for stationarity, a variable is stationary if its ADF value is greater than the critical value at a given level of significance. The level of significance adopted in this research work is the 5% level of significance. According to the results, Gross Domestic Product (GDP), Balance of Trade (BOT), Total Import (IMPT), Total Export (EXPT) and Balance of Payment (BOP) were stationary at 1st difference meaning that they are integrated of order 1.

Table 4.2: Augmented Dickey Fuller Unit root test

Variables	**ADF (Intercept & Trend)**	**5% critical value**	**Order of Integration**
GDP	-1.273914	-3.24522	I(1)
BOT	-2.071489	-3.24522	I(1)
IMPT	-0.997815	-3.24522	I(1)
EXPT	1.011792	-3.24522	I(1)
BOP	1.023463	-3.12565	I(1)

Source: Researcher's Computation on E-views 12

Heteroscedasticity Test

From the table below, the observed R-squared in the heteroskedasticity test was 0.128888 and the number of observations after adjustment was 29 while the p value was 0.7196 which is higher the significant value of 0.05. Hence, the null hypothesis is not rejected, and the homoscedasticity is present.

Table 4.3: Heteroskedasticity Test: ARCH

F-statistic	0.120535	Prob. F(1,27)	0.7311
Obs*R-squared	0.128888	Prob. Chi-Square(1)	0.7196

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.031932	0.012814	2.491999	0.0191
RESID^2(-1)	0.066646	0.191964	0.347181	0.7311

R-squared	0.004444	Mean dependent var	0.034210
Adjusted R-squared	-0.032428	S.D. dependent var	0.058334
S.E. of regression	0.059272	Akaike info criterion	-2.746887
Sum squared resid	0.094856	Schwarz criterion	-2.652591
Log likelihood	41.82987	Hannan-Quinn criter.	-2.717355
F-statistic	0.120535	Durbin-Watson stat	1.983689
Prob(F-statistic)	0.731147		

Source: Researcher's Computation on E-views 12

4.1.4 Serial Correlation Test

From the table below, the observed R-squared in the serial correlation test was 1.490508 and the number of observations after adjustment was 30 while the p value was 0.4746 which is higher the significant value of 0.05. Hence, there is no serial correlation in the relationship between the dependent variable and the independent variables.

Table 4.4: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.575092	Prob. F(2,22)	0.5709
Obs*R-squared	1.490508	Prob. Chi-Square(2)	0.4746

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Included observations: 30

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IMPT	0.031727	0.225039	0.140985	0.8892

EXPT	0.001092	0.006905	0.158171	0.8758
BOT	0.003861	0.101673	0.037978	0.9700
ECM	0.000238	0.001941	0.122644	0.9035
C	-0.092764	0.560034	-0.165639	0.8700
RESID(-1)	-0.099268	0.217535	-0.456330	0.6526
RESID(-2)	-0.223667	0.222096	-1.007074	0.3248

R-squared	0.049684	Mean dependent var	1.11E-16
Adjusted R-squared	-0.252690	S.D. dependent var	0.185134
S.E. of regression	0.207209	Akaike info criterion	-0.087001
Sum squared resid	0.944581	Schwarz criterion	0.286652
Log likelihood	9.305013	Hannan-Quinn criter.	0.032534
F-statistic	0.164312	Durbin-Watson stat	1.986000
Prob(F-statistic)	0.989876		

Source: Researcher's Computation on E-views 12

4.1.5 Error Correction Model (ECM)

From the table below b1, b2 and b3 are 0.405912, 0.002789 and 0.879389 are parameter estimates for trade openness, total export and total import respectively. Also, the error correction model (ECM) co-efficient is -0.004388 which signifies that there is some degree of correction in the result considering the fact that degree of correction exists in the co-efficient between -1 and 0; as anything outside these values are means there is no degree of correction. In the same light, it was established from the regression result that there is a positive and significant relationship between the Balance of trade and Gross domestic product (GDP) in Nigeria. This implies an increase in balance of trade will translate in an increase in Gross domestic product in Nigeria. This is in consonance with increase a priori expectation: this could be further justified on the basis that an increase in the balance of trade in the country will lead to a significant increase in economic growth in Nigeria. However, the magnitude of the positive relationship is shown with the value of the parameter estimate (0.405912). Increase in balance of trade would result to about 40.5% increase in the gross domestic product (GDP) in Nigeria. This is statistically significant at 5% level of significance using t-test and standard error estimate. The t-calculated is 1.863153 while the tabulated t-test is 2.05, the standard error estimate is 0.947354 while half of the parameter estimate is (1/2 * 0. 405912 = 0.202956). Since t-calculated is greater than the t-tabulated and standard error of the parameter estimate is less than half of the parameter estimate, there is sufficient evidence to conclude that there is statistical significance between balance of trade and gross domestic product in Nigeria. Equally, it was revealed from the regression result that there is a positive and significant relationship between the total export and gross domestic

product in Nigeria. This implies an increase in total export will translate in an increase in gross domestic product in Nigeria. This is in consonance with increase a priori expectation: this could be further justified on the basis that an increase in the total export in the country will lead to a significant increase in the gross domestic product in Nigeria. However, the magnitude of the positive relationship is shown with the value of the parameter estimate (0.002789). Increase in total export would result to about 0.3% increase in the gross domestic product (GDP) in Nigeria. This is statistically significant at 5% level of significance using t-test and standard error estimate. The t-calculated is 0.422241 while the tabulated t-test is 2.05, the standard error estimate is 0.006606 while half of the parameter estimate is (1/2 * 0. 002789 = 0.001394). Since t-calculated is greater than the t-tabulated and standard error of the parameter estimate is less than half of the parameter estimate, there is sufficient evidence to conclude that there is statistical significance between total export and gross domestic product in Nigeria. Similarly, it was established from the regression result that there is a negative and significant relationship between total import and gross domestic product (GDP) in Nigeria. This implies an increase in total import will translate in a significant decrease in the gross domestic product (GDP) in Nigeria. This is in consonance with increase a priori expectation: this could be further justified on the basis that an increase in the total import in the country will lead to a significant decrease in the gross domestic product in Nigeria. However, the magnitude of the negative relationship is shown with the value of the parameter estimate (0.879389). Increase in total import would result to about 87.9% decrease in the gross domestic product of Nigeria. This is statistically significant at 0.5% level of significance using t-test and standard error estimate. The t-calculated is 8.920073 while the tabulated t-test is 2.05, the standard error estimate is 0.098585 while half of the parameter estimate is (1/2 * 0.879389 = 0.439694). Since t-calculated is greater than the t-tabulated and standard error of the parameter estimate is less than half of the parameter estimate, there is sufficient evidence to conclude that there is statistical significance between total import and gross domestic product in Nigeria.

R-squared measures the goodness of fit of model. In the analysis the R-squared is 93.8% which is a good measure of fit which shows that balance of trade, total export and total import in Nigeria for about 93.8% systematic variation in the dependent variable (gross domestic product) whereas the remaining 6.2% are other factors which affects the gross domestic product but were not captured in the model. The adjusted R-squared also showed that after adjusting with the degree of freedom, the model is still of good fit (92.5%) whereas the remaining 7.5% are other factors which affects the gross domestic product but were not captured in the model which was represented earlier as the stochastic variable or error-term. Also, F statistic value which is used to test the joint statistical significance of the parameter estimates. From the result, the f statistic value of 72.72576 ($p<0.05$) showed that there is a joint statistical significance among balance of trade, total export, total import and gross domestic product. Furthermore, Durbin Watson statistics is used to test for the presence or absence of positive serial correlation. Since the Durbin Watson statistics falls between zero and two that is (2.142317). There is no evidence to show the presence of autocorrelation.

Table 4.5: Error Correction Model (ECM) analysis

Dependent Variable: GDP

Method: Least Squares

Included observations: 30 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IMPT	0.405912	0.217863	1.863153	0.0747
EXPT	0.002789	0.006606	0.422241	0.6766
BOT	0.879389	0.098585	8.920073	0.0000
ECM	-0.004388	0.001892	-2.318697	0.0292
C	-0.978245	0.541519	-1.806483	0.0834

R-squared	0.938085	Mean dependent var	3.075400
Adjusted R-squared	0.925186	S.D. dependent var	0.744027
S.E. of regression	0.203507	Akaike info criterion	-0.169374
Sum squared resid	0.993965	Schwarz criterion	0.110866
Log likelihood	8.540608	Hannan-Quinn criter.	-0.079723
F-statistic	72.72576	Durbin-Watson stat	2.142317
Prob(F-statistic)	0.000000		

Source: E Views 12 Computations

4.2 Discussion of Results

The study investigated empirically the extent at which foreign trade affects economic growth in Nigeria using an annual time series of a period of 1990 – 2019. To achieve this objective, Error Correction model (ECM) was estimated. It was revealed that the balance of trade, total export and total import are significant determinants factors of gross domestic product in Nigeria within the scope covered. Findings from the study are consistent with previous studies such as Gbosi (2019); Asaleye, Okodua, Oloni and Ogunjobi (2017); Kurihara and Fukushima (2016); Meroyi (2016). The result of the analysis however, shows that balance of trade has positive and significant impact on gross domestic product in Nigeria; also, total export has positive and significant impact on gross domestic product in Nigeria; additionally, total import has negative and significant impact on gross domestic product in Nigeria for the period under review. This agrees with the conclusion of some existing studies reported in our literature. The work of Nchom and Udeorah (2021); Obayori and Robinson (2019); and Odejimi and Odejimi (2015), however, shows a positive and significant relationship between trade liberalization and gross domestic product in Nigeria. One of the key takeaways is the negative relationship between imports and GDP. High import dependency in Nigeria has

led to economic distortions, including inflationary pressures, trade deficits, and currency devaluation. The influx of foreign goods, particularly consumer goods, has stifled local production, making it difficult for domestic industries to compete (CBN, 2021). This situation has resulted in job losses, a decline in manufacturing output, and an overreliance on foreign exchange reserves. To mitigate these challenges, Nigeria needs to adopt strategic trade policies that prioritize industrialization and import substitution. Policy interventions should include:

- **Promotion of Local Industries:** Implementing policies that support domestic manufacturers through tax incentives, subsidies, and infrastructural development will reduce dependence on foreign goods.
- **Import Tariffs and Trade Regulations:** Introducing higher tariffs on non-essential imports while lowering tariffs on capital goods and raw materials will encourage local production and technological advancement.
- **Exchange Rate Stability:** Managing currency fluctuations by maintaining a stable exchange rate policy will enhance trade competitiveness and reduce inflationary pressures.
- **Export Diversification:** Encouraging the production and export of non-oil products, such as agricultural and industrial goods, will enhance Nigeria's trade balance and economic resilience.
- **Strengthening Trade Agreements:** Participating in regional trade agreements such as the African Continental Free Trade Area (AfCFTA) can provide market access for Nigerian products while reducing overdependence on imports.

By implementing these policies, Nigeria can improve its trade balance, foster economic growth, and create a sustainable trade environment that benefits both producers and consumers.

5.0 Summary and Conclusion of the study

This study critically investigated the extent at which foreign trade affects economic growth in Nigeria. After a proper examination of the different studies relating to how foreign trade affect economic growth in Nigeria using its proxies; the empirical findings showed that there is positive relationship between balance of trade and gross domestic product in Nigeria; as well as, a negative relationship between total import and gross domestic product in Nigeria. The study also proves that there is a positive relationship between total export and gross domestic product in Nigeria. This is justified on the basis that when the total export increases, the gross domestic product (GDP) in Nigeria also increases. Also, the study showed that there a negative relationship between total import and gross domestic product. This denotes that increase in total

import in Nigeria has a negative impact on the gross domestic product (GDP) in Nigeria. Hence, government needs to implement policies that would help manage the balance of trade in Nigeria, so as to improve the gross domestic product (GDP) in Nigeria.

The findings of this study underscore the importance of effective trade policies in fostering economic growth in Nigeria. The positive correlation between exports and GDP demonstrates that expanding export-oriented production can enhance economic stability. Conversely, the negative impact of excessive imports on GDP highlights the need for policies aimed at reducing dependency on foreign goods and encouraging local production. To achieve this, Nigeria must focus on building a trade environment that balances liberalization with protective measures for domestic industries.

2.6 Actionable Recommendations

- **Implement Higher Tariffs on Consumer Imports:** Increase tariffs on finished consumer goods to reduce dependency on foreign products and protect local manufacturers. However, ensure that tariff policies are enforced effectively to prevent smuggling and illegal trade practices.
- **Lower Tariffs on Capital Goods and Raw Materials:** Reduce tariffs on machinery, technology, and essential raw materials to support industrial growth. Provide incentives for industries that source raw materials locally to encourage value addition.
- **Develop and Enhance Industrial Infrastructure:** Invest in industrial parks, power supply, and transport infrastructure to create an enabling environment for manufacturers. Moreover, establish public-private partnerships to fund industrial development projects.
- **Promote Export Diversification:** Implement policies that encourage non-oil exports, including agricultural and manufactured goods. Provide financial assistance and training for small and medium enterprises (SMEs) to expand into global markets.
- **Strengthen Local Supply Chains:** Encourage domestic production by supporting industries that utilize local raw materials. Establish incentives for businesses that prioritize local sourcing to reduce import reliance.
- **Stabilize Foreign Exchange Policies:** Implement policies to stabilize the exchange rate and reduce inflationary pressures on imports. Furthermore, support local industries by providing foreign exchange access for the importation of necessary industrial inputs.

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