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IMPACT OF TRADE POLICIES ON ECONOMIC DEVELOPMENT: THE NIGERIA EXPERIENCE, 1980 -2018

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Abstract: *This paper examines the impact of trade policies on economic development, using the Nigeria experience from 1980 to 2018. Theoretical foundation for this studies holds that trade specialization leads to increase in trade and economic development. Empirical evidences however, disagree on this proposition. This investigation attempts to resolve this inconclusiveness. This study uses secondary data form united nations report, Central Bank's statistical bulletin and the national bureau of statistics to test the impact of the independent variables namely import, export, exchange rate and inflation rate on the dependent variable – Economic development proxy by human development index. The statistical techniques used include selected diagnostics tests, ordinary least square regression, co-integration and impulse response techniques and tested at the 5% level of significance. The result of the study shows that import trade policies, exchange rate and inflation rate have a significant impact on economic development in the short and long-run periods while export trade was statistically insignificant in both short and long-run period with a significant impact response. We conclude that trade policies have significant impact on economic development and recommend the creation of trade-friendly environment and policies that will encourage domestic trade and SME growth; we admonish the government to embark on serious export diversification of the economy to develop and grow our agricultural base for exports and earn quantum foreign exchange, reduce unemployment and poverty; we advise further that the government block the various foreign exchange leakages from the economy ranging from the huge petroleum product importation activities to large scale corruption*

Keywords: International trade, Trade policies, Terms of Trade, Economic development

1.0 Introduction

Countries have different natural, capital and human endowments as well as technological know-how. According to Nzotta (2004), some countries have an adequate level of some or all of these resources, while most others lack these resources necessary to ensure economic growth and a high standard of living for their citizens. The above scenarios have led to some form of inter-country trade in an attempt to gain access to these resources and trigger economic developments, which results to improved living standards, higher employments or reduced unemployment, better welfares, low mortality rate etc.

While we can categorize factors that engender inter-country trade into;

i. Resources endowment among countries
ii. Country specializations, this means that a country devotes its productive activities only to a small proportion of the total set of goods it uses (Nzotta, 2004). This allows the country to benefit from special skills, resources, or economies of scale, thereby giving the country an advantage in the production of these goods which are then traded to other nations in exchange for items it does not itself produce,

It will be observed that various trade policies amongst these countries signal serious implications for their respective trade partners as well as on the country's economic development.

It is notable that there has been serious arguments between the classical school of thought, who argue that there exists some level of international trade separate from inter-regional trade and propounded the theory of comparative cost advantage to support

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their arguments of International trade while Bertil Ohlin and Haberler contested this view that inter-regional trade and international trade are one and that the only perceived difference is in degree rather than kind (Jhingan, 2010). Lipsey and Chrystal (2011) opined that sales and purchases of goods and services that take place across international boundaries are international trade. They further argued that there exists substantial evidence to show that international trade and economic growth are positively linked. This school of thought observed that though international trade is beneficial, the government have often attempted to restrict the freedom to trade through trade policies. Nzotta (2004) maintained that trade between nations can only occur if it is possible to exchange the currency of one nation for that of another. In his work, he distinguished between international trade and domestic trade in a number of ways including that domestic trade involves the use of one domestic currency while in international trade, agreed standard currency is used; secondly, while international trade is often influenced by international politics and diverse considerations, domestic trade is not; labour and capital move freely to areas of requirement but mobility of these resources are difficult with international trade; finally, while domestic trade involves one national government, international trade involves at least two national government.

Hence, the challenge posed in this study is to x-ray the international trade arguments and whether the trade policies have any impact on economic developments using the Nigeria experience. This paper shall be divided into five parts, namely; a. Introduction; b. Review of related literatures; c. Methodology of the study; d. Data presentation and Analysis; and e. Summary and Conclusion.

2.0 Review of Related Literature

International trade is necessary to achieve the gains that international specialization makes possible (Lipsey and Chrystal, 2011). Trade allows each country to concentrate on producing those goods and services that it produces relatively efficiently while trading to obtain goods and services that it would produce less efficiently than is done by others. There are three main sources of gain from trade. Firstly, climatic and resource endowments, which leads to advantages in producing certain goods and disadvantages in producing another; secondly, the reduction in each country's cost of production, that results from greater production that specialization brings; and thirdly the international competition that usually promote more rapid technological change and economic development.

2.1 Conceptual Issues

2.1.1 Merits of International Trade

Nzotta (2004) identified four basic gains from international trade, namely;

a. Economic Growth and Development: International trade promotes and sustains economic growth and development. While economic growth focuses on increase in an economy's real output or income over time, economic development hinges on improvement in standard of living of the people per time, poverty alleviation and increase in employment of the human capital. Generally, trade constitute an engine of growth and plays a supportive role in economic growth and development.
b. Foreign Exchange: International trade provides foreign exchange needed to trigger economic growth and development.
c. Input for the Productive: The inputs needed for the productive process is made available in a timely manner through international trade.
d. Gainful employment of labour: International trade provides opportunities for gainful employment of labour needed for the production of goods and services. The production of goods for export creates employment for the domestic economy.

2.1.2 Fundamentals of Specialization

International trade encourages specialization amongst countries and ensures that trade is beneficial to various trading partners. The fundamental principle of specialization is the law of comparative advantage (Nzotta, 2004). According to David Ricardo, comparative advantage is based on the differences in production costs of similar commodities in different countries. Production costs differ in countries because of geographical division of labour and specialization in production. Differences in climate, natural resources, geographical situations and efficiency of labour, enables one country to produce one commodity at a lower cost than the other. In this way, each country specializes in the

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production of that commodity in which its comparative cost of production is the least.

2.1.3 The Terms of Trade

This is the rate at which one country's export exchanges for its import. Jhingan (2004) puts it as the rate at which the goods of one country exchanges for the goods of another country. He argued that it is a measure of the purchasing power of exports of a country in terms of its imports, and is expressed as the relation between export prices and imports prices of its goods. Lipsey and Chrystal (2011) viewed terms of trade as the measure of the quantity of imported goods that can be obtained per unit of export. When the export prices of a country rises relative to its import prices, its terms of trade are said to have improved. The country gains from trade because it can have a larger quantity of imports in exchange for a given quantity of exports. Conversely, the terms of trade gets worsen when the import prices rises relative to its export prices. The country's gain from international trade is reduced because it can have a smaller quantity of imports in exchange for a given quantity of export than before.

Terms of trade is affected by the following factors which include – changes in technology, Devaluation, Reciprocal demand, changes in factor endowment, Economic growth and development, and tariffs.

2.1.4. The Theory of Commercial Policy

Government policy towards international trade is known as commercial policy (Lipsey &Chrystal, 2011). Absolute freedom from interference with trade is known as a Free Trade Policy, while any departure from the free trade developed to give some level of protection to domestic industries from foreign competition is called Protectionism. Protection could take the form of Tariffs, which are taxes designed to raise the prices of imported goods, or by non-tariff barriers, which are meant to reduce the flow of imports.

2.1.4.1 The Free Trade Policy

According to Lipsey and Chrystal (2011), whenever, there is difference in opportunity costs amongst countries, it leads to specialization and trade will rise, to raise the living standards. Hence, free trade allows all countries to specialize in producing products in which they have a comparative advantage. Free trade allows the maximization of world production for any given set of world costs, thus making it possible for each consumer to consume more goods than could have ordinarily done.

2.1.4.2 The Protectionist Policy

There are essentially two reasons why countries advocate and engage in protectionism. The first concerns national objectives other than total income. Lipsey and Chrystal (2011), argued that It is possible to accept the proposition that national income is higher with free trade and yet rationally oppose free trade for the following;

i. Non-economic advantage of diversification
ii. Risks of specialization
iii. National defense
iv. Protection of specific groups

The authors noted that increasing the production of the protected good and reducing that of others, tariffs tend to raise the incomes of those who work in the industry that is protected and lower the incomes of those who are not protected.

The second reason for protectionism is to maximize national income and this will best be achieved through;

a. Protection of infant industries
b. Encouragement of learning by doing
c. Creation of a specific trade advantage
d. Protection against 'unfair' actions by foreign firms and governments
e. Alterations of the terms of trade

2.1.4.3 International Trade Policies between Developed and Developing Countries

The international trade policies are better harmonized through the World trade organization (WTO) that took over the responsibilities of the General Agreement on Tariffs and Trade (GATT). This will help in protecting bilateral interests in international trade and prevent unfriendly trade wars between developed and least developing countries.

Important role of the WTO include setting up agreements between member countries not to make unilateral tariff increases. This has prevented the outbreak of tariff and trade wars in which countries raise tariffs to protect particular domestic industries and to retaliate against other countries' tariff increases. Such trade wars are very harmful in the long run to both countries. WTO is encouraged to assist even the highly developed countries in evolving relevant memorandum of understanding and agreements

between industrialized economies not to embark on retaliatory trade and tariff wars as recently experienced between USA and China.

2.1.4.4 Import and Export Trade Policies in Nigeria

i. **Export Diversification:** Export promotion policies seek to make Nigeria's export quite competitive in the international markets, particularly non-oil exports. Other policies however, seek to consolidate the earnings of the oil sector and thus improve the total resources flows into the country. Nzotta (2004) noted that many countries have begun their trade reforms by establishing realistic exchange rates and allowing them to move with market conditions, while replacing non-tariff barriers with more uniform tariff structures. The purpose of export diversification is to enhance export earnings through the foreign trade multiplier. The government of Nigeria must be commended for various efforts made so far to promote exports which includes – establishment of the Nigeria Export Promotion council; Deployment of export development funds; liberalized access to foreign exchange; setting up of the Nigeria Export-Import Bank (NEXIM), export free zones otherwise known as Export Processing Zones (EPZ); duty drawbacks and other export related incentives. The pertinent question is whether these efforts have been able to stimulate export volume and economic development at large?

ii. **Import Restrictions:** This seeks to reduce pressure on external sector while encouraging local output and thus ensure balance of payments equilibrium. The various import restrictions have the basic aim of restricting imports, drive up domestic prices of prohibited goods and thus ensure net resources inflows into the national economy (Nzotta, 2004). Baumol et al (1982) argued that import restrictions seek to achieve two basic objectives, which are, to achieve more advantageous prices for goods and secondly, to protect particular industries from foreign competition. Some challenges face under import restrictions includes the activities of smuggling – which have caused such much leakages in the trade liberalization of the economy coupled with the corruptions of the customs department that have aided its spread along with a thriving parallel black market.

iii. **Restrictions in Foreign Exchange Accessibility:** Recently the central bank prohibited forty-four items from gaining access to foreign exchange at official price. This was aimed at reducing importation of those imported items and redirect local importers to produce those items locally and conserve our foreign exchange. The above measures are aimed at bringing down the exchange rate.

iv. **Trade Promotions:** Trade promotional efforts by the government are directed at encouraging export of locally made goods and services and build up the nation's foreign exchange base. This includes efforts by the Central Bank of Nigeria at empowering local producers through fertilizer provisions, produce loans, provision of rice loans and other agricultural incentives as well as export promotion incentives.

v. **Arbitrary taxation system:** Taxation has been used as a tool for resources redistribution and allocation. It has also been used as an instrument to regulate consumption of certain products and services which are mostly considered as luxury goods that have suitable local alternative. Government trade policies have aimed at discouraging certain types of importation that we could ordinarily produce locally such as tooth picks and tooth brushes, in such situations, high taxes have been placed on the importation of such considered products to restrict consumption.

2.1.4.6 Trade Policies and Economic Development

The fundamental purpose of trade policies are to encourage the consumption of locally produced goods and services, raise revenue for the government, protect and encourage the growth of local industries from foreign competitions, manage the nation's external reserves and sector, raise level of employment and living standards of the citizens. These invariably will lead to economic growth and development. This development will be measured in terms of improvement in living standards, reduction in poverty level, improvements in education and human capital development, development of strong institutions to combat economic vices such as corruption, reduction in mortality rates etc. All these will be best captured using a composite economic development benchmark such as Human Development index.

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2.2 Theoretical Issues

There are several theories supporting the study of international trade amongst which are Adams Smith theory, David Ricardo's theory of comparative cost advantage, J. S. Mills theory of Reciprocal demand, the classical theory of international trade, Heckscher-Ohlins modern theory of International trade and Haberler's theory of opportunity cost.

From the foregoing, the researchers have adopted the Haberler's theory of opportunity cost.as this help to overcome the various shortcomings observed in the David Ricardo's comparative cost theory that is based on the labour theory of value (Jhingan, 2004). The labour theory of value states that the value of a commodity is equal to the amount of labour time involved in the production of that commodity. The implication of the above includes, that labour is the only factor of production, it is homogenous and is used in the same proportion in the production of all commodities. These assumptions, however are unrealistic for the following – i. labour is not the only factor of production as commodities are produced in combinations with other factors such as land, capital etc. ii. Labour is not homogenous but heterogeneous, and iii. Labour is used in varying proportions in the production of different commodities and is not a substitute for capital.

Haberler's opportunity cost theory overcomes above shortcomings and explains the doctrine of comparative cost in terms of Substitution curve or production possibility curve.

The theory of opportunity cost holds that if a country can produce either commodity A or B, the opportunity cost of commodity A is the amount of the other commodity B that must be given up in order to get one additional unit of commodity A. Thus, the exchange ratio between the two commodities is expressed in terms of their opportunity costs. The Production Possibility curves is best used in international trade to illustrate the concept of opportunity cost.

Haberler (1936), held that the following assumptions must hold for his theory to be in operation, namely;

i. There are only two countries, A and B.
ii. Each country possessed two factors of production, labour and capital.
iii. Each country can produce two commodities, say X and Y.
iv. There is perfect competition in both the factor and commodity markets.
v. The price of each commodity equals its marginal money costs.
vi. The price of each factor equals its marginal value productivity in each employment.
vii. The supply of each factor is fixed.
viii. There is full employment in each country.
ix. There is no change in technology.
x. Factors are immobile between the two countries.
xi. Factors are completely mobile within countries.
xii. Trade between the two countries is completely free and unrestricted.

Based on these assumptions, a production possibility curve could be developed and shows the various alternative combinations of the two commodities that a country can produce most efficiently by fully utilizing its factors of production with the available technology. The slop of the production possibility curve measures the amount of one commodity that a country must give up in order to get an additional unit of the second commodity. In other words, the slope of the production possibility curve is its marginal rate of transformation (MRT).

According to Jhingan (2004), it is the shape of the production possibility curve under different cost conditions that determine the basis and the gains from international trade under the theory of opportunity cost. If the amount of Y required to be given up to get additional quantity of X remains constant, the production possibility curve would be a straight line and would indicate constant opportunity costs. If more quantity of Y is required to be given up in order to have an additional quantity of X, the production possibility curve would be a concave to the origin and it would indicate increasing opportunity costs. However, if an additional quantity of X leads to the giving up of less quantity of Y, the production possibility curve would be convex to the origin and would indicate diminishing opportunity costs.

2.3 Empirical Issues

Several researchers have investigated the relationship between trade and economic growth but have been unable to come to a conclusion on what should be the impact of selected trade policies of a nation on its economic growth. This lacuna prompted us to expand the scope of such a study to cover economic development and ascertain what should be the likely impact of selected trade

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policies on economic development, examining the experiences of Nigeria.

Some of these empirical works consulted include;

David-Wayas (2014) studied the effect of trade tariffs, export aggregate, and trade openness on economic growth. The study revealed that independent variables have positive and significant effect on economic growth.

Nageri, Ajayi, Olodo and Abina (2013) investigated the relationship between trade and economic growth using the OLS technique and variables such as total trade, FDI, Exchange rate and degree of openness and GDP. The study concluded that there is a positive and significant relationship.

Ezike et al (2012) investigates the macroeconomic impact of trade on Nigerian growth. Using the Ordinary Least Square (OLS) regression technique and applying a combination of bivariate and multivariate models from the data covering the period 1970 – 2008 observed that the two predictors used in the study for trade, namely exports and foreign direct investment have a positive and significant impact on Nigeria's growth during the period.

Omoju, O and Adesanya, O (2012), studied International trade and economic growth in developing country using Nigeria as their premise. They used secondary data covering 1980 – 2010 and applying the Ordinary Least Square (OLS) regression method, they discovered that foreign trade, foreign direct investment, government expenditure and exchange rate have a significant positive impact on economic growth in developing country like Nigeria.

Eravwoke, K. E and Oyivwi, D. O (2012) studies growth perspective via trade in Nigeria, employ the Ordinary Least Square (OLS) method, Augmented Dickey Fuller (ADF) and the Johansenco-integration method. The Johansen cointegration test shows that there exist a co-integration at 5% level of significance implying a long run relationship between total trade, exchange rate, export and gross domestic product of Nigeria. The OLS result however, revealed that total trade and export are not statistically significant in

Atoyebi, Adekunjo, Edun and Kadiri (2012), studied the effect of export trade, trade openness on gross domestic product and discovered that the variables had positive and significant effect on economic growth.

Obadan and Okojie (2010) studied the relationship between openness, export trade, foreign direct investment, domestic investment, political stability and economic growth using OLS method. The study discovered that trade openness positively affected Nigeria's economic growth.

Baldwin (2003) investigated the relationship between trade restriction and economic growth and discovered that trade liberalization fosters economic growth and showed a positive and significant relationship.

Balassa (1978) in his study of eleven countries that have an established industrial base discovers that the positive correlation between export growth and the GDP growth will provide indication of the total effects of exports on economic growth.

In Nigeria some authors had examined the performance of foreign trade and economic growth. For instance, Oyejide (1974), using Nigeria, as a laboratory test ground that an increase in export proceeds could lead to an expansion. Explaining economic growth in Nigeria but exchange rate is statistically significant in explaining growth in Nigeria.

Krueger (1997) studied the relationship between export performance and economic growth focusing on 10 countries between 1954 to 1974 and found high level of positive correlation. However, Balassa (1980), Barro and Sala-i-Martin (1995), Cline (2004) and Shafaeddin (1994) observed an insignificant correlational relationship between export and economic growth.

3.0 Data and Methodology

The research design adopted here is the *ex post facto*, and is commonly used where variables for the research are drawn from already concluded events and there is no possibility for the researcher to do any form of data manipulation.

3.1 Sources and Nature of Data

This study utilized secondary data obtained for Human Development Index (HDI), Export (EX), Exchange rate (ER), and Inflation rate (INF) from the United Nations report, statistical bulletin of the Central Bank of Nigeria and the National Bureau of Statistics.

3.3 Model Specification and Validity

The model adopted for this work is taken from;

i. the neoclassical production function of the form:

$$Y_t = A_t\ F(K_t, L_t)$$

……. Equation 1.

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Where, Y_t = Output
A_t = Technological Change
K_t = Capital stock
L_t = Labour force

ii. Obadan (2008)
GDPGR = f(openness, Export trade, FDI, Political stability, Domestic investment)

We modify equations 1 and 2 above and transform to become;
HDI = f (IM, EX, ER, INF)

$$\sum HDI_t = \beta_{21} + \sum \beta_{22} IM_{1-t} + \sum \beta_{23} EX_{1-t} + \sum \beta_{24} ER_{1-t} + \sum \beta_{25} INFT_{1-t} + U_{tii} \ldots . 3$$

Where: HDI = Human Development Index and proxy for economic development
IM = Import
EX = Export
ER = Exchange rate
INF = Inflation rate

3.4 Apriori Expectation

The apriori expectation for this study is given below as follows:

Dependent Variable	Independent Variable	Relationship
HDI	IM	-
HDI	EX	+
HDI	ER	+
HDI	INF	-

4.0 Data Presentation and Analysis

Table 4.1: Trade Policies and Economic Development

YEAR	HDI	IM	EX	ER	INF
1980	0.378	11	14.9	0.55	10
1981	0.32	12.8	11.0	0.6100	20.08
1982	0.3	10.8	8.2	0.6730	7.7
1983	0.252	8.9	7.5	0.7240	23.2
1984	0.24	7.2	9.1	0.7650	17.8
1985	0.241	7.1	11.7	0.8940	7.4
1986	0.258	6.0	8.9	2.0200	13.67
1987	0.269	17.9	30.4	4.0200	9.69
1988	0.28	21.4	31.2	4.5400	61.21
1989	0.291	30.9	58.0	7.3900	44.67
1990	0.302	45.7	109.9	8.0400	3.61
1991	0.313	89.5	121.5	9.9100	22.96
1992	0.324	143.2	205.6	17.3000	48.8
1993	0.335	165.6	218.8	22.0500	61.26
1994	0.346	162.8	206.1	21.8900	76.76
1995	0.351	755.1	950.7	81.2000	51.59
1996	0.368	562.6	1,309.5	81.2000	14.31
1997	0.379	845.7	1,241.7	82.0000	10.21
1998	0.39	837.4	751.9	84.0000	11.91
1999	0.401	862.5	1,189.0	93.9500	22
2000	0.412	985.0	1,945.7	102.1000	14.53
2001	0.423	1,358.2	1,868.0	111.9300	16.49
2002	0.434	1,512.7	1,744.2	121.0000	12.97
2003	0.445	2,080.2	3,087.9	129.3000	23.81

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2004	0.463	1,987.0	4,602.8	133.5000	10.01
2005	0.466	2,800.9	7,246.5	131.6600	11.57
2006	0.477	3,108.5	7,324.7	128.6500	8.55
2007	0.481	3,912.0	8,309.8	134.0500	6.56
2008	0.487	5,593.2	10,387.7	132.3700	15.06
2009	0.492	5,480.7	8,606.3	132.6000	12.2
2010	0.5	8,164.0	12,011.5	154.8000	13.7
2011	0.509	10,995.9	15,236.7	165.1000	10.8
2012	0.514	9,766.6	15,139.3	161.5000	12.2
2013	0.521	9,439.4	15,262.0	162.9000	8.5
2014	0.525	10,538.8	12,960.5	170.0000	8
2015	0.527	11,076.1	8,845.2	199.0000	9
2016	0.531	9,480.4	8,835.6	305.0000	15.7
2017	0.528	10,804.8	13,988.1	360.0000	16.5
2018	0.51	943.6	1,733.1	361.0000	11.7

source: UNDP, CBN statistical bulletin and national bureau of statistics of various issues

4.2.1 DIAGNOSTIC TESTs

The aim of the diagnostic test is to ensure that our data for this research and model used herein conforms to the basic assumptions of the classical linear regression. This will ensure that the result of this process of data analysis is not prone to error and is reliable.

4.2.1.1 Test for stationerity

In carrying out stationerity test, the variables to be used in this model must be stationary at a particular level of significant as chosen by the researcher; here the chosen level of significance is at 5% level of significance and as such the probability-value (p-value) must be significant being less than the chosen probability level. Also, the stationarity of the variables is attained where the critical value at the chosen significance level is lesser than the test statistics, and then lesser negative. Therefore, the variables are said to without unit root.

Table 4.2: Unit Root Test

Variables	ADF Test Statistics	T-CRITICAL AT 5%	P-value	Order of Integration
HDI	-5.657822	-2.948404	0.0000	I(1)
IM	-4.982699	-2.960411	0.0003	I(0)
EX	-4.222889	-2.967767	0.0026	I(0)
ER	-3.954639	-2.943427	0.0042	I(1)
INF	-5.280108	-2.951125	0.0001	I(1)

Source: Author's E-view 10.0 Computation

Table 4.2 shows that all the variables are stationary at 5% level of significance in the first order of differentiating except the import and export which are stationary at the first level with positive and significant p-values. The ADF test statistics has most negative than the critical values at 5% level of significance for each of the variable.

4.2.1.2 Test for Serial Correlation – Breusch-Godfrey (BG) Tests

The Breusch-Godfrey serial correlation tests is used to test for the presence or absence of serial correlations in the model with the null hypothesis stating that there is no autocorrelation. This holds if p-value is greater than the chosen level of significance otherwise reject.

Table 4.3: Test for Serial Correlation for Trade Policies and Economic Development

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	3.391195	Prob. F(2,16)	0.0592
Obs*R-squared	10.41961	Prob. Chi-Square(2)	0.0055

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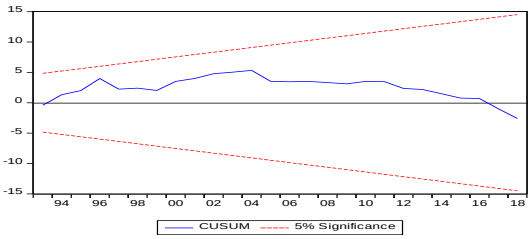
Source: Author's E-view 10.0 Computation

The null hypothesis is being stated that there is no presence of heteroskedasticity if the p-value is greater than the chosen level of significance of 5%. Therefore, the Null hypothesis is been accepted that there is no evidence of heteroskedasticity since p-value is greater than 5% significance level.

4.2.1.1 Stability Test

The assumption of the stability test graphically is that the Recursive Estimates of OLS (CUSUM TEST) which is being denoted by a blue line must lie in between the p-value of the chosen level of significance.

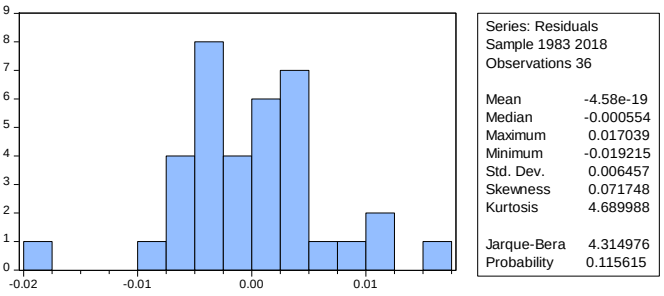
Fig. 4.1: Stability Test for Trade Policies and Economic Development



4.2.1.4 Test for Normality and Descriptive Statistics

The assumption concerning the normality of the residual is that the histogram would be bell-shaped and the Jargue-Bera statistic p-value should not be significant. The null hypothesis states that there is normality of the distribution if the p-value of the Jargue-Bera is not significant and is greater than the chosen level of significance of 5%. In order to accept the null hypothesis; consequently the alternate hypothesis would be rejected, that is the series is normally distributed (Brooks, 2014).

Fig. 4.2: Histogram and Normality Test for Trade Policies and Economy Development



Source: Authors' E-view 10.0 Computation

The null hypothesis states that there is normality of the distribution if the p-value of the Jargue-Bera is not significant and is greater than the chosen level of significance of 5%. Therefore, the null hypothesis is been accepted while the alternate hypothesis is been rejected since the distribution are normally distributed and had p-value of the Jargue-Bera (0.115615) which is greater than 5% significance level. Furthermore, the histogram is bell-shaped.

Table 4.4: Descriptive statistics for Trade Policies and Economic Development

	HDI	IM	EX	ER	INF
Mean	0.399564	2939.280	4246.947	97.95349	19.91487
Median	0.401000	862.5157	1309.543	93.95000	13.67000
Maximum	0.531000	11076.07	15262.01	361.0000	76.76000
Minimum	0.240000	5.983600	7.502500	0.550000	3.610000
Std. Dev.	0.096647	3930.366	5288.060	95.62802	17.36654
Skewness	-0.143197	1.142114	0.960778	1.102536	1.887557
Kurtosis	1.627705	2.669684	2.422260	4.077054	5.535489
Jarque-Bera	3.193474	8.656066	6.542517	9.786383	33.60530
Probability	0.202556	0.013193	0.037959	0.007497	0.000000
Sum	15.58300	114631.9	165630.9	3820.186	776.6800
Sum Sq. Dev.	0.354944	5.87E+08	1.06E+09	347499.3	11460.68
Observations	39	39	39	39	39

Source: Authors' E-view 10.0 Computation

The descriptive statistics in Table 4.4 shows the basic aggregative averages like mean and median for all the observations. The standard deviation used indicated the spread and variations in the series. Pertinently, kurtosis which shows the degree of peakedness of the distribution is also shown in synonymous of skewness which is a reflection of the degree of departure from symmetry of the given series. With the variables (ER and INF) showing an average kurtosis > 3, this means that the variables are platykurtic, the variables (HDI and EX) showing an average kurtosis <3, this means that the variables are leptokurtic and the variable (IM) showing an average kurtosis = 3, this means that the variable is mesokurtic. Also, the variables (IM, EX, ER and INF) Jarque-Bera statistics of p-values is below the 5% level of significance, which means they are statistically significant and the variable

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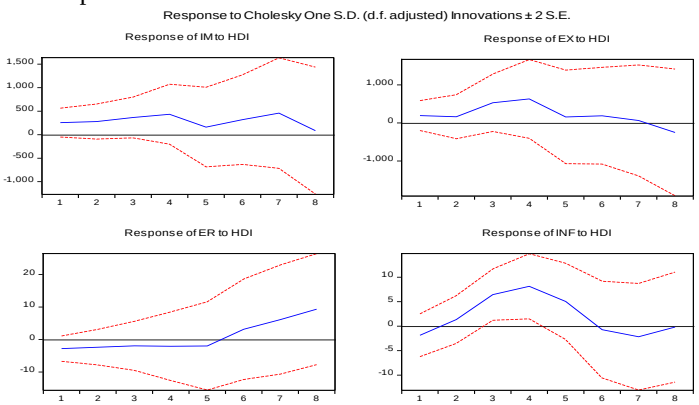
(HDI) show Jarque-Bera statistics of p-value above the 5% level of significance, which means it is not statistically significant.

Fig. 4.3: Impulse-Response Test for Trade Policies and Economic Development



Source: Authors' E-view 10.0 Computation

The impulse-response graph must always be within 5% level of significance for it to be accepted. For the first graphical representation of impulse-response of IM to HDI: at the earlier stage, the importation of goods and services is stable for the periods of one and two where it began to pick up gradually to period four with a sharp decline to period five and then fluctuate in that regard. It can be depicted from the graph that import to human development index was never negative for any period which means that import has a positive and statistically significant short and long run relationship with human development index.

Also, export at its earlier stage was stable to period two where it began to rise gradually and witnessed its peak period at four and gradually declines to period five. At period seven, it gradually declines to negative in period eight. Export has asymmetric but statistically significant short and long run relationship with human development index.

Furthermore, exchange rate from the period of one to five was negative before it gradually rose and witnessed an all-time peak at period eight. Exchange rate has a negative but statistically significant short and long run relationship with human development index.

Inflation rate all through periods fluctuates with human development index. Therefore, inflation has asymmetric but statistically significant short and long run relationship with human development index.

4.3 TEST OF HYPOTHESIS

Short Run Test

In carrying out the short run test, the OLS techniques would be used based on its properties of Best Linear Unbiased Estimator. The p-value of each independent variable will be used to test the dependent variable at 5% level of significance; p-values that are greater than 5% are rejected as been not statistically significant and vice versa.

Table 4.5: OLS Test for Trade Policies and Economic Development

Dependent Variable: HDI				
Method: Least Squares				
Date: 03/19/19 Time: 18:41				
Sample (adjusted): 1985 2016				
Included observations: 32 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.025931	0.008983	2.886739	0.0077
IM(-5)	-1.06E-06	3.71E-07	-2.867639	0.0081
EX(1)	-8.01E-08	2.45E-07	-0.326719	0.7465
ER(-1)	0.000127	4.78E-05	2.666858	0.0130
INF(2)	8.92E-05	4.18E-05	2.135407	0.0423
HDI(-1)	0.930591	0.032707	28.45210	0.0000
R-squared	0.998878	Mean dependent var		0.407969
Adjusted R-squared	0.998662	S.D. dependent var		0.091589
S.E. of regression	0.003350	Akaike info criterion		-8.392591
Sum squared resid	0.000292	Schwarz criterion		-8.117765
Log likelihood	140.2815	Hannan-Quinn criter.		-8.301494
F-statistic	4630.291	Durbin-Watson stat		2.342269
Prob(F-statistic)	0.000000			

Source: Authors' E-view 10.0 Computation

Table 4.5 shows that import is negatively related to human development index and statistically significant with a p-value of 0.0081. Exchange rate and inflation rate are positively and statistically significant to human development index with p-values of 0.0130 and 0.0423 respectively. Furthermore, export is negatively and not statistically significant to human development index with p-value of 0.7465. The R-squared and Adjusted R-squared of 0.998878 and 0.998662 respectively showed that the

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equation best fits the model. The Durbin Watson of 2.3 showed the absence of autocorrelation in the data used in the study. Importantly, the F-statistic of 4630.291 with p-value of 0.000000 showed that the variables (IM, EX, ER and INF) are statistically significant to the dependent variable (HDI).

From the table, it could be further inferred that there is a short run relationship between the independent variables (IM, ER, and INF) and dependent variables (HDI) but EX does not have a short run significant effect on HDI.

Table 4.6: Granger Casualty Test for Trade Policies and Economic Development

Pairwise Granger Causality Tests			
Date: 03/19/19 Time: 19:01			
Sample: 1980 2018			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
IM does not Granger Cause HDI	37	0.27991	0.7577
HDI does not Granger Cause IM		1.18454	0.3189
EX does not Granger Cause HDI	37	0.25620	0.7756
HDI does not Granger Cause EX		1.33847	0.2765
ER does not Granger Cause HDI	37	0.77016	0.4713
HDI does not Granger Cause ER		1.59444	0.2187
INF does not Granger Cause HDI	37	0.21356	0.8088
HDI does not Granger Cause INF		3.41377	0.0453
EX does not Granger Cause IM	37	8.76918	0.0009
IM does not Granger Cause EX		0.77390	0.4697
ER does not Granger Cause IM	37	2.02787	0.1482
IM does not Granger Cause ER		3.19337	0.0544
INF does not Granger Cause IM	37	0.22881	0.7968
IM does not Granger Cause INF		1.12358	0.3376
ER does not Granger Cause EX	37	0.71348	0.4976
EX does not Granger Cause ER		17.9260	6.E-06
INF does not Granger Cause EX	37	0.05248	0.9490
EX does not Granger Cause INF		1.56401	0.2249
INF does not Granger Cause ER	37	0.54905	0.5828
ER does not Granger Cause INF		1.66294	0.2055

Source: Authors' E-view 10.0 Computation

From the Granger Causality Test result in Table 4.6, for the effect of trade policies on economic development in Nigeria, the test was carried out with a lag of 2 period, and the causal effect relationship tested. The choice of the lag is based on the lag structure specified empirically to avoid prejudice of the outcome of the test.

From the result, Import (IM) does not granger cause Human Development Index (HDI) given the probability value of 0.7577 and Human Development Index (HDI) does not granger cause Import (IM) given the probability value of 0.3189. Therefore, there was no causality effect from Human Development Index (HDI) to Import (IM) and no feedback returning for Import (IM) to Human Development Index (HDI) in Nigeria.

Decision: We accept the null hypothesis for IM – HDI and HDI - IM, that there are no causal effects between them.

Also, Export (EX) does not granger cause Human Development Index (HDI) given the probability value of 0.7756 and Human Development Index (HDI) does not granger cause Export (EX) given the probability value of 0.2765. Therefore, there was no causality effect from Human Development Index (HDI) to Export (EX) and no feedback returning for Export (EX) to Human Development Index (HDI) in Nigeria.

Decision: We accept the null hypothesis for EX – HDI and HDI - EX, that there are no causal relationships between them.

Furthermore, Exchange rate (ER) does not granger causes Human Development Index (HDI) given the probability value of 0.4713 and Human Development Index (HDI) does not granger causes Exchange rate (ER) given the probability value of 0.2187. Therefore, there was no causality effect from Human Development Index (HDI) to Exchange rate (ER) and no feedback returning from Exchange rate (ER) to Human Development Index (HDI) in Nigeria.

Decision: We accept the null hypothesis for ER – HDI and HDI - ER, that there are no causal effect between them.

Also, Inflation rate (INF) does not granger cause Human Development Index (HDI) given the probability value of 0.8088 and Human Development Index (HDI) does granger cause Inflation rate (INF) given the probability value of 0.0453. Therefore, there was causality effect from Human Development Index (HDI) to Inflation rate (INF) and no feedback returning for Inflation rate (INF) to Human Development Index (HDI) in Nigeria.

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Decision: We accept the null hypothesis for HDI – INF, that there exists a Uni-directional causal relationship.

LONG RUN TEST

In carrying out the long run test, the Fully Modified Least Square (FMOLS) techniques was be used. The p-value of each independent variable will be used to test the dependent variable at 5% level of significance; p-values that are greater than 5% are rejected as been not statistically significant and vice versa.

Table 4.7: Fully Modified Least Square (FMOLS) Test for Trade Policies and Economic Development

Dependent Variable: HDI				
Method: Fully Modified Least Squares (FMOLS)				
Date: 03/19/19 Time: 18:48				
Sample (adjusted): 1986 2016				
Included observations: 31 after adjustments				
Cointegrating equation deterministics: C				
Long-run covariance estimate (Bartlett kernel, Newey-West fixed bandwidth				
= 4.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
IM(-5)	-9.05E-07	1.98E-07	-4.559782	0.0001
EX(1)	-3.92E-09	1.33E-07	-0.029459	0.9767
ER(-1)	0.000135	2.56E-05	5.267866	0.0000
INF(2)	8.27E-05	2.36E-05	3.509940	0.0017
HDI(-1)	0.913899	0.018504	49.38998	0.0000
C	0.031526	0.005299	5.949302	0.0000
R-squared	0.999195	Mean dependent var		0.413355
Adjusted R-squared	0.999034	S.D. dependent var		0.087801
S.E. of regression	0.002729	Sum squared resid		0.000186
Long-run variance	3.16E-06			

From table 4.7, it can be seen that import has a negative but statistically significance long run effect with HDI given the p-value as 0.001, export had a negative and statistically insignificant long run effect on HDI given the p-value as 0.9767 while exchange rate and inflation rate had a positive and statistically significant effect on HDI given the p-values of 0.0000 and 0.0017 respectively. The R-squared and Adjusted R-squared of 0.999195 and 0.999034 respectively showed that the equation best fits the model.

From table 4.7 it can be inferred that there is a long run effect between the independent variables (IM, ER, and INF) and dependent variables (HDI) but EX does not have a long run effect between HDI.

4.4 Discussion of Findings

The study investigated the effect of trade policies on economic development: the Nigerian experience between 1980 to 2018. To assist us achieve our objectives, data were collected on Human Development Index (HDI), Import (IM), Export (EX), Exchange rate (ER) and Inflation rate (INF) from the statistical bulletin of the Central Bank of Nigeria and the National Bureau of Statistics. The study adopted the Ordinary Least Square (OLS), Fully Modified Least Square (FMOLS) method and Granger Causality methods of econometrics to analyze the data and showcase the relationship that exists among the variables. The results showed that:

1. At the short run, exchange rate and inflation rate are positively and statistically significant to human development index, import is negatively and statistically significant to human development index, whereas export is negatively and statistically insignificant to human development index in Nigeria. This result is supported by the findings in Obadan & Okojie (2014)
2. At the long run, exchange rate and inflation rate are positively and statistically significant to human development index, import is negatively and statistically significant to human development index, while export is negatively and statistically insignificant to human development index in Nigeria. Similarly, this outcome agrees with the findings of Obadan & Okojie (2014)
3. Human Development Index (HDI) granger cause Inflation rate (INF) while dependent variables (IM, EX, ER and INF) does not granger cause Human Development Index (HDI). This is corroborated by the findings of Eravwoke and Oyivwi, (2012)

5.0 Conclusion

This research work investigated the effect of trade policies on economic development: the Nigeria experience from 1980 to

2018. We conclude from this study that trade policies had both short and long run effect on economic development proxied by Human Development Index (HDI) in Nigeria.

5.1 Recommendation

From the results of this investigations, we recommend the following policy directions for urgent consideration by the Nigerian government and monetary authorities;

i. That the government and monetary authorities should consider implementing trade policies that are business friendly and less restrictive, to further ginger the inflow of goods and resources.

ii. The government should review its domestic trade policies that have suffocating effect on local production, mining and manufacturing with reference to power and steel generations. Adequate restoration of regular and cheap power for instance, will help resuscitate the local small and medium scale businesses and launch the industrial base to trade boom and export growth.

iii. Export diversification from crude oil to agriculture. The government should reduce emphasis on only crude oil production and declare necessary state of emergency in agriculture with provision of ample funds and relevant technology. This will trigger increased trade, rise in employment and increased foreign exchange earnings.

iv. A major source of leakage from the economy is the huge petroleum product importation, it robs the nation of employment for her youths, scarce foreign exchange and value-chain businesses that would have resulted from proper functioning of all our oil refineries. To this end, the government is encouraged to enter into needful alliances with industrialized nations for assistance to get our refineries working again.

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