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Does Trade Openness Make Sense? Investigation of Nigeria Trade Policy

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Abstract

The empirically examined whether trade openness makes sense, using Nigeria trade policy as yardstick. Considering the framework of the traditional trade theories which postulate that trade has positive impact on economic growth, the study employed Autoregressive Conditional Heteroscedasticity (ARCH), Generalized Autoregressive Conditional Heteroscedasticity (GARCH) and Pairwise-Granger causality methodology using secondary data from 1984 to 2013. Results show that trade openness has a significant impact on economic growth. This implies that trade openness make sense in Nigeria given that most of the period under investigation ranged from when Nigeria adopted unrestricted trade policies. The control variables (interest rate and exchange rate) have significant positive effect on economic growth in Nigeria. The pairwise Granger causality test shows that there is a unidirectional causality between economic growth and trade openness at lag one only.

Keywords: Trade Openness, Trade Policy, Export, Import, Import Substitution, Economic Growth.

Introduction

The idea that trade openness leads to economic growth and improves the welfare of the citizens of a country has attracted the attention of policy makers and governments of the developing countries in the recent years. Nigeria as a developing country is not left out. But the question now is whether the economic environment is conducive for the trade policy (trade openness) to thrive?

However, trade openness is a trade policy which encourages the flow of goods and services unhindered by government-imposed restrictions. Such restrictions could be high taxes, tariffs

and even non tariffs barriers such as regulatory legislation and quotas. Trade openness permits an economy to make better use of its resources by allowing import of goods and services at a lower cost than they could be produced at home (following the theory of comparative cost advantage). It also enable developing countries to import capital equipment and intermediate inputs that are critical to long-run growth which will be expensive or impossible to be produced domestically. Other possible benefits of trade openness include more intense competition, which obliges local firms to operate more efficiently than under protection, and greater awareness of new foreign ideas and technologies (knowledge spillover).

Although trade openness reduces government revenue via reduction in taxes and tariffs on trade,

but studies (Knetter, 1993; Wade, 1990 and Singh, 1994) support that its benefits outweigh its cost. The potential costs of trade openness can also be either reduced or worsened by the overall context of policies in which reforms is undertaken. Higher macroeconomic instability such as high fiscal deficit, high and volatile inflation, volatile real exchange rate and institutional factors such as governance, rule of law, state of infrastructures in an economy can affect the efficacy of trade openness.

Over whelming evidence links openness and economic growth. In recent years many developing

countries have attempted to liberalize their trade and at the same time a growing number of governments have begun to explore and participate in regional and international trade agreements. To a greater extent these reform effort is consistent with the policy prescriptions that emerged from economic first principle: trade barriers should be low, more or less uniform across sectors, transparent and non-discretionary and should operate through price mechanism (Schiff and Winter 1998). Knetter (1993), Wade (1990), Singh (1994) have pointed out that in countries like Japan, south Korea, and Taiwan, the government has played a leading and a heavily interventionist role in the course of their economic growth and development and they achieved it.

Nigeria since its emergence as an independent nation has evolved two macroeconomic management regimes of the interventionist and market friendly style. The macroeconomic model that relied on inward orientation and import substitution strategy of urban industrial development (a more controlled and less open economic arrangement) was adopted in Nigeria at post-independence but prior to 1986 (before the introduction of structural adjustment programme, SAP). Since the introduction of SAP, Nigeria economy has been relatively more open as a result of the policy measure applied.

Nigeria having tried these two trade policy regimes - protection and trade openness and the later

still on course through the adoption of National Economic Empowerment and Development strategy (NEEDS), this research work is geared towards investigating the growth of the economy of the period incorporating these two regimes - control and open trade. It is over two decades since Nigeria commenced a series of reform measure aimed at putting the economy back on the path of sustainable growth and development. There is no doubt that several structural changes had taken place in the Nigeria economy, some positive while others are not too impressive. In the period before the introduction of structural adjustment programme (SAP) in July 1986 and given the place of industrialization in the process of development, the policy of import substitution (IS) industrialization which was inward oriented held sway.

According to Obaseki and Ojo (1998) a trend analysis show that the Nigeria economy has been
relatively more open since 1986 as a result of the policy measures applied under SAP. The broad measure of openness, total trade - GDP ratio increased from 0.21 in 1986 to 0.64 in 1987 and 1997 it had reached 18.8. The extensive liberalization of trade and exchange control and a more "realistic" exchange rate management resulted in this development.

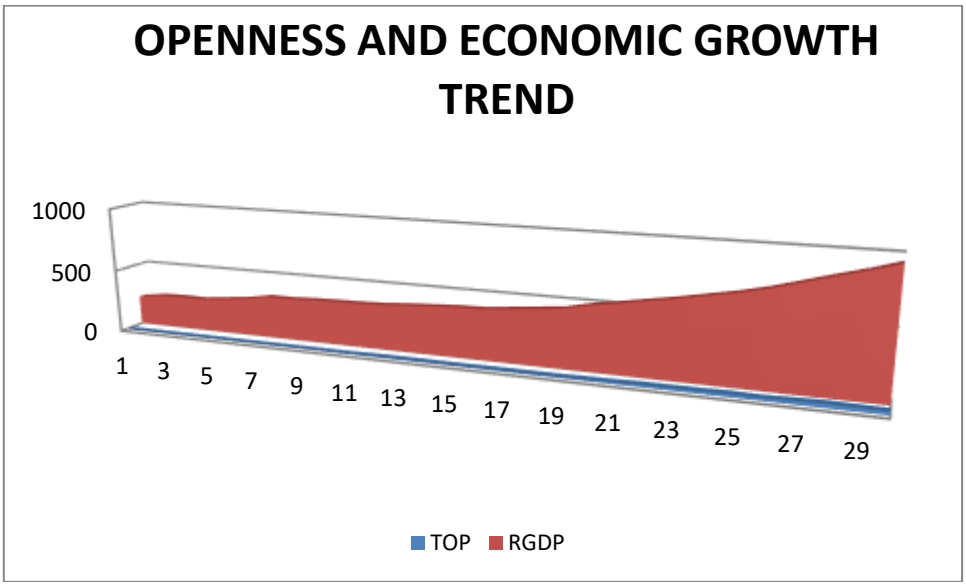

Figure 1.1 Relationship between Trade Openness and Economic Growth in Nigeria.

The figure above lends credence to the argument that trade openness begets economic growth.
The figure further reveals that economic growth has been on the increase in Nigeria after the introduction of Structural Adjustment Programme (SAP). This policy thrust opened Nigeria's trade with foreign countries.

It is argued that the basic aim of opening an economy is to restore long-term growth and
development. These have not been achieved in Nigeria, and even if growth is achieved as claimed by the government, it has significant distributional cost (Omoke, 2004). Hence a prominent feature or fallout of the Nigeria trade policy reform is the pervasive and widespread poverty and unemployment of the vast majority of the people. The expected growth seems elusive and major distortions are still found in the structure of the economy. The wide spread poverty, high unemployment rate, decay in the public infrastructure, inefficient social sector (like health and education) and rising price level, obviously, will have negative long-term effect on growth, income, production capacity and development in Nigeria.

Pertinent questions at this juncture are: why did Nigeria abandon the import substitution strategy
in preference for a more open and market oriented strategy of the international monetary fund (IMF)? To what extent has openness improved and sustained economic growth in Nigeria? And is there any causal relationship between trade openness and economic growth?

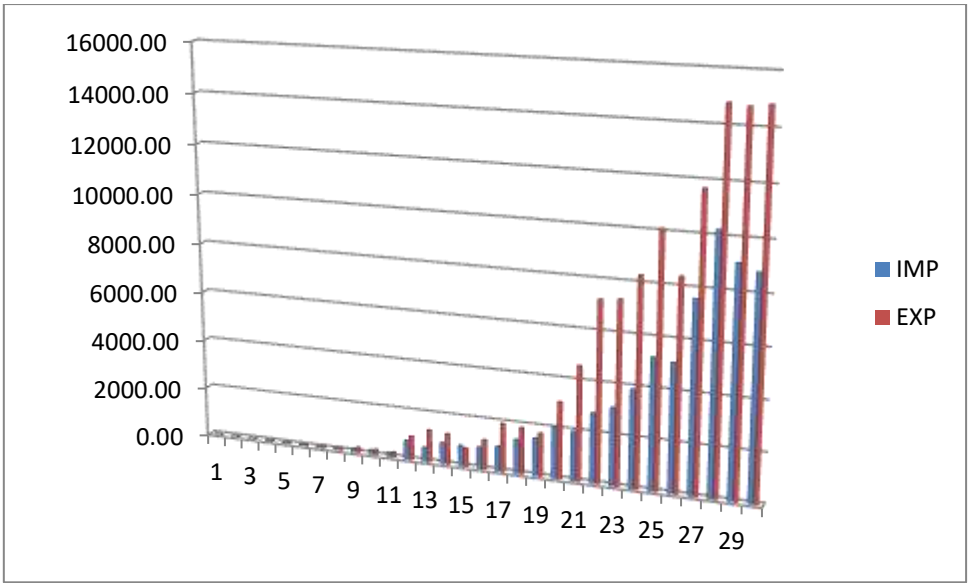

Figure 1.2 Relationship between import and export in Nigeria.

The figure above shows that greater percentage of Nigeria's export earning is used to finance its import for the past thirty years.

LITERATURE REVIEW

Conceptual Framework

Openness: concept and measurement.

Chakraverty and singh (1988) argued that openness is a multidimensional concept, apart from

trade a country can be open or not so open with respect to financial and capital market, in relation to technology, science, culture, education, inward and outward migration. Moreover, a country can choose to be open in some direction (say trade) but not so open in other such as foreign Direct Investment(FDI).Their analysis suggest that there is no unique optimum for or degree of openness which holds true for all countries at all time. Therefore in real sense of it, no country is open and no country is closed.

There are several measures of trade openness as listed by Rodriquez and Rodrik (2000):

- *Trade Dependency Ratio:* The growth rate of exports over the specified period.
- *Growth Rate of Export:* The growth rate of exports over the specified period.
- *Tariff Averages:* A simple or trade weighted average of tariff level.
- *Collected Tariff Ratio:* The ratio of tariff revenues to import.
- *Coverage of Quantitative Restrictions:* The percentage of good covered by quantitative restrictions.
- *Black Market Premium:* The black market premium for foreign exchange, a proxy for the overall degree of external sector distortions.
- *Trade Bias index:* The extent to which policy increase the ratio of importable good price relative to exportable goods prices compared to the same ratio in world market.
- *Sarch and warner Index:* A composite index that uses several trade –related indicator; tariffs, quota coverage, black market premier, social organization and the existence of export market boards.
- *Learner's Openness index:* an index that estimate the difference between the actual

trade flows and those that was expected from a theoretical trade model.

For a long time, economists have tried to provide comparative measure of openness. This has proved to be controversial and elusive. This is illustrated by the fact that while according to Green way and Nam (1998) South Korea has an open and outward oriented economy, for others like wade (1994) it is an example of a semi closed economy with a high degree of government intervention.

Overview of Trade Theories

The history of trade between and among nations is as old as mankind. In the ancient history of West Africa, we traded among one another. Many Kingdoms and empires like Mali, Ghana, Songhai, Kanem-Borno, Hausa land, the forest kingdoms at the coast of Dahomey, traded with one another on various goods .This type of trade that existed at these periods was called the *trans-Saharan trade* (Ukwueze 2009).

Adam Smith, in his book "an enquiry into nature and cause of wealth of nations" published in 1776 made it clear that countries should trade with one another. He saw clearly that a country would gain by trading with other countries. This was discussed in his theory of *Absolute Advantage of trade*. This theory states that a country should specialized in the production of that commodity which it can produce more cheaply than others and exchange it for the commodities that cost less in other countries. In other words, a country should specialize in the production of those commodities in which it has absolute advantage in its production. Adam Smith stressed for non-interference of trade by governments. In other words he stressed for free trade as the best trade policy for nations.

David Ricardo, after going through the work of Adam smith, came up with this question; what if one country is more productive than another country in all lines of production, that is, if a country has absolute advantage in all line of production, does it still benefit the countries to trade? Ricardo, (1817) in Sodersten and Reed (1994). His answer was yes! He said that, it is not the absolute but the comparative differences in cost that determine trade relations between two countries. Thus, he came up with the theory of *Comparative Cost Advantage* .This theory states that a country should specialize in the production of that commodity in which its comparative cost of production is the least. We compare the opportunity cost of producing each good in both countries. As long as the countries' opportunity cost of the production for one goods differ, one country has a comparative cost advantage in the production of one the two goods, while the second country has a comparative advantage in the production of the other. In this case, both will gain from trade, regardless of the fact that one of the countries might have an absolute advantage in both lines of production.

Bertin Ohlin in his famous book inter-regional and International Trade (1933) criticized the previous theories and formulated the General Equilibrium or factor Endowment or factor proportions theory of international trade. It is known as the modern theory of international trade or Heckscher-Ohlin (H-O) theory. In fact it was Eli Heckscher, Ohlin's teacher who first propounded it in 1919 and Ohlin carried it forward to build the modern theory of international trade. The theory postulates that trade arise because of the different countries factor endowments. Given relative factor endowments, factor prices will differ, for instance labour

will be relatively cheaper in labour abundant countries and so will domestic commodities prices ratio and factor combination. This theory explains why resource abundant (for instance, labour abundant) countries should specialize in the production and exportation of labour-intensive goods because of the relative cost and price advantage enhanced by international specializations. Trade therefore serves as an engine for a nation to capitalize on its abundant resources through more intensive production, Mete, et al (2006). What this theory suggests is nothing short of trade openness which was equally elicited in the Heckscher-Ohlin-Samuelson (H-O-S) model which is a development of the H-O principle.

This model (H-O-S) shows how an increase in the price of a commodity can raise the income of the

factors of production used most intensely in producing it. Samuelson's factor price equalization theorem postulates the condition under which trade openness offers a substitution for the free mobility of factors of production. Based on this model, free mobility of factors can lead to national resource movement from place of excess to place of relative scarcity and movement of welfare from one country to another.

Review of Nigeria Trade Policies

Nigeria's trade policies have been short-terms in nature and aims at securing Balance of payment

viability and export promotion. Other intended uses include industrialization policy, employment creation and self-sufficiency policies among others. The trade policies can be categorized under pre SAP era and post SAP era policy (Analogbei 2000). The Nigeria economy was largely agrarian at the independence with a very narrow industrial base. A development plan was then conceived as a means of expanding the industrial base (especially for local consumables) to realize this, the intensive export of cash crops was embarked upon so as to finance the import implied by the expansion of the industrial base. Marketing boards were created to guarantee the farmers ready external market for their cash crops of cocoa, palm produce, ginger, groundnut etc. Other exports include some solid minerals, coal and tin. The urge to quicken industrial growth led to higher demand for import which gave rise to Balance of payment (BOP) problem. Measures put on place to reduce pressure on the Bop include exchange control measures, import tariffs, import licensing to affect the import substitution industrialization policy, a discriminatory custom tariff structure and import prohibitions.

The second national development plan (1970-1974) sought economic growth via the replacement

of assets destroyed during the civil war and the restructuring of productive capacity as well as securing equitable distribution of gains of development was initiated. This development plan was also designed to incorporate and enhance the priority area of the 1962-8 plan. However due to continued pressure on Nigeria BOP, restrictive trade policy of the earlier period was still retained and strengthened. Midway into the execution of the second National Development plan, the international price for crude oil increased and there were surplus funds for which Nigeria had no immediate internal investment outlet due to the country's low absorptive exchange control regulations (CBN, 1979). The National Development plan 1975-1980 was introduced amid the oil boom but with an ambitious plan of enhanced earnings from oil. Trade policies were therefore relaxed (Analogbei 2000). The fourth National Development Plan (1980-1985) however, came when Nigeria was experiencing a decline in foreign exchange earnings due to the oil shock. Also due to the upward trend in the demand for imports, the external reserve fell and the BOP position worsened and stricter trade

restrictions were introduced but the efficacy of this measure was in doubt as import demand still maintained its upward trend while exports keep declining to further payment imbalance.

Trade policies during the SAP era was characterized by trade liberalization and the liberalization of

the pricing system – with emphasis on the use of an appropriate price mechanism form foreign exchange allocation. A second tier foreign exchange regime in which market forces determine the exchange rate was put in place. Import and export licenses were abolished, exports were encouraged and bottlenecks such as the requirements that exporters must surrender their proceeds to the CBN were scrapped. Domiciliary accounts for exporters were encouraged. The post SAP trade policies liberalized trade by removing the import-licensing requirement and using instead custom tariffs. The list of items on the prohibition list was drastically reduced.

In general, the trade policy regimes in Nigeria were well classified based on the strategies

employed from 1970-1973, 1974-1979, 1986-1993 and 1994-`1999 (Mete 2006).Therefore, it can be adduced from the above review that the broad objective of Nigeria trade policy is the diversification of export earnings from oil to non-oil sectors.

Empirical Literature

There are vast empirical evidences on trade openness as a trade policy that can enhance economic growth and improve the welfare of the citizens as well as those that contrast it. Dollar (1992) is one of the most cited in the recent studies on the relationship between openness and growth. The principal contribution of Dollar's paper lies in the construction of two separate indices, which he demonstrated are each negatively correlated when growth over the 1976-85 periods in a sample of 95 developing countries.

Aka (2005) examined the effect of the level of fiscal adjustment required to compensate for the

drop in fiscal receipt because of trade liberalization and adoption of external common tariffs in WAEMU countries on income distribution and poverty in Cote d'Ivoire. The study concludes that the elimination of agricultural exports and import taxes leads to poorer households in the case of pre-shock scenario. The elimination of taxes on industrial exports reduces the number of households that are poor relative to the pre-shock scenario.

Bacchetta, and Van Wincoop (2003) relate growth in countries' per capital output to changes in

the trade-GDP ratio. Out of 68 countries sampled, 24 are globalizers (open countries) and 44 are non-globalizers (trade restricted countries). Their finding was that increase in integration with world economy have been substantial among the globalizers and they have large change in trade volume between the 1970s and the 1990s; a doubling of trade to GDP on average of 16% to 33% of the GDP, but among the non-globalizers, trade actually fell as a share of GDP from 60%to 40% of GDP.

Rodriguez and Rodrik (2000) after reviewing the work of Dollar (1992, Ben-David (1993), Sarchs

and Warner (1995), and Romer, (1993) said that they find little evidence that open trade policies – in the sense of lower tariffs and non-tariff barriers to trade –are significantly associated with economic growth .they argued that methodological problems with the empirical strategies employed in these studies leave the result open to diverse interpretation and, in many cases, the indicator of "openness" used by the researchers are poor measure of

trade barrier or are highly correlated with other sources of bad economic performance. In other cases the methods to ascertain the link between trade policy and growth have serious shortcomings.

Ogujiuba et al (2004) studied the long–run relationship between trade openness and real

economic growth in Nigeria using Johansen-Juselive co-integration technique. Their result showed that at 1% significant level, there is co-integration between the variables. They conclude that available evidence in Nigeria show that tariff restriction raises economic uncertainties in Nigeria, especially in the textile and manufacturing enterprises that are adversely affected by intensified import composition from abroad.

Romer, (1993) analyzed the robustness of openness growth relationship to the use of different

indicators he uses nine alternative openness indexes to analyze the connection between trade policy and productivity growth during 1980-1990. While three of these indexes measure openness proper, the other six measures the extent of trade policy induces distortion. The result Edward presented are weighted least square (WLS) regression of total factor productivity growth on the nine openness indicators. Six of the nine indicators are significant and all but one has the expected sign.

Ben-David (1993) takes altogether different approach to studying the impact of openness on

economic growth. He measured the effect of trade policies on income by asking whether trade liberalization leads to a reduction in the dispersion of income level among liberalizing countries (that is whether it contributes to what has been called convergence). He shows that open economies converge and that the trade agreements of the European Union have resulted in convergence of its member to a higher level of income. Overall growth from 1945 to 1994 of the European communities (ECS) Belgium, France, the Netherlands Italy, and Germany was 3.45 percent, compared to 1.2, percent, between 1900 and 1939 and 1.16 percent from 1870 to 1899. However, Ben-David's work shows that the only economies that converge were those that are integrated in the world economy through trade.

Rodriguez and Rodrik (2000) find that the empirical evidences used in different studies such as

dollar (1992), Ben-David (1993) Sarchs and Warners (1995) have shortcomings and thus weaken the conclusion made by these economist in the above papers. They argued that these are little evidence that lower tariff and non-tariff barrier to trade have strong correlation with growth. They show that many authors specify the nation of openness differently.

Krueger (2005) studied the impact of trade policy on industrialization in Nigeria. The result from

ordinary least square regression indicates that tariffs had a positive and significant effect on output, but no effect on growth of exports or imports. However, Ajakaiye and Soyibo (1999) adopted a slightly different approach to standard time series analysis. They identified four episode of trade liberalization between 1970 and 1992 (in 1970-1976, 1986-1987, 1989 and 1992) based on policy account, tariff index and trade intensity measure. Using regression techniques, the authors found that only the first instance of liberalization (1970-1976) increased real import while none of the four episodes had a significant effect on real GDP.

Dorosh and Sahn (1999), examined the impact of trade and exchange rate liberalization on income

distribution and poverty in countries such as Cameroon, Gambia, Madagascar and Niger,

using social accounting matrices (SAMS) for the period 1989 - 1993. The findings from these studies shows that trade and exchange rate liberalization benefit poor households in urban and rural areas. Bautista and Thomas (1997) have also examined the impact of trade reform particularly import liberalization on income distribution and poverty in Philippines. The result indicates favorable effect of import liberalization on income distribution and poverty.

Decalawe, Partry, Savard, and Thorbecke (1999) have also used computable General Equilibrium

(CGE) model for an archetype Africa developing economy. They analyze the impact of a fall in price of the export crop and import tariff on poverty and income distribution. The study demonstrates that reductions in import tariffs are beneficial to the alleviation of poverty.

Previous studies are predominantly on testing the relationship between trade openness and

economic growth without paying attention to by how much higher or lower it has contributed to economic growth against the controlled regime. This forms the area of departure of this study from previous works and this study covered this gap.

Methodology and Data

The study follows Autoregressive Conditional Heteroscedasticity (ARCH), Generalized Autoregressive Conditional Heteroscedasticity (GARCH) and Pairwise-Granger causality frameworks.

Model Specification

This model of this study is adopted from Ajakaiye and Soyibo (1999) with some modifications to realize the objective of this study. The model is specified as:

$$RGDP_t = \phi_0 + \phi_1 EXCH_t + \phi_2 INT_t + \phi_3 TOP_t + \mu_t \quad \ldots\ldots (1)$$

Following the studies reviewed, the model follows ARCH(2) and GARCH(2) process.

$$RGDP_t = \phi_0 + \phi_1 RGDP_{t-1} + \phi_2 RGDP_{t-2} + \phi_3 EXCH_t + \phi_4 EXCH_{t-1} + + \phi_5 EXCH_{t-2} + \phi_6 INT_t + \phi_7 INT_{t-1} + \phi_8 INT_{t-2} + \phi_9 TOP_t + \phi_{10} TOP_{t-1} + \phi_{11} TOP_{t-2} + \mu_t \quad \ldots\ldots (2)$$

However, to obtain the rate of change, the study logged equation (2).

$$lnRGDP_t = \phi_0 + \phi_1 lnRGDP_{t-1} + \phi_2 lnRGDP_{t-2} + \phi_3 lnEXCH_t + \phi_4 lnEXCH_{t-1} + + \phi_5 lnEXCH_{t-2} + \phi_6 INT_t + \phi_7 INT_{t-1} + \phi_8 INT_{t-2} + \phi_9 lnTOP_t + \phi_{10} lnTOP_{t-1} + \phi_{11} lnTOP_{t-2} + \mu_t \quad \ldots\ldots (3)$$

Where, RGDP= Real Gross Domestic Product (Proxy for economic growth), EXCH= Exchange Rate, INT=interest rate, TOP= Degree of Openness (Import + Export/GDP), ϕ_0 = Constant, ϕ_i = parametric coefficients, μ_t = Random error term.

The Pairwise-Granger causality test is modeled as:

$$RGDP_t = \sum_{i=1}^{n} \alpha i \, TOP_{t-1} + \sum_{j=1}^{n} \beta j \, RGBP_{t-j} + \epsilon_{1t} \quad \ldots\ldots$$

(4)

$$TOP_t = \sum_{i=1}^{n} \delta i \; TOP_{t-1} + \sum_{j=1}^{n} \Theta j \; RGBP_{t-j} + \epsilon_{2t} \text{ ....}$$

(5)

Where, ϵ_{1t} and ϵ_{2t} are uncorrelated.

This study covers the period 1984 to 2013. Data were sourced from Central Bank of Nigeria statistical bulletin (2013). Trade openness ((import+export)/RGDP) was computed by the authors.

Results and Discussion

The result of the regression is presented below. The estimates of the result were subjected to various economic, statistical and econometric tests.

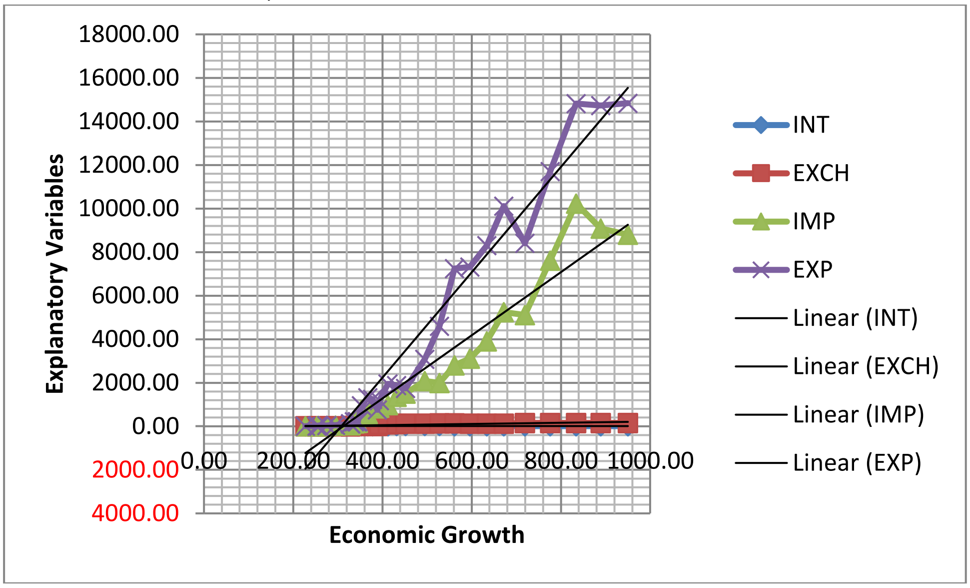

Figure 4.1 Relationship between economic growth and the explanatory variables.

From the figure above, the study infer that linear relationship exists between economic growth

and the explanatory variables specified above. However, the figure shows that import and export have been on upward trend since 1986.

Table 4.1
Relationship Between Trade Openness and Economic Growth in Nigeria

Dependent Variable: LOG(RGDP)
Convergence achieved after 65 iterations

	Coefficient	Std. Error	z-Statistic	Prob.
C	5.873240	0.074021	79.34514	0.0000
INT	-0.013743	0.003953	-3.476974	0.0005
LOG(EXCH)	0.073698	0.027839	2.647274	0.0081
LOG(TOP)	0.096600	0.024294	3.976327	0.0001
Variance Equation				
C	0.001976	0.003674	0.537679	0.5908
ARCH(1)	1.294830	1.261370	1.026526	0.3046
ARCH(2)	-0.754618	2.152789	-0.350530	0.7259
GARCH(1)	0.627838	1.203684	0.521597	0.6020
GARCH(2)	-0.107579	0.501336	-0.214584	0.8301

Table 4.1 shows that trade openness conformed to a priori expectation and it is statistically significant. This implies that trade openness make sense in Nigeria given that most of the period under investigation ranged from when Nigeria adopted unrestricted trade policies. Interestingly, interest rate and exchange rate are significant factors affecting Nigeria's economic growth rate. From the variance equation, the study observed that lag 1 of each of the explanatory variables in ARCH and GARCH estimators have positive impact on Nigeria's economic growth while lag 2 of the same variables and estimators have negative effect on Nigeria's economic performance.

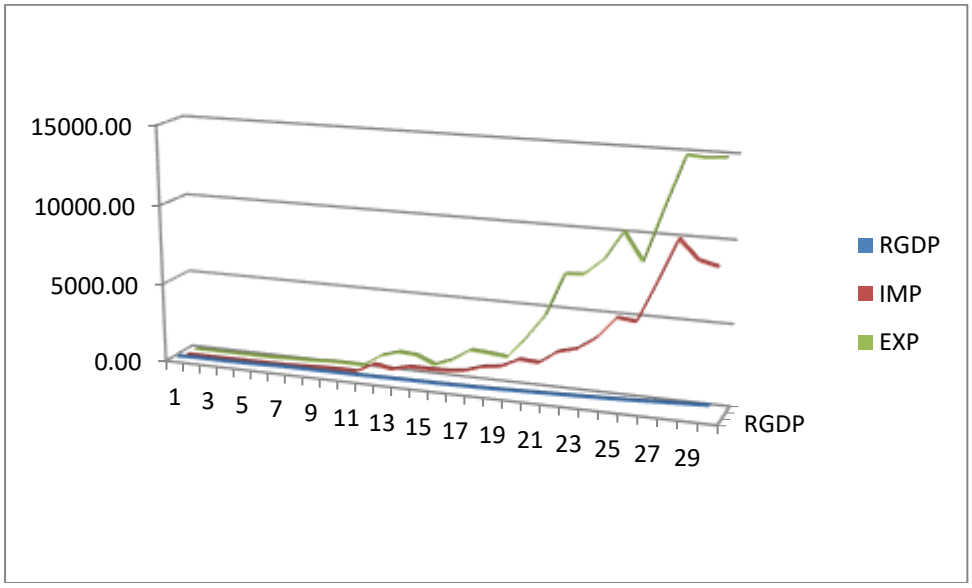

Figure 4.2 Relationship between Economic Growth and Nigeria's External Sector

The figure above shows that Nigeria's export determines its economic growth. However, the ugly trend is that Nigeria's import follows the trend and swings of its export. This is particularly worrisome and shows that Nigeria is susceptible to the slightest external shock.

Pairwise Granger Causality

This is used to test whether RGDP Granger cause TOP or vice versa (unidirectional causality) or whether both Granger cause each other (bidirectional causality). Pairwise Granger Causality follows the F-distribution given as:

$$F = \frac{RSS_R - RSS_{UR}/m}{RSS_{UR} / n - k} \quad \text{……… (4.1)}$$

with m and (n – k) d.f.

The null hypothesis is that TOP does not Granger cause RGDP and that RGD does not Granger cause TOP.

Decision Rule.

Reject H_0 if the computed F-value exceeds the critical F-value at 5% level of significance.

F-critical value = 3.42

The empirically examined whether trade openness makes sense, using Nigeria trade policy as yardstick. Considering the framework of the traditional trade theories which postulate that trade has positive impact on economic growth, the study employed Autoregressive Conditional Heteroscedasticity (ARCH), Generalized Autoregressive Conditional Heteroscedasticity (GARCH) and Pairwise-Granger causality methodology using secondary data from 1984 to 2013. Results show that trade openness has a significant impact on economic growth. This implies that trade openness make sense in Nigeria given that most of the period under investigation ranged from when Nigeria adopted unrestricted trade policies. The control variables (interest rate and exchange rate) have significant positive effect on economic growth in Nigeria. The pairwise Granger causality test shows that there is a unidirectional causality between economic growth and trade openness at lag one only.

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1. INTRODUCTION

The idea that trade openness leads to economic growth and improves the welfare of the citizens of a country has attracted the attention of policy makers and governments of the developing countries in the recent years. Nigeria as a developing country is not left out. But the question now is whether the economic environment is conducive for the trade policy (trade openness) to thrive?

However, trade openness is a trade policy which encourages the flow of goods and services unhindered by government-imposed restrictions. Such restrictions could be high taxes, tariffs and even non tariffs barriers such as regulatory legislation and quotas. Trade openness permits an economy to make better use of its resources by allowing import of goods and services at a lower cost than they could be produced at home (following the theory of comparative cost advantage). It also enable developing countries to import capital equipment and intermediate inputs that are critical to long-run growth which will be expensive or impossible to be produced domestically. Other possible benefits of trade openness include more intense competition, which obliges local firms to operate more efficiently than under

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Although trade openness reduces government revenue via reduction in taxes and tariffs on trade,

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Over whelming evidence links openness and economic growth. In recent years many developing

countries have attempted to liberalize their trade and at the same time a growing number of governments have begun to explore and participate in regional and international trade agreements. To a greater extent these reform effort is consistent with the policy prescriptions that emerged from economic first principle: trade barriers should be low, more or less uniform across sectors, transparent and non-discretionary and should operate through price mechanism (Schiff and Winter 1998). Knetter (1993), Wade (1990), Singh (1994) have pointed out that in countries like Japan, south Korea, and Taiwan, the government has played a leading and a heavily interventionist role in the course of their economic growth and development and they achieved it.

Nigeria since its emergence as an independent nation has evolved two macroeconomic management regimes of the interventionist and market friendly style. The macroeconomic model that relied on inward orientation and import substitution strategy of urban industrial development (a more controlled and less open economic arrangement) was adopted in Nigeria at post-independence but prior to 1986 (before the introduction of structural adjustment programme, SAP). Since the introduction of SAP, Nigeria economy has been relatively more open as a result of the policy measure applied.

Nigeria having tried these two trade policy regimes - protection and trade openness and the later

still on course through the adoption of National Economic Empowerment and Development strategy (NEEDS), this research work is geared towards investigating the growth of the economy of the period incorporating these two regimes - control and open trade. It is over two decades since Nigeria commenced a series of reform measure aimed at putting the economy back on the path of sustainable growth and development. There is no doubt that several structural changes had taken place in the Nigeria economy, some positive while others are not too impressive. In the period before the introduction of structural adjustment programme (SAP) in July 1986 and given the place of industrialization in the process of development, the policy of import substitution (IS) industrialization which was inward oriented held sway.

According to Obaseki and Ojo (1998) a trend analysis show that the Nigeria economy has been

relatively more open since 1986 as a result of the policy measures applied under SAP. The broad measure of openness, total trade - GDP ratio increased from 0.21 in 1986 to 0.64 in 1987 and 1997 it had reached 18.8. The extensive liberalization of trade and exchange control and a more "realistic" exchange rate management resulted in this development.

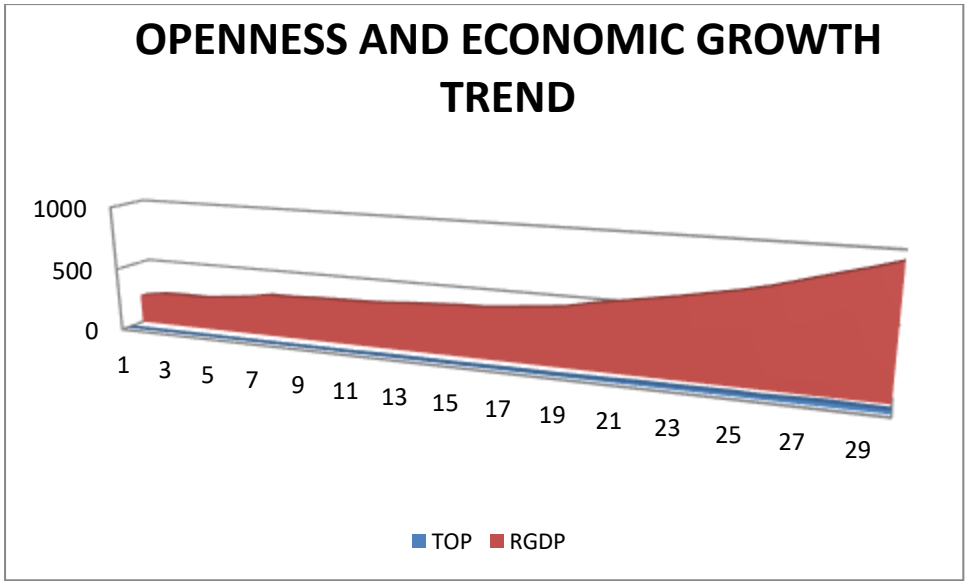

Figure 1.1 Relationship between Trade Openness and Economic Growth in Nigeria.

The figure above lends credence to the argument that trade openness begets economic growth.

The figure further reveals that economic growth has been on the increase in Nigeria after the introduction of Structural Adjustment Programme (SAP). This policy thrust opened Nigeria's trade with foreign countries.

It is argued that the basic aim of opening an economy is to restore long-term growth and

development. These have not been achieved in Nigeria, and even if growth is achieved as claimed by the government, it has significant distributional cost (Omoke, 2004). Hence a prominent feature or fallout of the Nigeria trade policy reform is the pervasive and widespread poverty and unemployment of the vast majority of the people. The expected growth seems elusive and major distortions are still found in the structure of the economy. The wide spread poverty, high unemployment rate, decay in the public infrastructure, inefficient social sector (like health and education) and rising price level, obviously, will have negative long-term effect on growth, income, production capacity and development in Nigeria.

Pertinent questions at this juncture are: why did Nigeria abandon the import substitution strategy

in preference for a more open and market oriented strategy of the international monetary fund (IMF)? to what extent has openness improved and sustained economic growth in Nigeria? and is there any causal relationship between trade openness and economic growth?

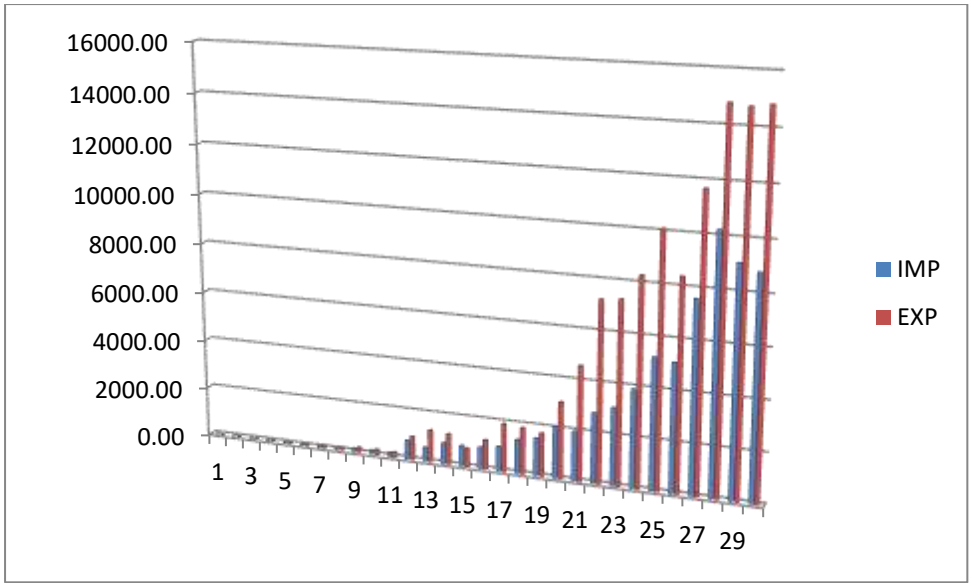

Figure 1.2 Relationship between import and export in Nigeria.

The figure above shows that greater percentage of Nigeria's export earning is used to finance its import for the past thirty years.

2. LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Openness: concept and measurement.

Chakraverty and singh (1988) argued that openness is a multidimensional concept, apart from

trade a country can be open or not so open with respect to financial and capital market, in relation to technology, science, culture, education, inward and outward migration. Moreover, a country can choose to be open in some direction (say trade) but not so open in other such as foreign Direct Investment(FDI).Their analysis suggest that there is no unique optimum for or degree of openness which holds true for all countries at all time. Therefore in real sense of it, no country is open and no country is closed.

There are several measures of trade openness as listed by Rodriquez and Rodrik (2000):

- *Trade Dependency Ratio:* The growth rate of exports over the specified period.
- *Growth Rate of Export:* The growth rate of exports over the specified period.
- *Tariff Averages:* A simple or trade weighted average of tariff level.
- *Collected Tariff Ratio:* The ratio of tariff revenues to import.
- *Coverage of Quantitative Restrictions:* The percentage of good covered by quantitative restrictions.
- *Black Market Premium:* The black market premium for foreign exchange, a proxy for the overall degree of external sector distortions.
- *Trade Bias index:* The extent to which policy increase the ratio of importable good price relative to exportable goods prices compared to the same ratio in world market.
- *Sarch and warner Index:* A composite index that uses several trade –related indicator; tariffs, quota coverage, black market premier, social organization and the existence of export market boards.
- *Learner's Openness index:* an index that estimate the difference between the actual trade flows and those that was expected from a theoretical trade model.

For a long time, economists have tried to provide comparative measure of openness.

This has proved to be controversial and elusive. This is illustrated by the fact that while according to Green way and Nam (1998) South Korea has an open and outward oriented economy, for others like wade (1994) it is an example of a semi closed economy with a high degree of government intervention.

2.2. Overview of Trade Theories

The history of trade between and among nations is as old as mankind. In the ancient history of West Africa, we traded among one another. Many Kingdoms and empires like Mali, Ghana, Songhai, Kanem-Borno, Hausa land, the forest kingdoms at the coast of Dahomey, traded with one another on various goods .This type of trade that existed at these periods was called the *trans-Saharan trade* (Ukwueze 2009).

Adam Smith, in his book "an enquiry into nature and cause of wealth of nations" published in 1776 made it clear that countries should trade with one another. He saw clearly that a country would gain by trading with other countries. This was discussed in his theory of *Absolute Advantage of trade*. This theory states that a country should specialized in the production of that commodity which it can produce more cheaply than others and exchange it for the commodities that cost less in other countries. In other words, a country should specialize in the production of those commodities in which it has absolute advantage in its production. Adam Smith stressed for non-interference of trade by governments. In other words he stressed for free trade as the best trade policy for nations.

David Ricardo, after going through the work of Adam smith, came up with this question; what if one country is more productive than another country in all lines of production, that is, if a country has absolute advantage in all line of production, does it still benefit the countries to trade? Ricardo, (1817) in Sodersten and Reed (1994). His answer was yes! He said that, it is not the absolute but the comparative differences in cost that determine trade relations between two countries. Thus, he came up with the theory of *Comparative Cost Advantage* .This theory states that a country should specialize in the production of that commodity in which its comparative cost of production is the least. We compare the opportunity cost of producing each good in both countries. As long as the countries' opportunity cost of the production for one goods differ, one country has a comparative cost advantage in the production of one the two goods, while the second country has a comparative advantage in the production of the other. In this case, both will gain from trade, regardless of the fact that one of the countries might have an absolute advantage in both lines of production.

Bertin Ohlin in his famous book inter-regional and International Trade (1933) criticized the previous theories and formulated the General Equilibrium or factor Endowment or factor proportions theory of international trade. It is known as the modern theory of international trade or Heckscher-Ohlin (H-O) theory. In fact it was Eli Heckscher, Ohlin's teacher who first propounded it in 1919 and Ohlin carried it forward to build the modern theory of international trade. The theory postulates that trade arise because of the different countries factor endowments. Given relative factor endowments, factor prices will differ, for instance labour will be relatively cheaper in labour abundant countries and so will domestic commodities prices ratio and factor combination. This theory explains why resource abundant (for instance, labour abundant) countries should specialize in the production and exportation of

labour-intensive goods because of the relative cost and price advantage enhanced by international specializations. Trade therefore serves as an engine for a nation to capitalize on its abundant resources through more intensive production, Mete, et al (2006). What this theory suggests is nothing short of trade openness which was equally elicited in the Heckscher-Ohlin-Samuelson (H-O-S) model which is a development of the H-O principle.

This model (H-O-S) shows how an increase in the price of a commodity can raise the income of the

factors of production used most intensely in producing it. Samuelson's factor price equalization theorem postulates the condition under which trade openness offers a substitution for the free mobility of factors of production. Based on this model, free mobility of factors can lead to national resource movement from place of excess to place of relative scarcity and movement of welfare from one country to another.

2.3 Review of Nigeria Trade Policies

Nigeria's trade policies have been short-terms in nature and aims at securing Balance of payment

viability and export promotion. Other intended uses include industrialization policy, employment creation and self-sufficiency policies among others. The trade policies can be categorized under pre SAP era and post SAP era policy (Analogbei 2000). The Nigeria economy was largely agrarian at the independence with a very narrow industrial base. A development plan was then conceived as a means of expanding the industrial base (especially for local consumables) to realize this, the intensive export of cash crops was embarked upon so as to finance the import implied by the expansion of the industrial base. Marketing boards were created to guarantee the farmers ready external market for their cash crops of cocoa, palm produce, ginger, groundnut etc. Other exports include some solid minerals, coal and tin. The urge to quicken industrial growth led to higher demand for import which gave rise to Balance of payment (BOP) problem. Measures put on place to reduce pressure on the Bop include exchange control measures, import tariffs, import licensing to affect the import substitution industrialization policy, a discriminatory custom tariff structure and import prohibitions.

The second national development plan (1970-1974) sought economic growth via the replacement

of assets destroyed during the civil war and the restructuring of productive capacity as well as securing equitable distribution of gains of development was initiated. This development plan was also designed to incorporate and enhance the priority area of the 1962-8 plan. However due to continued pressure on Nigeria BOP, restrictive trade policy of the earlier period was still retained and strengthened. Midway into the execution of the second National Development plan, the international price for crude oil increased and there were surplus funds for which Nigeria had no immediate internal investment outlet due to the country's low absorptive exchange control regulations (CBN, 1979). The National Development plan 1975-1980 was introduced amid the oil boom but with an ambitious plan of enhanced earnings from oil. Trade policies were therefore relaxed (Analogbei 2000). The fourth National Development Plan (1980-1985) however, came when Nigeria was experiencing a decline in foreign exchange earnings due to the oil shock. Also due to the upward trend in the demand for imports, the external reserve fell and the BOP position worsened and stricter trade restrictions were introduced but the efficacy of this measure was in doubt as import demand still maintained its upward trend while exports keep declining to further payment imbalance.

Trade policies during the SAP era was characterized by trade liberalization and the liberalization of

the pricing system – with emphasis on the use of an appropriate price mechanism form foreign exchange allocation. A second tier foreign exchange regime in which market forces determine the exchange rate was put in place. Import and export licenses were abolished, exports were encouraged and bottlenecks such as the requirements that exporters must surrender their proceeds to the CBN were scrapped. Domiciliary accounts for exporters were encouraged. The post SAP trade policies liberalized trade by removing the import-licensing requirement and using instead custom tariffs. The list of items on the prohibition list was drastically reduced.

In general, the trade policy regimes in Nigeria were well classified based on the strategies

employed from 1970-1973, 1974-1979, 1986-1993 and 1994-`1999 (Mete 2006).Therefore, it can be adduced from the above review that the broad objective of Nigeria trade policy is the diversification of export earnings from oil to non-oil sectors.

2.3 Empirical Literature

There are vast empirical evidences on trade openness as a trade policy that can enhance economic growth and improve the welfare of the citizens as well as those that contrast it. Dollar (1992) is one of the most cited in the recent studies on the relationship between openness and growth. The principal contribution of Dollar's paper lies in the construction of two separate indices, which he demonstrated are each negatively correlated when growth over the 1976-85 periods in a sample of 95 developing countries.

Aka (2005) examined the effect of the level of fiscal adjustment required to compensate for the

drop in fiscal receipt because of trade liberalization and adoption of external common tariffs in WAEMU countries on income distribution and poverty in Cote d'Ivoire. The study concludes that the elimination of agricultural exports and import taxes leads to poorer households in the case of pre-shock scenario. The elimination of taxes on industrial exports reduces the number of households that are poor relative to the pre-shock scenario.

Bacchetta, and Van Wincoop (2003) relate growth in countries' per capital output to changes in

the trade-GDP ratio. Out of 68 countries sampled, 24 are globalizers (open countries) and 44 are non-globalizers (trade restricted countries). Their finding was that increase in integration with world economy have been substantial among the globalizers and they have large change in trade volume between the 1970s and the 1990s; a doubling of trade to GDP on average of 16% to 33% of the GDP, but among the non-globalizers, trade actually fell as a share of GDP from 60%to 40% of GDP.

Rodriguez and Rodrik (2000) after reviewing the work of Dollar (1992, Ben-David (1993), Sarchs

and Warner (1995), and Romer, (1993) said that they find little evidence that open trade policies – in the sense of lower tariffs and non-tariff barriers to trade –are significantly associated with economic growth .they argued that methodological problems with the empirical strategies employed in these studies leave the result open to diverse interpretation and, in many cases, the indicator of "openness" used by the researchers are poor measure of trade barrier or are highly correlated with other sources of bad economic performance. In other cases the methods to ascertain the link between trade policy and growth have serious shortcomings.

Ogujiuba et al (2004) studied the long–run relationship between trade openness and real

economic growth in Nigeria using Johansen-Juselive co-integration technique. Their result showed that at 1% significant level, there is co-integration between the variables. They conclude that available evidence in Nigeria show that tariff restriction raises economic uncertainties in Nigeria, especially in the textile and manufacturing enterprises that are adversely affected by intensified import composition from abroad.

Romer, (1993) analyzed the robustness of openness growth relationship to the use of different

indicators he uses nine alternative openness indexes to analyze the connection between trade policy and productivity growth during 1980-1990. While three of these indexes measure openness proper, the other six measures the extent of trade policy induces distortion. The result Edward presented are weighted least square (WLS) regression of total factor productivity growth on the nine openness indicators. Six of the nine indicators are significant and all but one has the expected sign.

Ben-David (1993) takes altogether different approach to studying the impact of openness on

economic growth. He measured the effect of trade policies on income by asking whether trade liberalization leads to a reduction in the dispersion of income level among liberalizing countries (that is whether it contributes to what has been called convergence). He shows that open economies converge and that the trade agreements of the European Union have resulted in convergence of its member to a higher level of income. Overall growth from 1945 to 1994 of the European communities (ECS) Belgium, France, the Netherlands Italy, and Germany was 3.45 percent, compared to 1.2, percent, between 1900 and 1939 and 1.16 percent from 1870 to 1899. However, Ben-David's work shows that the only economies that converge were those that are integrated in the world economy through trade.

Rodriguez and Rodrik (2000) find that the empirical evidences used in different studies such as

dollar (1992), Ben-David (1993) Sarchs and Warners (1995) have shortcomings and thus weaken the conclusion made by these economist in the above papers. They argued that these are little evidence that lower tariff and non-tariff barrier to trade have strong correlation with growth. They show that many authors specify the nation of openness differently.

Krueger (2005) studied the impact of trade policy on industrialization in Nigeria. The result from

ordinary least square regression indicates that tariffs had a positive and significant effect on output, but no effect on growth of exports or imports. However, Ajakaiye and Soyibo (1999) adopted a slightly different approach to standard time series analysis. They identified four episode of trade liberalization between 1970 and 1992 (in 1970-1976, 1986-1987, 1989 and 1992) based on policy account, tariff index and trade intensity measure. Using regression techniques, the authors found that only the first instance of liberalization (1970-1976) increased real import while none of the four episodes had a significant effect on real GDP.

Dorosh and Sahn (1999), examined the impact of trade and exchange rate liberalization on income

distribution and poverty in countries such as Cameroon, Gambia, Madagascar and Niger, using social accounting matrices (SAMS) for the period 1989 - 1993. The findings from these studies shows that trade and exchange rate liberalization benefit poor households in urban and rural areas. Bautista and Thomas (1997) have also examined the impact of trade reform particularly import liberalization on income distribution and poverty in Philippines. The result indicates favorable effect of import liberalization on income distribution and poverty.

Decalawe, Partry, Savard, and Thorbecke (1999) have also used computable General Equilibrium
(CGE) model for an archetype Africa developing economy. They analyze the impact of a fall in price of the export crop and import tariff on poverty and income distribution. The study demonstrates that reductions in import tariffs are beneficial to the alleviation of poverty.

Previous studies are predominantly on testing the relationship between trade openness and
economic growth without paying attention to by how much higher or lower it has contributed to economic growth against the controlled regime. This forms the area of departure of this study from previous works and this study covered this gap.

3. METHODOLOGY AND DATA

The study follows Autoregressive Conditional Heteroscedasticity (ARCH), Generalized Autoregressive Conditional Heteroscedasticity (GARCH) and Pairwise-Granger causality frameworks.

3.1 Model Specification

This model of this study is adopted from Ajakaiye and Soyibo (1999) with some modifications to realize the objective of this study. The model is specified as:

$$RGDP_t = \phi_0 + \phi_1 EXCH_t + \phi_2 INT_t + \phi_3 TOP_t + \mu_t \quad (1)$$

Following the studies reviewed, the model follows ARCH(2) and GARCH(2) process.

$$RGDP_t = \phi_0 + \phi_1 RGDP_{t-1} + \phi_2 RGDP_{t-2} + \phi_3 EXCH_t + \phi_4 EXCH_{t-1} + + \phi_5 EXCH_{t-2} + \phi_6 INT_t + \phi_7 INT_{t-1} + \phi_8 INT_{t-2} + \phi_9 TOP_t + \phi_{10} TOP_{t-1} + \phi_{11} TOP_{t-2} + \mu_t \quad (2)$$

However, to obtain the rate of change, the study logged equation (2).

$$lnRGDP_t = \phi_0 + \phi_1 lnRGDP_{t-1} + \phi_2 lnRGDP_{t-2} + \phi_3 lnEXCH_t + \phi_4 lnEXCH_{t-1} + + \phi_5 lnEXCH_{t-2} + \phi_6 INT_t + \phi_7 INT_{t-1} + \phi_8 INT_{t-2} + \phi_9 lnTOP_t + \phi_{10} lnTOP_{t-1} + \phi_{11} lnTOP_{t-2} + \mu_t \quad (3)$$

Where, RGDP= Real Gross Domestic Product (Proxy for economic growth), EXCH= Exchange Rate, INT=interest rate, TOP= Degree of Openness (Import + Export/GDP), ϕ_0 = Constant, ϕ_i = parametric coefficients, μ_t = Random error term.

The Pairwise-Granger causality test is modeled as:

$$RGDP_t = \sum_{i=1}^{n} \alpha i \, TOP_{t-1} + \sum_{j=1}^{n} \beta j \, RGBP_{t-j} + \epsilon_{1t} \quad (4)$$

$$TOP_t = \sum_{i=1}^{n} \delta i \, TOP_{t-1} + \sum_{j=1}^{n} \Theta j \, RGBP_{t-j} + \epsilon_{2t} \quad (5)$$

Where, ϵ_{1t} and ϵ_{2t} are uncorrelated.

This study covers the period 1984 to 2013. Data were sourced from Central Bank of Nigeria

statistical bulletin (2013). Trade openness ((import+export)/RGDP) was computed by the authors.

4. RESULTS AND DISCUSSION

The result of the regression is presented below. The estimates of the result were subjected to various economic, statistical and econometric tests.

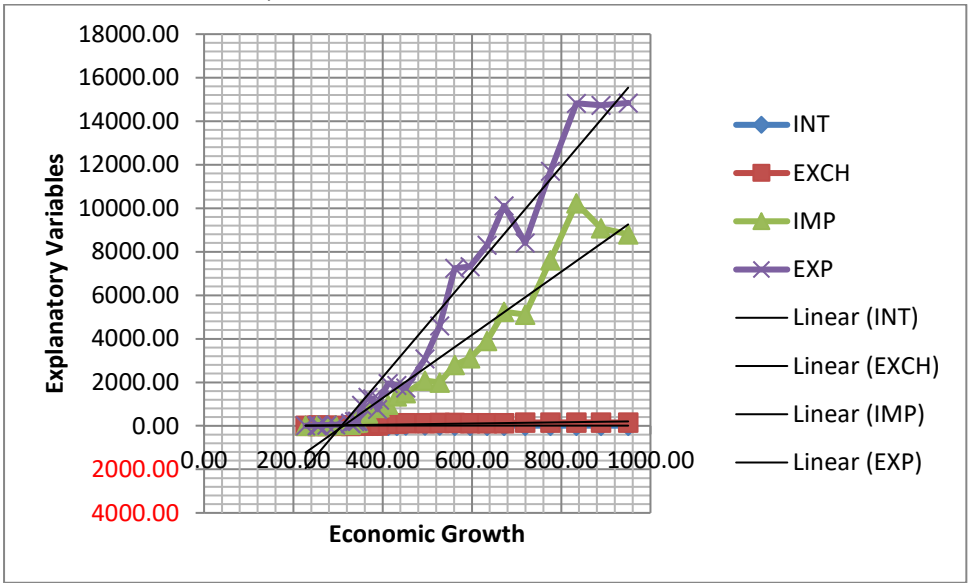

Figure 4.1 Relationship between economic growth and the explanatory variables.

From the figure above, the study infer that linear relationship exists between economic growth

and the explanatory variables specified above. However, the figure shows that import and export have been on upward trend since 1986.

Table 4.1 Relationship Between Trade Openness and Economic Growth in Nigeria

Dependent Variable: LOG(RGDP)

Convergence achieved after 65 iterations

	Coefficient	Std. Error	z-Statistic	Prob.
C	5.873240	0.074021	79.34514	0.0000
INT	-0.013743	0.003953	-3.476974	0.0005
LOG(EXCH)	0.073698	0.027839	2.647274	0.0081
LOG(TOP)	0.096600	0.024294	3.976327	0.0001
Variance Equation				
C	0.001976	0.003674	0.537679	0.5908
ARCH(1)	1.294830	1.261370	1.026526	0.3046
ARCH(2)	-0.754618	2.152789	-0.350530	0.7259
GARCH(1)	0.627838	1.203684	0.521597	0.6020
GARCH(2)	-0.107579	0.501336	-0.214584	0.8301

Table 4.1 shows that trade openness conformed to a priori expectation and it is statistically significant. This implies that trade openness make sense in Nigeria given that most of the period under investigation ranged from when Nigeria adopted unrestricted trade policies. Interestingly, interest rate and exchange rate are significant factors affecting Nigeria's economic growth rate. From the variance equation, the study observed that lag 1 of each of the explanatory variables in ARCH and GARCH estimators have positive impact on Nigeria's economic growth while lag 2 of the same variables and estimators have negative effect on Nigeria's economic performance.

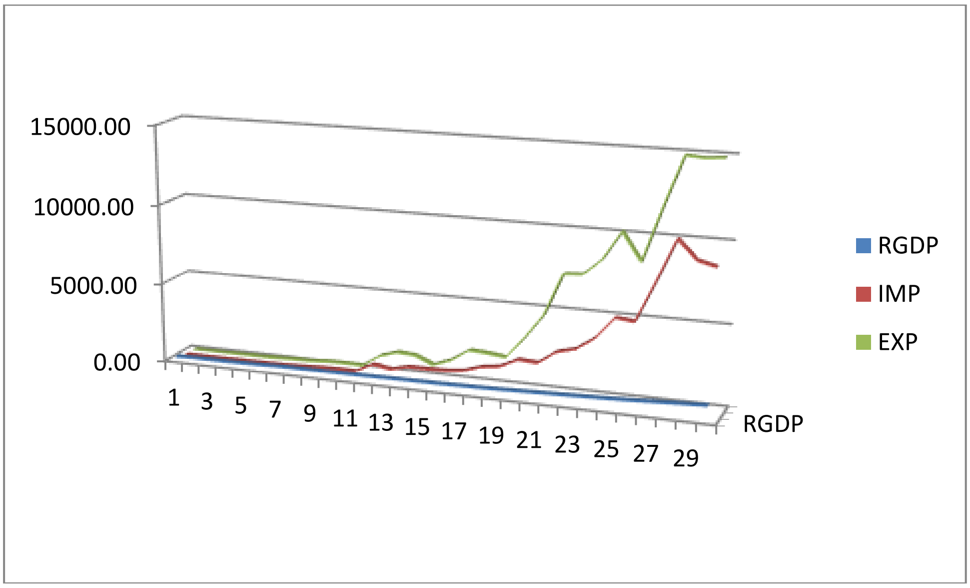

Figure 4.2 Relationship between Economic Growth and Nigeria's External Sector

The figure above shows that Nigeria's export determines its economic growth. However, the ugly trend is that Nigeria's import follows the trend and swings of its export. This is particularly worrisome and shows that Nigeria is susceptible to the slightest external shock.

4.4 PAIRWISE GRANGER CAUSALITY

This is used to test whether RGDP Granger cause TOP or vice versa (unidirectional causality) or whether both Granger cause each other (bidirectional causality). Pairwise Granger Causality follows the F-distribution given as:

$$F = \frac{RSS_R - RSS_{UR}/m}{RSS_{UR} / n - k} \quad \text{.........} \quad (4.1)$$

with m and (n – k) d.f.

The null hypothesis is that TOP does not Granger cause RGDP and that RGD does not Granger cause TOP.

Decision Rule.

Reject H_0 if the computed F-value exceeds the critical F-value at 5% level of significance.

F-critical value = 3.42

Table 4.2. Pairwise Granger Causality Test

Lags: 1

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause TOP	29	3.90996	0.05869
TOP does not Granger Cause RGDP		1.14885	0.29364

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause TOP	28	1.79703	0.18830
TOP does not Granger Cause RGDP		0.24083	0.78793

Lags: 4

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause TOP	26	0.34008	0.84715
TOP does not Granger Cause RGDP		0.99985	0.43468

Lags: 6

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause TOP	24	0.33598	0.90387
TOP does not Granger Cause RGDP		0.35411	0.89303

Lags: 8

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause TOP	22	0.88878	0.58098
TOP does not Granger Cause RGDP		0.25063	0.95894

From the table above, there is a unidirectional causality between RGDP and TOP at lag one and at
5% level of significance. Put in differently, RGDP Granger causes TOP at lag one. However, no causality (unidirectional or bidirectional) was observed between RGDP and TOP from lag 2 through lag 8.

5. CONCLUSION

The main aim of this research work is to test empirically whether trade openness makes sense, having Nigeria trade policy as yardstick. Considering the framework of the traditional trade theories which postulate that trade has positive impact on economic growth. Another puzzle that this work tried to explain is whether there is a causal relationship between economic growth and trade openness.

Although, this study shows that there is a meaningful relationship between trade openness and
economic growth and that economic growth Granger causes trade openness, but in order to fashion out meaningful trade design and reap in full the gains accruable from it, other factors of economic growth should be considered. Domestic and foreign investments are often determined by the endowment of natural resources and rule of law/ political stability. Woytek (2003), from a study on common wealth of independent states identified that governance and corruption, weak infrastructure and political conflicts may frustrate the maximization of the objective function of long term growth through trade openness. Given these arguments

and empirical evidences, one should think of a rather minor role for trade openness in Nigeria towards achieving growth.

Therefore, trade policy makers in Nigeria should not only be so much occupied with formulating

trade policies but should also consider whether the environment is conducive for such policy to thrive. However, the study makes the following recommendations for policy:

- Effort should be made in formulating policies that will enhance trade (both domestic and foreign) as the economy strives to attain growth through trade. There should be macroeconomic stability through appropriate application of trade policies, fiscal and monetary policies which if synchronized would be mutually reinforcing in achieving common macroeconomic objective of price stability, favorable balance of trade and growth.
- Nigeria should enter or concentrate her trade agreement with industrialized and developed nations because if the government of Nigeria is busy formulating trade policies that will widen her border and the developed nations are busy closing their border, then, the effort of the developing nation will be rendered useless. This is because Nigeria depends on them for technology which will enhance diversification of developing economy to increase productivity and export.
- There will be need for effective regulation of trade inflow to avoid conversion of the economy into a dumping ground for sub-standard and harmful goods. Also the government should fall back on balanced growth doctrine and target the development of certain key industries with respect to potentials embedded in them.
- Following Heckscher-Ohlin trade theory, Nigeria has abundant labour to produce and export Agricultural goods. Thus, there is need to go back and revive the Agricultural sector in Nigeria so that the benefits of trade openness will be maximized.

Generally, government should consider a set of consistent economic policies that will strengthen

bilateral and multilateral trade agreements, this will go a long way in restoring the confidence of trade partners, thereby increasing the rate of multilateral trade partners to Nigeria.

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Lags: 1

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause TOP	29	3.90996	0.05869
TOP does not Granger Cause RGDP		1.14885	0.29364

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause TOP	28	1.79703	0.18830
TOP does not Granger Cause RGDP		0.24083	0.78793

Lags: 4

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause TOP	26	0.34008	0.84715
TOP does not Granger Cause RGDP		0.99985	0.43468

Lags: 6

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause TOP	24	0.33598	0.90387
TOP does not Granger Cause RGDP		0.35411	0.89303

Lags: 8

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause TOP	22	0.88878	0.58098
TOP does not Granger Cause RGDP		0.25063	0.95894

From the table above, there is a unidirectional causality between RGDP and TOP at lag one and at
5% level of significance. Put in differently, RGDP Granger causes TOP at lag one. However, no causality (unidirectional or bidirectional) was observed between RGDP and TOP from lag 2 through lag 8.

Conclusion

The main aim of this research work is to test empirically whether trade openness makes sense, having Nigeria trade policy as yardstick. Considering the framework of the traditional trade theories which postulate that trade has positive impact on economic growth. Another puzzle that this work tried to explain is whether there is a causal relationship between economic growth and trade openness.

Although, this study shows that there is a meaningful relationship between trade openness and
economic growth and that economic growth Granger causes trade openness, but in order to fashion out meaningful trade design and reap in full the gains accruable from it, other factors of economic growth should be considered. Domestic and foreign investments are often determined by the endowment of natural resources and rule of law/ political stability. Woytek (2003), from a study on common wealth of independent states identified that governance and corruption, weak infrastructure and political conflicts may frustrate the maximization of the objective function of long term growth through trade openness. Given these arguments

and empirical evidences, one should think of a rather minor role for trade openness in Nigeria towards achieving growth.

Therefore, trade policy makers in Nigeria should not only be so much occupied with formulating

trade policies but should also consider whether the environment is conducive for such policy to thrive. However, the study makes the following recommendations for policy:

- Effort should be made in formulating policies that will enhance trade (both domestic and foreign) as the economy strives to attain growth through trade. There should be macroeconomic stability through appropriate application of trade policies, fiscal and monetary policies which if synchronized would be mutually reinforcing in achieving common macroeconomic objective of price stability, favorable balance of trade and growth.
- Nigeria should enter or concentrate her trade agreement with industrialized and developed nations because if the government of Nigeria is busy formulating trade policies that will widen her border and the developed nations are busy closing their border, then, the effort of the developing nation will be rendered useless. This is because Nigeria depends on them for technology which will enhance diversification of developing economy to increase productivity and export.
- There will be need for effective regulation of trade inflow to avoid conversion of the economy into a dumping ground for sub-standard and harmful goods. Also the government should fall back on balanced growth doctrine and target the development of certain key industries with respect to potentials embedded in them.
- Following Heckscher-Ohlin trade theory, Nigeria has abundant labour to produce and export Agricultural goods. Thus, there is need to go back and revive the Agricultural sector in Nigeria so that the benefits of trade openness will be maximized.

Generally, government should consider a set of consistent economic policies that will strengthen

bilateral and multilateral trade agreements, this will go a long way in restoring the confidence of trade partners, thereby increasing the rate of multilateral trade partners to Nigeria.

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