IMPACT OF EXPORT DEVELOPMENT POLICIES ON PERFORMANCE OF NON-OIL EXPORTS IN NIGERIA

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ABSTRACT

This study investigate the impact of export development policy on the performance of non-oil exports in Nigeria from 1986 to 2015 using secondary data in form of time series. The study used unrestricted Vector Auto Regression (VAR), granger causality and Auto Regressive Distributed Lag (ARDL) techniques in the data analysis. The study also uses impulse response function and variance decomposition. Unit root test was conducted; the results indicate that non-oil export (NOE), Export Expansion Grant (EEG), Gross Domestic Product (GDP) and trade openness are found to be I(1) variables, while interest rate (INTR) is I(0) variables. The ARDL bound test result reveals long-run equilibrium relationship between the variables. The error correction framework was correctly signed and statistically significant. The impulse response function and variance decomposition reveal a mixed of both positive and negative shocks from non-oil export(NOE), Export Expansion Grant(EEG), interest rate(INTR), Gross Domestic Product(GDP) and trade openness(OPEN) based on past and current values. Base on Vector Auto regression(VAR) result, the study concluded that, increase in Export Expansion Grant, Gross Domestic Product and Degree of Trade Openness and decrease in Interest Rate are ways of improving the performance of Non-oil Export. The study recommends that, government should enforce existing non-oil export policies toward re-sustaining the failing non-oil export industry. Also, government should improve on exports incentives, providing sufficient infrastructure as no economy can grow without adequate infrastructure.

Keywords: Export development, Non-oil export, Export expansion grant, Interest rate, Gross Domestic Product, Trade Openness

INTRODUCTION

One of the most important and efficient tools for growth and development globally, export promotion policy has been taken by many countries since 1970s. The role of exports in economic growth and the relationship between these two have been the subject of a wide range of empirical and theoretical studies in international trade and economic development fields. Nigeria is endowed with various kinds of resources needed to place her among the top emerging economies in the world. Unfortunately, the nation has not adequately benefitted from the economic prosperity expected of a nation richly blessed (Abou-stait, 2005).

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Nigeria adopted import substitution trade strategy immediately after the independence and export strategy was later ushered in as part of the structural adjustment program. Over the years, Nigeria has applied several measures of trade protections as a means of consolidating her trading position. These trade policies have to some extent impacted on the performance of the Nigerian non-oil export.

From the period the structural adjustment program was introduced in Nigeria, concerted effort had been made to diversify Nigerian export sector by promoting non-oil export (Ogbona, Uwajumogu, Chijioke and Agu, 2013). The importance of this subsector cannot be overemphasized. Nigeria's non-oil exports which can broadly be classified into three namely, agricultural produce, manufactured export and solid mineral have great potentials. It is only of recent that the export potential of solid minerals was brought to the fore. The interest to promote non-oil export was borne out of not just its huge potential for foreign exchange earnings, but also for its employment generation and poverty reduction capability through the extensive backward linkages it offers as well as the desire to diversify the country's production base. According to Iyoha and Oriakchi, (2002) in spite of SAP, the well-publicized attempts to diversify the economy have not been successful.

Although Harb, (2008) found that oil revenues have no long-run effect on the macro performance of the economy and as such, cannot be blamed for a bad performance of the economy. Zafar, (2004) argues that volatility has become a prominent and endemic feature of the world economy, and pronounced fluctuations in commodity price, especially oil, have had a negative effect on the macro economic performance of many developing countries. He stressed that the management of volatility is very difficult in oil – exporting countries in the developing world because fiscal revenue and macroeconomic performance are highly sensitive to fluctuations in the international oil price and thereby call for diversification.

The year 2009 was overcast by the Global financial and economic crises, which was precipitated in August (2007) by the collapse of the sub-prime lending market in the United States. The crises led to the crash of most other sectors and markets across Europe with consequent effort on developing economies especially oil-export dependent countries like Nigeria. The impact was aggravated by the reduction in crude oil production, due to the persistent restiveness in the Niger Delta region and pipeline vandalisation and theft.

The spiral effect of the Global economic crises on Nigerian economy continued in 2009 with the exorbitant lending rate mounting pressure on the stock market as a result of massive borrowed fund in the market. The rush by stock investors to liquidate their investment to repay their loans in order to avoid the excessive lending rate caused the Nigerian stock market to crash. This decline was also driven by concerns over unrealistically high valuations in practically all sectors. Regulatory interventions in the equities market only served to dent investor confidence further, especially among institutional investors, as the measure failed to address the fundamental issues (Patricia & Izuchukwu, 2016).

The success story of the Asian Tigers, which led to some sort of theoretical agreement among neoclassical writers, clearly shows that albeit free market an outward oriented policy is desirable, sound domestic economic policy by the state complements export led growth initiatives. This is because the government export led of Taiwan, Singapore, Hong Kong and the Republic of Korea were able to achieve high rate of

economic growth and development based not only on encouraging free market and export development policies. Their domestic production and export composition was not left to the forces of demand and supply alone to determine but a product of careful planned intervention by the respective states. As rightly observed by Amsden (1989) the success story of the Asian Tigers is highly attributed to a focused and strong state whose domestic policy composition is structured in such a way that it produces domestic industries and also provide an array of incentives to encourage foreign participation.

Through export promotion for instance, Nigeria can manage her resources with respect to Agriculture, manufacturing, mineral resources among others to create enough wealth and improve the quality of the economy vis-à-vis standard of living and also enhance her global economic rating. An appraisal of Nigeria export promotion policy indicates that there is the need to review aspects relating to non-oil exports so as to harness the vast potential hitherto largely underutilized in that critical sub-sector.

LITERATURE REVIEW

Mercantilism was developed in the sixteen century and is considered to be the oldest theory of international trade. According to this theory, a country's wealth could be determined by the amount of its gold and silver holdings. This theory is among the theorist believed that every country should increase its gold and silver holdings by increasing its export and reducing imports. During that point of time, gold and silver had the status of currency. The countries should focus on having a "trade surplus" that is value of export should be greater than the value of import, trade deficit is to be avoided. Domestic manufactures threatened by foreign imports endorsed mercantilist trade policies, such as those imposing tariffs or quotas, which protected the mercantilist ideology is widely used by most developing countries or nations in their effort to maintain a favorable balance of trade. In Nigeria, government subsidies of export in the form of incentives and other export policies is clear indication that mercantilism is politically popular theory of international trade. Modern supports of these policies are known as neo-mercantilist or protectionist. The mercantilist was group of economist who precede Adams Smith and they judged the success of trade by the size of trade balance (Lipsy and Chrystal, 1996).

Also the theory of absolute advantage is generally attributed to Adam Smith for his 1776 publication "An inquiry into the nature and causes of the wealth of nations" in which he countered mercantilist ideas. Smith argued that it was impossible for all nations to become rich simultaneously by following mercantilism because the export of one nation is another nation's import and instead stated that all nations would gain simultaneously if they practiced free trade and specialized in accordance with their absolute advantage. Smith also stated that the wealth of nations depends upon the goods and services available to their citizens, rather than their gold reserves. While there are possible gains from trade with absolute advantage the gains may not be mutually beneficial.

It seems obvious that if one country is better at producing one good and another country is better at producing a different good (assuming both countries demand both goods) that they should trade. What happens if one country is better at producing both goods? Should the two countries still trade? This question brings into play the theory of comparative advantage and opportunity cost (Ricardo, 1817).

A country is said to have a comparative advantage in whichever good, it sacrifices the least to produce. Thus, the good in which a comparative advantage is held is the good that the country produces most efficiently .Therefore; if given a choice between producing two goods (or service) a country will make the most efficient use of its resources by producing the good with the lowest opportunity cost, the good for which it holds the comparative advantage. The country can trade with other countries to get the goods it did not produce. To David Ricardo,(1817), it is not the absolute advantage, but the comparative differences in cost that determines trade relations between two countries. Countries produce goods and exchange it for the commodity which cost less in other countries. It follows that each country should specialize in commodities in which it has greatest advantage or the least comparative advantage. According to Ricardo, production cost differs in countries because of international division of labour and specialization.

It is as a result of differences on climate condition, natural resources, geographical location and efficiency of labour, that a country can produce one commodity at a cheaper or lowest cost than the other. Therefore, a country should emphasize the production of those commodities it has greater comparative gain and preset those goods for export deals with other nations. This will enable the country secure grater gain in the international trade (Ricardo, 1817).

However, we have also modern theory of international trade. One of the main drawbacks of Ricardian theory of comparative cost was that it did not explain why differences in comparative cost exist.

Eli Heckscher, (1919). Propounded the idea that international trade results from differences in factor endowment among different countries, the idea was further carried forward and developed by Bertil Ohlin, (1933) in his famous book inter-regional and international trade. This book forms the basis for what is known as Heckscher-Ohlin theory or modern theory of international trade.

Heckscher –Ohlin theory is based on most of the assumptions of the classical theories of international trade and leads to the development of two important theorem (a) Heckscher – Ohlin theorem and (b) Factor price equalization theorem.

Heckcher –Ohlin, (1933), have explained the basis of international trade in terms of factor endowments. According to Heckcher and Ohlin, regions or countries have different factor endowments. It means that some countries are rich in capital while some are rich in labour. In their theory, the concept of factors endowment or factor abundance is used in relative terms and not in absolute terms. Moreover they have defined the concept of factor endowment or factor abundance in terms of two criteria.

a. Price criteria and

b. Physical criteria

a. Price criteria: - As per price criterion, a country is said to be capital abundant if ratio of price of capital to the price of labour (Pk/Pl) is lower as compared to the other country. This criterion considers only supply of factors.

b. Physical criteria:- As per physical criterion, a country is said to be capital abundant if the ratio of the total amount of capital to the total amount of labour (K/L) is greater as compared to other country. This criterion considers only supply of factors.

On the basis of the above criterion the Heckscher – Ohlin theorem states that "A nation will export the commodity whose production requires the intensive use of the nation relatively abundant and cheap factor and import the commodity whose production requires the intensive use of the nation's relatively scarce and expensive factor" in other words, the countries in which capital is cheap and abundant will export capital – intensive goods and import labour- intensive goods.

Thus, for them it is the difference in factors intensities in the production of goods along with actual difference in factor endowment of the countries which explain international differences in comparative cost of production.

The Heckscher – Ohlin, (1933) further leads to the development of factors price equalization theorem. The theorem indicates that free international trade will ultimately lead to equalization of commodity price and facto prices.

Economist Paul Samuelson & Wolfgang Stolper, (1941) have further contributed to this theory and have formed Stolper- Samuelson theorem. The theorem explains the effect of change in relative products price on factor allocation and income distribution. It postulates that an increase in the relative price of a commodity raises the return to earnings of the factor used intensively in the production of that commodity. In other words, an increase in the relative price of labour intensive commodity will increase wages similarly; an increase in the relative price of capital intensive commodity will increase the price of capital. This implies that free trade would raise the returns to the abundant factor and reduce the returns to the scarce factor.

It is observed that the Recardian theory, (1817) and H – O theory, (1933) provided good explanations of trade theory till the first half of the 20th Century. However, in due courses many researchers observed that comparative advantage seemed to be less relevant in the modern world. Economist now believe that the traditional trade between developed and developing countries also arises because of the developed countries have the advantage of economies of scale and highly developed technology while the developing countries lag behind in the economies of scale and technological progress.

The Neo-Technological trade theories emphasize the importance of technological innovation and the technological gap across firms and countries as a major source of international trade. The main theories are as follows:

Kravis' Theory of availability, (1956): - In this model, technological innovation as a basis of trade operate through his product availability hypothesis. The availability approach seeks to explain the pattern of trade in terms of domestic availability and non-availability of goods, availability influence trade through demand and supply forces.

According to Kravis, (1956) a country produces and exports those goods which are available; that is goods developed by its entrepreneurs and innovators. By availability he measures elastic supply. In short, as per Kravis theory of availability of international trade takes place because of differences in the availability of certain products among countries.

Linder's theory of volume of trade and demand pattern, Linder (1961) in his theory gave importance to demand side factors like similarity in income levels across nations and income distribution characteristics framework and have incorporated development in industrial organization theory within the trade theory. They have incorporated scale economies and products differentiation in the imperfect framework within the H-O general equilibrium theory of comparative advantages.

These theories have taken into account the importance of the pattern of international trade such as increasing return to scale, technological innovations, products differentiation and international oligopoly rivalry etc., the strategic trade policy models have provided theoretical justification for policy interventions in the form of import protections, export subsidies etc., in increasing national relative advantage in exports. The theories show the possible interaction between inter – industry pattern of trade based on relative factor endowment of factors of production and intra-industry trade based on scale economies and product differentiation. They are quite powerful in explaining the patterns of trade between developed countries as well as trade between developed and developing countries at any given point of time in static terms.

Trade between developed countries in terms of this theory is explained by differences in the economies of scale existing among the different oligopoly firms as well as by the levels of technological progress among them. Trade theories, which are Ricardian, (1817) and H-O theories, (1933) fail to provide a complete explanation of the structure of the world trade. The world trade data now contains several empirical regularities or stylized facts that appear to be inconsistent with the traditional theories. Thus, the assumptions of H-O theory like – perfect competition, constant return to scale and same technology are invalid in today's context of world trade.

Therefore, the theoretical framework of this research work will be based on New Trade Theories, especially Krugman's Strategic Trade Model. The study have chosen the new trade models because they explained the pattern of international trade as well as plan state intervention in order to stimulate, direct, control and enhance export sector of the economy

METHODOLOGY

This research study determined to ascertain if there is relationship between export development policies and non-oil export performance in Nigeria between 1986 -2022. It intended to determine if export development policies has any impact on non-oil export performance. Such policies (Export expansion Grant) and other significant policies will make the country to be one of the best export performances in the international market. Therefore, data is collected using the relevant tools and the impact analysis was carried out.

3.2 Sources and Method of Data Collection

Data required for empirical estimation is a secondary data in form of time series is gathered from different sources. Data on Export Expansion Grant (EEG) is sourced from annual publications of Nigerian Export Promotion Council. The interest rate(INTR) and Gross Domestic Product(GDP) data is gathered from central bank of Nigeria (C.B.N Statistical bulletin), and the degree of trade openness(OPEN) data is generated by the ratio of export and import to Nigerian G.D.P. within the period under investigation.

3.3 Model Specification and Variable Measurement

The main objective of this study is basically to examine the impact of export development policy on the performance of non-oil exports in Nigeria. To achieve the above objectives we develop economic aggregates in line with the theoretical framework and literature reviews

The model and variable selection is adopted partially from the work of Ezike and Ogege, (2012): "Nigerian foreign trade policy: its impact on non-oil exports" with a little modification in terms of variable selection.

The study employed Vector Auto Regression (VAR) framework which is made up of five variables; Non-Oil Export (NOE), Export Expansion Grant (EGG), interest rate(INTR), Gross Domestic Product(GDP) and Degree OF Trade Openness(OPEN)

The econometric model

$$NOE = F(EEG, INTR, GDP, OPEN) \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 3.1$$

Subsequent Model:

$$EEG = F(NOE, INTR, GDP, OPEN) \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots .3.2$$

Where:

NOE= Non-Oil Export
EEG= Export Expansion Grant
INTR= Interest Rate
GDP=Gross Domestic Product
OPEN= Degree of Trade Openness

The unrestricted VAR model is adopted for this particular study because it has a forecasting power relative to large structural model. Also, one of the goodness of VAR is that it obviate a decision as to what contemporaneous variable are exogenous, all variables are endogenous according to Ang and Mckibbin, (2007), once the difference between the short run dynamics and the long run causality, also the VAR framework all the variables as potentially endogenous as explained by Sims (1980).

The study seeks to examine the impact of Export development policies on the performance of non-oil export in Nigeria for a period (1986-2022). The basic aim of our empirical estimation is to; examine the

long run relationship among the EEG, INTR, GDP, OPEN and the level of NOE, secondly, to evaluate the dynamics and causal relationship among these five variables and thirdly is to use impulse response function and variance decomposition to examine how each variable response to shock by the other variables in the VAR framework. To achieve this, a log form of VAR model with OLS regression is adopted.

Variable Measurement

The variables employed for the analysis are Non-oil Export, Export Expansion Grant, Interest Rate, Gross Domestic Product (GDP) and Trade Openness. Data on other variables are directly observable from their sources. Trade Openness is therefore in line with extant literature.

(a) Non-oil Export Performance.
We define Non-oil Export Performance as Non-oil Export earnings as percentage of GDP. This is expressed mathematically as:

$$\text{Non-oil Export Performance} = \frac{\text{non-oil export}}{\text{GDP}} \times 100$$

(b) Trade Openness.
We define Trade Openness as ratio of export and import to Gross Domestic Product (GDP). This is mathematically expressed as:

$$\text{Trade Openness} = \frac{\text{export} + \text{import}}{\text{GDP}}$$

Data used for estimations are sourced from Central Bank of Nigeria Statistical Bulletin, 2022

3.3 Techniques of Data Analysis

VAR approach is used to determine the impact of export development policies on the performance of non-oil exports in Nigeria 1986-2015. This approach is essentially non-structural framework in which no particular relationships are imposed on the variable based on economic theory. As long as there is some hint of certain variable being related, a VAR model can be employed to investigate the empirical relationship, once the VAR is estimated, the relative importance of a variable in generating variations in its own value and in the value of other variables can be assessed (forecast error variable decomposition (V.D.C) and impulse response (I.R).

3.3.1 Var Model
The VAR model of order ρ can be expressed as follows:

Export Development Policy determinant and Export Development Policy effect model are specified as:

$$Yt = m + A_1Y_{t-1} + A_2Y_{t-2} + \ldots\ldots\ldots\ldots A_pY_{t-p} + \varepsilon\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.\ldots 3.3$$

Equation (3.3) specifies VAR (ρ) process, where y_t is a 5x1 vector of variable and Ai (i=1, 2… ρ) are 5 X 5 matrices of coefficients, m is a 5 X 1 vector of constants and ε_t is a vector of white noise error term.

Estimations Technique

For each one model (specified above), the study used secondary data inform of time series. Such data is subjected to deferent diagnostic test. Empirical work base on time series data assumes that the underlying time series is stationary. Therefore, test for stationarity, co-integration, granger causality and model specification test are conducted.

3.3.2 Unit Root Test

The first step involves testing the order of integration of the individual series under this consideration. Researchers will develop several procedures for the test of order of integration. The most popular ones are augmented Dickey – Fuller (ADF) test due to Dickey and Fuller, (1997 – 1981), and the Phillip – Perron (PP) due to Phillip 1987 and Phillip and Perron, (1998). Augmented Dickey – Fuller test relies on rejecting a null hypothesis of unit root (the series are non-stationary) in favor of the alternative hypothesis of stationary. The test is conducted with and without a deterministic trend (t) for each of the series. The general form of ADF test is as in the following regression equations.

$$\Delta Y_t = \alpha_\circ + \alpha Y_{t-1} + \sum \alpha \Delta Y_t + \boldsymbol{\varepsilon}_t \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.3.4$$

$$\Delta Y_t = \alpha_0 + \alpha_{1t} + \alpha_2 Y_{t-1} + \sum \alpha_3 \Delta Y_{t-1} + \boldsymbol{\varepsilon}_t \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.3.5$$

Where:

Y is a time series, t is a linear time trend, Δ is the first difference operator, α_0 is constant, n is the optimum number of lags in the dependent variable and $\boldsymbol{\varepsilon}$ is the random error term, the difference between equation (3.4 and (3.5) is that the first equation includes just drift. However, the second equation includes both intercept and the trend.

RESULT AND DISCUSSION

Unit Root Test

The unit root test has been conducted to determine the stationary conditions of the series and know their order of integration. The results of the test reported in table 1 below:

Table I: Unit root test result.

Variable	ADF Statistic	5% Critical value	Pro. Value	Status	Order of integration
		VARIABLES AT LEVEL			
LNOE	0.197716	-2.967767	0.9677	Not Stationary	Unknown
LEEG	-0.192918	-2.967767	0.9288	Not Stationary	Unknown
LINTR	-3.829912	-3574244	0.0292	Stationary	I(0)
LGDP	0.441848	-2.967767	0.9814	Not Stationary	Unknown
LOPEN	0.303518	-3.004861	0.9729	Not Stationary	Unknown
		VARIABLES AT FIRST DIFFERENCE			
LNOE	-3.743252	-2.971853	0.0088	Stationary	I (1)
LEEG	-5.065933	-2.971853	0.0003	Stationary	I (1)
LINTR	-3.829912	-3.574244	0.0292	Stationary	I (0)
LGDP	-5.376667	-2.971853	0.0001	Stationary	I (1)
LOPEN	-7.7 26399	-2.971853	0.0000	Stationary	I (1)

Source: Authors computation using e-view 8.1

  With respect to unit root result in table1 above, the result shows that, the log of Non-Oil export (NOE), Export Expansion Grant (EEG), Gross Domestic Product (GDP) and trade openness (OPEN) are not stationary at level. This is a fact since the ADF test statistic for these four variable are less negative than the 5% critical value with the p-values more than 0.05 respectively indicating non rejection of the unit root at 5% level of significance. In addition interest rate (INTR) appear to be stationary at level since the ADF statistic for this variable is more negative than the 5% critical value and p-value is less than 0.05 indicating rejection of unit root in the series. Subjecting these four variables that are not stationary at level to a first difference test revealed that they are stationary at first difference. This is because their ADF test statistics for the log of NOE, EEG, GDP and OPEN are now more negative than the 5% critical values and the p-values are less than 0.05 indicating rejection of unit root. Thus, the log of NOE, EEG, GDP and OPEN are variables integrated of order one (1) while INTR is a variable integrated of order zero i.e. I (0).

4.2 Vector Auto regression (VAR)
4.2.1   Order of LAG Selection Criteria
The choice of lag length is an essential part of empirical research based on the Vector Autoregressive (VAR) model since all inferences on this model depend on correct model specification. The procedure requires that the choice of deterministic variable and maximum lag length (k) is such as to prevent serial correlation in the disturbances processes both within each equation of VAR and also across equations.

Table 2: Order of LAG Selection Criteria

Lag	LOGL	LR	FPE	AIC	SC	HQ
0	-129.8350	NA	0.010481	9.631070	9.868963	9.703796
1	-47.30076	129.6966	0.000178	5.521483	6.948845	5.957842
2	4.342252*	62.70937*	3.21e-05*	3.618411*	6.235241*	4.418402*

*   *Indicating lag order selected by the criterion*
LR: Sequential modified LR Test statistic(each at 5% level)
FPE: Final predictor error
AIC: Akanke information criterion
SC: Schwarz information criterion
HQ: Hannah – Quinn information criterion
Source: Authors computation using e-view 8.1

Based on the order of lag selection criteria reported in Table 2, two lags have been selected for the estimation of the VAR model. The selected lag is based on all criteria and also the fact that lags have been able to satisfy OLS assumptions of no serial correlation, normality of residuals and constant error variance (homoskedasticity). The result of the residual diagnostic test is reported in table 3 and it is done to ensure that we are dealing with the right lags.

Table 3 Diagnostic Test Result

Test	Coefficient	P-Value
Serial Correlation LM Test	25.122	0.45
Residual Heteroskedasticity Test	32.84	0.13

Source: Author computation Eview 8

Residual diagnostic check test have been conducted for the lag selected to ensure that the selected lag are free from serial correlation, heteroskedasticity and ensure that the residuals of the selected lags are normally distributed. Base on the LM test result of residual correlation in table 3 above, we cannot reject the null hypothesis of no serial correlation at 5% level given the LM statistic and probability value of more than 0.05.

However, the test for heteroskedasticity reveals that the residuals are homoscedastic given the Chi-square of 390.6885 and the probability value of 0.3378 which makes it homoscedastic. The normality test (jaque-bera) to determine the normality of the residuals indicate that, there is no departure from normality, as evident from the Janque-Bera statistics for the joint test and the probability value of 0.000 which is less

than the critical value of 0.05 at 5% level of significance. Hence, it means that the selected lags are good for VAR model analysis. Since virtually all the misspecification tests have been passed.

4.2.2 Vector Auto regression (VAR) Model

Interpreting VAR estimates is not always attractive or interesting, that is why impulse response function and variance decomposition are most appropriate way of explaining or interpreting VAR results. Using the past values of the variable of interest, the current values can be explained.

Table 4: Vector Auto regression Estimate Result

REGRESSOR REGRESSAND	D(LNOE)	D(LEEG)	D(LINTR)	D(LGDP)	D(LOPEN
	0.767598	0.169325	0.28197	0.010943	0.038823
D(LNOE) (-1)	[2.35394]	[0.47245]	[0.47069	[0.75453]	[0.79351]
	-2.223317	1.808691	-0.028276	0.005874	0.039416
D(LNOE) (-1)	[-0.55716]	[4.10577]	[-0.38401]	[0.32954]	[0.65544]
D(LEEG) (-1)	0.005487	0.200466	-0.013430	-0.003905	0.001984
	[0.05086]	[1.69092]	[-0.67771]	[-0.81402]	[0.12262
D(LEEG)(-2)	0.340010	0.186123	-0.26823	0.003695	0.011631
	[2.92630]	[1.45748]	[-1.25662]	[0.71501]	[0.66719]
D(LINTR)(-1)	-0.139669	1.379619	0.168276	-0.013592	-0.135954
	[-0.08539]	[0.76741]	[0.55999]	[-0.18683]	[-0.55397
	0.116126	4.087428	-0.211024	-0.032310	0.073524
D(LINTR)(-2)	[0.07692]	[2.46255]	[-0.76091]	[-0.48123]	[0.32461]
	-2.048914	-8.296184	-0.203836	1.165142	-0.0563131
D(LGDP)(-1)	[0.38306]	[-1.41121]	[0.2.20744]	[4.89774]	[-0.70170]
	-4.593717	2.624906	-0.594736	-0.200378	-0.084075
D(LGDP)(-2)	[-0.88276]	[0.45895]	[-0.62211]	[-0.86578]	[-0.10768]
	2.104311	-0.550589	0.687137	0.076096	-0.009043
D(LOPEN (-1)	[1.24904]	[-0.29735]	[2.22011]	[1.01556]	[-0.03578]
	-1.357991	-3.907738	0.299568	-0.100416	0.150600
D(LOPEN)(-2)	[-0.83440]	[-2.18463]	[1.00193]	[-1.38726]	[0.61675]
Intercept	10.70163	69.51105	4.734131	0.788720	9.748693
	[23.5214]	[25.8517]	[4.32114]	[1.04613]	[3.52908]
FIT MEASURES					
R^2	0.846085	0.962373	0.739288	0.972183	0.735759
R^2	0.755547	0.940240	0.585928	0.955820	0.580323
Sc	4.232299	4.421227	0.843513	-1.993330	0.438549

Source: Authors computation using e-views 8.1

With regards to result reported in table 4, one year lag values of NOE has positive impact on its current values and lagging past values of NOE by two years indicate negative impact on current values of NOE. However, the past values of EEG have positive impact on current values of NOE. Also lagging GDP and OPEN by one year indicates positive impact to current values of NOE and lagging by two periods indicate negative impact to current values of NOE. With respect to interest rate, past values of INTR by one period signifies negative impact to current values of NOE and lagging past values of INTR by two periods reveals positive impact on current values of NOE. However, past values of non-oil export(NOE), export expansion grant(EEG) and interest rate(INTR) have positive impact on the current values of export expansion grant(EEG), while past values of OPEN and a period lag of GDP have negative impact on EEG. Past values of EEG and GDP have negative impact on current values of INTR. Also, one year lag values of NOE and INTR have positive impact on current values of INTR and lagging them by two periods reveals negative impact on the current values interest rate (INTR).

Furthermore, past values of NOE has positive impact on current values of GDP, while past value of INTR has negative impact on the current values of GDP. Also, lagging GDP and OPEN by one period reveal positive impact to current values of INTR and there lagging by two years signifies negative impact. With respect to current values of trade openness(OPEN), past values of NOE and EEG indicate positive impact to current values of OPEN, while lagging pass values of INTR and OPEN by one period reveals negative impact to current values of OPEN and lagging them by two years signifies positive impact to current values of trade openness.

4.3 Impulse Response and Variance Decomposition
The result of impulse response function and variance decomposition is reported in appendix III. It depicts the direction of the impact of own –shock or innovation and shock on other variable. Ten quarters have been considered to be adequate to test for the impulse response of each of the variables to another.

4.3.1 Impulse Response Function
The response of NOE in the first quarter to its own shock is positive, also positive response to its own shock in the fifth, eight and tenth quarters. The response to one standard deviation shock of NOE to innovations in Export Expansion Grant (EEG), interest rate (INTR), Gross Domestic Product (GDP) and trade openness are all zero in the first quarter, negative in the fifth quarters except EEG and INTR which are positive. Also, in the ninth and tenth quarters NOE responded positively to shocks in EEG, INTR and OPEN except GDP appears negative.

The response of EEG to its own shock and NOE at first quarter is positive but with magnitude of 48% with respect to innovation from NOE, similarly, the response to one standard deviation shock of EEG from shocks in INTR, GDP and OPEN at first quarter is zero and negative in the fifth quarter with the exception of OPEN Which is positive. The response to one standard deviation shock of EEG to innovations in NOE, EEG and INTR is positive in seventh quarter but negative with respect to innovations in GDP and OPEN. Looking at the tenth quarter the response of EEG to innovation in all the variables appears to be positive with the exception of GDP which indicate negative shock.

Furthermore, the response of one standard deviation shock of INTR to innovation or shock in NOE is positive in the first quarter, but for innovation in EEG and GDP appears to be negative in the first quarter. Also, INTR response to shock, in open appears to be zero in the first quarter. However, in the fifth quarter the response to one standard deviation shock of INTR from innovations in NOE, GDP and OPEN appears to be negative, also in the ninth and tenth quarters NOE, INTR and GDP innovations to INTR appear to be negative and that of EEG and OPEN indicate positive response with magnitude of 3.4% with respect to EEG and 0.23% which is less than one percent with respect to OPEN.

The result also shows that response of standard deviation shock of GDP to innovations in INTR and OPEN appears to be zero but negative with regards to NOE and EEG in the first quarter. Response of GDP to own shock indicates positive response with magnitude of about 4.5%. While in the sixth quarter the response of GDP to innovation in EEG, INTR and OPEN appears to be negative, but NOE and own shock appears to be positive. Also in the tenth quarter, the response of GDP to shocks in NOE, INTR and GDP indicate negative response while NOE, EEG, INTR and OPEN reveal positive response only the variable GDP to its own shock indicate negative response with negative -1.77%. Meanwhile, the response of one standard deviation shock of OPEN to shock in NOE, EEG, INTR and OPEN appears positive while in the seventh quarter the response of OPEN to shocks in NOE, EEG, INTR and its own shock appears positive but with regard to GDP shows negative response with a magnitude of 7.8%.and in eighth and tenth quarters, the response of one standard deviations shock of OPEN to innovation or chocks in all variable is positive with an exception of GDP variable which reveals negative response.

4.3.2 Variance Decomposition

The most importance aspect of variable decomposition technique is to measure the fraction of forecast error variance for each of the variables under investigation to its own shock and to shocks of other variables. The result of the variance decomposition is reported in appendix III with both direct and indirect effect of shocks.

Variance Decomposition of NOE

The decomposition of NOE shows that its own shock has explained about 100% of variation in NOE in the first quarter about 72% in the fifth and sixth quarter and about 45% in the tenth quarter. While Export Expansion Grant (EEG) explain zero variation in non-oil export (NOE) in the first quarter, about 18% in the fifth and seventh quarter and about 30% in the tenth quarter. Interest rate (INTR) also explains zero percent variation in GDP in the first quarter, less than one percent in second, third and fourth quarters and about 2% variations is explained by INTR in the tenth quarter.

GDP has explained zero percent variation in NOE in the first quarter, about 9% and 20% in seventh and tenth quarters respectively. Trade openness(OPEN) explain zero percent variation in NOE in the first quarter, about 2% in the fourth, fifth, and eight quarters and also OPEN explained about 1.5% variation in NOE in the 9th and tenth quarters.

Variance Decomposition of EEG

In the first quarter, NOE has explained about 10% variation in EEG. It also, explained about 71% of variation in EEG in the fifth quarter and also 50% and 44% variation in Export Expansion Grant (EEG) is explained in ninth and tenth quarters respectively. Its own shock (EEG) has explained about 89% in the first quarter, 16% in the fifth quarter and about 27% and 29%was explained by its own shock in the ninth and tenth quarters respectively. INTR explained zero percent variation in EEG in the first quarter; it also explained about 2% variation in EEG in the last four quarters that is seventh, eighth ninth and tenth quarters.

However, GDP explained about zero percent variation in EEG in the first quarter, about 3.9% in the fifth quarter and 14% in the eighth quarter while 20% in the tenth quarter. The degree of trade openness also explained zero percent variation in EEG in the first quarter, about 6% in the fourth and fifth quarter. While in the eighth and tenth quarters, OPEN has explained about 2% variation in EEG respectively.

Variance Decomposition of INTR

NOE has explained about 56% of variation in INTR in the first quarter, about 36% in the fifth and about 33% to 40% in the ninth and tenth quarters respectively. EEG has explained variation in INTR in first quarter with about less than one percent magnitude and the six quarter it explained about 13% variation in INTR, also, 13% in the eight quarter with about 11% in the tenth quarter. The INTR has explained its own shock with about 42% in the first quarter, 21% in the seventh quarter and it has also explained about 19% in the ninth quarter.

However, GDP has explained bout 0.48% variation in INTR in the first quarter with a magnitude of less than one percent. GDP has also explained about 11% variation in INTR in the fifth quarter and about 30% and 40% in the eight and tenth quarters. Means while, degree of trade openness (OPEN) has explained about zero percent variation in INTR in the first quarter and about 16% in the seventh, eighth and ninth quarters respectively.

Variance Decomposition of GDP

The variance decomposition of GDP shows that NOE has explained about 0.37% variation in GDP in the first quarter, about 7% in the fourth quarter and also about 58% and 74% in the eight and tenth quarters respectively. EEG also explained about 40% variation in GDP in the first and second quarters, EEG also shows that it explained about 23% and 68% variation in GDP in the sixth and ninth quarters.

Furthermore, INTR has explained zero percent variation in GDP in first quarter, 0.9 percent in the seventh quarter with a magnitude of less than 10% percent and also about 0.7% in the ninth and tenth quarter respectively. GDP to have explained its own shock with about 59% in first quarter, 48% in the sixth quarter and with about 13% in the tenth quarter. OPEN has explained about zero percent variation in GDP in the first quarter, about 1.3% in the fifth quarter and 0.6% in the tenth quarter.

Variance Decomposition of OPEN

Variance decomposition of OPEN reveals that NOE has explained only 2.3% of variation of OPEN in the first quarter, about 21% in third quarter and explained about 37% and 30% variation in OPEN in the seventh and tenth quarters respectively. Export Expansion Grant (EEG) has explained about 13% variation in OPEN in the first and second quarters and about 25% and 32% in the seventh and tenth quarters respectively. INTR also explained about 1% variation in OPEN in first quarter, about 1.8% in the fifth quarter and also about 2% in the seventh quarter down to tenth quarter.

Meanwhile, GDP has explained about 3% variation in OPEN in the first quarter about 6% in the fourth quarter in the fourth quarter and about 11% and 20% in the sixth and ninth quarters respectively. OPEN has explained its own variation with about 80% in the first quarter, about 46% in the fourth quarter and it also explained variation in OPEN with about 15% and 9% in the eight and tenth quarters respectively.

SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS
The chapter deals with summary of the empirical result of this research, conclusion and recommendations.

5.1 Summary of major findings
The research examined the impact of export development policies on the performance of Non-oil export in Nigeria using secondary data in form of time series from 1986 to 2022. The variables used in the study include Non-oil export (NOE), Export Expansion Grant (EEG), interest rate (INTR), economic growth proxies by Gross Domestic Product (GDP), and degree of trade openness (OPEN). The study employed the use of unrestricted Vector Auto Regression (VAR), because it has a forecasting power relative to large structural models. The technique, (ARDL) bound testing approach was used to test for long-run relationship between export development policy and performance of Non-oil export in Nigeria. However, VAR granger causality test was used to establish the direction of causality between export development policies and Non-oil export. The impact of shocks has also been explored by impulse response function and variance decomposition. Unit root test was conducted, the results reveal that Non-oil export (NOE) Export Expansion Grant (EEG), trade openness (OPEN) and Gross Domestic Product (GDP) are not stationary at level, but they are stationary at first difference so they are I(1) variable, while interest rate (INTR) is stationary at level I(0).

The result of Vector Auto regression (VAR) indicates that past values of non-oil export have positive impact on its current values. Past values of Export Expansion Grant (EEG), OPEN and INTR indicate positive impact on current values of non-oil export (NOE). While past values interest rate (INTR) has significant negative impact on current values of non-oil export (NOE).

Granger causality test result reveals that, taking non-oil export as a dependent variable, it is evident that only Export Expansion Grant (EEG) granger cause's non-oil export (NOE) at 5% level of significance. While, interest rate (INTR), Gross Domestic Product (GDP) and trade openness (OPEN) do not granger causes non-oil export at 5% level. However, the joint probability of all the independent variables together indicates existence of causal relationship at 5% level of significance. This may be due to the fact that

granger causality test are design to handle pairs of variables, and may produce misleading results when the true relationship involves three or more variables.

The result of ARDL Bound test indicates that there is existence of long-run relationship between export development policies and performance of non-oil exports in Nigeria as the F-statistic is greater than both the critical values of lower and upper bound at 5% level of significance. The result reveals that, the variables under study are co-integrated and share common linear trend within the period under study. As reported in the error correction mechanism in the table 9, there is long-run relationship and valid error correction between the variables under consideration because the error correction coefficient is negatively sign (-0.5370) as required and it is highly significant. However, the ARDL model reveals that, export development policies have positive and significant impact on performance of non-oil exports in Nigeria.

5.2 Conclusion

Base on the estimated Vector Auto regression (VAR) result, past values of Export Expansion Grant (EEG), Gross Domestic Product (GDP) and Trade Openness (OPEN) indicates positive influence on current values of Non-oil Export, only Interest Rate indicates negative influence on current values of Non-oil Export. This implies that a rise in these variables encourage better performance of Non-oil Export while a fall reduce Non-oil Export performance. On the other hand, Interest Rate was found to be negatively influencing the dependent variable, this shows that rise in interest rate will discourage better performance of Non-oil Export in Nigeria. The study concluded that, increase in Export Expansion Grant, Gross Domestic Product, Trade Openness and decrease in Interest Rate are ways of improving the performance of Non-oil Export in Nigeria.

5.3 Policy Recommendations

The result of the Auto Regressive Distributed Lag (ARDL) model indicates, export development policy has positive and significant impact on performance of non-oil export in Nigeria within the period under study.

Since, it is discovered that export development policies have positive and significant impact on non-oil exports in Nigeria. Therefore, existing policies, programs and incentives that are geared towards boosting export especially non-oil exports should be vigorously pursued. To achieve this, it is recommend the policy makers should focus on:

   i.   There is need for government and other stake holders to focus on reviving the Nigerian non-oil sector to improve its performance and ensure the non-oil sector is repositioned. This can be achieved through shifting more attention on the part of government and other stake holders from oil to non-oil export with high commitment in expanding the production of non-oil products increase its value and expand market coverage.

   ii.   Government should enforce non-oil export policies toward re-sustaining the failing non-oil export industry in order to diversify the economy and increase foreign exchange earnings through non-oil export. This can be achieved through strengthening of all institutions in

general and agencies that are directly responsible for implementing non-oil export development policies and ensure that their goals are directed toward diversifying the economy and improving foreign exchange earnings through non-oil exports.

REFERENCES

Abogan, O. P. Akinola E. B and Baruwa O.I. (2014) 'Non-oil export and economic growth in Nigeria (1980- 2011)'. *Journal of Research in Economics and International Finance* (JREIF):3(1):1-11.

Abou-Stait, F. (2005) 'are export the engine of economic growth: An application of co-integration and Causality analysis for Egypt, 1977-2003'. *African Development Bank, Economic Research Working Paper,* 2005, 76.

Adedipe, B. (2004), "The Impact of oil in Nigerian Economic Policy Formulation". A paper presented at the conference on Nigeria: *Maximizing pro-poor Growth: Regenerating the socio-economic data base,* Organized by Overseas Development Institute in collaboration with the Nigerian Economic Summit Group 16th/17th June.

Akeem, O. U.(2011)," Non-oil export determinant and economic growth". European Journal of business management, 3(3), 236-257

Alade, S. Y, Adekunle O. A. and Joseph O. A. (2014) 'Foreign Exchange Rate Regimes and Non-Oil Export Performance in Nigeria', VOL. 4, NO 1.

Amelia, U. S. P. (2000) 'Trade Liberalization and Export Performance in Selected Developing Countries' ISSN 1466-0814

Amsden, I. (1989), *Asians Next Giant: South Korea and Industrialization*. New York: Oxford University press.

Anthony, S. and Mustapha, I. (2011), "The Impact of Financial Sector Reform on Non –Oil Export in Nigeria." Journal of Economics, 2(2): 115-120 (2011).

Brender, J. and Krugman, P. R. (1983), "Reciprocal dumping model of international trade", *Journal of International Economics*, vol.11, no.1, pp. 1-14

Brender, J. and Spencer, B.(1985). "Export subsidy and International market share rivalry" – *Journal Of International Economics,* vol. 18, no.1-2, pp 83-100.

Brender, J.(1981). "Intra-industry trade in Identical Commodities." *Journal of International Economics,* vol.11, no.1, pp 1-14.

Bryan, R.(2004). "Remittance in America: size, impact, and measures to enhance their contribution to development" USSAID/Armenia, October 1, 2004.

Central Bank of Nigeria,(2008) statistical bulletin, Golden Jubilee Edition, December, 2008.

Central Bank of Nigeria (2013), Annual Report For The Year Ended 31st December. Abuja: Central Bank of Nigeria.

Central Bank of Nigeria, (various years), Economic and Financial Reviews. Abuja: Central Bank of Nigeria.

Central Bank of Nigeria, (various years). Annual Reports and Statement of Accounts. Abuja: Central Bank of Nigeria.

Dickey, P. and Fuller, W. (1979). "Time series with unit root". *Journal of American Statistical Association*, vol.7, No.4, 427-431

Efobi, U.R and Osabuohien E.S. (2011), Promotion of Non-oil Export in Nigeria: empirical Assessment of Agricultural Credit Guarantee scheme fund. *Current research Journal of Economic Theory* 3(1):20-28, 2011.

Emilio, J. M. S. (2001). "Is the Export- led Growth Hypothesis valid for developing countries: A case study of Cost Rica." *Policy issues in international trade and commodity study series* no.7 United Nation, New York Geneva.

Engle, R.F. and Granger, C.W.J. (1987)."Dynamics Model Specification with equilibrium constrains," co-integration and error correction. Economics 55(3)

Ewetan, O.O and Okodua, H. (2007) 'Econometric Analysis of Export and Economic Growth in Nigeria' JEL Classification: C33, C32, F43, F21

Ezeudu, I.J (2014), "Evaluation of Non-oil contribution in export financing the development of Nigerian 'Economy' An empirical Analysis of export processing zone" *Research Journal of Finance and Accounting.* 5(6):58-63.

Ezike, J.E and Ogege, S. (2012), Nigerian foreign trade policy: its impact on non-oil export. *Journal of Economic and International Finance*, Vol.4 (8) pp.192-200, 7May, 2012.

Ezike, J.E., Ikpesu, F, and Amah, P.(2012). Macro-economic Impact of Trade Nigerian Growth: An empirical evaluation. *Research Journal of Business Management and Accounting*, vol. Vol. 1(4), DEC 2012.

Giancarlo, G. (1986) "International Trade and Economic Growth,"Europian Journanal Business Management. pp. 164-214

Granger, C.W.J.(1998). 'Some recent development in concept of causality' *Journal of econometrics, vol.* 39, 199-211

Harb, N.(2008) "Non- oil exports, Non oil GDP and Investment in the GCC countries" Munich personal Repec Achieve.

Harris, R. G. and Robertson, P. (2003), "The new economics of labour migration and the role of remittance in the migration process" International Migration 37 (1)

Helleiner, G.K. (2002). Peasant agriculture, Government and Economic Growth in Nigeria: Ibadan, Homewood Publishers.

Iyoboyi, M. and Na-Allah, A. (2015), policy, Institution and Non-oil Exports: *Evidence from Nigerian International Journal of Economic and Finance;* Vol. 7, No. 11, 2015.

Iyoha, M.A and Oriakhi, D. (2002) "Explaining African Economic Growth performance: The Case of Nigeria: *A revised Interim Report on Nigerian case study prepared to the African Economic Research consortium Research,* May, 2002

John, E.E. and Samson, O. (2012) 'Nigerian Foreign trade policy: Its impact on Non-oil exports'. *Journal of Economics and International Finance* Vol. 4(8), pp 192-200, 7 May 2012.

Kravis, I. B.(1956) 'Availability and other influences on the commodity composition of trade. *Journal of political economy*, 64: 143-155.

Krugman, P. R. (1979). 'Monopolistic competition and optimistic product variety'- American Economic Review, vol. 67, no.3 pp297-308

Krugman, P. R.(1984). "Import Promotion and Export Promotion" In-Henry Kierzkowski(Ed) – Monopolistic Competition and International Trade- Oxford University Press

Linder, S. B. (1961). "An essay on trade and transformation" New York, John Wiley

Lipsey, G. and Chrystal, A. (1996) "an introduction of positive economics" 8th – Edition. Oxford University Press.

Ningi, I. and Dutse A.Y. (2013), Analysis of supply side factors Affecting Bank Financing of Non-Oil exports in Nigeria. World Academy of science, engineering and technology, *International Journal of social, Behavioral, Education Economic, Business and Industrial Engineering* vol. 7 No. 9, 2013.

Nigerian Export Promotion Council (NEPC), 2013. Annual Report for the year ended, 2014. Abuja, Nigeria.

Nwachukwu, P.O. (2013), 'The Impact of Non-oil Export Strategies on Economic Growth in Nigeria' (1970-2013) *Journal of economic Theory* 3(1):20-28, 2011.

Nwane,T.F.I. (2014), 'Assessing the Relationship between diversification of Non- oil Export Product And Economic Growth in Nigeria'. *European Journal of Accounting and Finance Research* vol. 2, No.10 DEC. 2014.

Nwanko, O. (2015), 'Diversification of Non-oil export product as a precondition for Accelerated real Economic Growth in Nigeria' *International Journal of Management and Research.*

Nwidoble, B.M (2014) "Growth in Nigerian: Non-oil Export finance and Non-oil Export Performance: A correlation Analysis" *International Journal of Business and Social Research* (IJBSR). 4(2): 31-39.

Ogbonna, I.C., Uwajumogu, N.R; Chijioke, G. and Agu, S.V. (2013) "Economics Globalization Its impact on the growth of Non-oil supply in Nigeria". *Journal of Economics and Sustainable Development*, 4(7): 66-74.

Ogujumi, Aderinto and Ogunro, (2015) 'An Empirical Analysis of the Relationship between Non-Oil exports and Economic Growth in Nigeria' *International Journal of Academic Research in Business and social Science* Dec 2015, Vol.5, No. 12.

Olaloku, F.A. (2001), Structure of the Nigerian Economy. Lagos: University of Ibadan Press.

Olayiwola, K and Okudua, H. Foreign Direct Investment, Non- Oil exports, and Economic Growth in Nigeria: A causality analysis. J. JEL Classification: C33, C32, F43, F21.

Olurankise, F and Bayo. F. (2012) 'Analysis of the Impact of Non-oil sector on economic Growth'*Journal of Canadian Social Science* Vol.8, No.4, 2012.

Onwualu, D. A. (2012), Agricultural sector and national development focus on value chain approach, presented at 5th edition of the annual lecture of Onisha Chambers of Commers, 24th may, 2012.\

Patricia C. N and Izuchukwu C. D. (2016).The relationship between diversification of non-oil export product and economic growth in Nigeria. Co-integration analysis. International journal of multidisciplinary research and development vol3, issue 3; march 2016.

Pesaran, M. H. and Shin, Y. (1999) 'Auto distributed Lag Modeling Approach" to co-integration analyses Chapter two in Econometrics and Economic Theory in 20th Century. The Regan Frisch Central Symposium Storns(Ed) Cambridge Press: Cambridge; 1999.

Philip, P. (1987) A guide to modern econometrics. Second edition by Marno Verbeek John Wisley and Sons ltd.

Posner, M. V. (1961). 'International Trade and Technical Change' Oxford Economic Papers, vol.13, no.3, pp 323-341

Rezaie, M. (2013). "Factors affecting Non-oil exports" Kuwait Chapter of Arabian *Journal of Business and Management Review*. 2(5): 17-23.

Sanusi, J.O. (2002). Developing the Non-oil sector in Nigeria. Central Bank of Nigeria, 8th monetary policy forum August 7: from *<www.cenbank.org/out/speeche/2003/Govadd – 7 Aug>* (Retrieved 15 October, 2009)

Sim, H.(1980) Time Series Econometrics, concise introduction, Palgrave text in econometrics by Trence C. Mills, pp 36.

Sorsa, P. (1999) 'Algeria- The real exchange rate, export diversification and trade protection' Policy development and Review Department, International Monetary Fund (IMF).

Thomson, G. (2008) International encyclopedia of social science.

Todaro, M. P. and Smith, S. C.(2003) *Economic Development*. Eight Edition, Addison Wesley. Singapore.

Todaro, P. M. and Smith, C. S. (2006) *Economic Development,* 9th Edition Bosten Pearson Addison Wesley.

Udah, E. B.(2012) 'Exports – Growth Hypothesis: An Econometric Analysis of the Nigerian case' *Inter-Disciplinary Journal of Research in Business* Vol. 2, Issue.4 (pp. 39-49)

Yesufu, T. M. (1996) The Nigerian Economic Growth and Development, Benin City: University of Benin press. Pp 1-400.

Zafar, A. (2004). 'What happens when a country does not adjust to terms of trade shocks: The Case of Oil Rich Gabon' *World Bank policy Research, working paper* No. 3403 September.