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Full Length Research Paper

Non-oil export and Economic growth in Nigeria (1980-2011)

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ABSTRACT

The study investigates the impact of non-oil export on economic growth in Nigeria between 1980 and 2010. The study examines the significant role of non-oil export on economic growth which the previous studies might have ignored and the aggregate non-oil exports data used by them might bias their conclusions. In achieving the objectives of the study, Ordinary Least Square Methods involving Error correction mechanism, over-parametization and parsimonious were adopted. In testing for the time series properties, the evidence from estimated economic models suggests that all the variables examined are stationary at first difference I(Is) using the Augmented Dickey- Fuller (ADF) and Phillips-Perron. Besides, Johansen Co integration test reveals that the variables are co integrated which confirms the existence of long-run equilibrium relationship between the variables. Thus, this suggests that all the variables tend to move together in the long run. The study reveals that the impact of non-oil export on the economic growth was moderate and not all that heartening as a unit increase in non-oil export impacted positively by 26% on the productive capacity of goods and services in Nigeria during the period. This was evident in the study that the policies on non-oil sectors during the period in Nigerian do not sufficiently encourage non-oil export, thus reduce their contributions to growth. This study therefore predicts an imminent collapse of the Nigerian non-oil sector in the nearest future if immediate remedial measures are not taken to strengthen the sector. The study among other things encourages the government to strengthen the legislative and supervisory framework of the non-oil sectors in Nigeria and diversify the economy to ensure maximum contributions from all faces of the sectors to economic growth of Nigeria.

Keywords: Non-oil export, economic growth, Ordinary Least Square, diversification, Nigeria

INTRODUCTION

The growth of Nigeria's non-oil exports has been sluggish and non encouraging in the post-independence period. It averaged about 2.3% during 1960 to 1990 but in relative terms, declined systematically as proportion of total exports fell from about 40% in 1970 to about 5% in 2010, World Bank, 2011. A well developed export sector will provide employment opportunity for the people with the attendant reduction in social cost of unemployment. Earning from export will reduce the strain on the balance of payment position and even improve it. A rewarding export drive can turn a hitherto underdeveloped economy into a prosperous economy. Income earned through exporting will help in increasing the level of demand within the economy.

An assessment of the trend and patterns of activities in the non-oil sector of Nigeria revealed that despite the various policies, strategies and reform programmes, the contributions of the sub-sectors of this sector have been dismal, disheartening and below its full potential. Agriculture that serves as mainstay is still characterized by low productivity. This stems from small farm size with crude and outdated farm implements, lacking access to

credit facilities production machinery and inputs by farmers owing to inadequacies of their provision among others.

The challenges of non-oil export sector is not that it is being over shadowed by the oil export trade, but traceable to declining non-oil export and loss of market share in the non-oil trade globally is a clear evidence of how the non-oil sector competitiveness of the Nigerian economy has been consistently eroded over the last three decades. A robust and strong export trade is indicative of how competitive the commodities and services are, and how large the scale of the industrial base of an economy is, this is reflected by the comparative advantages possessed by the country. Also, exports of commodities are possible when domestic demand for such are satisfied and surpluses exist in commercial quantities. Thus, the non-oil export sector serves as the hub for exporting these surpluses produces by the non-oil base of the country's economy. There has been several research works which have examined the relationship between non-oil export and economic growth. Okoh (2004) observed that global integration had positive but not significant relationship in explaining the behavior of non-oil exports in the long-run. Since the aggregate non-oil exports data used by previous studies may biased their conclusion and the need to correct the existing cultural distortions and put the economy on the path of sustainable growth is therefore compelling. This raises the question of what need to be done in order to diversify the economy and develop the non-oil sector to realize the potentials of the sector.

The broad objective of this study is to investigate the impact of non-oil export on economic growth in Nigeria between 1980 and 2010. The specific objectives are to examine the trends and patterns of non-oil export and economic growth; to analysis the impact of non-oil exports on economic growth of Nigeria; and to test for the causal relationship between non-oil export and economic growth in Nigeria.

LITERATURE REVIEW

The Structure of Non-Oil Export during the Pre and Post SAP Era

Pre Sap Era

It was observed that most contribution of the non oil sector was from agriculture whose largest contribution was in 1998 with 92.8% and the lowest in 1981 with 19.6%. The contribution of agriculture to total export is not something to be proud of, none of the years under review made a percentage of 10%. Before the introduction of SAP that is the year within 1981 and 1985, one would examine that there was a negative growth rate in agricultural export. It is generally known that agricult-

-ural performance was particularly unsatisfactory and this tend to increase the burden of the whole economic. Many factors responsible for this, the major frequent problem of agricultural production is its high propensity to weather changes. Whenever there was unfavourable weather, output decline substantially with adverse consequences of the economy. This in itself is a symptoms of an inefficient agriculture system, which is unable the economy unlike a developed agricultural system.

Another important problem was the poor implementation of policy measures by the various government agencies. Most of the institutions involved in policies implementation were very ineffective and were not particularly oriented to the needs of majority of the small farmers. Such inadequacies were common in key institution like credit agencies, research institution, commodity board, river basin development authority and institution which handled input procurement and distribution. Many of them either did not have adequate facilities and funds or competent staff to enable them to work efficiently.

Inappropriate government macroeconomic policy measures often place agriculture at a disadvantage. For instance, excessive growth in government spending and money supply fuelled inflation and labour cost, which hamstrung agricultural in several ways. Generally, agriculture was deserted for its more profitable but often less tedious activities such as construction and commerce. This stands was officially backed up administration control of the over value naira which place agriculture at a disadvantage and export in an uncompetitive position in the world market. The local prices that were subsidies by government were in fact unrenumerative and therefore disincentives to increase agricultural produce.

Sap Era

According to Itegbe (1989), between 1984 to September 1986, successive military administrations started giving serious consideration to the need to urgently find other methods of sourcing foreign exchange, in addition to measures adopted to conserve what was already earned. This situation arose as a result of mounting obligation on the country to settle trade arrears and for debts servicing as well as to meet current trade bills. He further stated that by 1984, Nigeria had found herself in huge foreign debts in addition to being in serious arrears in settlement of foreign trade bills mainly on irrevocable letters of credit.

Thus, it became clear to policy makers in Nigeria that additional effort had to be made by the nation to earn foreign exchange. It was for this reason that the government in 1986 adopted export oriented development strategy as a major comer stone of the structural adjustment programme.

SAP involved the formulation and adoption of a comprehensive export incentive legislation known as the export incentives and miscellaneous provision decree No.18 of 1986. The provisions of this decree were subsequently strengthened by the provision of the second tier foreign exchange market (SFEM) decree No.26 of September, 1986. The introduction of the export decree and SFEM decree could be described as 'Watershed' in the history of non oil export policy development in Nigeria, according to Itegbe1989, pointing out for the first time, in the history of the country, export expansion and diversification strategy became a national policy objective. The removal of all bureaucracies and additional incentives through SAP did not however make any significant impact on the volume non oil exports. Experts and academicians in the area of export promotion have tried to figure out why after 20 years of this export policy regime there is little significant positive results.

Fagbenro (1999) identified some major defects in the policy environment. These include constraints in infrastructural development for instance electricity, water, communication, transport and inefficient implementation of incentives. He further cited difficulties in managing the transition from import substitution to export oriented industrialization strategy and various policy inconsistencies among other factors. In their view, Faruqee and Husain 1994 said SAP policy virtually had everything sorted out but only on paper including plans for diversification, foreign exchange earnings and retention through domiciliary accounting, incentives, institutional frameworks, laws decree.

However, a fresh dimension into export policy expectation which might not have been provided for is the increased protectionism in most developed countries especially those of developed markets that the country trade ties with. They further stated that the inability of SAP to secure against this protectionism, is indicative of the fact that the global trade competition is more formidable and less friendly than reflected by our acceptances (as in the law of contract) and by the competitions themselves. This assertion goes to show that there may have been some fundamental defects in polices regarding non oil exports in Nigeria in the period under study.

Post Sap Era

It is in the area of agriculture export that recent policy measures have produced the most visible impact so far. The growth rate of agriculture exports grew from negative figure apart from 1992 which was -10.8, all other years were positive. The share of agriculture in non oil also grew with an average of 74.6. The highest contribution was in 1998 with 92.8%. the agricultural export from the total exports also increased making about 4.5% within 1986 to 1988, which was an improvement of 2.5% in the pre SAP period.

Apart from the significant rise in the agricultural export noted above, the upsurge in the sharp increase in local currency prices of the sharp export product, following the large depreciation in naira exchange rate and the removal of marketing and price control after the abolition of the commodity boards. Another source of increase was the new package incentives given to the non oil exporters.

Empirical Perspectives

According to Ogunkola et al., (2008), in the 1960's Nigeria's export trade was largely dominated by non-oil products such as groundnuts, palm kernel, palm oil, cocoa, rubber, cotton, coffee, copra, beniseed and others. Other non-oil exports of significant value then were tin ore, columbite, hides, skin and cattle. Over 66% of total exports on the average were accounted for by these commodities. The same pattern continued into the early 1970s. As a matter of fact, cocoa was the dominant export product at that time contributing about 15% of total exports in 1970. However, oil's dominance of the country's export basket began in 1973/74 and was greatly magnified during the 1980s. The crux of the problem was that while oil export was growing, non-oil exports were declining making the dominance much more rapid and pervasive. Teal (1983), estimates that the output of export crops grew at an average annual rate of 4.7% in 1950– 1957 and 7.4% in 1960–1965, then declined by 17.3% in 1970–1975. The transformation of Nigeria from a net exporter of agricultural produce to a large-scale importer of the same commodities was particularly marked during the period 1973–1982 (Oyejide, 1986). The efforts to reverse these trends seem to be yielding little or no results, as oil continues to dominate the country's exports. Non-oil exports share of Nigeria's total exports have remained under 5% for most years since the introduction of the structural adjustment programme SAP. Ezirim et al., (2010), observed that the economy, which was largely at a rudimentary stage of development at the first half of the last century, started experiencing some structural transformation immediately after the country's independence in 1960. Throughout the 1950"s and 1960"s and the early part of 1970"s, agriculture was the core of economic activities in Nigeria, followed by manufacturing and mining activities at very low levels of development. The massive increase in oil revenue, accruing to the federal government of Nigeria since early 1970s, created an unprecedented, unexpected, and unplanned wealth for Nigeria. In order to make the business environment conducive for new investments, the government began investing the new found wealth in socio-economic infrastructure across the country, especially in urban areas; the services sector

grew as well (Adedipe, 2004) in Ezirim (2010). The massive investments in socio-economic infrastructure led to the migration of many able-bodied young men and women from the hinter land to the urban areas and cities took part in the expanding and burgeoning oil-driven urban economy; a situation that created many social problems, such as congestion, pollution, unemployment, and criminal activities. The national currency, Naira, strengthened as foreign exchange inflows outweighed out flows, and external reserves were built up.

To Ajakaiye and Fakiyesi (2009), earnings from non-oil exports, such as finished leather products, cocoa and its products, sesame seeds and manufactured products like cosmetics and toiletries, rose to about US$1.38 billion in 2007. By the end of 2008, this value rose to $1.8 billion, the highest in the country's history. To Obeke (2004), gross official external reserves rose by 20% to stand at about $50.75 billion by end-December 2007, as against $42.3 billion in December 2006. In 2008, estimated growth of GDP of 6.77% was higher than that of 2007 (at 6.2%). Growth was again driven by the non-oil sector, especially the agriculture sector, which contributed 39.8% out of the 80.7% total contribution of the non-oil sector to GDP in the first half of 2008. This increased to 60% by the last quarter of 2008. This improvement in its output, especially in the first half of 2008, was attributed partly to moderate weather, especially the early rains experienced in the southern and northern states of Nigeria. Other factors that helped to boost agricultural production included several government intervention measures, like the National Agricultural Project, the National Special Programme for Food Security, zero tariffs on imported agro- chemicals, export expansion grants as well as tightening of controls on illegal imports of agricultural products. The country maintained a balance of payments surplus in 2007, fuelled by the current account surplus. The 2008 half-year report indicated that the trend continued although, judging by the performance of major drivers of the current account, the latter part of the second half of 2008 especially the last quarter was likely to show deep deficit.

Muhammad and Atte (2006), are of the opinion that the Nigeria's rich human and material resource endowments give it the potential to become Africa's largest economy and a major player in the global economy. Compared with other African and Asian countries, economic development in Nigeria has been disappointing, with GDP of about 45 billion, 32.953billion and55.5billion dollars in 2001, 2002 and 2003 respectively and per capita income of about $300 a year, Nigeria has become one of the poorest countries in the world. In view of the importance of agricultural growth to economic growth, Adebayo (1999) in Muhammad and Atte (2006) observed that rising agricultural productivity has been most important concomitant of successful industrialization. A retrospective look into the Nigerian economy and its development reveals that agriculture was both the main stay of the Nigerian economy and the chief foreign exchange earner (Chigbu (2000)). In the 1960s, agriculture accounted for well over 80 percent of the export earnings and employment; about 65 percent of the GDP and about 50 percent of the government revenue (FRN (2000)). This contribution to the Nigerian economic growth has however declined over the years. The contribution of agriculture according to the Central Bank of Nigeria (CBN) to the GDP was about 50% in 1970 and 34% in 2003 (CBN (2003)). Although agriculture no longer serves as the leading contributor to Nigeria's gross national product and leading foreign exchange earner due to phenomenal growth in the petroleum sector of the economy as (Ingawa (1979)) observed, agriculture is still the dominant economic activity in terms of employment and linkages with the rest of the economy (NNPC (2004)). While accounting for one-third of the GDP, it remains the leading employment sector of the vast majority of the Nigerian population as it employs two-third of the labour force (Chigbu (2000)).

RESEARCH METHODOLOGY

Theoretical Framework

The linkage between oil, non-oil export and economic growth has occupied a central position in the development literature. The focus is on how some of the components of non-oil export affect economic growth in Nigeria. The application of the endogenous growth theory has only emerged properly not too long ago from the work of Moosa (2002), Devarajan et al., (1996) even though one of the pioneering authors in its original contribution is the work of Barro (1990) and later Futagam et al. (1993). Barro made use of the endogenous growth model to find a linkage between public revenues / spending and economic growth which is to be linked with the relationship that exist between non-oil export and economic growth in Nigeria in this research work.. Tsoukis and Miller also built on the work of Barro. All their studies centered on endogenous growth theory. In examining this on Nigeria's data, the study use the neoclassical growth model, otherwise referred to as the growth accounting framework, to explain the source of growth in an economy. The national accounts form the basis of the economies to be analyzed and it is used in conjunction with the aggregate production function. This approach has got a wide application in econometric analysis (for example, Akinlo and Odusola, 2003; Levine and Zervos, 1996; Obstfeld, 1994).Using a production function approach, it states that the growth rate of output (GDP) is principally determined by the following factors: The rate of growth of gross labour and/or the rate of growth of its quality, multiplied by the labour income share; the rate of growth of gross capital input and/or the rate of growth of its quality, multiplied by the capital

income share; and Change in technology or total factor productivity (TFP).

This is given as:

$$g=f(L, K, T) \quad (1)$$

Where: **g** = growth of GDP; **L** = labour; **K** = capital formation / investment; and **T** = technology

Going by the above, the model for this study is shown below by incorporating other determinants of economic activities which include the key variables to be considered in this study. These include; non-oil export (as key variable), exchange rate and inflation rate as intervening variables.

$$rgdp=f(nonx, excr, inf) \quad (2)$$

Where: rgdp =real gross domestic product; nonx= non-oil export and inf= inflation rate and excr= exchange rate.

Model Specification

The economic model presented in this work was designed to test the hypothesis of whether non-oil exports have any effect on economic growth. To test our hypothesis, we developed a general model on the economic growth. As stated earlier, the regression analysis will be employed to study the influence of revenues of the government on the economy. The basic model employed here relates the country's growth in a 31 years period measured by the change in real per capita GDP to the public revenue. In the context of this research work, GDP is the dependent variable and it is denoted by RGDP. Hence functional relationship for the model shall be in the form;

$$RGDP=f(OILR, NONX, EXCR, INF) \quad (3)$$

Stated explicitly

$$RGDP=\beta_0+\beta_1 NONX+\beta_2 EXCR+\beta_3 INF+U_i \quad (4)$$

Where $\beta_0$is the intercept while β_1 β_2, and β_3 are the regression coefficient and depicts the change in the value of non-oil exports, exchange rate and inflation rate. μ_t is the error term. It depicts external factors that affect the magnitude of gross growth rate that are not explicitly captured in the model. In this project work, we are not interested in μ_t that is other factors that influence the value of GDP growth rate. We are only concerned about the relationship between the structural compositions of the government oil and non-oil revenue and the GDP. As stated earlier, one of the broad objectives of this research work is to examine the impact of non-oil exports on economic growth in Nigeria over the years of study (1980-2010). The linearized model specification for the analysis is given as

$$\log RGDP=\beta_0+\beta_1 \log NONX+\beta_2 \log EXCR+\beta_3 \log INF+U_i \quad (5)$$

where $\beta_0$is the intercept while β_1 β_2, and β_3 are the slopes of the equation.

Dynamic model

The dynamic version of the long run relationship equation is specified as follows:

$$\Delta \log RGDP_{t-1}=\beta_0+\beta_1 \Delta \log NONX_{t-1}+\beta_2 \Delta \log EXCR_{t-1}+\beta_3 \Delta \log INF_{t-1}+\beta_4 ECM_{t-1}+V_t \quad (6)$$

Where Δ represents the first difference operator, ECM_{t-1} the error correction term, and V_t is a disturbance term. The error correction model utilizes information in the error term of the long run model to approximate deviation from the equilibrium and represent the short run necessary to move the system back toward its equilibrium.

Analytical Techniques and Sources of Data

The time series econometric procedures were used in order to examine the impacts of non-oil exports on economic growth. There are four steps involved in estimating the relationships. The first step is to test the stationarity of the series or their order of integration, as the series need to be integrated in the same order. The second step is to examine the presence of a long run relationship among all variables in the equation. However, the long run coefficients are estimated using the associated co-integration model, proposed by the Johansen et al. Once the co-integration is confirmed in the model, the residuals from the equilibrium regression can be used to estimate the error-correction model in the third step. Lastly, several of diagnostic tests – which are tests of normality, autocorrelation, heteroskedasticity in the error term and the stability of model would be conducted to examine the validity and reliability of these models.

The research data employed in analyzing the impacts of non-oil exports on economic growth was secondary data. The secondary sources of the data are useful relying on the efficiency of validated model built by economic experts in this field to analyze such data. More so, the sources of such secondary research are from the publication of Central Bank of Nigeria (CBN) and Federal Bureau of Statistics (F.B.S) particularly their information unit.

Table 1. Unit roots results for the variables

Variables	ADF statistics (At level)	ADF statistics (At 1st difference)	Order of integration	P-P statistics (At level)	P-P statistics (At 1st difference)	Order Of integration
GDP	0.570115	-8.377849	I(1)	-0.757709	-8.987744	I(1)
NONX	-0.823433	4.173845	I(1)	-0.568944	-7.918975	I(1)
EXCR	0.146294	-5.128811	I(1)	0.140348	-5.128259	I(1)
INF	-2.963969	-5.127296	I(1)	-2.933570	-10.74633	I(1)
Test Critical Values						
1%	-3.670170	-3.679322		-3.670170	-3.679322	
5%	-2.963972	-2.967767		-2.963972	-2.967767	
10%	-2.621007	-2.622989		-2.621007	-2.622989	

Source: Author's computation using E-View 7.0

Definitions of the Variables

Gross Domestic Product implies the market value of all officially recognized final goods and services produced within a country in a given period. GDP per capita is often considered as an indicator of a country's standard of living. GDP is related to national account, a subject in macro -economics. It is customarily reported on an annual basis. It is defined to include all final goods and services, that is, those that are produced by economics resources located in that nation regardless of their ownership and are not resold in form.

Inflation is defined as a generalized increase in the level of price sustained over a long period in an economy (lipsey1995). It is a rise in the general level of prices of goods and services in an economy over a period of time.

Exchange rate: An exchange rate (also known as foreign exchange rate) between two currencies is the rate at which one currency will be exchanged for another. It is regarded as the value of one country's currency in terms of another currency. Exchange rates are determined in the foreign exchange market, which is open to a wide range of different types of buyers and sellers where currency trading is continuous.

Non-oil export: These include the exportation of the non-oil produces among which are agricultural, industrial and manufacturing outputs.

Non-oil export index: This is the fraction of the total export of goods and services that are produced within the economy that are not directly related to the oil sector of the economy. The non-oil products exports are unlimited as they include cash crops, food crops, manufacturing, entertainment, tourism etc. the value of the non-oil export index shall be used for measuring the non-oil export.

EMPIRICAL RESULTS AND DISCUSSIONS

Time Series properties Analysis

Unit-Root Test

Table 1 reports the result of the unit root test based on the Augmented Dickey Fuller Test and Phillips-perron. The results showed that all the variables have unit root in their level for ADF and P-P test, since their statistics values were lesser than the test critical values in absolute term. Besides, *p-values* for all series were not significant. Based on these estimated results, we failed to reject the null hypothesis of unit roots at all level. However, when we performed the unit root test at first difference, the results showed that all the variables were stationary at first difference since the ADF and P-P statistics values exceeded the test Critical values in absolute terms at 1%,. This means that after we have taken the first difference of all the variables, we discovered that there is no evidence of the existence of unit roots in ADF and P-P test. Interestingly, however, first differencing of all the variables shows stationarity under these tests. Table 1

Lag Order Selection

In testing for the lag order, we observed Akaike Information Criterion (AIC), Schwarz Information Criterion (SIC), Hannan-Quinn Information Criterion (HQ) and the Final Prediction Error (FPE) in determining the optimal lag length. It was noted that, of all these criteria, Akaike Information Criterion (AIC) indicated optimal lag length of five as shown in table 4.4 below. Besides, Inverse Roots of AR Characteristic Polynomial of figure 1 reveals the stability condition of the model or the series considered. It

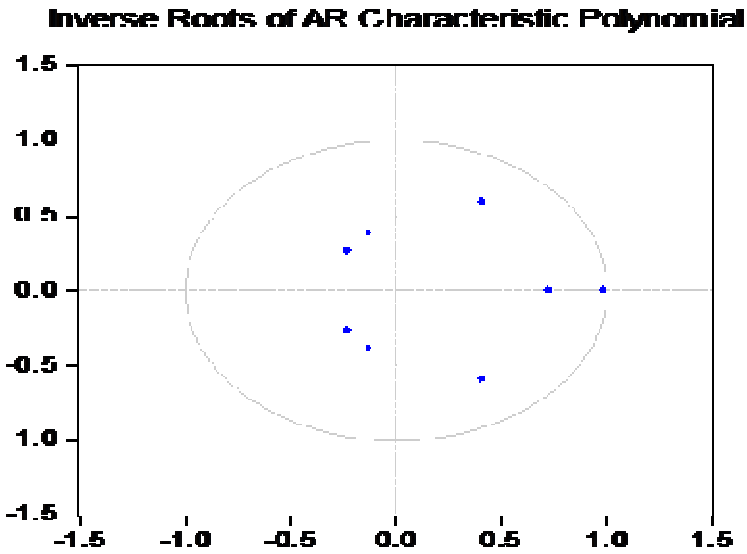

Figure 1. Inverse Roots of AR Characteristic Polynomial

Table 2. Results of Lag Order Selection Criteria

VAR Lag Order Selection Criteria

Endogenous variables: LRGDP LNONX EXCR INF
Exogenous variables: C
Sample: 1980 2011
Included observations: 27

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-331.1230	NA	1843790.	25.77869	25.97224	25.83443
1	-265.8132	105.5005	42341.28	21.98563	22.95340	22.26431
2	-244.3565	28.05876*	30751.14	21.56588	23.30786	22.06751
3	-219.7041	24.65235	20811.44	20.90032	23.41651	21.62489
4	-202.6554	11.80297	36071.90	20.81964	24.11005	21.76716
5	-153.1344	19.04653	11978.88*	18.24111*	22.30573*	19.41157*

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

could be observed from the graph that none of the roots lies outside the unit circle, thus this means that VAR satisfies the stability condition. Table 2

Co integration Test

The estimated results indicated that the series had three co integrating relationships. This was because the null hypothesis (there is no co-integration, r=0), was clearly rejected since the trace statistics and Maximum eigen value exceeded the critical values at 5% level. This implies that all variables, namely LRGDP, LNONX, EXCR and INF, were co integrated and follow a common long run path. Hence, the superiority of Johansen's approach compared to Engle Granger's residual based approach lies in the fact that Johansen's technique is capable of detecting multiple co integrating relationships among the variables (Asafu-Adjaye, 2000 and Pradhan 2010). These results confirmed that there was long run equilibrium relationship among variables in Nigeria between 1980 and 2010. **Table 3**

Table 4 shows the estimation of the long run relationship yielded (with the t-statistic in parentheses). From the discoveries in the research work, the impact of non oil export on the economic growth was moderate as a unit change in non oil export resulted in 26% change in the productive capacity of goods and services in Nigeria during the period. But, there exist an inverse and insignificant relationship between the two variables which does not conform to our positive theoretical framework.

Table 3: Co integration Test Results

Sample (adjusted): 1982 2011				
Included observations: 30 after adjustments				
Trend assumption: Linear deterministic trend				
Series: LRGDP LNONX LEXCR LINF				
Lags interval (in first differences): 1 to 1				
Unrestricted Co integration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.568699	60.64339	47.85613	0.0020
At most 1 *	0.455596	36.25586	29.79707	0.0078
At most 2 *	0.432181	18.62203	15.49471	0.0163
At most 3	0.073357	2.209410	3.841466	0.1372
Trace test indicates 3 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Source: Author's computation using E.View 7

Table 4. The results of long run relationships estimates

Dependent Variable: LRGDP				
Method: Least Squares				
Sample: 1980 2011				
Included observations: 32				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNONX	-0.260314	0.205465	-1.266950	0.2160
EXCR	0.020290	0.008139	2.492888	0.0191
INF	0.014129	0.012658	1.116217	0.2742
C	13.34228	1.510954	8.830369	0.0000
R-squared	0.251975	Mean dependent var		12.38923
Adjusted R-squared	0.168861	S.D. dependent var		1.384042
S.E. of regression	1.261787	Akaike info criterion		3.422850
Sum squared resid	42.98689	Schwarz criterion		3.607880
Log likelihood	-49.05417	Hannan-Quinn criter.		3.483165
F-statistic	3.031681	Durbin-Watson stat		2.291440
Prob(F-statistic)	0.046467			

Source: Author's computation using E-view 7

The reason for the insignificance and negative sign may be as a result of the fact that during the period in consideration attention were almost shifted from non-oil sectors to the oil sector which reduced its contributions to total revenue and gross domestic product in Nigeria. Thus, output from the non oil sectors are disheartening and leading to the reduction in the export of non oil outputs.

Within the period under review, the real exchange rate of the Naira vis-à-vis the US Dollar ($) was statistically significant and positive which influence GDP moderately. Investigation revealed that a unit change in the percentage exchange rate resulted in only 2% total variation in GDP. With increases in the exchange rate, GDP increased moderately. This is not in conformity to the a prior expectation that exhibits negative relationship because increase in the exchange rate of Naira in relation to US $ causes devaluation to the naira, thus , this leads to the reduction in investment, which in turns reduces the productive capacity of goods and services. But, the reverse is the case to the sign exhibited, which might have been caused by appreciation of the currency.

However, inflation rate during the period was statistically insignificant and positively influenced economic growth in Nigeria given its low impact of 1 percent in varying the GDP with a unit change in the inflation rate. As inflation services as a devour that eats deep into the fabric of a nation, it is expected to exhibit an inverse relationship with the GDP, but the negative relationships it maintains with GDP might comes indirectly from the policy embarked upon by the government in form of the increase in the volume of money in the circulation, which in turns boost the investment activities that services as the engine of growth

Table 5: Parsimonious Results

Dependent Variable: D(LRGDP)				
Method: Least Squares				
Sample (adjusted): 1985 2011				
Included observations: 27 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LRGDP(-1))	-0.751137	0.169120	-4.441438	0.0008
D(LRGDP(-2))	-0.396962	0.281416	-1.410589	0.1838
D(LRGDP(-3))	-1.090213	0.281274	-3.875984	0.0022
D(LNONX)	0.933389	0.583557	1.599481	0.1357
D(LNONX(-1))	-2.558525	0.566602	-4.515563	0.0007
D(LNONX(-2))	0.741566	0.529542	1.400391	0.1867
D(LNONX(-3))	1.369568	0.606860	2.256812	0.0435
D(LNONX(-4))	-0.966285	0.612710	-1.577068	0.1408
D(EXCR)	-0.041289	0.029773	-1.386795	0.1907
D(EXCR(-1))	0.061461	0.025901	2.372924	0.0352
D(INF)	0.032736	0.015018	2.179750	0.0499
D(INF(-2))	-0.026713	0.017822	-1.498926	0.1597
D(INF(-4))	-0.018601	0.014669	-1.268029	0.2288
C	0.138122	0.430839	0.320588	0.7540
R-squared	0.875681	Mean dependent var		0.054501
Adjusted R-squared	0.741002	S.D. dependent var		1.954395
S.E. of regression	0.994628	Akaike info criterion		3.130837
Sum squared resid	11.87141	Schwarz criterion		3.808274
Log likelihood	-26.70088	Hannan-Quinn criter.		3.325914
F-statistic	6.501987	Durbin-Watson stat		1.993723
Prob(F-statistic)	0.001316			

Source: Author's computation using E-view 7

Table 6. The Results of Error Correction Model Estimates

Dependent Variable: D(LRGDP)				
Method: Least Squares				
Date: 02/13/13 Time: 15:57				
Sample (adjusted): 1981 2010				
Included observations: 30 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNONX)	0.104395	0.462512	0.225714	0.8233
D(EXCR)	0.024172	0.015968	1.513757	0.1426
D(INF)	0.029591	0.011569	2.557728	0.0170
ECM(-1)	-1.201814	0.188937	-6.360932	0.0000
C	-0.033689	0.253154	-0.133075	0.8952
R-squared	0.636207	Mean dependent var		0.105937
Adjusted R-squared	0.578000	S.D. dependent var		1.845264
S.E. of regression	1.198712	Akaike info criterion		3.351383
Sum squared resid	35.92274	Schwarz criterion		3.584916
Log likelihood	-45.27075	Hannan-Quinn criter.		3.426093
F-statistic	10.93010	Durbin-Watson stat		2.018554
Prob(F-statistic)	0.000029			

Source: Author's computation using E-view 7

to the productivity in Nigeria. Hence, direct relationship.

As a result of the non significance and inconformity of the key variables, we then over parameterize the model by observing the impacts of lagged values of the explanatory variables on the gross domestic product. Thus, leads to the discussion of the results shows in table 5 titled Parsimonious Results of the model.

The results revealed that the first and third lagged value of the non oil exports maintained negative and positive relationships with the gross domestic product respectively. And, both are highly significant at both 1 per cent and 5 per cent levels. Thus, this simply implies that one percent increase in one lagged and third non-oil exports would automatically lead to 256% and 136%

decrease and increase in GDP respectively. It could be observed that it is the third lagged non oil export that influence the GDP appropriately and also in conformity with the theoretical justification. Also, the result revealed that the second lagged exchange rate has significance positive impact on the real gross domestic product of the Nigeria which implies that one percent increase in the exchange rate will increase GDP by 6 percent. Finally the current exchange rate has significant positive impact on the GDP which is not inconformity with the a priori expectation.

From the regression result, the value of R-squared (R^2) the coefficient of determination, which measured the proportions that is explained jointly by the explanatory or independent variables, that is, variations in the variables that determine the GDP , which accounted for approximately 88% of the total change or variations in GDP leaving 12% unexplained due to random chance. Table 6 shows the short run estimates. Short run results of Vector error correction model (VECM) reveal that all the coefficient of inflation is statistically significant but not conformed to a prior expectation while other are insignificant. The examination of the result shows that the overall fit is satisfactory with an R- squared of 63%. Thus, 63% of the systematic variation in the GDP is explained by ECM. The F-statistic of 10.93 is significant at the 1% level. The coefficient of the ECM is significant at 0.03% and it is negative. Thus, it will rightly act to correct any deviations from long-run equilibrium.

CONCLUSION AND POLICY RECOMMENDATION

This paper had investigated the impact of non-oil export on the economic growth of Nigeria between 1980 and 2011. From the research work, it was revealed that a lot of menaces had contributed to the non-performance of the non-oil sectors in Nigeria under the period studied. So based on these challenges as identified above, it is expected that non-oil exports should boost gross domestic growth through foreign exchange earnings. The industrial, agricultural and manufacturing sectors therefore, have been identified as necessary engines that would stimulate growth in non-oil production for export. Given the poor performance of these sectors in Nigeria, it is therefore expedient that the government create an enabling environment that will ensure the survival and functioning of them. Doing this will boost the productivity of the Nigerian economy. Precisely, the following policies are recommended to boost the impacts of non-oil export on economic growth of Nigerian economy.

- Diversification of the economy is of paramount important in the economy by not chiefly dependent on oil sector as the mainstay and the largest contributor to the Total government revenue and GDP. Agricultural, manufacturing and industrial sectors should be more funded and equipped to ensure good outputs and contributions.
- The electricity situation in the country need to be improved upon as a matter of urgency since most industries in Nigeria depends heavily on the usage of private generators to power their production. This action of course increases the overhead cost of production and affects the outputs of the non-oil sector for exportation purposes.
- Wide interest rate has been severally observed as the factor affecting accessibility of firms to loans by entrepreneurs. Thus, the monetary authorities need to intensify effort at pursuing financial reforms targeted at reducing high interest. A moderate interest rate will act to stimulate the market for non-oil produce.
- In other to encourage local entrepreneurs to increase their production, the government needs to restore the 25 percent import duty rebates for industrial raw materials, machineries and spare parts. The high cost of purchasing these materials constitutes a huge overhead cost on the industries, thus lower the quantities of their produces for export.
- Create an enabling environment that will ensure the survival and functioning of the ailing industries.
- The problem of poor economic infrastructure (water supply, transport system, telecommunication, and energy) is solved by the use of either massive public expenditure or massive private investment mostly in the non-oil sectors. These have inflationary effect on the economy. But such inflationary effect would be minimized/ minimal if these investments were spread out over a long time period. Doing this, would enhance the contribution of the non-oil sectors to the productive activities of the economy
- The government should display a high sense of transparency in the fiscal operations to bring about realistic fiscal deficits. Fiscal deficits, where recorded should be channelled to productive investments like road constructions, electricity provision, and other overheads that will serve as incentives to increased productivity and high Gross Domestic Product (GDP).
- Exchange policy should be designed to bridge the savings investment gap, enhance government revenue and reduce the fiscal gap through the curtailment of deficits and guarantee of external balance in the long run. This implies that domestic productivity and exports should be enhanced in the medium to long term while aggregate demand should be curtailed in the short run. To reduce exchange rate, the foreign exchange market should be policed to ensure that only those who have the aim to add value to the real sector get attention. This among other steps would at least increase the value of the naira against major world currencies, and leave us with only the prices increases occasioned by increase in local money supply.
- Finally, appropriate and regular monitoring of the officials in non-oil sectors should embark upon so as to curb the mismanagement and improper execution of the policies introduce to realign the economy. The act of mismanagement and embezzlement led to the failure of

SAP and Dual Exchange introduced in 1986 and 1995 in Nigeria.

- The Federal Government should strengthen and revise the credit guarantee scheme. Legal and supervisory framework should be reinforced to track the use of these funds as well as identified loan defaulters. Perceive delays and bottlenecks in the disbursement of fund should also be identified and removed to ensure prompt release and application of funds. Doing this, will boost the productive capacity of the economy and enhance export both in the non-oil and oil sectors,
- Relevant agencies overseeing the non-oil sectors should institute mechanism that will ensure good corporate governance among managing directors in the industry.

The establishment of Microfinance Banks (former Community Banks), Small and Medium Industries Equity Investment Scheme (SMIEIS), Small and Medium Enterprises Development Agencies of Nigeria (SMEDAN), Bank of Industry (BOI) should be overhauled for development and improvement in the local production.

- Central Bank of Nigeria through Bankers Committee should ensure that the disbursement of the SMIEIS' fund for manufacturing firms and industries are not diverted to private purses.

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