

Economic diversification in Nigeria: The Role of Agriculture and Manufacturing Sector

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Abstract - Economic diversification has been regarded as a major tool for sustainable growth and development in developing countries which suffers from low domestic investment. This is particularly essential in country like Nigeria that depends solely on oil revenue or oil export as the major source of foreign exchange earnings. Thus, this research investigated the role of agriculture and manufacturing sector as a tool for economic diversification and sustenance in Nigeria, with emphasis on how rising investment in agriculture sector and modernization of the sector can improve the economic growth of Nigeria. To achieve the objectives of the study, the study employed Auto Distributed Lag Model (ARDL) to investigate the impact of non-oil export on Nigeria economic growth, role of investment in agriculture sector and credit availability in the manufacturing sector in driving economic growth both in the short-run and long-run. The result of the time series revealed that non-oil export have positive significant impact on Nigeria economic growth in both the shortrun and longrun. The implication for the findings is that there is urgent need for massive mobilization of local financing and creation of institutions that are transparent enough to encourage large scale investment in the agricultural sector. The sector can be strengthened through provision of soft loans, subsidized costs of inputs and machines and strengthening farmers' capacity on marketing and exportation of their outputs.

Keyword: *Economic diversification, economic growth, agriculture sector, manufacturing sector, non-oil export, Nigeria, and ARDL*

I. INTRODUCTION

Economic diversification has been regarded as a major tool and source of sustainable economic growth and development in developed, emerging and developing economies through direct effect on the GDP by increasing economic activities and indirectly through multiplier effect (Anyaehe & Areji, 2015; Akpan, 2009; Gachino, 2007). Classical and neo-classical economics theory projected convergence between poor developing countries and the developed countries in the longrun due to transfer of technology and capital from the developed countries to the developing countries.

One of the way capital and technology are transferred from developed countries to developing countries is through the inflow of foreign direct investment that can only be possible through economic diversification (Solow, 1956; Romer, 1990; Noko, 2016b). Economic diversification therefore becomes a necessity for sustained growth in developing countries that are largely dependent on the production, utilization and export of one particular type of product over time. Economic diversification entails strong and deliberate involvement in wide range of economic activities key to the growth and development of a nation. Diversification of an economy resolves economic recession (Noko, 2016a), unemployment problem (Hyden, 2006), reduce poverty (Suberu et al, 2015), and improves economic growth (Anyaehe & Areji, 2015).

At independence, agriculture dominates the economic activities of Nigeria economy contributing about 85 per cent to foreign exchange earnings, 90 per cent to employment generation and contributing about 80 per cent to the country gross domestic product (CBN, 2010). However, with the discovery of crude oil in commercial quantity, the agriculture sector was abandoned and neglected over time. Crude oil or mining sector became the principal driver of Nigeria economy; contributing over 80 per cent of Nigeria revenue, 95 percent of the country foreign exchange earnings among others exposing the economy to international oil price fluctuation and shocks making it impossible for the country not to witness economic recession whenever there is oil price glut in the international market (World Bank, 2015).

The neglect of the agriculture sector was not alone, as the manufacturing sector is neither performing either; the sector poor performance is revealed by its paltry contributions to gross domestic product, low capacity utilization, in terms of manufacturing output and low value addition. The sector capacity utilization fell from as high 73.1 in 1981 to 29.29 in 1995 and remains at 50.97 as at 2016. The sector contribution to GDP has never reached 10 per cent since 1981 till date, the highest contribution of the sector to GDP was 9.87 per cent in 1981. This is really disheartening considering the sector contribution to the GDP of the newly industrialized and developed countries. For instance, the sector contributes an average of 50 percent to GDP of the US economy for last two decades, contributes

about 40 percent to the Asian economy and contributing about 30-38 per cent on average on the newly industrialized Asian countries (World Bank, 2015; CBN, 2016).

Agriculture sector contribution to the country revenue and foreign exchange earnings is abysmal and not encouraging and need urgent strategy that can accelerate the sector performance. Noko (2016a) noted that the major challenges facing these two sectors includes issue of high taxation or multiple taxation, high interest rate on loans, and the unchanging structure and method of production in the country since independence. In response to such assertion, the government has over the year developed several programmes aimed to improving the agriculture sector production and accelerating the manufacturing sector productivity over time. Majority of the programmes were introduced after the civil war in Nigeria (1967-1970) as measure of rebuilding the country.

Among the leading policies introduced to accelerate agricultural productivity includes; National Accelerated Food Production project (NAFPP) in 1972, 'Nigeria Agricultural and Cooperative Bank' (NACB) in 1973, 'Operation Feed the Nation, (OFN) in 1976, 'Green revolution' in 1980. Other few programmes introduced includes 'Farm Settlement Scheme', 'Agricultural Development Projects (ADPs)', 'River Basin Development Authorities (RBDAs)', 'Nigerian Agricultural, cooperation and Rural Development Bank (NACRDB)', 'National Agricultural Land Development by farmer Authority (NALDA)' in 1989, 'State-wide Agricultural Development Projects (SADPs)' introduced in 1991 (Umaru et al, 2013; Ojo, 2008). And in 2016, the importation of rice and other 21 products were banned into the country to encourage rice production, which has spurred the production of more than 1.5 metric tonne of rice in 2017 alone (CBN, 2017).

Similarly, the government have equally introduced many programmes aimed at accelerating the performance of the manufacturing sector in terms of employment generation, value-added to GDP among others. Although, majority of the programmes are not directly directed towards increasing manufacturing sector contribution to GDP, but more like encouraging entrepreneurship among the youth as measure to solve the problem of unemployment and poverty in the country. This led to the introduction of indigenization policies in 1972, Nigerian Enterprises Promotion Decree (NEPD), No. 4 of 1972 all aimed at encouraging indigeneous participation in enterprises in Nigeria with the intention of encouraging entrepreneurship and reduce employment and poverty in the country (Tende, 2014).

The challenge, however that call for concern is that, despite the number of policies developed over time by the government to promote the agricultural and manufacturing sector output, the sectors are still performing poorly in terms of value addition, contribution to GDP, revenue to government and foreign exchange earnings as revealed earlier. The country currently is a mono-product or one sector economy exposing the country to oil price volatility in the international market and leading to urgent needs for economic diversification of the economy. Secondly, few literature has made significant efforts in investigating the relationship between economic diversification and Nigeria economic growth and development. Few studies that have made considerable effort to investigate the prospects of economic diversification on Nigeria economic growth are mostly inadequate to serve as basis for policy analysis, since majority of the study did not test any empirical relationship.

The over-dependence of Nigeria economy on oil revenue has resulted into difficulties in national planning; exposing the economy to external shocks; infrastructural decay; mass unemployment as oil exploration is more capital intensive; low aggregate demand, resulting from low employment and low income. Others includes; rural-urban migration in search for greener pasture; high level of corruption incidence as everyone want to share from the national cake; high level of insecurity, agitation, and call for succession. And lastly, low inflow of foreign direct investment in the country given the low ranking of the country on ease of doing business parameters and other factors as enumerated earlier. Noko (2016a) argued that diversifying the country economy will solve the problem of economic recession, unemployment, inflation rate, insecurity, increase the market size which are among the many factors that cause the slow inflow of FDI in the country as well as poor economic performance of the nation.

In lieu of the above challenges peculiar to Nigeria economy as a result of its total neglects and failure to diversify the economy, this study therefore aimed at investigating the role of agriculture as tool of economic diversification in Nigeria. While the research emphasizes the role of agriculture in economic diversification, manufacturing sector will be incorporated as well to enable robust findings. The remaining section of the article includes literature review in section two, methodology in section three, analysis in section four, and section five in the conclusion.

1.1 Research Objectives

This study shall be guided by the following objectives of the study;

1. To investigate the role of economic diversification on Nigeria economic growth over time.
2. To examine the role of agricultural and manufacturing sector on the economic growth of Nigeria.

II. LITERATURE REVIEW

2.1 Economic Diversification and Economic Growth: An Overview

Economic diversification has been seen by several scholars as medium of accelerating growth and development especially in mono-product economy, which is heavily depended in exporting one commodity like crude oil (Anyaehe and Areji, 2015; Akpan, 2009; Hyden, 2006). Akpan (2009) argued that, economic diversification is pre-requisite for achieving sound economic growth particularly Nigeria in meeting the needs of the poor masses through increase in aggregate supply in the economy. Noko (2016a) argued that, diversification of the economy is the major solution that will put Nigeria economy on the path of growth given the recent economic recession in the country. He argued further, that the country should promote agriculture and industrial development to create employment, increase foreign earnings, improve the exchange rate and ultimately achieve sustainable economic growth and development.

Economic diversification does not necessarily imply increase in a country aggregate output overtime but the diversification of the country economic base to absorb any sudden economic shock ((Suberu, Ajala, Akande, and Adeyinka, 2015).

There is increasing trend of resource curse or predominant mono-product in most African and Arab countries where there is abundant of natural resources and little economic growth and development (Olumola, 2006). The issue of mono-product that continue to hinder sustainable economic development in Nigeria can be resolved with diversifying the economy productive base from exploration and mining of crude oil into industrialization and agricultural development. Anyaehe, and Areji (2015) argued that economic diversification should be viewed as a long term growth strategy of any nation. Viewing diversification from this angle, diversification has the potential to increase and strengthen a nation economic base as well as safeguard its long-term development in the light of severe commodity price fall in the international market.

Suberu et al (2015) argued that Nigeria budget is mostly based on exogenous factor (revenue from oil price) to the economy rather than endogenous factor within the control of Nigeria. Manufacturing sector in particular, has been performing very poorly in the country contributing less than 8 percent to the country GDP compared to US where the sector contributes over 50% to the nation GDP and over 40 percent to the Asian country GDP (World Bank, 2015). Anyaehe and Areji (2015) noted that economic diversification has the potential of meeting a country basic requisite for sustainable development like providing job opportunities, food security, safe and quality healthcare, sound and improved educational system through opening up the economic base of the country. Noko (2016a) argued that diversification of a country productive base leads to technology development, efficient utilization of natural resources, social organisation, and ultimately create an economic base that is both responsive to people's needs and is sustainability.

In spite, of the potential of Nigeria in diversifying her economy and most other African countries, the continents have not achieved any meaningful progress in attracting foreign investor in the country. For instance, Hyden (2006) is of the opinion that, the major reason for the poor performance of African countries in attracting investors into the continents despite resource abundance in the region is largely due to poor physical infrastructure development. He noted further that over time, the region has neglected infrastructure such as good road network, improved communication, rail road and power supply. Gangas (2017) however argued that, one way to ensure economic diversification in the country is for the government to increase its spending and infrastructural building in the agricultural sectors in the country.

Suberu et al (2015) argued that government over time have formulated series of policies to promote the agricultural sector in Nigeria. The author noted that, Nigeria agricultural policies since independence has been formulated towards achieving improvement in the agricultural productivity, b. to achieve self-sustainability and food security in food production, c. self-sustained growth in agriculture production, d. realization of structural transformation at all level.

2.2 Government Policies to promote economic diversification

Among the popular agriculture programmes developed by the government before the Structural Adjustment Programmes (SAP) includes National Accelerated Food Production project (NAFPP) which was introduced in 1972. The aim of the policy was to educate the farmers on best farming practice and subsequently grow the country agriculture product. The major problem that face the programme was finance as noted by (Adamu and Ibrahim, 2016; Nokob, 2016b). This challenge led to the introduction of Nigeria Agricultural and Cooperative Bank (NACB in 1973. NACB championed by World Bank was designed provide credit facility to small scale farmers who lack access to credit and other farming facility. The programme was jointly financed by the federal government and the World Bank. Umaru et al (2013) noted that the programme failed because of poor implementation and evaluation of the financial institution performance in providing credit to the right target.

In 1976, Operation Feed the Nation was introduced. The programme was introduced basically for two reasons, first was because of the poor performance of earlier policy on poverty alleviation and secondly, because there was a change in the government at this period. The major aim of the policy was to arouse and create awareness of the populace in agricultural production as means of self-sustenance (see Gangas, 2017). The poor implementation plan and corruption were major hindrance to the success of the programme leading to its failure. The green revolution was equally introduced in 1980 to assist farmers and reduce their poverty level through encouraging more mechanized farming practice, though this seems like a duplication of other earlier poverty alleviation policy programmes earlier introduced (Adamu and Ibrahim, 2016). Other few programmes introduced to encourage agriculture production before the SAP period includes 'Farm Settlement Scheme', 'Agricultural Development Projects (ADPs)', 'River Basin Development Authorities (RBDAs)', 'Nigerian Agricultural, cooperation and Rural Development Bank (NACRDB)'.

Other agriculture programmes introduced after SAP periods includes; 'State-wide Agricultural Development Projects (SADPs)' introduced in 1991 to encourage cooperative farming among the farmers, 'transfer of Agricultural Research Institutes from Federal Ministry of Science and Technology to the Federal Ministry of Agriculture' in 1992 to encourage government direct investment in agriculture production. 'Restoration of fertiliser subsidies at 25%' to encouragement the production of agriculture by small and medium scale farmers.

Recently, the government administration under President Buhari launched several agriculture programmes aimed at ensuring the country food sustenance and food security. Among the programmes launched include the ban of the importation of rice in 2016 to increase the production of local rice. The injection of N40billion for the "Anchor Borrowers Programme" (ABP) for rice farmers (Oyetunji, 2017). The programme was designed to assist small and medium scale farmer to increase the production and supply of feedstock to agro-processors. According to the Central Bank of Nigeria governor, Godwin Emiefele, the programme aimed at diversifying the economy from mono-product economy by creating an eco-system. The Green Alternative policy (2016-2020) was also launched to increase food production in the country. The policy according to the Ministry of Agriculture will serve as new fulcrum for economic diversification for inclusive growth and economic development.

2.3 Theoretical Framework

In literatures examining economic diversification and its role on economic growth, especially in developing countries that are largely dependent on one-commodity for all its foreign exchange earnings, Arthur Lewis dual model and the endogenous growth model is often employed in the empirical analysis (see Noko, 2016b; Aremu, 2014; Oluwatoyese, 2013; Ogbonna, 2010). While Arthur Lewis Dual Model appears to be the first model to give insight into the role of diversification on developing countries economic growth, the theory fail to present a comprehensive model to explain economic growth over time from economic diversification.

Timms (2008) argued that Lewis dualistic model of economic development is based on the classical school foundation that contain two sectors; the agriculture sector and the non-agriculture sectors with varying asymmetric behaviours. Lewis (1954) refined the classical postulation and explained a better framework that describe the development process.

According to Lewis (1954) there exist unlimited supply of labour in the traditional sector (perfectly elastic supply of labour). Lewis model assume that the agricultural sector is not profit maximizing oriented unlike the industrial sector as such emigration of labour from the sector to the industrial sector leaves the output un-affected. According to James (1996) Lewis model implies that initial effort will be focused on industrialization for expanding local market and export, since it can expand without necessitating the expansion of domestic demand, largely due to the small size of the domestic market and initial low wage rate.

In conclusion, Lewis model implies that as agriculture sector continued to be modernised over time, wages in the sector will rise, industrialization would also rise due to competition in the demand for labour and will create further linkages between the various sector of the economy increasing agricultural output and export over time (Witter, 2004). Nurkse (1959) though present an alternative to economic diversification when advocates for increased investment in several industries simultaneously in developing countries as means towards achieving, enlarged market size, increase the country aggregate demand, provides for investment by the private sector and ultimately achieve sustainable growth and development. Ambika (2006) argued that Nurkse postulation of low income in the underdeveloped countries, implies low savings leading to poor investment. The low investment leads to further low income, leading poor demand for products in both the agriculture and industrial sector further leading to low market size. According to Nurkse (1961) the underdeveloped country can achieve sustainable development or breakaway from vicious cycle of poverty. This implies that one way to achieve economic growth and development in developing countries like Nigeria, entails diversifying the economy productive base into agriculture, manufacturing, mining, telecommunication, real estate leading to increase productivity of the nation and market size.

Although, Nurkse model give a fair insight into the role of economic diversification as major means of economic growth and development in developing countries, the theory however, failed to describe the process of economic growth and development. Uzonwanne (2015) argued that mere investment in any sector of the economy does not guarantee sustainable growth but rather what guarantee growth is strategic investment in selected sectors of the economy as well as infrastructural building.

2.4 Empirical Literature Review

In this section, the research will evaluate empirical research work that have investigated economic diversification as a tool for sustainable economic growth and development, works on the role of agriculture and its influence on the economic growth of Nigeria. For instance, Uzonwanne (2015) investigated the impact of economic diversification on Nigeria economic growth in the face of dwindling oil revenue. The findings revealed that diversification of the economy has significant positive relationship with economic growth over time. He recommended that, government should be more responsible to the needs of the masses by creating an enabling environment that encourage business success and competition among the various sector of the economy. A similar view was shared by Suberu et al (2015) that investigated the role of diversification of the Nigerian economy towards a sustainable growth and economic development', when they argued that diversifying Nigeria economy into modern agricultural production is the ideal solution to the mono-economy problem of Nigeria. Using descriptive survey, they finds out that diversifying the economy has the potential to drive the economic growth of Nigeria upwards. The challenges with this study is the methodology it employed as the generalization were based on mere descriptive statistics such means, median and standard deviation and the findings were not subjected to either parametric or non-parametric test whatsoever.

Eko, Utting and Eteng (2013) in their research work, argued that Nigeria economy prior to the discovery of oil in commercial quantity was stable from international shock with agriculture contributing most in terms of revenue, employment and economic growth, but was neglected with the discovery of oil. They argued that the problem of mono-product of relying on crude-oil supply that is vulnerable to international price shock, depletion and exhaustion, unfavourable quota system among others can be resolved through economic diversification into agriculture and tourism. A similar study by Ayeni (2013) on the, argued that tourist investment stands as a major source of economic diversification in Nigeria given the country dependence on crude for its major export earnings, revenue employment among others. Using a multiple regression analysis argued that tourist stands as one of the major source of economic diversification of Nigeria and the driver of economic growth and development. Although, Ayeni study found positive relationship between policies on tourism and economic growth, it modelling and estimation techniques nonetheless does not follow standard econometric analysis.

A more recent study on diversification rather see diversification as a tool of solving the problem of poverty in the country rather than accelerating economic growth. Tyomlia et al (2017) investigated 'economic diversification and infrastructural development as effective strategies for poverty alleviation in Africa: the Nigerian perspective'. The study argued that Nigeria and other Africa countries should focus in the production and industrialization of those commodities in which they have comparative advantages in its production over other countries of the world. For instance, Akpan, (2009) examined the relationship between 'private sector development and economic diversification using panel data analysis drawn from West African countries'. They argued that diversification is measure of achieving sustainable economic growth and development, but have been hampered by number of factors in the context of Nigeria including 'limited market access, insecurity and political instability, rent seeking behavior, inadequate technological capabilities'.

Ahungwa, Haruna and Rakiya, (2014) in their paper, 'economic diversification in Nigeria: any role for solid mineral development?', using quantitative and qualitative methodology revealed that solid mineral which has been neglected over the decades by the government of Nigeria has the ability to contributes significantly to Nigeria economic growth over time. They therefore advocate for government diversification of the economy through more investment in the solid mineral sector of the economy. They further assert that solid mineral is capable of reducing poverty in the country and generating more employment opportunity in the country. A similar findings was discovered by Olaleye, and Adegbiyi (2013) investigated trade openness, export diversification and political regimes using panel data of 116 countries for the period of 35 years. Their findings revealed that trade openness has significant relationship with specialization and diversification of exports in developing countries.

The empirical work reviewed revealed that literature on diversification is still scanty and the few one that investigated the relationship were not adequate in both scope and methodology employed to make generalization. This study will improves on the previous study by employing a robust econometric estimation techniques as well as taking cognizance of the major economic diversification tools identified in literatures driving economic growth.

III. RESEARCH METHODOLOGY

3.1 Model specification

The theoretical framework of the model is based on the endogenous growth model adopted by works like Mahir & Azra (2017), and Remirez (2000) using an augmented Cobb-Douglas production function as shown below.

$$Y = A f(L, K, E) = AL^\alpha K^\beta E^{(1-\alpha-\beta)} \dots\dots\dots 1$$

Where; Y equals real domestic output, An' equals production efficiency parameter, L, labour force, K, capital stock, and E equals economic diversification variables.

The model adopted is based on the modified empirical work of the work of Uzonwanne (2015) as explained in the theoretical framework. Two model were developed to properly investigate the link between economic diversification and Nigeria economic growth. The first model aimed at investigating the overall effect of diversification as captured by non-oil export on Nigeria economic growth. The second model, specifically investigate the role of investment in agriculture and manufacturing sector as a means of driving economic growth in Nigeria

To achieve the first and second objectives of the study, the research employed Auto Distributed Lag (ARDL) Model to investigate both the short and longrun relationship following the research work of Noko (2016b) who employed ARDL in their estimation techniques. Secondly, ARDL model is equally employed as it can be used to estimate the relationship regardless of whether the variables under investigation are integrated of order zero or one.

The first model ARDL bound test is expressed as follows:

$$\begin{aligned} \Delta \ln RGDP_t = & \alpha_0 + \sum_{i=1}^n \beta_1 \Delta \ln RGDP_{t-i} + \sum_{i=1}^n \beta_2 \Delta \ln NOX_{t-i} + \sum_{i=1}^n \beta_3 \Delta EXR_{t-i} + \sum_{i=1}^n \beta_4 \Delta \ln GEX_{t-1} \\ & + \sum_{i=1}^n \beta_5 \ln INT_{t-i} \varphi_1 \ln RGDP_{t-1} + \varphi_2 \ln NOX_{t-1} + \varphi_3 EXR_{t-1} + \varphi_4 \ln GEX_{t-1} + \varphi_5 \ln INT_{t-1} \\ & + \mathcal{E}_t \dots\dots\dots 3 \end{aligned}$$

Where:

RGDP = Real GDP, NOX = Non-oil export, EXR = Exchange rate, GEX = Government expenditure, INT = Interest rate. Ln represents natural logarithm, Δ is the first difference operator, and α_0 is the drift component. The expression with summation sign ($\beta_1 - \beta_5$) represents the short-run dynamics of the model, while the coefficients ($\varphi_1 - \varphi_5$) represents long-run relationship and \mathcal{E}_t is the serially uncorrelated disturbance with zero mean and constant variance. The null and alternative hypothesis of the bond testing is represented below;

$$H_0: \varphi_1 = \varphi_2 = \varphi_3 = \varphi_4 = \varphi_5 = 0$$

$$H_1: \varphi_1 \neq \varphi_2 \neq \varphi_3 \neq \varphi_4 \neq \varphi_5 \neq 0$$

The second model are specified following the previous explanation. As captured by equation 2 .

$$\begin{aligned} \Delta \ln RGDP_t = & \alpha_0 + \sum_{i=1}^n \beta_1 \Delta \ln RGDP_{t-i} + \sum_{i=1}^n \beta_2 \Delta \ln CBLA_{t-i} + \sum_{i=1}^n \beta_3 \Delta GEA_{t-i} + \sum_{i=1}^n \beta_4 \Delta \ln FDI_{t-1} \\ & + \sum_{i=1}^n \beta_5 \ln ACGSF_{t-i} \varphi_1 \ln RGDP_{t-1} + \varphi_2 \ln CBLA_{t-1} + \varphi_3 GEA_{t-1} + \varphi_4 \ln FDI_{t-1} + \varphi_5 \ln ACGSF_{t-1} \\ & + \mathcal{E}_t \dots\dots\dots 2 \end{aligned}$$

Where:

CBLA = Commercial bank lending agriculture, GEA = Government expenditure on agriculture, MCU = manufacturing sector capacity utilization.

IV. RESULT DISCUSSION

As was seen in table 4.1, the result of the unit root test using Augmented Dickey-Fuller (ADF) test revealed that the data used for the econometric analysis were fractionary integrated of order zero and one (I(0) & I(1)). As such, following Perseran and Shin (1999), and Perseran et al (2001), the researcher adopted Auto regressive distributed Lag (ARDL) methods to investigate the relationship.

The unit root test reveals that in the first model, LNOX, EXR and LGEX are integrated of orders one, I(1) while real gross domestic product and interest rate are integrated of order zero, I(0). In the second model, LCBLA, LGEA and MCU are integrated of orders one, I(1) while real gross domestic product is integrated of order zero, I(0) as revealed in table 4.1. This indicates that all the variables are free from unit root problems and hence there is no need to suspect that the estimated results are spurious.

From the estimated Autoregressive distributed Lag (ARDL) result from the first model presented in table 4.2, it was found that non-oil export (LNOX), which is the main variable in the specified model which captures economic diversification, has a positive and significant long run impact on real gross domestic product which served as a proxy for economic growth in Nigeria. This entails that economic diversification enables the economy of Nigeria to operate as a versatile, stable and strong economy. Specifically, the findings revealed that increasing non-oil export by one percent will increase the gross domestic product by as much as three percent (3%).

This is line with findings of Ifeacho, Omoniyi, and Olufemi (2014) who investigated the effect of 'non-oil export on the economic development of Nigeria' and using OLS and found that non-oil export has positive significant impact on Nigeria economic development. The findings equally corroborates that of Ogbonna (2010) who investigated the role of non-oil export on the economic growth of Nigeria using ordinary least square estimation techniques and found that there exist significant relationship between non-oil export and Nigeria economic growth.

From the long run result of the second model, as presented in table 4.3 and analysed thereunder, it was found that commercial bank lending to agriculture (CBLA) has a positive impact on real gross domestic product. Equally, government expenditure on agriculture (GEA) when lagged once, twice and thrice all exerted positive impact on real gross domestic product while manufacturing sector capacity utilization exerts positive impact on economic growth. This goes to confirm that investing in agriculture and manufacturing sector as a means towards diversifying the Nigerian economy away from oil has inherent potentials of putting the economy of the country on the path of sustained growth. As noted by Noko (2016b), agriculture sector in Nigeria is the largest employer of labour in Nigeria, and more investment in the sector to modernize the sector will improve the output of the sector and position the sector to assume its initial position of being the largest earners of foreign exchange in the country.

The estimated result above is in line with the result obtained by Umaru et al (2013) that investigated the effect of agriculture sector on Nigeria economic growth and found that investment in the agriculture sector through provision of credit facilities to the farmers, infrastructural building through effective road networks and provision of subsidies and bumper stock can aid the development of the sector which is capable of driving Nigeria economy towards the path of growth.

V. CONCLUSION AND POLICY RECOMMENDATIONS

From the analysis done, it was found that a positive relationship exists between economic diversification and growth in Nigeria. The implication of this is that policies aimed at diversifying the economy of Nigeria away from oil should be vigorously pursued especially on the face of dwindling and instability in the international oil price which most experts singled out as one of the major factors which plunged the Nigerian economy into economic recession, the effect of which the country is still battling to do away with. The research equally revealed that there is a positive impact of investment in the agricultural sector on the growth of the Nigerian economy. The implication of this being that the agricultural sector, which once was the economic base of the country and a major source of foreign exchange into the country still have the potential of playing a lead role it once played as far as employment, foreign exchange and self-sufficiency in food production is concerned.

Finally, the research revealed a positive impact of the manufacturing sector on the growth of the country's economy. This implies that the efficiency in the manufacturing sector equally has a large role to play in the economic emancipation of the country. The study therefore recommends that there should be a massive diversification of the export base of the country in favour of non-oil commodities as this has the potential of not only increasing its contribution to the gross domestic product of the country but would as well shield and protect the country against the vagaries and price shocks in the international oil market. This can be done through persuading oil explorers, producers and exporters to diversify their interests into non-oil commodities or better still provide some form of assistance with exportation of non-oil commodities.

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Appendix

Table 4.1: Augmented Dickey- Fuller Unit Root Test Result (Trend and Intercept)

Series	ADF T-Statistic (LEVEL)	5% critical values	ADF T-Statistic (1 ST DIFF)	5%critical values	Order of Integration	Remarks
LRGDP	-3.738883	-3.595026			1(0)	Stationary
LNOX	-3.229247	-3.552973	-7.04771	-3.548490	1(1)	Stationary
INT	-4.793402	-3.568379			1(0)	Stationary
EXR	-3.040784	-3.544284	-6.95159	-3.548490	1(1)	Stationary
LGEX	0.176254	-3.552973	-4.60221	-3.552973	1(1)	Stationary
LCBLA	-2.361583	-3.544284	-6.67529	-3.548490	1(1)	Stationary
LGEA	-2.170012	-3.544284	-3.65541	-3.587527	1(1)	Stationary
MCU	-2.089433	-3.544284	-5.57342	-3.548490	1(1)	Stationary

SOURCE: Researcher's Compilation from E-view 9.0

Table 4.2: Long Run Estimate (model one)

Dependent Variable: LRGDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LRGDP(-1)	0.900382	0.044025	20.45178	0.0000
LNOX	0.030468	0.013829	2.203204	0.0357
INT	0.001348	0.001628	0.828227	0.4143
EXR	-0.000123	0.000219	-0.560526	0.5794
LGEX	-0.006632	0.014234	-0.465894	0.6448

C	0.988219	0.442232	2.234618	0.0333
R-squared	0.996092	Mean dependent var		10.23711
F-statistic	1478.404	Durbin-Watson stat		1.411230
Prob(F-statistic)	0.000000			

SOURCE: Researcher's Compilation from E-view 9.0

Table 4.3: Long Run Estimate (Model two)

Dependent Variable: LRGDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LRGDP(-1)	0.682302	0.106473	6.408231	0.0000
LCBLA	0.003164	0.022355	0.141549	0.8887
LGEA	-0.016479	0.008087	-2.037598	0.0538
MCU	0.120911	0.013415	9.013119	0.0000
C	2.307179	0.761536	3.029641	0.0062
R-squared	0.998171	Mean dependent var		10.27721
F-statistic	1200.612	Durbin-Watson stat		1.952635
Prob(F-statistic)	0.000000			

SOURCE: Researcher's Compilation from E-view 9.0