

Role of Non Oil Exports in the Economic Growth of Nigeria

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Abstract

This study examined the role of non oil exports in the economic growth of Nigeria. This is with a view to, determine how five selected independent variables (Non Oil commodities); Cassava, Groundnut, Millet, Yam and Maize contributes to Nigeria's GDP (Dependent Variable). The research covers a period from 1985 to 2017. Annual time series was utilized and data was retrieved from secondary sources, such as the Central Bank of Nigeria Statistical Bulletins and the National Bureau of Statistics. This study made use of judgmental sampling technique and longitudinal survey research design. This study with references to several analytical and empirical tests, adopted the Ordinary Least Square method using E-view version. 7.0, 2017, presenting the existing relationship between the variables employed, the level of significance at 0.05 (5%) and the Durbin Watson result of 1.766 (approximately 2) ≤ 2 indicating the absence of autocorrelation. From the statistical analysis of data, the study revealed a positive relationship between Gross Domestic Product (GDP) and the explanatory variables yam, maize, cassava, groundnut and millet exports and also contributes significantly to GDP having an OLS p-value of $0.00 < 0.05$. Also, the F-statistic indicates that the regression plane was statistically significant. Therefore, the null hypotheses (H_0) for this study were rejected. The study therefore concludes that non-oil export product in Nigeria play an important in examining the performance of export commodities such as cassava, groundnut, millet, yam and maize in the economic growth of Nigeria. This will enable the government of Nigeria determine the shortcoming and problems that been confronting the non oil exports activities in Nigeria. Thus, it was recommended that transparency in the emission reports as it concerns fumes from machineries, lights, heat discharge from green houses, gas discharge from big power plant industries that may be harmful to atmospheric conditions, health, plants and agricultural crops should be put in place.

Keywords: gross domestic product (gdp), non-oil exports, agriculture, economic growth, commodities

INTRODUCTION

For nations ready to fulfill their basic necessities, exports will serve as a relevant tool for expanding their productive capacity (Geoff, 2015), this is because its trade activities are required by countries to improve revenue allocations and usher in sustainable economic growth. The outlook of vast agricultural commodities seemed to be a monorail in supporting growth earnings, but a sudden shift in direction in the early 1970's made agro-allied export activities a icebox with the discovery, exploits and exports of black gold i.e. Crude oil. Gains from petroleum export has since skyrocket GDP thereby turning Nigeria to a mono-cultural

Okubor (2014) is of the view that, the priority agenda of all developing nations is the achievement of optimal economic growth within a short timeframe. It is expected that Gross Domestic Product will translate positively into "sustained economic growth". Crude oil which is considered as Nigeria's primary source of foreign exchange and a recognized exhaustible asset, the country needs no alarm to infer that, relying solely on black gold will produce sustainable national growth.

A statement released in Abuja on the 24th of January ,2017, the Federal Government of Nigeria promises to spend \$175 million to restore agricultural and secondary social infrastructure in 7 states (Sokoto, Jigawa, Niger, Anambra, Kebbi, Kano and Enugu) in its Agricultural Transformation Support Programme Phase one (ATASP-1). This initiative supported by the African Development Bank and implemented by the Federal Ministry of Agriculture and Rural Development with the objective of boosting cassava, rice and sorghum value chains in the country's agricultural sub-sector and primarily contributing to agricultural development, ensure food security and generate employment.

Statement of the Problem

The development of any economy is a direct function of the level of growth in the activity sectors. Nigeria, with Her vast collection of agricultural products once proved to be main economic growth drivers, not until the discovery and consistent dominance of crude oil trade in the foreign market in the 1970's. According to CBN (2010) a review of the Federal government revenue profile in the last half decade showed that oil gains accounted for over 80% of foreign exchange

earnings while the non oil despite its improved performance, recorded 20.1%.

Thus, the major problem currently facing the Nigerian economy is the over reliance on petroleum products without considering the enormous potential of non oil exports particularly agricultural crops. This is traceable to the decline in non oil exports and loss of market share in global non oil trade performance from 40% in 1970 to 5% in 2010 (Abogan, Akinola and Baruwa, 2014). Although, initiatives and strategic programme have been enacted for the aim of economic diversification and resurging the fortunes of agriculture for the Nation's growth as it will reflect on the level of Gross Domestic Products (GDP). This paper is therefore carried out to assess diversification of the Nigerian economy through the agricultural sector, diversification exercise, to proffer suitable solutions to the lingering industrialization challenges affecting non oil exports in Nigeria, the strategies and initiatives set up for the nation's economic growth and majorly selected non oil products from the agricultural sector, such as cassava, groundnut, millet, yam and maize exports.

Purpose of the Study

The broad purpose of this study is to examine non oil products and the nation's economic growth (GDP; Gross Domestic Product). Specific purposes are;

- i. To examine the performance of cassava exports in the economic growth of Nigeria.
- ii. To examine how groundnut exports have contributed to Nigeria's economic growth.
- iii. To evaluate the performance of millet exports in Nigeria's economic growth.
- iv. To identify the contribution of yam exports to Nigeria economic growth.
- v. To evaluate the contributions of maize exports in the economic growth of Nigeria.

Significance of the Study

This study can be useful to researchers, the Federal government, Government offices and parastatal, policy makers, aspiring entrepreneurs, private sectors, public offices and the general public. Therefore, the relevance of this study is:

- i. The research will enable the government determine the shortcomings and problems that have been confronting the non-oil export activities in Nigeria, that can be relevant for future.
- ii. The study will enable the policy makers such as the Central Bank of Nigeria (CBN) and stakeholders to implement various policies and reforms with the aim of restructuring the Nation's economy.
- iii. The research will serve as a resource material to students for knowledge, information and further research in the Nigerian economy, agricultural activities and also non oil goods that includes

maize, millet, yam, cassava and groundnut export services and trade.

- iv. This study will be vital for existing knowledge and enlightening the general public on the importance of non oil exports and sub-sectors in sustainable economic growth in Nigeria.
- v. The study will bring into light facts that are essential for Nigeria's economic growth.

Limitations of the Study

The research work met few breaks, involving;

- I. The Discrepancy of data: Figures and nominal values posted in representing GDP, non-oil i.e. agricultural products in cassava, groundnuts, millet, yam and maize exports varies in periodical issues of the CBN statistical bulletins.
- II. Difficulty in retrieving information and data for review and analytical purposes from CBN statistical bulletins, statement of accounts, National Bureau of Statistics including the Federal Ministry of Agriculture, Federal Ministry of Trade and investment and required search engines such as world wide websites of Google and Wikipedia links etc. However, these limitations did not hamper the drive to pursue this research.

REVIEW OF RELATED LITERATURE

A Review of Agricultural activities and Non-Oil Exports in Nigeria

Non oil exports are commonly agriculture based, with no affiliation with the exhaustible dominant commodity (Crude oil; petroleum) in Nigeria. Captured in the Nations encyclopedia web engine (2016), agricultural activities builds essential components for any economy aiming to establish a growth bound system. Thus, there is the need for Nigeria to return to its leading position in the export of palm produce, cocoa, groundnuts and rubber. For instance, the output of cocoa exports, fell from about 365,000 metric tonnes in the 1950's to less than 240,000 metric tonnes in 2007. The indigenous production of palm produce (palm oil and palm kernels) and ground nuts do not meet domestic demands. In fact, Federal Government was forced to lift the prohibition on imports of palm oil in early 2016. Two major staples crops; rice and maize, also experienced insufficient local production that ceased the prospect of export services. Other major staples that are not normal items of foreign exchange, such as beans, yam and cassava, are also not produced in adequate quantities to meet domestic requirements. Many factors have echoed low productivity in Nigerian agricultural system including the dominance of production by subsistent peasant farmers using traditional technology and low-yielding varieties of seedlings, dependent on the seasons for production and having non-economic farm sizes in the country.

With about 76 million acres of land area under cultivation, excess water supply, favorable climate condition, the economic advantage of large scale agriculture are recognized and some Federal Government programme supports the formation of cooperative societies and villages to promote industrial agriculture.

Selected Agricultural Commodities (Non oil products) in Nigeria

Drawing from the objectives of this study, the following non-oil exports under crop production in the agricultural activity sector describes their importance as they seek to play vital roles in the development of a non-oil driven economy which is industrially inclined. These selected agro-products are;

i. Cassava: According to Nigeria markets via United States Agency for International Development (USAID) web feed (2013), the production of cassava in the country has been well progressed into an ordered agricultural crop. It has well formed increased and processing methods for food products and cattle feeds with more than 40 varieties of cassava in use the crop is produced in 24 states of the country's 36 states. Adeniji, Ega, Akoroda, Adeniyi, Ugwu and Balogun (2005) stated that "cassava is consumed in many processed forms, as livestock feeds and also consumed in the industry. Its roots and leaves are made into flours". Flours are of three types; yellow garri, white garri and intermediate colour, with yellow garri considered the best product in Nigeria.

ii. Groundnuts: Nnabuife (2014) study traces the northern region involvement in the large quantity of groundnuts output where cities, such as Kano, can attest to the historic invention of groundnut pyramids by Alhassan Dantata in 1919, Nigeria. Groundnut pyramids (pyramid-like structures made from groundnut sacks) were built all across northern Nigeria, in cities like Dawakin kudu, Kofar mazugal, Malam madori, Bebeji and Brigade later becoming a symbol of wealth and attracted tourists (Bashir, 2014). However, in the 1960's and '70s, as production in Nigeria shifted from non oil to oil, groundnut production recorded declines in the 1970's and the '80s.

iii. Millet: These major staple food crop is categorized under a group of variable small seeded grasses, widely grown around the globe as grains or cereal for fodder and also human consumption. Millet are essential crops in the tropics of Asia and Africa especially in countries like India, Niger republic and Nigeria, with stunning 97 per cent of millet production in developing nations (McDonough, Rooney and Serna-saldivar, 2000). The United States of America, a largely agrarian country, is often involved in the extraction of raw cereal seeds in order to produce the brand quake oats (made from 100% natural grains) used domestically and exported for

worldwide consumption. In the United Nations statistical base (2013), top 10 millet producers saw Nigeria ranked second in the world accounting for over 5,000,000 tonnes of production level. Hence, this food crop provides suitable options that may promote export activities.

iv. Yam: Nigeria produces a large quantity of yam where in all the state of the country and the yam is always available. According to Tunji (2015), a business finance expert made it clear that Nigeria was one of the largest producer of yam in the world (more than 6 metric tonnes) accounting for 50% of its output. Yam is one of the major agricultural products under the activity sector of crop production in Nigeria. World production of yam is 51.4 million tonnes per year of which Nigeria accounts for an average of 36.7million tonnes. According to Nigerian Export Promotion Council (2008), Nigeria realized ₦56billion (USDollars380million) from yam exports.

v. Maize: Its often referred to as corn, a type of cereal crop that is planted all over the world in a range of agro-ecological environments. In industrialized countries like the United States, maize is mostly used as raw material for industrial products and livestock feed, while in West Africa maize flour is assembled into porridge. All over Africa, green maize is boiled or roasted on its cob and served as a snack like popcorn. A website feed on maize production tagged 'Farri consulting Nigeria' (2011), a subsidiary named Foraminifera Market Research Limited, it is on history book that more than 60% of Nigeria's production of maize is consumed by the industrial sector for production of flour, beer, malt drink, corn flakes, dextrose etc. In order to meet the local demand for the crop, the Federal Government placed a ban on the export of maize in Nigeria.

Policies and Initiatives aimed at Promoting Non-Oil Exports and Economic Growth in Nigeria

Several policies and attempts have been made throughout the years by the Nigerian government to enhance the non-oil sector of the economy by implementing helpful policies and incentives in order to encourage diversification strategies in the economy. In the 1970s, the Federal government made efforts into diversifying its export base and thereby establishing various agencies and various policies to improve the economic situation of Nigeria in addition, by increasing the share of non oil products in total exports. In this section, a few of many key policies will be examined;

a. Nigerian Agricultural Policy (1988 and 2000) :- Under the Nigerian Investment Promotion Commission (2015) web-feed, a comprehensive overview on the agricultural policy document (old) which finalized in 1988 then later amended with a new policy document bearing most of the features of the former agricultural policy document but with more improved articulation and goals, includes:

- i. The achievement of self-sufficiency in basic food production and the attainment of food security;
- ii. The increased supply of agricultural raw materials for industries.
- iii. Gainful employment being generated.
- iv. Increased production and processing of export crops, using sophisticated technological means.
- v. Promoting the increased application of modern technology to agricultural activities involving exports.

b. The Nigerian Export Promotion Council (NEPC) :- ~~Model for achieving predictability and transparency in~~ Nigerian export promotion

Nigeria is trying to follow. Export promotion simply begins with production of the export products and ends with the consumption of the product outside the country. Therefore, export promotion covers planning for the recognition and exploitation of any economy exporting ability purposed for GDP growth.

The beginning of crude oil in the 70's, brought a unforgotten change in the affairs of Nigeria. The first decade of Nigeria's independence also witnessed export of primary commodities majorly from agriculture such as cotton, palm products, cocoa etc. Such product accounted for over ninety per cent of export values. From 1970 to 1978, international trade of agricultural goods were replaced by mineral products. Mineral produce such as petroleum, crude oil, accounted for 95% of export values.

Following the oil market variation (rise and fall) in the 80's, revenue declined from the projected target and many programme set aside for implementation in the National Development Plans (NDP) were phased out. Frail industrialization strategies on import substitution as well as local factories failed in trying to save the foreign exchange gains necessary for financing importation of raw materials. To reverse this trend, Nigerian government established the Nigeria export promotion council Decree No. 26 of 24, June 1976, formally inaugurated in March 1977 and later amended by Decree No. 72 of 1979.

According to Abebefe (1995), its mandates are to aid the Nigerian government in the creation of emergence infrastructures such as export incentives and trade information services. Obalolu (2015) highlights a report from the NEPC, where gross income generated from non-oil exports that stood at ₦531billion (USDollars2,700,000) in December,2014 and a 30 percent climb that saw the figure rise to ₦691billion (USD3.5million) in the next 4 years. The council is also planning to create 1.5million jobs in the small and medium scale enterprises sector of the economy in the next five (5) years.

c. Trade Liberalisation Policy (1986 The Structural Adjustment Programme Era): According to Anowor, Ukweni and Ikeme (2013),trade liberalization is the system of reducing certain restrictions on international trade that includes the reducing of tariff rates, abolition import quotas

and the removal of requirements for administrative permits on imports or allocations of foreign exchange. Supporters of the policy believe that it can hasten economic growth of several African communities. Yusuf, Malarvizhi and Khin (2013) further added that, trade liberalization is central to the structural adjustment programmes being implemented by most countries in Sub-Saharan Africa including Nigeria in West Africa. Since the introduction of the Structural Adjustment Programme (SAP) in Nigeria, 1986 as observed by Monisola (2014), a seven year tariff regime between 1988 through 1994 was ~~Model for achieving predictability and transparency in~~ Nigerian export promotion. Former Head of state, Gen. Sanni Abacha during his regime (1993-1998) shunned some aspects of economic reform and enabled "guided deregulation". Soon after, Gen. Abdulsallam Abubakar (98/99) set up a legal framework for the next phase of privatization. This framework did not deter as Ex-President Olusegun Obasanjo (1999-2007) continued the privatization exercise so as to enhance competitiveness among domestic industries with a view of encouraging local value added and diversifying exports especially in agriculture.

Onodugo, Vincent, Ikpe and Anowor (2013) points out that, this policy was aimed at deregulation, privatization, commercialization, financial liberalization and development of the private sectors(agro-allied, SMES) in the economy for the achievement of greater openness and integrating with world power economies, and to also face the challenges of imbalances in the economy and thereby making way for sustained economic growth.

d. Export Incentives and Miscellaneous Provisions Decree no. 18 of 1986: The decree was promulgated on the July 11, 1986 and it led to the building of institutions and establishment of programme geared towards promoting some exports activities, particularly of non-oil exports. A source document by Babalakin (2004) expands the segments that constitutes and concerns the Act as amended by Export Incentives and Miscellaneous Provisions, Decree no. 65, 1992.

e. The Nigerian Export-Import Bank: According to the site, NEXIM was established in 1991 as an export credit agency with the wide aim of structuring balance and diversifying the composition and destination of Nigerian Exports as well as attaining overall export growth. The bank provides three (3) main services which are; credit, risk-bearing and trade information and export advisory services. Captured in an article, Managing Director/Chief Executive Officer, NEXIM, Roberts Orya stated that, NEXIM functions by statute as one of the globally recognised Export Credit Agencies (ECA) like United States Exim i.e. The United States Export Import Bank.

NEXIM bank's major concentration is on the developmental function (harmonizing deposit money banks DMBs) via the creation of job and assisting the exports of made in Nigeria goods and services. By law, NEXIM Bank concentrates on virgin subdivisions and non oil exports in various segments of the market. Its role is to help structure the appropriate financing for such markets either with other deposit money banks (DMB's) or financial institutions through syndication. The banks showcase 10 facilities, namely: rediscounting and financing, stocking implementation, direct lending, local inputs, foreign inputs, export credit guarantee, export credit insurance, ECOWAS interstate road transit scheme, ECOWAS trade support facility, Nigerian creative and entertainment industry stimulation loan scheme. The Bank position is a dependable edge for exploiting sufficient chances operating in international trade for Nigerians. It has scheduled a maximum application processing period of 4 to about 12 weeks, with special focus on manufacturing, agriculture, solid minerals and the service sector. These facilities hold growth potentials with immediate growth stimulating multiplier effect on the other relevant facilities.

f. Promoting Small and Medium-scale Enterprises (SMEs):- According to Adeyemi and Abiodun (2013), the state of the economy is informed by the colossal failure of the Import Substitution Industrialization (ISI) model because local firms could not compete globally, draw backs from the transformative roles of Small and Medium scale Enterprises (SMEs) in other countries, the Government undertook the promotion of SMEs for the Nigerian economy. SMEs in Nigeria refer to enterprises with a minimum asset base of N300million (excluding land and working capital) and an employment size between 10 to over 280 workers. The major features of SMEs initiative that can benefit Nigerians include the following:

- i. They provide the environment for the development of indigenous or domestic entrepreneurial, technical and marketing skills.
- ii. They serve as an important source of raw materials and intermediate inputs for large scale industries. They serve as a major vehicle for mobilization of savings and domestic capital formation.
- iii. They act as catalysts for market competition because of the ease of entry and exit in the activity sub sectors
- iv. They make use of highly labour-intensive technologies.

THEORETICAL FRAMEWORK

The Unbalanced Growth Theory

The guardians of the unbalanced growth theory include scholars like, Hirschman, Streeten, Fleming and Singer (1969). They promulgated the theory of

unbalanced growth as a plan for development and growth to be used by underdeveloped countries. The theory emphasizes the need for investment in key strategic sectors of the economy rather than all the sectors simultaneously, for instance, investing into agriculture exports. According to this theory, the other sectors would genuinely develop themselves via what is called "Linkages effect". The theory contends that an intentional unbalancing of the economy in agreement with predetermined plans by researchers and scholars, is the best means to attain economic growth of a nation. An ideal case maintains that when disequilibrium calls for a development move, this should in turn lead to further disequilibrium and soon ad-infinity. Hirschman, Streeten, Fleming and Singer (1969) observes that, development has proceeded in this way with growth being transmitted from the key leading sectors such as agriculture or industry of the economy to other sub- sectors.

Empirical Framework

A good number of researchers from series of extracts, tried to establish the level of influence and (or) relationship between non oil exports and the Nigerian economy using various parameters as proxies. Accordingly, the use of current, relevant and related reviews will unearth the relationship between non oil exports and GDP.

Abogan, Akinola and Baruwa (2014) studied the impact of non oil exports on the economic growth of Nigeria for 31 years from 1980 – 2011. The study adopted ordinary least square (OLS) estimation technique which include error correction, parsimonious and over-parametization to analyze the data generated from the CBN statistical bulletin (2011). In testing for the time series properties, the evidence from estimated economic models suggests that all the variables examined are stationary at I(1) using the Augmented Dickey-Fuller (ADF) and Phillips-Perron. The variables were found to be co-integrated by the Johannsen co-integration test which shows that a long-run relationship exist among the variables. The study concluded that the impact of non oil export on the Nigerian economic growth was not excessive as a unit rise in non oil export impact positively by 26% on the productive capacity of goods and services in Nigeria during the period (1980 – 2011). It was recommended that the Nigeria government reinforce the legislative and monitoring committee of the non oil sectors and spread the economy to have optimal support from all part of the sectors in the Nigerian economy.

Akeem (2009), stressed on the perception of Nigeria's important contribution and export capacity to the world volume with non oil export which has developed to become the fourth largest exporter in the world with high production level. The multi-linear regressions research technique was adopted to

investigate if a linear relationship exists between non oil export and GDP. Using analytical tools for data derived from CBN sources from 1989 to 2008. Hence, results from the regression model revealed that the R^2 is 0.979 implying that 97.9% variation in the dependent variable can be attributed to the variation in the independent variable. Also, adjusted R of 0.975 which implies that 97.4% shows a minimized error from coefficient of determinant R-square. This research work specified the important factors that affect GDP positively to non oil export for previous years and consumer price index, as such the government had an essential part to play if sustainable development is to be achieved since an insignificant non oil export and exchange rate would slow down the economic growth rate. The outcome of the analysis shows that non oil export has some significant contribution on the economic growth of Nigeria.

Ijirshar (2015) studied the effects of non oil export on the Nigerian economy for 41 years from 1970 – 2011. The study proxied non oil exports by rate of oil export, index of trade openness, real exchange rate, inflation rate and rate of non-oil export as the independent variables while the Nigerian economic growth was proxied by GDP as the dependent variable. The study adopted the unit root test, augmented dickey-fuller (ADF), error correction model and Johannsen co-integration to test for significance among the variables. The result of the unit root suggested that all the variables in the model are stationary at first difference. The result from the co-integration test revealed a long-run equilibrium relationship among the variables between the periods of 1970 to 2011. There was a positive contribution of non oil export to the economic growth of Nigeria from the result of error correction model. The study recommends that measures should be taken to diversify, reduce and eliminate the supply constraints that determine the performance of the export sectors so as to maximally exploits the advantages of other sectors via export promotions of non oil products.

Onodogu, Vincent, Ikpe and Anuwor (2013) empirically investigated the impact of non oil exports on the Nigerian economic growth for 31 years from 1981 – 2012. The study used secondary data sourced from CBN statistical bulletin (2012). It adopted the endogenous growth model, augmented production function, co-integration and conventional tests for mean reversion to test for significance between non oil exports and the economic growth of Nigeria. The result showed that a weak impact of non oil export exists and it influences the change in the level of growth in the Nigerian economy. The study failed to give support to recent claims on non oil exports led growth in Nigeria. It has also set a data benchmark for appraisal of likely advancement in future

performance of non oil exports owing to GDP growth rate.

Ulakpa (2013) examined the impact of non oil exports on the economic growth of Nigeria for 24 years from 1986 – 2010. The study was undertaken against the background of the important function that non oil can perform as a substitute source of revenue apart from crude oil exports. Multiple regression technique was used in analyzing the data in order to achieve the objective of the study. The result revealed that non oil exports are statistically significant to Nigeria economic growth. On the other hand, Government Expenditure (GEX) was not significant to Nigerian economy. Due to this, some recommendations were made which includes; encouraging financial institutions, improving in data collection and banking, efficient allocation and use of resources, and creating economic environment that will help boost the activity of the non oil export sector.

METHODOLOGY

The study examines the role of non oil exports in the economic growth of Nigeria. The study applied the ex-post-factor research design method. According to Ibadin, Moni and Ekikhmun (2014), the ex-post-facto research design is adopted when data is collected from secondary sources and the researcher lacks the ability to manipulate them in some cases. The geographical population constitutes the crop production sub sector under the agricultural activity sector generated from secondary sources from the National Bureau of Statistics data base and the CBN statistical bulletin. The study adopted Ordinary least square method (OLSM via E-view) and Descriptive statistical technique (SPSS). The multiple linear regression for data analysis with aid of the statistical package for social sciences (SPSS version 23) and Econometric View (E-view 7.0) was used to analyze the data used for this study.

Model Specification

The chosen economic growth indicator is the Gross Domestic Product (GDP) which is specified to depend on selected non-oil (agriculture) exports i.e. Cassava, groundnut, millet, yam and maize (1985-2017). The model is specified as-

$$GDP = f(CAS, GRO, MIL, YAM, MAZ) \quad (1)$$

The model thus:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \epsilon. \quad (2)$$

Where: Y = Dependent variable (Explained or endogenous variable).

β_0 = intercept or constant coefficients (the constant term).

$\beta_1, \beta_2, \beta_3, \beta_4$ and β_5 = the parameters or coefficients of the independent variables.

x_1, x_2, x_3, x_4 and x_5 = the independent variables (Explanatory variables).

The model can be restated as-

$$\text{GDP} = \beta_0 + \beta_1 \text{CASX} + \beta_2 \text{GROX} + \beta_3 \text{MILX} + \beta_4 \text{YAMX} + \beta_5 \text{MAZX} + \varepsilon \quad (3)$$

These depict:

GDP = Gross Domestic product (economic growth).

CASXt = Cassava export.

GROXt = Groundnut export.

MILXt = Millet export.

YAMXt = Yam export.

MAZXt = Maize export.

ε = stochastic, disturbance or error term.

Apriori Expectation

The Apriori Expectation of data estimates validating the regression analytical procedure for the variables employed to this study i.e. $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5 > 0$

RESULTS AND DISCUSSIONS

Table 4.1: Ordinary Least Squares Method

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.228830	3.717256	0.654895	0.001347
CASSX	4.04433	0.137552	0.546731	0.000316
YAMX	3.04442	0.043902	0.546731	0.000476
MILX	2.57592	4.132803	1.027805	0.561134
GROX	1.27859	3.138703	1.027805	0.001134
MAZX	2.24521	2.633803	1.027805	0.780113
R-squared	0.412875	Mean dependent var		-4.714556
Adjusted R-squared	0.394673	S.D. dependent var		12.46738
S.E. of regression	11.35676	Akaike info criterion		2.100356
Sum squared resid	24.68234	Schwarz criterion		7.265485
Log likelihood	-1.354218	F-statistic		6.324537
Durbin-Watson stat	1.766389	Prob(F-statistic)		0.000000

Source: Author's computation with the use of E-view 7.0 (2017)

From the table 4.1, coefficient of determination ($R^2=0.412875$ or 41%) indicates that, the independent variables (CASX, YAMX, MILX, GROX and MAZX) contributed 41% to the GDP of Nigeria while the remainder in 59% (0.59) is contributed by other variables not specified in the model ($Y = \beta_0 + \beta_1 \text{CASX} + \beta_2 \text{GROX} + \beta_3 \text{MILX} + \beta_4 \text{YAMX} + \beta_5 \text{MAZX} + \varepsilon$; $\text{GDP} = 2.228830 + 4.04433 + 1.27859 + 2.57592 + 3.04442 + 2.24521 + \varepsilon$), which is handled by the stochastic disturbance term(ε).

The F-Statistic of 6.324537 which is significant at 5% confirms that the Agricultural exports contributed positively to Nigeria's GDP over the periods 1985 to 2017 when compared to the F critical value of 4.14 (E-view generated). Under the decision rule, if p-value or probability (f-stat= 0.000) is less than the level of significance (0.05), it is required to reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1). Hence, the influence of the explanatory variables on the dependent variable (GDP) is statistically significant and this is also confirmed by the F-probability which is statistically zero (0). Finally, the value of Durbin-Watson at $1.766 \leq 2$, implies the absence of autocorrelation.

Hypothesis One

H_0 : Cassava exports have not contributed significantly to the GDP of Nigeria.

H_1 : Cassava exports have contributed significantly to the GDP of Nigeria.

Decision Rule

Reject H_0 : If F- calculated (6.3) > F- tabulated (4.14) otherwise;

Accept H_1 , at 5% level of significance where p-value is 0.00

From the result obtained, it was observed that F-calculated value is greater than F-tabulated value of 4.14, thus reject the H_0 (Null hypothesis) and accept the H_1 (Alternative hypothesis). This means that, there is significant relationship between the cassava exports and Nigeria's economic growth (GDP).

Hypothesis two

H_0 : Groundnut exports have not contributed significantly to the GDP of Nigeria

H_1 : Groundnut exports have contributed significantly to the GDP of Nigeria.

Decision Rule

Reject H_0 : If F- calculated (6.3) > F- tabulated otherwise;

Accept H_1 , at 5% level of significance where p-value is 0.00

From the output obtained, it was observed that F-calculated value is greater than F-tabulated value of 4.14, thus reject the H_0 (Null hypothesis) and accept the H_1 (Alternative hypothesis). This implies that, groundnut exports have contributed significantly to the economic growth (GDP) of Nigeria.

Hypothesis three

H_0 : Millet exports have not contributed significantly to the GDP of Nigeria.

H_1 : Millet exports have contributed significantly to the GDP of Nigeria.

Decision Rule

Reject H_0 : If F- calculated value (6.3) > F- tabulated value (4.14) otherwise;

Accept H_1 , at 5% level of significance where p-value is 0.00

From the computation, it was observed that F-calculated value is greater than F-tabulated of 4.14, thus reject the H_0 (Null hypothesis) and accept the H_1 (Alternative hypothesis). This implies that, millet exports have contributed significantly to the economic growth (GDP) of Nigeria.

Hypothesis four

H_0 : Yam exports have not contributed significantly to the GDP of Nigeria

H_1 : Yam exports have contributed significantly to the GDP of Nigeria.

Decision Rule

Reject H_0 : If F- calculated (6.3) > F- tabulated (4.14) otherwise;

Accept H_1 , at 5% level of significance where p-value is 0.00

From the output, it was observed that F- calculated value is greater than (>) F-tabulated value of 4.14, thus accept the H_1 (alternate hypothesis) and reject the H_0 (Null hypothesis). This means that, there is significant relationship between yam exports and Nigeria's economic growth (GDP).

Hypothesis five

H_0 : Maize exports have not contributed significantly to the GDP of Nigeria.

H_1 : Maize exports have contributed significantly to the GDP of Nigeria.

Decision Rule

Reject H_0 : If F- calculated (6.3) > F- tabulated (4.14) otherwise;

Accept H_1 , at 5% level of significance where p-value is 0.00.

From the result obtained, it was observed that F-calculated value is greater than (>) F-tabulated value of 4.14, thus reject the H_0 (Null hypothesis) and accept the H_1 (Alternative hypothesis). This implies that, maize exports have contributed significantly to the economic growth (GDP) of Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study measures the degree of the relationship that exists between GDP and non-oil goods and services, mainly focusing on the agricultural sub-sector. From information acquired, the performance of non-oil exports seemingly inquests the efficiency of government strategies, policies and initiatives over the years, export promotion strategies, financial authorities involvement and confirming the fact that the Nigerian economy is far from being diversified, away from petroleum activities. Still, non oil export activities has proven countable even in the modern age of technology and global meltdown.

In order to increase the revenue that accrues to the economy through the exports of non-oil commodities (agro-allied) continuous efforts by the Federal government through policies, and strategic initiatives specifically for non-oil exports should be executed to improve the level of development and self-sustainability thereby reducing the level of vulnerability to macro-economic shocks as it affects GDP.

Arising from the above, it was recommended that transparency in the emission reports as it concerns fumes from machineries, lights, heat discharge from green houses, gas discharge from big power plant industries that may be harmful to atmospheric conditions, human health, plants and agricultural crops should be put in place.

REFERENCES

- Abebefe, H. A. (1995). The structure of Nigeria's external trade: A Focus on Export in Central Bank of Nigeria Bullion. 19(4): 39-50.
- Abogan, O. P., Akinola, E. B. and Baruwa, O. I. (2014). Non-oil export and economic growth in Nigeria. *Journal of Research in Economics and International Finance* (JREIF), 3(1): 1-11.
- Adeniji, A. A., Ega, L. A., Akoroda, M. O., Adeniyi A. A., Ugwu B. O. and Balogun, (2005). Cassava development in Nigeria. Department of agriculture, federal ministry of agriculture and natural resources.
- Adeyemi, K. S. and Abiodun, A. J. (2013). Development of the non-oil sector in Nigeria: challenges & lessons for less developed countries. *Covenant Journal of Business and Social Sciences* (CJBSS), 5(23).
- Akeem, U. O. (2009). Non-oil export determinant and economic growth Nigeria. *European Journal of Business and Management*, 3(3): 236-250.
- Anowor, O. F., Ukwani, N. O. and Ikeme, M. (2013). The Impact of trade liberalization on Nigeria agricultural sector. *Journal of Economics and Sustainable Development*, 4(8): 14-24.
- Bashir, B. (2014). *Groundnut Pyramids: Lost pride of the North*. Freedom radio, retrieved 19th, May.
- Central Bank of Nigeria (2010). Annual report for the year ended 31st December. Abuja: Central Bank of Nigeria.
- Ibadin, L. A., Moni, O. M. and Eikhomun D. E. (2014). Real sector, gross fixed capital formation and the Nigerian stock market. *European Journal of Business and Management*, 6(33): 157.

- Ijirshar, V. U. (2015). Non-oil exports and economic growth in Nigeria. *Academic Journal* 7(3): 113-122.
- Monisola, J. O. (2014). Public policy and trade liberalization in Nigeria economic development, *Research on Humanities and Social Sciences*, 4(15): 9-10.
- Nnabuiife, C. (2014). As federal government revive groundnut pyramids. Nigerian tribune. Retrieved 19th, May.
- Okubor, S. I (2014). Promoting sustainable development in Nigeria through non oil sector. *Export Research on Humanities and Social Sciences*. 4(8): 89.
- Onodugo, V. A., Ikpe M. and Anowor, O. F. (2013). Non-oil export and economic growth in Nigeria: a time series econometric model. *International Journal of Business Management & Research*. 3(2): 115-124.
- Yusuf, M., Malarvizhi, C. A. and Khin, A. A. (2013). Trade liberalization on economic growth and poverty reduction in Nigeria. *International Journal of Business and Management*, 8(12): 42-47