Non-Oil Export Earnings and Economic Growth in Nigeria

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Abstract- ***The study assessed non-oil export earnings and Economic Growth in Nigeria. Ex-post facto design was adopted for the study. The data were sourced from Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), and National Export Promotion Council (NEPC) bulletin spanning 1990 to 2021. Ordinary Least Square (OLS) method was employed to analyze the relationship between the dependent variable (GDP) and the independent variable (NOEXP). The result showed a positive and significant relationship between NOEXP and GDP (29%) in Nigeria. The study recommends that farmers should engage in innovative, modern, and sustainable farming techniques that will enhance productivity and higher returns (increasing return to scale)***

Indexed Terms- ***Non-Oil Export, Economic Growth, Staple Theory***

I. INTRODUCTION

Countries with abundant natural resources tend to have an inward movement of the Production Possibility Curve (PPC) owing to underutilization of resources and uneven distribution of the proceeds. Non-oil export was the mainstay of Nigerian economy in 1960s accounting for 70% of the Gross Domestic Product (GDP) as non-oil export accounts for 330.6 million naira out of the total export trade of 339.4 with oil export accounting for only 8.8 million naira in 1960 (NBS, 2017). The advent of oil in the 1970s led to the neglect and decline in earnings from non-oil sector in the country. Earnings from oil rose drastically from 64.1 million naira in 1964 to 1.17 billion naira in 1972 (CBN, 2006) with little effect on structural transformation and development of the economy. As seen in a study by Okezie and Azubike (2016) cited in Olowo, Daramola, Ogunsanwo and Adewusi (2020) "hitherto, oil contributes over 231 billion in rents for the Nigerian economy and these rents have contributed between 21 percent and 48 percent of Gross Domestic Product, nonetheless, the effects have not assisted to alleviate poverty and unemployment currently embattling the nation". Also, Vincent (2017) posits "prior to the 1970s, Nigeria's exports were predominantly non-oil commodities with agricultural commodities accounting for high contribution. However, in the 1970s, when the price of crude oil in the international market sky rocketed, the contribution of non-oil exports began falling and has remained low ever since".

Despite the overwhelming contribution of earnings from oil to GDP of Nigeria, the country is bedevilled with unemployment, low per capita income, inadequate infrastructural facilities, increased debt, volatile exchange rate, and deficit balance of payment. The volatile and dwindling nature of the economy due to external shocks that is beyond the control of the government has given the nation to the Dutch Disease, resulting to a near collapse of other sectors of the economy. The near collapse of the non-oil sector is a wakeup call for concerted efforts and measures to diversify the economy and enhance revenue yield from non-oil sector of the economy.

To mitigate the aforementioned issues, the federal government over the years put up measures like One State One Product (OSOP), zero oil plan with the

focus to generate a minimum of 40-50 percent exchange earning from non-oil export and 1.5 million jobs in SME by 2020, Small Business Export Network (SBEN) to bridge information gap in export market (NEPC,2016), export development fund, export expansion grant fund, and export credit guarantee and insurance scheme (Akpa, 2014) to revamp the economy and set it on even and balanced growth. Notwithstanding earnings from non-oil sector trails behind earnings from oil sector in the country. This backdrop provides the basis for the study to assess the following research questions.

1.1 Research Questions

i. What is the effect of non-oil export earnings on GDP in Nigeria?
ii. What are the factors mitigating non-oil export earnings in Nigeria?

1.2 Research Hypotheses

H_{o1}: There is no relationship between non-oil export earnings and GDP in Nigeria

II. CONCEPTUAL REVIEW

2.1.1 Non-oil Export

For this study, non-oil export constitutes the list of export commodities compiled from PIAs returns by the National Export Promotion Council (NEPC). In 2016, 141 main non-oil products under 13 categories were exported with a value of US$ 1,203.179 billion to 14 countries, with cocoa beans, cigarettes, and sesame seeds coming first, second, and third and export value of US$242.223, US$118.484, and US$107.676 respectively (NEPC, 2016). Non-oil export constitutes export commodities and earnings derived from commodities not relating to oil export. Oil and non-oil export in 1981 stood at 10.68 and 0.34 billion naira respectively and in 2018 at 17,845.87 and 1,434.17 billion naira respectively (NBS, 2017)

2.1.2 Economic Growth

Economic growth is the increase in the inflation-adjusted market value of the goods and services produced by an economy over time (Asogwa, Okechukwu and Onyekwelu, 2018). According to Kuznets (1973) a country's economic growth may be defined as a long-term rise in capacity to supply increasingly diverse economic goods to its population. This growing capacity based on advancing technology and the institutional and ideological adjustments that it demands. The definition by Kuznets (1973) suits the study as it seeks to provide policy recommendation to the government on how to diversify the economy and to provide different economic goods and employment opportunity to the citizens rather than depending on the oil sector for the sustenance of the economy. Economic growth also, is the increases in goods and service produced in a country over time and its effect on the standard of living of the citizen.

2.2 Theoretical Framework

2.2.1 Staple Theory

The theoretical framework for the study is the staple theory articulated first by Mackintosh (1967) a Canadian economist, advanced and popularised by Innis (1930, 1940) a Canadian economist on fur trade and cod fisheries in Canada. Proponents of the theory include among others Baldwin (1956) and Watkins (1963). The theory evaluates a historical development of newly settled nations that is rich in natural resources with abundant land. Investment and development from the ripple effects of inputs from staple industries through backward, forward, demand, fiscal linkages (postulated by Hirschman (1977) will spur structural transformation in the economy brought about by cost reduction in transport system. The export induced investment will translate to other sector of the economy which induces even and balanced growth in the economy in the long-run. Staple theory is a comparative advantage framework in 'regions of recent settlement' with abundance of labour and land that promotes export of primary inputs. Proponents of the theory argued that in staple-export economies, development are the process of diversification around the staple, and that this process is shaped by the characteristics of the staple's production (Droller and Fiszbein, 2019).

An inherent requirement of the staple theory is the development of the transport sector that will convey the input requirement supplied by the backward linkages from the staple sector. The development of the transport and staple sectors creates ripple effect in industries that depends on inputs from staple industry.

Staple theory was instrumental to the development and transformation of the economy of Canada and the United States of America but largely unsuccessful in Argentina. The theory is relevant to the study in paving the way for diversification of the economy of Nigeria and to mitigate over dependence on earnings from oil sector.

2.3 Literature Review

Olurankinse and Fatukasi (2012) assessed the impact of non-oil export on economic growth in Nigeria using secondary data. The findings of OLS showed a positive impact of non-oil export on economic growth in Nigeria. The study recommends increase in production activities in agricultural and manufacturing sector to boost export growth.

Vincent (2017) analyzed the impact of non-oil export and economic growth in Nigeria spanning 1980 to 2016. The Engel-Granger Co-integration test showed a strong evidence of co-integration relationship of non-oil exports in influencing the rate of change in the level of economic growth in Nigeria. The study recommends that the government should re-emphasize its plan on industrial revolution plan to enhance sectorial and even development in the country.

Enoma and Isedu (2011) assessed the impact of financial sector reforms on non-oil export in Nigeria spanning 1986 to 2009. The study showed a positive relationship between financial sector reform and non-oil export in Nigeria. The study recommends reforms in the financial sector that will augment the gains from non-oil export.

Nwafor (2017) examined the effect of non-oil export on Nigeria economy spanning 2004 to 2013. The OLS result showed a significant and positive impact of non-oil exports on economic growth in Nigeria. The study recommends the diversification of the economy to reduce over reliance on oil earnings.

In a study non-oil export and economic growth, Obogan, Akinola and Baruwa (2014) assessed the contribution of non-oil export to the growth of the economy of Nigeria using the OLS technique. The findings showed a positive coefficient of 26, indicating a unit increase in non-oil export translates to a 26 percent increase in the GDP of Nigeria. The study recommends the diversification of the economy and the strengthening of legislative framework by the government.

Droller and Fiszbein (2019) investigates how the historical patterns of primary production influenced development across local economies in Argentina. The result of OLS method revealed that locations specialising in ranching had weaker linkages with other activities, higher concentration in land ownership, lower population density, and less immigration than cereal production areas. Also, the study showed that over time, ranching localities continued to exhibit lower population density and relatively sluggish industrialisation. The study recommends structural changes with finer levels of aggregation than standard two-or three-sector frameworks and proper study of the role of linkages in growth process in the long run.

III. METHODOLOGY

Ex-post facto research design was adopted for the study. The design was adopted because the historical fact exists already and the researcher cannot interfere with the data. The trend of Non-Oil Export earnings and GDP were sourced from CBN, NBS, and NEPC bulletins spanning 1990-2021. Augmented Dickey Fuller (ADF) test and Ordinary Least Square (OLS) technique were employed for the study. The stated hypothesis was tested using the P-value at 5% level of significance and 95% confidence level. The unit root test via ADF employed showed that the data are stationary at first difference (Appendix A)

3.1 Model specification

The model developed by Nwafor (2017) was adopted for the study. The model is however modified to capture the earnings from NOEXP and how it relates to economic growth in Nigeria proxy by GDP. Thus;

GDP = f (NOEXP) ---------- (3.1)

From the above function, the following model is derived:

$GDP = a + ß_1 NOEXP_t + £$ ------- (3.2)

Where:

GDP: Gross Domestic Product

NOEXP: Non-Oil Export

a is constant

$ß_1$ is the coefficient of the parameter estimate.

t is time
£ is the error term.

3.2 Test of Hypotheses and Discussion of Findings

Dependent Variable: GDP

Method: Least Squares

Date: 02/04/22 Time: 09:19

Sample: 1990 2021

Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7217585.	4047142.	1.783378	0.0846
NOEXP	29.85125	4.061434	7.349928	0.0000

R-squared	0.642948	Mean dependent var	23835128
Adjusted R-squared	0.631047	S.D. dependent var	31261194
S.E. of regression	18988530	Akaike info criterion	36.41703
Sum squared resid	1.08E+16	Schwarz criterion	36.50864
Log likelihood	-580.6725	Hannan-Quinn criter.	36.44740
F-statistic	54.02144	Durbin-Watson stat	0.799730
Prob(F-statistic)	0.000000		

The R^2 and adjusted R^2 of 64 and 63% respectively showed the model is best fit and the probability of F-statistics which is less than 0.05 shows that the independent variable of NOEXP accounts for GDP in Nigeria, indicating a significant model.

3.2.1 Test of Hypothesis

H_{01}: There is no relationship between NOEXP and GDP in Nigeria.

Given that the P-Value of NOEXP is less than 0.05 the null hypothesis is rejected and the alternative hypothesis is accepted that there is a significant and positive relationship between NOEXP and GDP in Nigeria.

3.2.2 Discussion of Findings

In relation to the first objective of the study which was set to assess the effect of NOEXP on GDP in Nigeria, a null hypothesis was formulated and tested at 5% level of significance. The result indicated a strong positive relationship between NOEXP and GDP in Nigeria. The result indicates that a percentage or unit increase in non-oil export will lead to a 29 percent increase in the growth of the economy. This is in line with the findings of Obogan, Akinola and Baruwa (20140) which sees a 26 percent growth in the economy of Nigeria resulting from a unit increase in export of non-oil produce.

The second objective was set to assess the proximate factors mitigating non-oil export earnings in Nigeria. NEPC (2016) advanced the following as proximate factors mitigating non-oil export earnings in Nigeria.

(i) Inadequate and decaying infrastructures
(ii) Inadequate funding and difficulty in accessing trade finance at favourable interest rate
(iii) Policy inconsistencies and its impact towards execution of export orders
(iv) Inconsistency in provision of export incentives schemes

(v) Dearth of relevant skills to support manufacturing for non-oil exports
(vi) Inappropriate packaging and low quality of local agricultural products
(vii) High incidence of informal trade
(viii) Inadequate funding of NEPC

Germane to the challenges confronting the non-oil sector in the country are foreign exchange instability due to external shocks, corruption and embezzlement of funds, inadequate implementation of formulated policies, and inadequate technical skills to convert raw materials into finished goods.

CONCLUSION

This study assessed non-oil export earnings and economic growth in Nigeria. In line with the findings, the study concludes, there is a significant influence of NOEXP on economic growth in Nigeria which is largely due to high revenue yield from agricultural raw materials. As posited by the staple theory, for an economy to reach the desired level of growth and development, the economy should be export oriented from which the linkages in stable sector will translate to even and balanced growth in the economy through forward, demand, and fiscal linkages. These linkages are yet to be seen in the economy of Nigeria as proceeds from export of staple produce like cocoa beans and sesame seeds with receipts of US$ 242.233 and US$ 107.762 million respectively are not properly harnessed and channelled to other sectors to stimulate (big push) growth in the economy.

RECOMMENDATIONS

i. Farmers should engage in innovative, modern, and sustainable farming techniques and the use of quality breed that will enhance productivity and higher returns (increasing return to scale).
ii. The federal government should fully implement the Zero-Oil plan in other to achieve the stated goal of achieving 40-50 Percent yield from non-oil export.
iii. The Ministry of Agriculture, trade and industry, Environment, and other relevant stakeholders should engage in advocacy and sensitize the public on the benefits and value chain in non-oil sector through Small and Medium Scale Enterprises (SMEs) programs.
iv. More research and advocacy should be carried out by Non-Governmental Organizations, researchers and academicians on processing, branding, packaging, and marking of staple raw materials to enhance value addition and export of manufactured goods.

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APPENDIX A

GDP UNIT ROOT @ FIRST DIFFERENCE
Null Hypothesis: D(GDP) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=0)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.679742	0.0396
Test critical values:	1% level	-4.296729	
	5% level	-3.568379	
	10% level	-3.218382	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GDP,2)
Method: Least Squares
Date: 02/04/22 Time: 09:23
Sample (adjusted): 1992 2021
Included observations: 30 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDP(-1))	-0.669128	0.181841	-3.679742	0.0010
C	5649.169	2734601.	0.002066	0.9984
@TREND("1990")	96847.21	149651.8	0.647150	0.5230
R-squared	0.334107	Mean dependent var		94441.40

Adjusted R-squared	0.284781	S.D. dependent var	8223974.
S.E. of regression	6955065.	Akaike info criterion	34.44248
Sum squared resid	1.31E+15	Schwarz criterion	34.58260
Log likelihood	-513.6372	Hannan-Quinn criter.	34.48730
F-statistic	6.773514	Durbin-Watson stat	2.015620
Prob(F-statistic)	0.004130		

NOEXP UNIT ROOT @ FIRST DIFFERENCE

Null Hypothesis: D(NOEXP) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=0)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.227445	0.0000
Test critical values:	1% level	-4.296729	
	5% level	-3.568379	
	10% level	-3.218382	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(NOEXP,2)
Method: Least Squares
Date: 02/04/22 Time: 09:24
Sample (adjusted): 1992 2021
Included observations: 30 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(NOEXP(-1))	-1.432840	0.174154	-8.227445	0.0000
C	-52508.78	210982.0	-0.248878	0.8053
@TREND("1990")	8999.992	11354.67	0.792625	0.4349

R-squared	0.714938	Mean dependent var	13225.94
Adjusted R-squared	0.693823	S.D. dependent var	969944.5
S.E. of regression	536702.2	Akaike info criterion	29.31891
Sum squared resid	7.78E+12	Schwarz criterion	29.45903
Log likelihood	-436.7837	Hannan-Quinn criter.	29.36374
F-statistic	33.85817	Durbin-Watson stat	2.048279
Prob(F-statistic)	0.000000		