

Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621 Impact factor: 6.37

# NON-OIL EXPORTS AND ECONOMIC GROWTH IN NIGERIA: A DISAGGREGATED APPROACH

### Dresmann Austin Inaton, Godly Otto and Obayori Joseph Bidemi

profobj2000@gmail.com

Institute Of International Trade And Development University Of Port Harcourt, Nigeria

Abstract: Against the clamour for diversification of the economy and slow growth rate of gross domestic product (GDP) in Nigeria, the study examined the role of non-oil exports on economic growth in Nigeria using a disaggregated approach from 1999–2020. The objectives of the study were to; determine the effect of hide and skin exports on economic growth; determine the impact of textile exports on economic growth; and examine the impact beverage and tobacco product exports on economic growth in Nigeria. Semi-annual data were collected from Central Bank of Nigeria statistical bulletin. The technique of Autoregressive Distributed Lag (ARDL) model was used. The Augmented Dickey Fuller unit root test was used to ascertain the order of integration of the variables. The unit root test results showed that, some variables were stationary at order zero, while other were at order one. The ARDL results showed the coefficient of 60%. Thus, the model is a good fit. In the long-run, non-oil exports have positive relationship with economic growth in Nigeria. In the short-run, textile exports as well as hide and skin exports have positive and significant relationship with economic growth. But, beverages and tobacco exports has positive but insignificant relationship with economic growth. Based on these findings, the study recommended amongst others that, the various components of the non-oil sectors such as agriculture, mining and service sectors, should be given urgent developmental priority because of their advantage of value addition.

KEY WORDS: Beverage, Economic growth, Non-oil exports, Textile, and Tobacco

#### 1. INTRODUCTION

The general view of trade theory is that international trade creates the flow of foreign capital into both developed and developing economy. This is so, when there is positive value of net export in such an economy. Therefore, exportation of goods and services is needed by an economy to boost revenue in order to increase the growth of the economy. Thus, Adenugba and Dipo (2013) posited that, when the demand for exports is high more production is required, this therefore increase the level of employment and national income and as well helps to attain a favourable balance of trade and equilibrium balance of payments for the exporting economy. This underlines the importance of exports in the growth of an economy.

Meanwhile, the Nigerian export sector has immense potentials for growth even when they are not fully harnessed. The sector is divided into two – oil and non-oil exports, with the former contributing more than 90% of exports. But the focus of this study is the non-oil exports. As a matter of fact, before the independence till early 1970s, the Nigerian economy relies heavily on non-oil exports trade for growth. During this period, the economy was driven majorly by agricultural products and a few other solid minerals (Matthew, Charle, Dorathy & Suleiman, 2017). Basically, the non-oil products traded includes but not limited to; rubber and plastic, hide and skin, textile and cocoa exports. All these generated huge

#### **Academic Journal of Current Research**

An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621 Impact factor: 6.37

amount of revenue for the Nigerian economy (Awoke, Iwuoha & Awoke, 2019).

Meanwhile, despite the enormous contribution of non-oil exports to the Nigerian economy, the over dependent on oil exports has limited the percentage contribution of non-oil exports to the Nigerian economy. Consequently, efforts have been made over the years by various administration to make the non-oil sector of the economy vibrant by initiating supportive policies and incentives to encouraging the diversification of the economy (Elisha & Omekwe, 2022). These policies can be categorized into three, namely: Protectionism Policy (1960 to 1986) - import substitution industrialization was aimed at expanding the industrial base, enhancing cash crop exports, encouraging farmers to expand their farms and increasing the production of cash crops. The second one is the Trade Liberalisation Policy (1986 SAP era)- trade policies of this era was aimed at deregulation, commercialization, privatization and liberalization of the economy in order to achieve greater openness to and integration with the world economy in order to achieve economic growth and development. The third one is the Export Promotion Policy (Post SAP period) - government policies since the fourth republic (from 1999 till date) are aimed at facilitating the diversification of the economy through policy support to SMEs to enhance the export of their products. Examples of such policies include; Agricultural Transformation Agenda (ATA) from 2011 - 2015, and Agricultural Promotion Policy (APP) 2016-2020 plan, which aimed to cure food shortage for local consumption and the meager foreign exchange earned from the export of agriculture produce (Onwualu, 2012).

In the words of Onwualu (2012), some of the identified key weaknesses to the growth of the non-oil sector are: fragile infrastructure, supply side constraints due to low level of technology, low level of human capital development and poor access to finance. This scenario therefore provided a

justification to find out if non-oil exports in terms of textile, hide and skin and many more do impact positively on economic growth in Nigeria. Thus, the objectives of the study were to; determine the impact of hide and skin exports on economic growth; determine the effect of textile exports on economic growth; and examine the impact beverage and tobacco product exports on economic growth in Nigeria.

#### 2. REVIEW OF RELATED LITERATURE

## 2.1 Theoretical Review: Balanced Growth and Exportled Theories in Focus

The balance growth theory is an economic theory established by a renowned economist, Ragnar Nurkes who lived between 1907 and 1959. The theory assumed that, the government of any emerging nation needs to make huge investment in several sectors of the economy simultaneously. This will enlarge the market size, increase productivity and provide an incentive for the private sector to invest. Thus, Nurkse (1961) was in favour of achieving balanced growth in both the industrial and agricultural sectors of the economy. He recognized that the expansion and inter-sectoral state of balance between agriculture and manufacturing is important to these sectors in order to provide market for the products of one another and in turn, supplies the needed raw materials for the growth and development.

Nurkse (1961) discussed how the poor size of the market in underdeveloped countries perpetuates its underdeveloped state. Nurkse also pinpointed the various determinants of the market size and focus primarily on productivity. "According to him, if the productivity levels rise in a less developed country, its market size will expend and thus it can eventually become a developed economy". The size of a market assumes primary importance in the study of what induces investment in a country. But underdeveloped countries lack adequate purchasing power. Low purchasing power means that the real income

#### **Academic Journal of Current Research**

#### An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621 Impact factor: 6.37

of the people is low, although in monetary term it may be high.

As a matter of fact, the size of the market determines the incentive to invest irrespective of the nature of the economy. This is because entrepreneurs invariably take their production decisions by taking into consideration the demand for the concerned product. Private entrepreneurs sometimes resort to heavy advertising as a means of attracting buyers for their products. Although this may lead to a rise in demand for the entrepreneur's good of service, it does not actually raise the aggregate demand in the economy.

Nurkse Concluded that the limited size of the domestic market in a low income country can thus constitute an obstacle to the application of capital by any individual firm or industry working for the market. In this sense the small domestic market is an obstacle to development generally. In conclusion, this theory is relevant to the study because it proposed that all sectors of the economy should be developed simultaneously and if this is done, there will be proper balanced between industry and agriculture and between production for home (domestic) consumption and production for exports. This will promotes equality in comparative prices in all the sectors, enhance growth in all sectors of the economy (Awoke et al, 2019).

On the other hand, the export-led growth theory posited that, export is the main determinant of overall economic growth of an economy. This is because, export may affect total factor productivity through dynamic spillover effects on the rest of the economy (Akeem, 2013). Based on the theory, there are several ways in which exports can potentially cause an increase in output. This can be through promotion of specialization in production of exports products which will in turn boost productivity levels and cause the general level of skills to rise in the export sector. This productivity change leads to output growth (Todaro & Smith, 2012).

## 2.2 Empirical Literature: Non-Oil Exports and Economic Growth in Focus

Adenugba and Dipo (2013) examined the impact of nonoil exports on economic growth in Nigeria: a study of agricultural and mineral, using descriptive and inferential statistic tools to analyze gross domestic product, non-oil exports and exchange rate. Findings from the study revealed that non-oil exports have performed below expectations giving reason to doubt the effectiveness of the export promotion strategies that have been adopted in the Nigerian Economy. The study also revealed that the Nigerian economy is still far from diversifying from crude oil export and as such the crude oil sub-sector continues to be the single most important sector of the economy. Also, Raheem and Adeniyi (2013) examined the linkage between economic growth and nonoil export using time series data for Nigeria over a period of 1970-2010, employing both Simultaneous Equation Model (SEM) and a single equation model. Gross domestic product, nonoil exports, agriculture and industrial were used in the analysis. The result shows that nonoil export and agricultural performance are negatively associated with growth. It was also found that that the industrial sector performance and population growth are good determinant of economic growth. They failed to consider inflation, exchange and trade openness in their analyses.

Abogan, Akinola and Baruwa (2014) investigated the impact of non-oil exports on economic growth in Nigeria between 1980 and 2010, using error correction mechanism. Gross domestic product, non-oil export, inflation rate and exchange rate were used in their analysis. The study revealed that the impact of non-oil exports on the economic growth was moderate and not all that heartening as a unit increase in non-oil export impacted positively by 26% on the productive capacity of goods and services in Nigeria during the period. Also, Igwe, Edeh and Ukpere (2015) adopted the export-led growth hypothesis to examine the

### **Academic Journal of Current Research**

An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621 Impact factor: 6.37

impact of non-oil export to economic growth in Nigeria for the period 1981-2012. The model specified economic growth as a function of capital stock, labor and non-oil export using Johansen cointegration and the vector error correction model. Findings from the VEC analysis revealed that in both the short and long runs, non-oil export determines economic growth. The cointegration analysis indicated a long run relationship between non-oil export and economic growth over the period under study. However, the Granger causality analysis indicated no causality relationship between non-oil export and economic growth. A uni-directional causality relationship runs from capital stock to economic growth. Also, a uni-directional causality relationship runs from economic growth to labor force.

Agbo, Agu and Eze (2018) evaluated the impact of balance of trade on Nigeria's economic growth from 1980-2012. Multiple regression analysis techniques were employed in estimating the various components of foreign trade. The results showed that export trade impact significantly on economic growth in Nigeria. But there is no significant impact of import trade on economic growth. In Like manner, Awoke, Iwuoha and Awoke (2019) investigated impact of non-oil export on economic growth in Nigeria using the auto regressive distributive lag method (ARDL). The ARDL results revealed that all the variables tend to move together in the long run. However, the impact of nonoil exports on economic growth in Nigeria is not significant enough to take the country to an enviable level within the period under the study. It also indicated that all variables considered possess inherent capacity to contribute to the growth of non-oil export if effectively, efficiently and adequately managed.

Hafsat, Usman, Badawi and Kamal (2020) determined the impact of non-oil export on economic growth in Nigeria with the use of Auto regressive distributive lag (ARDL). The finding of the study revealed that, there is a positive

and significant relationship between non-oil export and economic growth in Nigeria. While the other finding, revealed a long-run relationship between agricultural output and economic growth in Nigeria. Meanwhile, in their analysis, they disaggregated non-oil export but failed to do same to oil export. Also, Obisike, Onwuka, Okoli and Udeze (2020) examined the impact of international trade on the growth Nigerian economic from 2000 to 2018. The Ordinary Least Square (OLS) regression technique was employed. The results revealed that in the short run, the oil commodity terms of trade (OCTOT) and non-oil commodity terms of trade (NOCTOT) had positive impact on Nigeria's economic growth, well the granger causality test shows that OCTOT, NOCTOT and GDP are independent of each other. From the results, the study therefore concludes that international trade both in oil and non-oil are vital for economic growth.

Uzonwanne (2020) examined the role of non-oil exports to the economic growth of Nigerian economy from 2010-2017. The ARDL result showed that hides and skins; rubber and plastic export, and textile and textile article shave positive but not significant to real GDP which was used as a proxy for economic growth. There is bidirectional flow of causality between the real GDP and the non-oil exports. Also, Zubair, Salihu and Gyang (2021) used ARDL to examine foreign trade and economic growth in Nigeria from 1986 to 2018. The empirical result shows that; non-oil import (NOILIM) and exchange rate (EXCHR) have positive and significant relationship with economic growth in Nigeria. While non-oil export (NOILEX) was not significant in explaining the variation in economic growth in Nigeria, but is positively related to economic growth. Meanwhile, they failed to use disaggregated method of analyzing non-oil export.

#### 3.0 METHODOLOGY

The econometric techniques of the Auto Regressive Distributed Lag (ARDL) model were used to determine the

#### **Academic Journal of Current Research**

An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621 Impact factor: 6.37

impact of non-oil exports on economic growth in Nigeria. The reason for using the ARDL model is because, the study proposed that based on the Augmented Dickey Fuller unit root test the variables of study were stationary at order zero, I(0) and order one, I(1). (Dickey & Fuller, 1979). Meanwhile, the ARDL model help to determine the longrun and short-run variation in each of the independent on the dependent variables. Semi-annual data for the study is essentially sourced from secondary sources from 1999-2020. This includes relevant publications of the Central Bank of Nigeria (CBN) statistical bulletin (2020).

#### **Model Specification**

Theoretically, the study was anchored on the balanced growth and Export-led growth hypotheses. Empirically, the study is cast in line with the work of Matthew, Charles, Dorothy and Suleiman (2017) whose model on the contribution of non-oil export to economic growth in Nigeria in 2017 is in this form; GDP = f (NOL, EXG). Where; GDP is gross domestic product, NOL is non-oil exports and EXG is exchange rate. But the current study used a disaggregated approach by decomposing non-oil exports in order to obtain a more robust analysis of the contribution of non-oil export to economic growth. Thus, the estimated model was represented in an ARDL Log-Linear long-run and short-run forms as follows:

$$\Delta LnRGDP_{t} = qo + y_{1}LnRGDP_{t-1} + y_{2}LnHXP_{t-i} + y_{3}LnTXP_{t-i} + y_{4}LnBTX_{t-i} + \sum_{i=1}^{p} b_{1}\Delta LnRGDP_{t-1} + \sum_{i=1}^{n} b_{2}\Delta LnHXP_{t-1} + \sum_{i=1}^{n} b_{3}Ln\Delta TXP_{t-1} + \sum_{i=1}^{n} b_{4}\Delta LnBXP_{t-1} + \mathbf{e}_{1t}$$
 (1)

RGDP = Real Gross Domestic Product, HXP= Hide and Skin Exports, TXP=Textile Exports, BTX = Beverages and tobacco exports, t = Time Frame,  $t_{-1} = Lag$  Period,  $q_0 = constant$  terms,  $y_{1}$ - $y_{4}$ = long run multipliers  $b_{1}$ - $b_{4}$  = short dynamic coefficients of the regressors,  $\Delta$ = first difference operator, n = maximum lag lengths,  $e_{1t}$  = white noise, Ln = natural logarithm Following the general-to-specific rule, the error correction model (ECM) was formulated from the ARDL model in the equation below:

$$\Delta \text{Ln}RGDP_{t} = V2 + \sum_{i=1}^{K} f_{1}\Delta \text{Ln}RGDP_{t-i} + \sum_{i=1}^{k} f_{2}\Delta \text{Ln}HXP_{t-i} + \sum_{i=1}^{k} f_{3}\Delta \text{Ln}TXP_{t-1} + \sum_{i=1}^{k} f_{4}\Delta \text{Ln}BXP_{t-i} + \delta ECMt - 1 + U_{2t}$$
(2) Where; V<sub>2</sub>=

Constant terms,  $f_1$ - $f_4$ = short run effects of changes, k = optimal lag lengths ECM = error correction term lagged for one period,  $\delta$  = error correction coefficients which measures the speed of adjustment.  $U_{2t}$ = Random disturbance term

**A priori Expectation**;  $y_1 > 0$ ,  $y_2 > 0$ ,  $y_3 > 0$ , and  $y_4 > 0$ ;  $f_1 > 0$ ,  $f_2 > 0$ ,  $f_3 > 0$  and  $f_4 > 0$ 

#### 4. RESULTS AND DISCUSSION

**Table 1: Analysis of the Descriptive Statistics for the Variables** 

Measuremen				
t	RGDP	HXP	TXP	BTX
Mean	50470.73	806.8087	894.9746	888.9689
Std. Dev.	16827.35	402.0656	380.5958	411.9453

#### **Academic Journal of Current Research**

#### An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621

Impact factor: 6.37

Skewness	-0.292411	1.754283	1.786869	2.009710
Kurtosis	1.596592	5.476607	6.074773	6.899009
Jarque-Bera	4.237882	33.81331	40.74735	57.48967
Probability	0.120159	0.000000	0.000000	0.000000
Observations	44	44	44	44

**Source:** Computed by the Researcher's from E-Views 12

**NB;** Real gross domestic product (RGDP), Hide and skin export (HXP), Textile export (TXP), Beverages and tobacco export (BTX)

The analysis of descriptive statistics of the series in Table 1 indicated that; the approximate mean of real gross domestic product (RGDP) is №50470.73billion; while the corresponding standard deviation is ₩16827.35billion. On the other hand, the approximate mean of hide and skin exports (HXP) is ₹806.8087million, while corresponding standard deviation is ₹402.0656million. Similarly, the approximate mean of textile exports (TXP) is ¥894.9746million, while the corresponding standard deviation is \$\frac{1}{2}\$380.5958million. The approximate mean of beverages and tobacco exports (BTX) is ¥888.9689million while the corresponding standard deviation is N 411.9453million. Based on the analysis above, the standard deviation of all the variables converged around their respective means, it therefore denoted that, the variables were normally distributed.

The Skewness test result showed a mixture of positive for the variables. Specifically, all the independent variables (HXP, TXP and BTX) were positively skewed. While, the dependent variable (RGDP) was negatively skewed. Moreover, the analysis of the kurtosis test showed that, only RGDP is platykurtic relative to normal, since the approximate value of kurtosis is 1.596592, and this value is less than 3 bench mark for kurtosis. This suggested that the variable has short and thin tail, and its central peak is lower and broader.

Meanwhile, HXP, TXP and BTX all have leptokurtic distributions relative to normal, since their approximate values for kurtosis are more than 3. Therefore, the study concluded from the statistical properties of the time series that the variables were to some extent not normally distributed, which may have resulted from the problem of unit root. This necessitated stability via ADF unit root test.

Table 2: Results of ADF Unit Root Test for the Model

Variables	Unit Root Test @ Level				
	ADF	5%Critical	ADF	5% Critical Value	integration
	Statistics	Value	Statistics		
TXP	-4.195359	-2.935001	-	-	1(0)
HXP	-1.233793	-2.935001	-5.412122	-2.935001	1(1)
BTX	-1.763294	-2.935001	-7.483145	-2.935001	1(1)
RGDP	-2.690772	-2.935001	-6.575389	-2.935001	1(1)

Source: Computed by the Researcher's from E-Views 12.

The test of stationarity via the Augmented Dickey Fuller (ADF) unit root test for the variables in the estimated

model showed that, TXP was stationary at order zero. However, the remaining three variables (HXP, BTX and

## Academic Journal of Current Research An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621

Impact factor: 6.37

RGDP) which were not stationary at level, were differenced once and became stationary at first differences; 1(1). Given that some of the variables were integrated of

order 1(0) and some 1(1); the requirement to fit into an ARDL model to test for both long run and short-run relationship is satisfied.

**Table 3: ARDL Bounds Test for the Estimated Model** 

Model		F-Statistic = 6.547357	
F(Log(HPX), LOG(TXP), Log(BTX)		K = 3	
Critical Values	Lower Bound	Upper Bound	
10%	2.188	3.254	
5%	2.591	3.766	
1%	3.54	4.931	

**Source:** Computed by the Researcher's from E-Views 12.

The co-integration test using real gross domestic product (RGDP) as the dependent variable showed that the F-statistic value of 6.547357 is higher than the upper bound critical value of 3.766 at 5% level of significance using

restricted intercept and no trend in specification for the model. The result showed that all the explanatory variables and dependent variable have long-run relationship in Nigeria.

**Table 4: ARDL Long-Run Coefficients for the Estimated Model** 

**Dependent Variable: Log (RGDP)** ARDL (3, 3, 2, 1)

Regressors	Coefficient	t-Statistic	P-Value
LOG(HXP)	0.428040	2.651349	0.0091
LOG(TXP)	0.367519	0.474393	0.6395
LOG(BTX)	0.866031	2.893345	0.0074
С	12.77895	3.757985	0.0010

**Source:** Researchers' Computed Result from (E-views 12)

The table above showed the estimated ARDL long-run coefficients to determine the relationship between non-oil export and real gross domestic product (economic growth) in Nigeria. The estimated result showed that hide and skin exports has positive and significant relationship with real gross domestic product in Nigeria. This means that, a percentage increase in hide and skin exports will cause an increase in real gross domestic product by 42.804%. The estimated ARDL result showed that textile exports has positive relationship with real gross domestic product in

Nigeria. This means that, a percentage increase in textile exports will increase real gross domestic product (economic growth) by 36.7519%. The ARDL long-run result showed that beverages and tobacco exports has positive and significant relationship with real gross domestic product (economic growth) in Nigeria. This means that, a percentage increase in beverages and tobacco exports will increase real gross domestic product (economic growth) by 86.6031%.

Academic Journal of Current Research An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621 Impact factor: 6.37

Table 5: Error Correction Representation for the Estimated Model Dependent Variable GDP; ARDL Selected Lags (3, 3, 2, 1)

Regressors	Coefficients	t-Statistic	P-Value	
Log(RGDP(-1))	0.495821	3.241405	0.0035	
LOG(HXP)	0.006222	2.189403	0.0245	
LOG(TXP)	0.028502	4.100777	0.0004	
LOG(BTX)	0.005232	0.822332	0.4190	
ECM(-1)	-0.025701	-5.488768	0.0000	
R-squared = $0.7239$	Adjusted R-Squared=0.6011	Prob(F-statist) = 0.0000	DW= 2.0625	

**Source:** Researchers' Computed Result from (E-views 12) **NB;** Real gross domestic product (RGDP), Hide and skin export (HXP), Textile export (TXP), Beverages and tobacco export (BTX)

The short-run dynamic model presented on the table above showed that showed that the coefficient of the lag value (current value) of the RGDP is positively signed and significant with the past value. The coefficient of determination (Adjusted R-squared) is 0.6011. Meaning that, the dynamic model is a good fit. Thus, the variation in real gross domestic product brought about by the explanatory variables is about 60%. Therefore the explanatory power of the estimated model is 60%. As a matter of fact, the coefficient of the ECM has the hypothesized negative sign and statistically significant at 5% level. Thus, the deviations from the short-term in real GDP adjusted to long-run equilibrium with the speed of 2.5701 percent. Moreover, the coefficient of the Durbin Watson test is 2.0625 which is not too far from 2.0; based on rule- of-thumb implies that, the model is free from positive first order correlation. Thus, the explanatory variables in the model are not serially dependent. Therefore, the model is valid for policy making and implementation.

In the meantime, the coefficient of hide and skin exports (HXP) is positively related with real gross domestic product (RGDP) and statistically significant. This means that percentage change in hide and skin exports will

increase real gross domestic product. Similarly, the study concludes that, the null hypothesis of no significant relationship was rejected and the alternative hypothesis accepted. The implication of this result is that, the positive contributions of revenue from hide and skin exports increases real gross domestic product in the Nigerian economy. The result is in support of the study of Elisha, and Omekwe (2022) as well as Onodugo, Ikpe and Anowor (2013), in their investigation of the contribution of the non-oil exports to economic growth in Nigeria. They revealed that a positive nexuses between non-oil exports and economic growth in Nigeria.

Meanwhile, the coefficient of textile exports is positively related with real gross domestic product (RGDP) and statistically significant. This means that percentage change in textile exports will decrease real gross domestic product. Similarly, the null hypothesis of no significant relationship was rejected and the alternative hypothesis accepted. The implication of this result is that, the positive contribution of revenue from textile exports to real gross domestic product in the Nigerian economy. The finding negates the empirical work of Adenugba and Dipo (2013) that assessed the impact of non-oil exports on economic growth in Nigeria and revealed that non-oil exports have indirect relationship with economic growth.

The ARDL short-run result showed that beverages and tobacco exports have positive but insignificant relationship

#### Academic Journal of Current Research

#### An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621 Impact factor: 6.37

with real gross domestic product (economic growth) in Nigeria. This means that, a percentage increase in beverages and tobacco exports will increase real gross domestic product (economic growth). The finding supported the empirical work of Omojolabi, Mesagan and Adeyemi (2015) that examined the impact of non-oil

exports on economic growth in Nigeria and revealed that non-oil exports does not have significant impact on economic growth.

#### **Post Estimation Tests**

The following tests were discussed, serial correlation test, stability test and normality test.

Table 6: Breusch-Godfrey test for Serial Correlation Test for the Estimated Model

				Critical	value	@
Test Statistics	Value	P-va	alue	5%		
F-statistic	0.379532	Prob. F(2,22)	0.6886	0.05		
		Prob.	Chi-Square(2)			
Obs*R-squared	1.367438	0.5047		0.05		

**Source:** Researcher's Computation Using E-views 12 Based on the serial correlation test using Breusch-Godfrey test LM test to test the null hypothesis of no serial correlation against the alternative hypothesis of serial correlation in the estimated short run and long-run models at 5% level. The result showed that, serial autocorrelation does not exist in the ARDL model. This is because the chisquare p-value for the estimated model which is 0.5047 is greater than the critical value at 5% (0.05).

#### **Stability Test**

The stability test helps to determine if the parameter estimate is stable. Stability test is measure via CUSUM (cumulative sum). In order to determine the stability of the estimated model, using the CUSUM test, the plot of the CUSUM must be between the 5% critical bound lines. See Figure 1

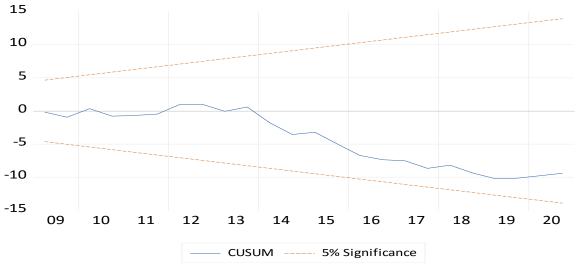


Figure 1: Stability Test for the Estimated Model

### Academic Journal of Current Research An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621 Impact factor: 6.37

The stability test results showed that the estimated ARDL model is stable. This is because the plot of CUSUM for the model under study is within the 5% critical bound as indicated by two lines that bounded the trend curve. The implication of this result is that, the parameters of the model do not suffer from any structural instability over the period of study. Therefore, the estimated model is stable and useful for policy decision.

#### **Normality Test Results for the Estimated Model**

The Jarque-Bera statistic is applied to examine whether the error term in the model is normally distributed. Thus, the probability of Jarque-Bera statistic is compared with the critical p-value at 5% level of significance. The null hypothesis is upheld if the probability of the Jarque-Bera statistic is greater than the critical p-value at 5% significance level.

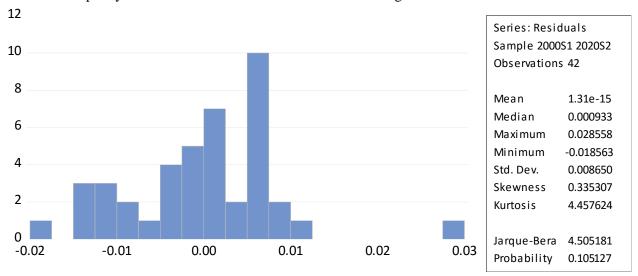


Figure 2: Normality Test for the Estimated Model

The normality test result in Figure 2 showed that, the error term is normally distributed at 5% level of significance. This is because, the probability value of the Jarque-Bera statistic is 0.105127; and this value is greater than 5% critical value. Meaning that, the Jarque-Bera statistic hypothesis of normally distributed residuals in the model was accepted.

#### 5. CONCLUDING REMARKS

The study investigated the impact of non-oil exports on economic growth in Nigeria and concludes that, in the long-run, non-oil exports measured with hide and skin exports, textile exports, beverages and tobacco exports all have positive relationship with real gross domestic product (economic growth) in Nigeria. Nevertheless in the long-

run, rubber and plastic exports, hide and skin exports and beverages and tobacco exports all have significant impact on economic growth in Nigeria during the period of study. Moreover, in the short-run, non-oil exports in terms of hide and skin exports as well as textile exports, have positive and significant impact on economic growth. While, beverages and tobacco exports are positively related with economic growth. Thus, if properly managed, the non-oil sector is well endowed with the capacity to improve the revenue base of the country.

Based on these findings, the study made the following recommendations; (i) The various components that make up the non-oil sectors such as agriculture, mining, service, and manufacturing sectors, should be given urgent

## Academic Journal of Current Research

An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621 Impact factor: 6.37

developmental priority in terms of infrastructural provision because of their advantage of value addition and immediate returns to the economy.(ii) Policies aimed at boosting the level of the non-oil exports should be encouraged, in order to maintain international competitiveness of such products. This could include improved standardization and packaging.

#### **REFERENCES**

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

Adenugba, A.A. & Dipo, S. O. (2013). Non-oil exports in the economic growth of Nigeria: A study of agricultural and mineral resources. *Journal of educational and social research*, (*JESR*) 3(2), 403-418

Agbo, E. I., Agu, R. E. & Eze, L.O. (2018). Impact of the balance of trade on the economic growth of Nigeria. *European Journal of Business and Management*, 10(18), 1-10

Akeem, U. O. (2013). Non-oil export determinant and economic growth Nigeria, *European Journal of Business and Management*, 3 (3), 236-250.

Awoke, C.F., Iwuoha, J. & Awoke, C. (2019). Impact of non-oil export on economic growth in Nigeria, *Enugu State University of Science and Technology Journal of Social Sciences*, 4(2), 201-216

CBN (2020). Central Bank of Nigeria (CBN) Annual Report and Statement of Accounts for 2020. Abuja, Nigeria

Dickey, D.A., & Fuller, W.A. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American Statistical Association*. 74(1), 427-431.

Dickey, D.A., & Fuller, W.A. (1979). Distribution of the estimators for autoregressive time series with a unit root.

Journal of the American Statistical Association. 74(1), 427-431.

Elisha, A. & Omekwe, S.P.O. (2022). The contribution of non-oil exports to economic growth in Nigeria, *British International Journal of Education and Social Sciences*, 9(7), 1-16

Hafsat, M.M., Usman, U.U., Badawi, M.M. & Kamal, M.F. (2020). Impact of non-oil export on economic growth in Nigeria, *IOSR Journal of Economics and Finance*, *11*(7), 101-107

Igwe, H., Edeh, C. & Ukpere, K. (2015). Impact of non-oil sector on economic growth: A managerial economic perspective. *Problems and Perspective in Management*, 13(2), 142

Matthew, J. K., Charles K., Dorathy, P. N. & Suleiman, L. (2017). Contribution of nonoil exports to economic growth in Nigeria (1985-2015), *International Journal of Economics and Finance*, *9*(4), 253-261

Nurkse, R. (1961). Problems of Capital Formation in Underdeveloped Countries. New York: Oxford University Press. p. 163.

Obisike, N.E., Onwuka, I.N., Okoli, U. V. & Udeze, R. C. (2020). Impact of international trade on Nigerian economic growth: Evidence from oil terms of trade, *International Journal of Economics and Financial Management*, 5(2), 31-47

Omojolaibi, J. A., Mesagan, E. P. & Adeyemi, O. S. (2015). The impact of non-oil export on domestic investment in Nigeria. Online at https://mpra.ub.uni-muenchen.de/70201/ MPRA Paper No. 70201.

Onodugo, V. A, Ikpe, M & Anowor, O. F (2013). Non-oil export and economic growth in Nigeria: A time series econometric model. *International Journal of Business Management & Research (IJBMR)*, 3(2), 115-124.

Onwualu, A. P. (2012). A presentation at 51 AGM Conference of NACCIMA; Raw materials *Research and development council*.

## Academic Journal of Current Research

An official Publication of Center for International Research Development



Vol.9, No.10; October-2022; ISSN (2343 – 403X); p –ISSN 3244 – 5621 Impact factor: 6.37

Raheem, I., & Busari, A. (2013). Non-oil export and economic growth in Nigeria: Does methodology matter? *Journal of Asian Development Studies*, *2*(2), 21-34
Todaro, M.P., & Smith, S.C. (2012). *Economic Development*, (11<sup>th</sup> Ed. Boston): Pearson Education Inc. Uzonwanne, M.C. (2020). Non-oil export and economic growth in Nigeria: A disaggregated analysis, *Turkish Economic Review*, *7*(1), 1-15
Zubair A. Z., Salihu, D. & Gyang, E. (2021). Impact of non-oil foreign trade on economic growth in Nigeria, *International Journal of Comparative Studies in International Relations and Development*, *7*(1), 153-167.