



ROLE OF NON-OIL EXPORT ON ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

Nigeria's economy has fluctuated between booms and dooms due to global oil price. Conversely, this study investigates the role of non-oil export on economic growth in Nigeria from 1986 to 2022. The study employed Autoregressive Distributed Lag (ARDL) Model. The long run result revealed that the non-oil export is positive and statistically significant at 5% level, this implies that one percent increase in non-oil export will lead to 0.308102 increase in economic growth, exchange rate positively influence economic growth, that is one percent increase in exchange rate leads to 0.112040 increase in economic growth, gross fixed capital formation is positive and statistically not significant at 5% level, one percent increase in gross fixed capital formation leads to 0.003369 increase in economic growth. The short run results show that the non-oil export is positively related to economic growth, one percent increase in non-oil export leads to 0.086238 increase in economic growth. The exchange rate exhibit positive relationship with economic growth, one percent increase in inflation and exchange rate would result to 0.137905 increases in economic growth. The gross fixed capital formation is positive, one percent increase in gross fixed capital formation leads to 0.164841 increases on economic growth. The error correction term is negative and statistically significant which signifies the speed of adjustment and would be corrected at adjustment speed of 89% percent in the current quarter. Therefore, the study recommended that policies and initiatives should be directed towards diversifying Nigeria's economy.

Keywords: Non-Oil Export, Exchange Rate, Gross Fixed Capital Formation, ARDL

JEL Classification Code: NI, Q34, Q43

1.0 Introduction

Nigeria's export sector can be categorized into two major components: oil exports and non-oil exports. Oil exports focus on crude oil and petroleum products sold in the international market, while non-oil exports encompass all commodities excluding crude oil, including agricultural products, manufactured goods, solid minerals, and services, which are crucial for revenue generation (Akeem, 2011). The oil sector accounts for over 90% of Nigeria's total revenue, while non-oil exports make up less than 10%, resulting in widespread poverty, with over 89 million Nigerians living in extreme poverty (John & Ogege, 2010; Okoli et al., 2013). The COVID-19 pandemic exposed the vulnerability of Nigeria's economy, causing a sharp decline in economic growth from 6.1% to 3.6% in the second and third quarters of 2020. In response to the challenges of oil dependency, successive Nigerian governments have introduced various policies and programs aimed at boosting non-oil exports. The Structural Adjustment Program (SAP) of 1986 sought to diversify the economy away from oil by promoting non-oil exports. The Nigerian Export Promotion Council (NEPC), established in 1979, was created to promote non-oil exports, while the National Economic Empowerment

and Development Strategy (NEEDS) in 2004 aimed to further diversify the economy, similarly, 2015 to 2019 administrations, focused on promoting non-oil exports to enhance economic growth (Adeniyi & Adewumi, 2022). Despite these efforts, Nigeria's non-oil export sector has seen a steady decline since the 1960s. Agricultural exports, which accounted for 84% of total exports in 1960, dropped to 1.8% in 1995 and further to 1.2% by 2020 (World Bank, 2021). Similarly, manufacturing exports decreased from 13.1% in 1960 to 0.66% in 1995 and continued to hover around 0.5% in 2020. These trends highlight structural issues within the non-oil export sector that require urgent attention and reform to stimulate economic growth.

Nigeria's economy has fluctuated between "booms and dooms" due to global oil price volatility, with the non-oil sector being significantly affected during these periods (Igwe et al., 2015). From 1987 to 1995, non-oil exports saw a surge, increasing their contribution to GDP from 1.25% to 8.20%, and by 2002, this figure reached 21.8%. The upward trend continued, with non-oil exports contributing 31.42% to GDP in 2007 and rising to 41.27% in 2009. Between 2010 and 2012, the non-oil sector experienced further growth, with its contribution climbing from 52.33% to 59.66% (CBN, 2012). However, by 2020, due to the impact of COVID-19, the sector's contribution dropped to less than 10%, these fluctuations highlight the volatility of Nigeria's non-oil export sector and underscore the need for sustainable strategies to ensure growth and stability. Thus, figure 1 depicts a growing trend in the non-oil export sector contribution to GDP during the study.

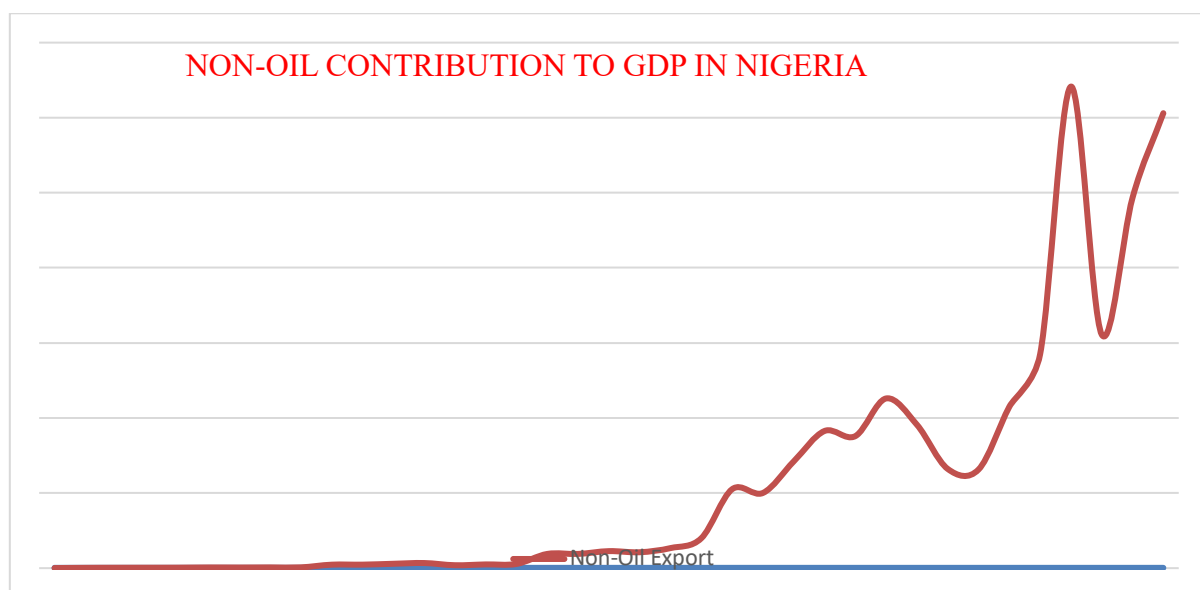


Figure 1: Contribution of non-oil export to GDP

Source: Central Bank of Nigeria Statistical Bulletin, (2023).

Furthermore, previous studies have shown mixed results regarding the impact of non-oil exports on economic growth, with some indicating positive contributions (such as: Ekeke and Uprasen, 2020), while others highlight challenges such as poor infrastructure, limited market access, and policy constraints (Nwodo & Asogwa, 2017). However, the findings of Adeniyi and Adewumi (2022) indicate a less favorable outlook. These discrepancies highlight the need for more robust empirical analyses that consider the heterogeneity of non-oil exports, the quality of export infrastructure, and the differential effects across sectors. Therefore, there is a pressing need to thoroughly investigate the role of non-oil exports in Nigeria's economic growth from 1986 to 2022.

The actual data relating to the significance of non-oil exports has become more relevant as Nigeria persists in giving priority to economic diversification in its development target. This study provides insightful information about the efficacy of previous programs and policies intended to encourage exports of goods other than oil. Policymakers can optimize the sector's contribution to overall economic growth by assessing the factors that promote and hinder the growth of non-oil exports. This will allow them to undertake targeted interventions and enhance current plans. In addition, studying the connection between Nigeria's non-oil exports and economic expansion theoretically is a chance to add to the larger body of knowledge in the field of development economics. Through the empirical testing of hypotheses related to export-led growth and structural transformation in the Nigerian context, this study offers a significant insight into the workings of the economy. The period from 1986 to 2022 is chosen for this study due to its encapsulation of critical economic transitions in Nigeria that are pivotal for understanding the relationship between non-oil exports and economic growth. Starting with the implementation of the Structural Adjustment Programme (SAP) in 1986, which marked a significant shift towards economic liberalization and diversification away from oil dependency, the timeframe includes various policy reforms and global economic influences that shaped the non-oil export structure in Nigeria. Analyzing this extensive period allows for a comprehensive examination of long-term trends, the impact of subsequent trade policies, and the interplay between non-oil export activities and overall economic growth, as it provides a valuable insight into the effectiveness of diversification strategies over the study period. After the introduction, the paper is further partitioned into four sections as follows. Section two reviews relevant literature, section three provides the methodology. While section four presents and discusses the results and section five concludes the paper with recommendations.

2.0 Literature Review

2.1 The Concept of Non - oil Export

Different perspectives exist regarding the definition and essence of non-oil within the field of economics. Elechi et al. (2016) defined Non-oil exports, as goods produced in a nation's mining, quarrying, agricultural, entertainment and industrial sectors with the aim of generating income that can be converted into growth, including goods like coal, cotton, timber, groundnuts, cocoa, beans, palm kernel, palm oil, and hides. Similarly, Uzonwanne (2020) sees non-oil export as commodities apart from oil, which are sold in the international and national market. While Badreldin and Ahmed (2020) defined non-export as the value of goods and services that are traded between a nation and the rest of the world in order to boost national income, as both emerging and developed countries depend on these exports for economic development and prosperity.

2.2 Empirical Review

Empirical discussion on the nexus between non-oil export and economic growth is much and diverse in the literature. For example, Kabiru et al., (2024) conducted a comprehensive examination of the impact of non-oil exports on the Nigerian economy. Employing a combination of Autoregressive Distributed Lag (ARDL) cointegration method, Error Correction Model (ECM), and Granger causality analysis, the study sought to unravel these effects. The long-term analysis findings are diverse: manufacturing exports exhibit a negative effect on economic growth and is statistically insignificant; conversely, food exports demonstrate a positive and statistically significant impact on economic growth, while merchandise exports showcase a positive yet statistically insignificant effect. Furthermore, exports of primary commodities excluding oil manifest a negative but statistically insignificant influence on economic growth. Intriguingly, the results indicate that trade openness has a positive and statistically significant effect on economic growth. The bound

testing outcomes confirm cointegration and the existence of a long-term relationship between economic growth and the export of manufacturing, food, merchandise, primary commodities excluding oil, and trade openness.

Okoli et al., (2023) examined the influence of non-oil exports on Nigeria's economic growth using the Autoregressive Distributed Lag (ARDL) Bound testing approach, the study sought to estimate the impact. Their analysis revealed that non-oil exports in Nigeria exhibit a positive effect on economic growth, while the terms of trade for non-oil exports in Nigeria display a negative impact on economic growth. Consequently, the study concludes that non-oil exports serve as a pivotal economic mechanism with the potential to address various challenges confronting the Nigerian economy. However, realizing this potential necessitates the full utilization of the inherent capabilities within the system. Therefore, in essence, leveraging non-oil exports effectively could provide solutions to the array of issues facing the Nigerian economy. Adeniyi and Adewumi (2022) examined the impact of non-oil exports on balance of payment disequilibrium in Nigeria. ARDL Cointegration analysis and ARDL Error Correction Model were employed. The study finds that non-oil export has not been contributing positively to improve the balance of payment position in Nigeria. Findings from the study also exhibited positive relationship between exchange rate, trade openness and balance of payment. However, the positive impact of exchange rate on balance of payment is significant while that of trade openness is not significant.

Ihenetu and Wokocha (2022) investigated the effect of non-oil revenue on economic growth in Nigeria. The study employed ex post facto design; the sample size of 22 years, the study also applied ordinary least square. The findings at 0.05 level of significance, revealed that company income tax has no positive and significant effect on gross domestic product in Nigeria, custom and excise duty has no positive and significant effect on economic growth in Nigeria, value added tax has a positive and significant effect on gross domestic product in Nigeria and education tax has no positive and significant effect on economic growth in Nigeria. Ideh et al., (2021) embarked on an exploration of the ramifications of non-oil sector growth on the Nigerian economy. Employing the Granger causality test and a Multivariate Vector Autoregressive (VAR) model, the study aimed to discern the relationship. The findings from the analysis unveil intriguing insights: in the long term, the Real Gross Domestic Product exhibits weak endogeneity in the short run, while it demonstrates strong endogeneity as evidenced by the Vector Autoregressive and variance decomposition results.

Esiaka et al., (2021) studied the impact of non-oil foreign trade on economic growth in Nigeria. The study employed vector error correction model (VECM) to investigate and analyze the long run and short run impact of non-oil export on economic growth. The results showed that in the short run, increase in non-oil import leads to increase in the GDP while increase in non-oil export leads to decrease in GDP. The results indicate that there is positive impact of non-oil import on GDP and negative impact of non-oil export on GDP.

2.3 Theoretical Framework:

The export-led growth hypothesis postulates that exports are a main determinant of overall economic growth towards achieving sustainable growth and development According to the theory, focusing on exporting goods and services allows a nation to tap into larger markets outside of its borders, increasing the scale of production and gaining economies of scale. This could result in a significant increase in exports, especially of manufactured goods, and higher economic growth. Furthermore, it was mentioned that export-oriented activities promote the adoption of cutting-edge technologies and production techniques, which raises productivity. As a result, businesses are motivated to invest in technological advancements and increase efficiency in order to stay competitive in the global market, which supports economic growth

in general (Feder, 1983). Therefore, in the context of export-led growth (ELG), economic growth can be model by extending the traditional production function to incorporate the theoretical components of increasing productivity, technological adoption, and diversification associated with exports. The fundamental production function can be written as:

$$Y=A (K, L, X, T) \quad (1)$$

Where Y represents GDP, K is capital, L is labor, X is exports, and T represents technological advancement driven by export activities. In this model, exports (X) not only contribute directly to growth but also promote technological improvements (T), which enhance total factor productivity (A).

3.0 Methodology

The model of Kubalu and Hanif, (2016) was employed in order to evaluate the role of non-oil exports on economic growth in Nigeria. The model was augmented and expressed as Real Gross Domestic product (RGDP) proxy for Economic growth as a function of Non-Oil export (NOEXP), Exchange rate (EXCR) and Gross Fixed Capital formation proxy for capital formation (GFCF). Unit root test or the order of integration among the variables of interest was carried out using both Augmented Dickey-Fuller (ADF) test and Phillips-Perron (PP) test which takes into account serial correlation and Heteroscedasticity. The diagnosis test was carried out to make the study robust.

3.1 Model Specification

The Kubalu and Hanif, (2016) model emphasized the Causal-Nexus and impact of non-oil export on economic growth. Therefore, specification of this model's functional form is expressed as follows:

$$RGDP = F (NOEXP, EXCR, GFCF) \quad (2)$$

The mathematical form for the first model can be expressed as;

$$RGDP_t = \beta_0 + \beta_1 NOEXP_t + \beta_2 EXCR_t + \beta_3 GFCF_t \quad (3)$$

The precise or deterministic relationship between the variables is stated in equation (3) consequently, to account for the inexact relationship, which occurs with most economic variables, the stochastic error term " μ_t " is added to the equation. The models' econometric form is so displayed as follows:

$$RGDP_t = \beta_0 + \beta_1 NOEXP_t + \beta_2 EXCR_t + \beta_3 GFCF_t + \mu_t \quad (4)$$

Where: $RGDP_t$, = Real Gross Domestic product at time t. $NOEXP_t$, = Non-Oil export at time t. $EXCR_t$, = Exchange rate at time t. $GFCF_t$, = Gross Fixed Capital formation at time t.

Stating Equation 3.3 in natural logged form we have Equation 3.4 as shown below:

$$\Delta \ln GDP_t = \beta_0 + \beta_1 \ln NOEXP_t + \beta_2 EXCR_t + \beta_3 GFCF_t + \mu_t \quad (5)$$

Where β_0 is intercept, β_1 is the coefficient of Non-Oil export, β_2 is the coefficient of exchange rate and β_3 is the coefficient of Gross Fixed Capital formation and μ_t is the error term. The Aprior expectation for the relationship among Non-Oil export, exchange rate and capital formation are stated below: . This implies that the coefficient of Non-Oil export, and capital formation

are expected to be positive according to the theory, however > 0 or < 0 , implies that coefficient of exchange rate can either be positive or negative depending on the economic policy on ground

3.2 Source of data

This study employed secondary time series data from 1986 to 2022; hence, the choice of this time period was made based on the availability of data on the study's variables of interest. The study uses real Gross Domestic Product, Non-oil exports, Exchange rate and Capital formation. Thus, data on real Gross Domestic Product and Non-oil exports were sourced from Central Bank of Nigeria's 2022 annual statistical bulletin, while data on exchange rate and capital formation (proxy for gross fixed capital formation) were sourced from World Bank database.

Table 1: Definition and Measurement of Variables

Variable	Definition	Measurement
Economic Growth(RGDP)	The sustained increased in the aggregate production of goods and services in an economy over a period time.	Real Gross Domestic Product (RGDP) in billion Naira.
Non-oil export (NOEXP)	Non-oil export refers to the sale and trade of goods and services that are not derived from petroleum or its by-products to foreign markets.	Volume and value of goods and services exported from a country, excluding any petroleum-related products.
Real Exchange rate (EXCR)	Is the rate that is corrected for inflation measures, that is the ratio of domestic price level to the foreign price level	Real effective exchange rate index (2010 = 100)
Gross Fixed Capital formation (GFCF)	Gross fixed capital formation as proxy for domestic investment is gross outlays by the private sector (including private nonprofit agencies) on additions to its fixed domestic assets.	Percentage of GDP

Source: Authors' Computation Using Eview10

4.0 Result and Discussion

4.1 Descriptive Statistics

The study used descriptive statistics to provide a summary measures and a quick overview of the main features of a variable in the study, which can provide a clear and concise understanding of the data distribution and central tendencies.

Table 2: Descriptive Statistics Result

Variables	RGDP	NOEX	EXCR	GFCF
Mean	4.301207	11.73262	70.90590	45.25965
Median	4.230061	10.90435	22.06540	25.96315
Maximum	15.32916	23.24167	158.9834	183.8531

Minimum	-2.035119	5.692500	0.546781	0.405056
Std. Dev.	3.731934	3.748556	65.47026	52.38619
Skewness	0.566187	0.953058	0.160249	1.113807
Kurtosis	3.657094	4.031858	1.214489	3.139595
Jarque-Bera	2.642481	7.242762	5.073269	7.680194
Probability	0.266804	0.026746	0.079132	0.021492
Sum	159.1447	434.1070	2623.518	1674.607
Sum Sq. Dev.	501.3839	505.8602	154308.8	98795.26
Observations	37	37	37	37

Source: Authors' Computation Using Eview 10

The variables notations are: Gross Domestic Product (Economic Growth), NOEXP (Non-oil export), EXCR (real effective exchange rate) and GFCF (gross fixed capital formation). The result above reveals the nature of the variables in their raw form, the mean and median measure the central tendency of the variables set. The result it shows that the average value of the variables are as follows; economic growth has mean value of 4.301207, non-oil export is 11.73262, real effective exchange rate is 70.90590, and gross fixed capital formation is 45.25965. The median represent the middle values of the variables sorted from the highest to the lowest value. The deviation in the data set is measure by the standard deviation which measures the dispersion of the data set from the sample average, and the result for shows that economic growth has value of 3.731934, non-oil export is 3.748556, real effective exchange rate is 65.47026, and gross fixed capital formation is 52.38619. The control variables are exchange rate and gross fixed capital formation and the total sample of the data is 37 years from 1986 to 2022. From the probability value only Real GDP is not significant which means all the rest of the variables are significant from the probability value. This means that RGDP has a normal distribution from the sample mean. This study carried out more examination to check for the potency and robustness.

4.2 Correlation Analysis

The analysis also shows whether there exists high-order of linear correlation among the independent variables.

Table 3: Correlation Matrix Result

Variables	GDP	NOIL	EXCR	GFCF
GDP	1.000000			
NOIL	0.121753(0.4728)	1.000000		
REER	0.002277(0.9893)	-0.653912	1.000000	
		0.0000	-----	
GFCF	-0.09213(0.5876)	-0.51238(0.0012)	0.880360	1.000000
			0.0000	-----

Authors' Computation Using Eview 10

The correlation among the economic growth, non-oil export, exchange rate and gross fixed capital formation give insight in predicting the possibility of having Multicollinearity in the

estimated model. Putting into consideration the effect of non-oil export, exchange rate and gross fixed capital formation on economic growth, from the probability values indicate that the null hypothesis of no correlation among pairs of variables is rejected variables. However, the result from the correlation result as depict in table 3 cannot be used for inferential purposes because it gives only the magnitude and direction of Pairwise association in a linear sense which can change when non-normality exists, thus there is need for further investigation.

4.3 VAR Order Lag Selection Criteria

Prior the estimation of the non-oil export and economic growth, the appropriate lag would be selected for the ARDL model using the underlined information criteria based on log likelihood of the model as depicted in table 4 below

Table 4: Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-376.7594	NA	1987018.	23.01572	23.15177	23.06150
1	-344.0210	57.54027	473066.3	21.57703	22.12121*	21.76013
2	-329.9280	22.20704*	353046.9*	21.26837*	22.22069	21.58879*
3	-322.0608	10.96644	393298.2	21.33702	22.69748	21.79477
4	-313.5393	10.32915	436907.0	21.36602	23.13462	21.96110

Authors' Computation Using Eview 10

statistics (each test at 5% level), the * indicates lag order selected by the criterion of the final prediction error (FPE), Akaike information criterion (AIC), Schwarz information criterion (SC) and Hannan-Quinn information criterion (HQ). The appropriate or selected model base on the number of lags is lag 2 which has the smallest value according to the Akaike information criterion (AIC) information criteria.

4.4 Stationarity Analysis

The unit root properties of the series; at their natural logarithm is examine which are non-oil exports, exchange rate were investigated using Augmented Dickey Fuller (ADF-test) test and Phillips-Perron (PP-test) unit root test.

Table 5: Unit Root Test Results

	ADF	Test	PP-Test			
	Result		Result			
	At-Level	At-First Diff	I(d)	At-Level	At-First Diff	I(d)
RGDP	-3.60**	-----	I(0)	-----	-3.75***	I(1)
NOEXP	-3.59**	-----	I(0)	-3.70**	-----	I(0)
EXCR	-3.50**	-----	I(0)	-3.73**	-----	I(0)
GFCF	-----	-4.68***	I(1)	-----	-4.73***	I(1)

Source: Authors' Computation Using Eview 10

Table 5 presents the unit root result using both Augmented Dickey Fuller (ADF-test) test and Phillips-Perron (PP-test) unit root test. The results indicate that real gross domestic product

Real GDP is stationary at level when using Augmented Dickey-Fuller (ADF) test with a trend and intercept, but stationary at the first difference under the Phillips-Perron (PP) test with an intercept at 1% significance level. Furthermore, Non-oil exports (NOEXP) and real exchange rate (EXCR) are found to be stationary at level for both the ADF and PP tests under a test equation with trend and intercept at the 5% significance level. Gross fixed capital formation (GFCF) is stationary at first difference with intercept at 1% significance level for both ADF and PP tests. Consequently, the null hypothesis of a unit root is rejected for all variables, concluding that they are stationary.

4.5 ARDL Long Run Result

The long run relationship between the economic growth, non-oil export, exchange rate and gross fixed capital formation is estimated.

Table 7: ARDL Long Run Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-9.643610	3.550957	-2.715777	0.0167
GDP*	-0.891612	0.229237	-3.889473	0.0016
NOEXP	0.308102	0.082352	3.741272	0.0022
REER	0.112040	0.035249	3.178565	0.0067
GFCF	0.003369	0.039757	0.084745	0.9337

Authors' Computation Using Eview 10

The long run result revealed that the coefficient of non-oil export is positive and statistically significant at 5% significance level, this implies that one percent increase in non-oil export will lead to 0.308102-unit increase in economic growth in the long run, meaning that non-oil export significantly contributes to economic growth. This is consistent with the results of Ideh et al., (2021), but contradicts those of Kabiru et al., (2024) who found insignificant and negative relationship between non oil export and economic growth.

Furthermore, from the long run result it revealed that exchange rate positively influences economic growth, that is one percent increase in exchange rate leads to 0.112040 unit increase in economic growth in the long run, and the finding is statistically significant, from the probability value of 0.0067 which is less than 5% significance level, this implies that a positive fluctuation in exchange rate increases economic growth and this is also consistent with the results of Ideh et al., (2021), but contradicts those of Kabiru et al., (2024) who found insignificant and negative relationship between non oil export and economic growth.

However, the coefficient of gross fixed capital formation is positive and statistically not significant at 5% significance level, meaning that one percent increase in gross fixed capital formation leads to 0.003369 unit increase in economic growth, and the result is in line with the finding of Bamidele and Joseph (2019) who examined the influence of gross fixed capital formation on Nigeria's economic growth and determined that a 1% increase in capital formation resulted in a 5.6% increase in GDP, although the result is statistically not significant. Finally, Adefeso and Okoli (2022) provided further evidence showing that the impacts of exchange rates and capital formation on GDP are positive although it is statistically not significant. These studies collectively validate the result of this study on the positive relationship between economic growth, non-oil export and gross fixed capital formation.

4.5 ARDL Short Run Dynamic Result

The Short run dynamic and error correction form of the model is estimated to examine the short run effect of the explanatory variables of the dependent variable as well as the speed of adjustment of the model.

Table 8: ARDL Short Run Dynamic Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RGDP(-1))	0.257635	0.127257	2.024520	0.0624
D(NOEXP)	0.086238	0.029652	2.908337	0.0115
D(NOEXP(-1))	0.136472	0.038091	3.582795	0.0030
D(EXCR)	0.137905	0.034086	4.045793	0.0012
D(EXCR(-1))	-0.075225	0.029155	-2.580184	0.0218
D(GFCF)	0.164841	0.133333	1.236316	0.2367
D(GFCF(-1))	-1.217731	0.208005	-5.854327	0.0000
CointEq(-1)*	-0.891612	0.146102	-6.102657	0.0000

Authors' Computation Using Eview 10

To examine the impact of non-oil export, exchange rate and gross fixed capital formation on economic growth in the short run, the short run dynamic for the autoregressive distributive lag model depicted in table 8 above shows that, the coefficient of non-oil export exhibit positive relationship to economic growth, meaning that one percent increase in non-oil export leads to 0.086238 increase in economic growth in the short run, that is increase in economic activities of other sectors of the economy improve trade balance by creating more employment opportunities thereby leading to more output, and from the probability values of less than 5% the result is statistically significant. Again, the first lag of non-oil export shows a larger effect on economic growth, meaning that at one percent increase in non-oil export, increases economic growth by 0.136472 unit in the short run, and this finding is in conformity with the finding of Kromtit et al., (2017) and that of Esiaka et al., (2021) whose found positive and significant effect of non-oil export on economic growth.

The exchange rate exhibit positive relationship with economic growth in the short run that is one percent increase in inflation and exchange rate would result to 0.137905 increases in economic growth. However, the coefficient of gross fixed capital formation is positive, meaning that one percent increase in gross fixed capital formation leads to 0.164841 increase on economic growth in short run, and from the probability value the result is statistically not significant at 5% significance level, however, the first lag of gross fixed capital formation exhibit negative relationship with economic growth, meaning one percent increase in gross fixed capital formation leads to -1.217731 decrease in economic growth and from result is statistically significant at 5% significance level. This negative effect on economic growth can be attributed from misallocation of resources, that is if capital is invested in projects that do not generate adequate returns such as poorly planned infrastructure or inefficient industries this can lead to stagnation or decline in economic growth and again, short-term focus of firms within the economy that prioritize short-term gains over long-term investments, leading to capital formation that does not support sustainable growth.

Furthermore, the coefficient of error correction term (ECT) is negative and statistically significant which signifies the speed of adjustment, the coefficient is residual obtained in the

model which is the cointegration lagged of one period. The adjustment term coefficient is negative -0.891612 and statistically significance at 5% significance level, it shows that there is going to be convergence to equilibrium, which means that the disequilibrium would corrected at adjustment speed of 89% percent in the current quarter.

4.7 Post Estimation Diagnostics Test Results

To assess the model's adequacy, several diagnostic tests were performed: The Jarque-Bera test for normality, the Breusch-Godfrey LM test for serial correlation, the ARCH test for Heteroscedasticity, and the Ramsey test for model specification. Therefore, the results of these tests are detailed in Table 9.

Table 9: Post Estimation Diagnostics Test Results

Type of Diagnostics (Test)	F-Statistics	Prob V.
Breusch-Godfrey Serial Correlation LM Test	1.651580	0.2211
Heteroscedasticity Test: Breusch-Pagan-Godfrey	1.288116	0.3011
Normality: J-Bera/Skewness/ Kurtosis	1.62595/0.1826/4.04196	0.44363
Functional form: Ramsey Reset Test	3.506518	0.775011
Stability: Cusum	Stable	0.963400
Stability: Cusum of Square	Stable	0.567800

Authors' Computation Using Eview 10

Table 9, shows that the diagnostics for autocorrelation, using Breusch-Godfrey, the F-statistics is 1.651580 and the probability value of 0.2211, this shows no evidence of serial correlation in the model, thus the null hypothesis of residual are serial correlated is rejected.

Furthermore, the diagnostic result for the Heteroscedasticity using Breusch-Pagan-Godfrey test, with F-statistics of 1.288116 with the probability value of 0.3011 this shows evidence homoskedasticity in the model, thus, the null hypothesis of residual are Heteroskedasticity is rejected. Again, the result of normality distribution and statistics based on the following statistics, which are Skewness of 0.182639, Kurtosis of 4.04196 with a Jarque-Bera value of 1.625495. The probability of 0.8030, which reveals that residual are normally distributed. From the functional form test of the model using Ramsey reset test, the F statistics is 3.506518 and the probability value is 0.775011 shows that the model is correctly specified.

5.0 Conclusion and Recommendation

The study found that non-oil exports significantly contribute to Nigeria's economic growth, by 0.31% supporting previous studies that highlight the importance of non-oil exports in economic diversification. However, it also revealed that while exchange rates and gross fixed capital formation positively influence RGDP growth, this is consistent with the results of Ideh et al., (2021), but contradicts those of Kabiru et al., (2024) who found insignificant and negative relationship between non oil export and economic growth.

The study recommended the following:

1. Policies and initiatives should be directed aimed at enhancing export diversification as a strategy for sustainable economic development.

2. Exchange rates and capital formation positively influence economic growth, thus highlighting the need for a more comprehensive economic policy that addresses multiple growth-driving factors. To capitalize on the potential of non-oil exports, Nigeria should invest in improving infrastructure, reducing bureaucratic hurdles, and providing better access to financing for businesses in the non-oil sector.
3. The capacity and competitiveness of non-oil industries, such as agriculture, manufacturing and services, to sustain and boost their contributions to economic growth in Nigeria should be reinforced.

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