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Governance and Export Growth in Nigeria

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Abstract

This study examined the effects of governance on export growth in Nigeria using an annual time series data from 1996 to 2022, analysed by autoregressive distributed lag model (ARDL). The study discovered that control of corruption has a significant negative short-run impact and insignificant positive long-run effect on non-oil export growth, while having significant positive short and long-run effects on oil export growth. Government effectiveness has significant positive short and long-run effects on non-oil export growth, and a positive but insignificant effect on oil export growth both in the short and long run periods. Also, Political Stability and Absence of Violence/Terrorism index has significant positive short-run and insignificant long run effects on non-oil export growth in Nigeria, while this variable has an insignificant positive impact on oil export growth in both the short and long run periods. Based on these findings, the study recommends that government should place a mechanism, such as implementing the Petroleum Industry Governance Act, that is capable of reducing corruption and increasing transparency in the Nigerian oil industry. Also, Infrastructure development, including roads, airports, and seaports, should be government priority to reduce transportation costs and facilitate the flow of export products. Finally, government should improve the security infrastructure of the country to improve the business environment capable of encouraging export activities.

Keywords: Governance, Non-oil export, Oil export

INTRODUCTION

Export growth is an important indicator of a country's economic health and can significantly affect job creation and income generation. Furthermore, a country's ability to export goods and services can impact its international standing and influence. Strong export performance can bolster a nation's reputation as a reliable trading partner and enhance its geopolitical clout. In addition, the revenue generated from exports can provide vital resources for investment in infrastructure, education, and healthcare (Alvarez *et al.,* 2018; Gries & Grundmann, 2020; Hassan *et al.,* 2019; Shahzad *et al.,*2022). Export growth refers to the increase in the value of goods and services a country exports over time. Export growth is

influenced by various factors that can differ from country to country. Some key drivers of export growth include a country's natural resources, technological advancements, and trade policies. Additionally, factors such as governance, infrastructure development, and access to financing can also play a role in boosting export growth. Government policies can also impact export growth by facilitating or hindering trade between countries (De-Ferranti *et al.,* 2002; Isham *et al.,* 2005; Qiao *et al.,* 2023; Sultanuzzaman *et al.,* 2019).

Governance refers to how rules, norms, and actions are structured, sustained, regulated, and held accountable. It is the process of making and enforcing decisions within an organization or society. Governance indicators are tools used to measure and assess the quality of governance in countries and organizations. The Worldwide Governance Indicators (WGI) is a set of composite indicators covering six governance dimensions: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, the rule of law, and control of corruption. Good governance can positively impact export growth in developing countries especially, while poor governance can negatively impact export growth. Good governance practices that promote transparency and reduce corruption can lead to an increase in export expansion. This is because transparency and accountability in government institutions create a conducive environment for businesses to thrive. When businesses are confident that they can operate without fear of being subjected to corrupt practices, they are more likely to invest in the country, ultimately leading to increased economic growth and export growth. On the other hand, poor governance can discourage foreign investment and limit export growth. This is because corrupt practices such as bribery and embezzlement can increase business costs, making it less attractive for foreign investors. Poor governance can also lead to political instability, further discouraging investment and hindering economic growth (Admed *et al.,* 2014; Cooray,2009; Huaug & Ho. 2017; Kamal & Batool, 2021; Nguyen & Wu, 2020). This study captured governance by using the World governance indicators of the World Bank developed by Kauffman *et al.,* (2007). Three of the six indicators (Absence of terrorism and political stability, government effectiveness, control of corruption and are used to capture governance.

Nigerian oil export share of total export accounts for the largest component of its total exports, from 1996 to 2000, the average of oil export share of total export stood at 97.68 % while non-oil export share of total export stood at 2.32 percent; control of corruption index, political stability and absence of violence/terrorism index and government effectiveness index stood at -1.20, --1.14 and -1.01 respectively. During this period, oil export growth rate stood at an average of 23.86 % while non-oil export rowth rate stood at 5.48 percent. This indicated that between 1996 to 2000, oil export growth rate was higher than non-oil export growth rate by a growth rate differential of 18.36%. Between 2001 to 2005, the average of oil export share of total export stood at 97.22 % while non-oil export share of total export stood at 2.78 percent; control of corruption index, political stability and absence of violence/terrorism index and government effectiveness index stood at -1.36, -1.66 and -0.95 respectively. This showed that during this period oil export recorded a marginal declined while non-oil export recorded a marginal

increment in terms of share of total export. In term of growth rate, the average growth rate of oil export growth rate stood at 35.19 % while non-oil export growth rate stood at 52.83%. This indicated that between 2001 to 2005, non-oil export growth rate was higher than oil export growth rate by a growth rate differential of 17.64% (World Bank's World Development Indicators, 2022).

Between 2006 to 2010, the average of oil export share of total export stood at 95.80 % while non-oil export share of total export stood at 4.20 percent; control of corruption index, political stability and absence of violence/terrorism index and government effectiveness index stood at -1.04, 2.02 and -1.08 respectively. In term of growth rate, the average growth rate of oil export growth rate stood at 11.34 % while non-oil export growth rate stood at 55.27%. This indicated that between 2006 to 2010, non-oil export growth rate was higher than oil export growth rate by a growth rate differential of 43.93 %. Between 2011 to 2015, the average of oil export share of total export stood at 93.19 % while non-oil export share of total export stood at 6.81 percent; control of corruption index, political stability and absence of violence/terrorism index and government effectiveness index stood at -1.19, -2.03 and -1.05 respectively. In term of growth rate, the average growth rate of oil export growth rate stood at -4.29 percent while non-oil export growth rate stood at 1.39 percent. This indicated that between 2011 to 2015, non-oil export growth rate recorded a positive growth and was higher than oil export growth rate which recorded a negative growth rate by a growth rate differential of 5.68 percent(WBWDI, 2022) .

Between 2016 to 2022, the average of oil export share of total export stood at 89.79 % while non-oil export share of total export stood at 10.24 percent; control of corruption index, political stability and absence of violence/terrorism index and government effectiveness index stood at -1.06, -1.96 and -1.10 respectively. In term of growth rate, the average growth rate of oil export growth rate stood at 10.9 % while non-oil export growth rate stood at 33.84%. This indicated that between 2016 to 2020, non-oil export growth rate was higher than oil export growth rate by a growth rate differential of 22.94%. and Between 2021 to 2023, the average of oil export share of total export stood at 88.62 % while non-oil export share of total export stood at 11.98 percent; control of corruption index, political stability and absence of violence/terrorism index and government effectiveness index stood at -1.09, -1.82 and -1.03 respectively. In term of growth rate, the average growth rate of oil export growth rate stood at 48.04 % while non-oil export growth rate stood at 40.71%. This indicated that between 2021 to 2023, oil export growth rate was higher than non-oil export growth rate by a growth rate differential of 7.37% (WBWDI, 2022).

The study's main objective was to examine the impact of governance on export growth in Nigeria while the specific objectives were to examine the following: The effects of absence of terrorism and political stability on oil export and non-oil export growth respectively in Nigeria. The effects of government effectiveness on oil export growth and non-oil export growth respectively in Nigeria, and the effects of control of corruption on oil export growth and non-oil export growth respectively in Nigeria (Akpan & Udo 2022).

Sujianto *et al.,* (2023) examined the effect of the human development index and good governance practices on exports in several ASEAN countries using panel data from 2010 to 2021. The study estimated a regression panel and found that human development affects exports. While some good governance practice variables, including political stability and the absence of violence/terrorism, and regulatory quality can explain exports in several ASEAN countries. However, voice and accountability, government effectiveness, and the rule of law do not affect exports. The analysis shows that, simultaneously, the human development index and good governance practices affect exports in several ASEAN countries.

Munemo (2022) examined the impact of regulation-driven trade barriers on export entrepreneurship in a panel of 60 countries between 2006 and 2014. The paper finds robust evidence that unfavourable trade regulations significantly reduce the export entry rate and export entry density (two critical measures of export entrepreneurship) by increasing the time and cost associated with documentary and customs compliance procedures. These findings support the hypothesis that less conducive business regulations are an important domestic supply constraint which impedes export entrepreneurship by increasing trade costs. In addition, the paper finds that the magnitude of the negative relationship between export entrepreneurship and regulation-driven trade barriers is significantly more pronounced in countries with poor governance quality. Two measures of governance quality (i.e., political stability and rule of law) are shown to be relatively more significant in aiding favourable trade regulations that promote export entrepreneurship. Furthermore, a reduction in regulation-driven trade barriers has a positive impact on the net entry rate and survival rates of first-, second- and third-year exporters and high-quality governance institutions significantly increase the magnitude of this positive relationship (Udo *et al.,* 2024)..

Sabry (2022) examined the effect of good governance in exporting to the highly competitive markets of developed countries, especially those committed to a developmental mission centred on promoting good governance using the two-stage least-squares and Poisson pseudo maximum likelihood models. Different indicators of German exports are used as dependent variables while the independent variables are various governance indicators. The study found that good governance generally boosts Arab exports to Germany relatively more than it does for non-Arab exporters to Germany. This is especially true for governance indicators that directly affect exporting activities, such as regulatory quality and government effectiveness. For some indicators that indirectly affect exporting, however, the results are mixed for both Arab and non-Arab countries, especially for the textile industry.

Dubey and Das (2022) investigated the effect of governance on the export performance of small and medium enterprises (SME) firms in India. The study used descriptive analysis and found that would surge for SMEs given the governance structures considered. The authors consider several governance modes and two types of product classifications, namely, products and services. The study found conditional support for the two models – indicating that governance structures do not consistently support finding new markets. Further, given the governance structure, export performance is not consistently a means to improve performance.

This is contrary to the expectations. However, at the same time, the study found evidence that governance matters and affects products and services differently.

Bah *et al.,* (2021) investigated the effects of governance quality on exports in sub-Saharan African countries. The study employed the six worldwide governance indicators (i.e. voice and accountability, political stability, regulatory quality, rule of law, control of corruption, and government effectiveness) as explanatory factors for exports and its components in a sample of 45 countries over the period 1996-2019. The system GMM method was employed as an estimation technique and the study found that total exports and exports of services are positively affected by the six governance indicators, while manufactured goods are positively associated with those indicators except government effectiveness. While political stability, voice and accountability, rule of law, and control of corruption have positive effects on exports of goods, only voice and accountability effects positively primary commodities.

Arif *et al.,* (2021) examined the impact of export and political stability on economic growth in D8 member countries using panel regression analysis. The study found that there is no impact between exports on economic growth. However, political stability had an impact on economic growth in developing countries. This result implies that the government should increase political stability to accelerate growth.

Soussi *et al.,* (2021) examined the effects of governance on the performance of agri-food exporting SMEs in Morocco using a sample of food SMEs in Agadir city and found that a good governance system improves export performance and accelerates the process of SME internationalization.

Moradi *et al.,* (2020) investigated the effect of corporate governance mechanisms on export performance using a sample of ninety-eight export companies listed on the Tehran Stock Exchange from 2010 to 2016 in Iran. Data mining and statistical analysis are used to test the research hypotheses. This paper operationalizes the corporate governance mechanisms by the board of directors' independence, the concentration of ownership, and institutional investors. It further operationalizes export performance by export sales, export sales intensity, and the volume of export sales. The results show that ownership concentration has a significant effect on export sales. Furthermore, institutional investors have a significant effect on the volume of export sales.

Nguyen and Wu (2020) examined the correlation between Vietnam's export efficiency and bilateral-specific governance performance indicators covering the period 1996 to 2014. The study found that Vietnam's export efficiency is positively correlated with the bilateral governance indicator and regional trade agreements, but negatively correlated with tariffs in the importing countries. The performance of Vietnam's export efficiency also displays an overall increasing trend, with some fluctuation before 2005 and a gradual rise afterwards.

An export-led growth strategy is one where a country seeks economic development by opening itself up to international trade (Malefane, 2021; Mora & Olabisi, 2022). This approach involves producing goods and services that are in demand globally and selling them to other countries. Export-led growth allows countries to tap into larger markets and benefit from economies of scale. Nigeria has shifted from an import substitution development strategy,

popular in the 1970s among developing countries, to an export promotion development strategy (Duma, 2023; Kedir, 2023). This involves diversifying the Nigerian export base from oil-dominated export, into non-oil export promotion. Non-oil exports refer to the export of goods and services unrelated to the oil industry.

Hecksher Ohlin's Theory states that a country should export only those goods which she has abundant resources to produce in the country and for which the means of production factors can be utilized more intensively. This theory is based on the idea that countries have different endowments of resources, such as land, labour, and capital. Therefore, a country should specialize in producing goods using abundant resources more efficiently. The Hecksher-Ohlin Theory also suggests that trade can benefit both countries involved by allowing them to exchange goods in which they have a comparative advantage. This means that each country can produce the goods for which it has the lowest opportunity cost and trade them for other goods produced more efficiently by its trading partner (Lancaster, 1957). However, critics argue that this theory oversimplifies the complexities of international trade and does not consider factors such as transportation costs, economies of scale, and government policies. However, another debate that is currently going on among scholars who have gone on to present empirical evidence is the role of governance in export growth (Bah *et al.,* 2021; Chand *et al.,* 2020; Chishti et al..,2021; Eegunjobi & Ngepah,2022; Hernández *et al.*,2022; Martínez-Zarzoso & Márquez-Ramos,2019; Sabry, 2022; Sharma *et al.*,2020; Zongo & Oyelami,2021).

RESEARCH METHODOLOGY

The study adopted an ex post facto research design. This type of research design uses empirical estimation methods to estimate the causal relationship between the dependent variable and the independent variables by examining existing conditions and searching back in time for plausible causal factors. To ensure robust analysis, the study employed relevant econometric techniques (Autoregressive distributed lag modelling method) for model estimation and analysis.

Pre-estimation tests, unit root, and co-integration tests (Bounds test) were conducted to determine the stationarity condition and the extent of long-run relationships among the study variables.

Model specification

This study is anchored on the Heckscher-Ohlin theory of international trade and endogenous growth theory. The Heckscher-Ohlin theory of international trade posits that the specific natural resources, land, capital, and human resources which a country has in abundance will give it an advantage in producing and exporting a particular commodity. Endogenous growth theory posits that economic growth is generated from internal forces within a system as a direct result of investment in human capital, knowledge and innovation. More specifically, the theory notes that enhancing a nation's human capital and knowledge-based economy will lead to economic growth by developing new forms of technology and efficient and effective means of

production. The endogenous growth theory primarily posits that the long-run growth rate of an economy depends on policy initiatives such as subsidies for education, research and development and increasing incentives for innovation. With these theoretical foundations, the basic endogenous model, which is of a similar structural form to the exogenous model, is presented as:

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

Where:

Y= aggregate output in the economy; K = capital; L = labour; and A = Technological progress or total factor productivity.

In the study context, the model will be augmented with governance indicators and some controlled variables, and Y will be substituted for non-oil export growth and oil export growth respectively. Since growth (RGDP) is a function of capital, labour and technological progress, it is represented in the export models here as RGDP, one of the factors that influence exports. Thus functionally, the non-oil export growth-governance equation and oil export growth-governance equation are stated in equations 2 and 3 respectively as follows:

$$NOXGR = f(RGDP, EXR, INVS, POL, COC, COEFF) \quad (2)$$

$$OXGR = f(RGDP, EXR, INVS, POL, COC, COEFF) \quad (3)$$

Where:

NOXGR = non-oil export growth rate, measured in percentage

OXGR = oil export growth rate, measured in percentage

F= functional notation

RGDP = real gross domestic product, proxy for economic growth, measured in naira

EXR =exchange rate, measured by units of naira by one US dollar

INVS = total investment, the sum of domestic investment and foreign direction investment, measured in Naira.

POL = Political Stability and Absence of Violence/Terrorism index. Ranging from the scale of -2.5 to 2.5.

COC = control of corruption index. Ranging from the scale of -2.5 to 2.5.

COEFF = government effectiveness index. Ranging from the scale of -2.5 to 2.5.

The mathematically specification of equation (2) is given as:

$$NOXGR_t = \alpha_0 + \alpha_1 RGDP_t + \alpha_2 EXR_t + \alpha_3 INVS_t + \alpha_4 POL_t + \alpha_5 COC_t + \alpha_6 COEFF_t \quad (4)$$

The econometric specification of equation (4) is given as:

$$NOXGR_t = \alpha_0 + \alpha_1 RGDP_t + \alpha_2 EXR_t + \alpha_3 INVS_t + \alpha_4 POL_t + \alpha_5 COC_t + \alpha_6 COEFF_t + \mu_t \quad (5)$$

Equation 5 can be written in linear log form, because the some of the variables involve are dominated in percentage and some at level, as thus:

$$NOXGR_t = \alpha_0 + \alpha_1 \log (RGDP)_t + \alpha_2 EXR_t + \alpha_3 \log (INVS)_t + \alpha_4 POL_t + \alpha_5 COC_t + \alpha_6 COEFF_t + \mu_t \quad (6)$$

Where:

μ_t is the error term which represents all other variables that affect non-oil export not captured by the equation with NOXGR as dependent variable.

α_0 is the constant term while α_1, α_2, α_3, α_4, α_5, and α_6 are parameters of log(RGDP), EXR, log(INVS), POL, COC and GOVEFF respectively.

The mathematically specification of equation (3) is given as:

$$OXGR_t = \beta_0 + \beta_1 RGDP_t + \beta_2 EXR_t + \beta_3 INVS_t + \beta_4 POL_t + \beta_5 COC_t + \beta_6 COEFF_t \quad (7)$$

The econometric specification of equation (7) is given as:

$$OXGR_t = \beta_0 + \beta_1 RGDP_t + \beta_2 EXR_t + \beta_3 INVS_t + \beta_4 POL_t + \beta_5 COC_t + \beta_6 COEFF_t + e_t \quad (8)$$

Equation 8 can be written in linear log form, because the some of the variables involve are dominated in percentage and some at level, as thus:

$$OXGR_t = \beta_0 + \beta_1 \log (RGDP)_t + \beta_2 EXR_t + \beta_3 \log (INVS)_t + \beta_4 POL_t + \beta_5 COC_t + \beta_6 COEFF_t + e_t \quad (9)$$

Where:

e_t is the error term which represents all other variables that affect oil export not captured by the equation with OXGR as dependent variable.

β_0 is the constant term while β_1, β_2, β_3, β_4, β_5, and β_6 are parameters of log (RGDP), EXR, log (INVS), POL, COC and GOVEFF respectively.

Presentation and Analysis of Descriptive Data

Descriptive statistics

The result of the descriptive statistics of NOXGR, OXGR, COC, EXR, GOVEFF, INVS, POL and RGDP is presented in Table 1. The mean or average value of NOXGR, OXGR, COC, EXR, GOVEFF, INVS, POL and RGDP over the study period stood at 30.57%, 17.82 %, -1.16 rank, N178.97, -1.038 rank, N12,300 billion, -1.77 rank and N75,500 billion respectively. The maximum value of NOXGR, OXGR, COC, EXR, GOVEFF, INVS, POL and RGDP over the study period stood at 238.22%, 81.46 %, -0.90 rank, N443.67, -0.90 rank, N38,200 billion, -0.5882 rank and N230,000 billion respectively. The minimum value of NOXGR, OXGR, COC, EXR, GOVEFF, INVS, POL and RGDP over the study period stood at -51.50%, -40.80 %, -1.50

rank, N21.88, -1.200 rank, N1,500 billion, 2.211 rank and N3,53 billion respectively. The analysis of the skewness of the variables as shown in Table 1 showed that the variables NOXGR, OXGR, EXR, INVS, POL and RGDP were skewed to the right as evidenced by their respective positive values of skewness. This implies that the mean values of NOXGR, OXGR, EXR, INVS, POL and RGDP were greater than their respective median values, implying that they were higher than their sample mean. While COC and GOVEFF were skewed to the left as evidenced by their respective negative values. This implies that the mean values of COC and GOVEFF were greater than their respective median values, implying that they were lower than their sample mean. The kurtosis analysis also in table 1 showed the distribution of the variables used in the study. The kurtosis analysis showed that NOXGR, COC, EXR, INVS and POL were leptokurtic, which implies that the respective kurtosis values of these variables were greater than 3, that is, it peaked and possessed a thick tail. This indicates that there is a possible outlier in the NOXGR, COC, EXR, INVS and POL variables. But OXGR, GOVEFF and RGDP were platykurtic, meaning that their respective kurtosis values were less than 3 which implies that OXGR, GOVEFF and RGDP respectively are normally distributed.

Table 1: Descriptive statistics, 1996 -2022

	NOXGR	OXGR	COC	EXR	GOVEFF	INVS	POL	RGDP
Mean	30.5728	17.8171	-1.1648	178.9716	-1.0378	12,300,000,000,000	-1.7685	75,500,000,000,000
Median	22.8287	12.7855	-1.1600	148.8800	-1.0200	9,590,000,000,000	-1.8741	53,200,000,000,000
Maximum	238.2241	81.4616	-0.9000	443.6700	-0.9000	38,200,000,000,000	-0.5882	230,000,000,000,000
Minimum	-51.5001	-40.8011	-1.5000	21.8844	-1.2000	1,500,000,000,000	-2.2111	3,530,000,000,000
Skewness	1.8302	0.0768	-0.6735	0.9555	-0.2873	1.1294	1.6369	1.0642

Kurtosis	6.6938	1.8816	3.1696	3.0947	1.9060	3.0862	5.5431	2.9577
Obs	27	27	27	27	27	27	27	27

Source: computation by Author, 2024, with the assistance of E-view 9.

The Correlation Matrix of the Study's Variables

The correlation matrix of the study's variables is presented in table 2 and the result of the correlation coefficient between NOXGR and COC is -0.0902. This revealed that there is a very weak negative correlation or association between NOXGR and COC. The result of the correlation coefficient between NOXGR and EXR is 0.0033. This revealed that there is a very weak positive correlation or association between NOXGR and EXR. The result of the correlation coefficient between NOXGR and GOVEFF is 0.0187. This revealed that there is a very weak positive correlation or association between NOXGR and GOVEFF. The result of the correlation coefficient between NOXGR and INVS is 0.0442. This revealed that there is a very weak positive correlation or association between NOXGR and INVS. The result of the correlation coefficient between NOXGR and POL is -0.1139. This revealed that there is a very weak negative correlation or association between NOXGR and POL. the result of the correlation coefficient between NOXGR and RGDP is -0.0209. This revealed that there is a very weak negative correlation or association between NOXGR and RGDP. The result of the correlation coefficient between OXGR and COC is -0.1549. This revealed that there is a very weak negative correlation or association between OXGR and COC. The result of the correlation coefficient between OXGR and EXR is 0.0696. This revealed that there is a very weak positive correlation or association between OXGR and EXR. The result of the correlation coefficient between OXGR and GOVEFF is 0.3521. This revealed that there is a very weak positive correlation or association between OXGR and GOVEFF. The result of the correlation coefficient between OXGR and INVS is -0.0770. This revealed that there is a very weak negative correlation or association between OXGR and INVS. The result of the correlation coefficient between OXGR and POL is -0.1053. This revealed that there is a very weak negative correlation or association between OXGR and POL. The result of the correlation coefficient between OXGR and RGDP is 0.0045. This revealed that there is a very weak positive correlation or association between OXGR and RGDP.

Table 2: Correlation matrix of the study's variables

	NOXGR	OXGR	COC	EXR	GOVEFF	INVS	POL	RGDP
NOXGR	1	-0.0063	-0.0902	0.00332	0.01867	0.04422	-0.1139	-0.0209
OXGR	-0.0063	1	-0.1549	0.06962	0.35214	-0.077	-0.1053	0.00454
COC	-0.0902	-0.1549	1	0.3765	-0.3655	0.45528	0.15563	0.43239

EXR	0.00332	0.06962	0.3765	1	-0.2891	0.93714	0.02511	0.98728
GOVEFF	0.01867	0.35214	-0.3655	-0.2891	1	-0.3954	-0.045	-0.316
INVS	0.04422	-0.077	0.45528	0.93714	-0.3954	1	-0.0353	0.95847
POL	-0.1139	-0.1053	0.15563	0.02511	-0.045	-0.0353	1	0.04563
RGDP	-0.0209	0.00454	0.43239	0.98728	-0.316	0.95847	0.04563	1

Source: computation by Author, 2024, with the assistance of E-view 9.

Presentation and Analysis of Econometric Results

Unit Root Test Results

Table 3: Unit Root Test Summarized Result Results: ADF and PP

Variable	At level		After first difference		Remark
	ADF	PP	ADF	PP	
COC	-2.2022	-2.4123	-5.1641	-4.8197	I(1)
	(0.4688)	(0.3652)	(0.0027)	(0.0037)	
EXR	-0.1666	-0.9523	-4.3475	-4.0766	I(1)
	(0.9900)	(0.9338)	(0.0111)	(0.0190)	

GOVEFF	-3.9586	-3.9598	NE	NE	I(0)
	(0.0237)	(0.0236)			
Log(INVS)	-2.1343	-2.1343	-4.7363	-4.7233	I(1)
	(0.5040)	(0.5040)	(0.0045)	(0.0046)	
NOXGR	-5.7125	-5.7125	NE	NE	I(0)
	(0.0005)	(0.0005)			
OXGR	-5.1122	-4.1808	NE	NE	I(0)
	(0.0019)	(0.0147)			
POL	-5.0790	-5.0787	NE	NE	I(0)
	(0.0018)	(0.0018)			
Log(RGDP)	-2.5429	-2.7812	-4.5348	-5.4771	I(1)
	(0.3068)	(0.2159)	(0.0074)	(0.0008)	

Figures in brackets are corresponding probability values of ADF and PP statistics.

NE stands for "not estimated", this is for variables whose series was stationary at level and there was no need to go further.

Source: Computation by Author, 2024, with the assistance of E-view 9.

The unit root result is presented in Table 3. The table shows both the ADF and PP unit root test results for all the variables, and it shows that GOVEFF, NOXGR, OXGR and POL variables were stationary at a level while COC, EXR, log (RGDP) and log (INVS) were stationary after first difference. The order of integration of the variables in Table 3 using ADF and PP unit root test showed a mixed stationarity, and this justified the use of the ARDL estimation techniques in this study.

Optimal Lag Selection

This study used VAR lag order selection criteria to determine the lag length. The result is shown in Table 4, and using the greater number of criteria to choose from, the result showed that the optimal lag selection for estimating the ADRL models is two (2).

Table 4: Optimal Lag Selection

VAR Lag Order Selection Criteria

Endogenous variables: NOXGR COC EXR GOVEFF LOG(INVS) POL LOG(RGDP)

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-309.88	NA	241.248	25.3507	25.692	25.4453
1	-185.43	169.2609*	0.67845	19.3141	2.04442*	20.0714
2	-122.03	50.7169	0.671240*	18.16245*	23.2817	19.58232*

Endogenous variables: OXGR COC EXR GOVEFF LOG(INVS) POL LOG(RGDP)

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-289.64	NA	47.7811	23.7315	24.0728	23.8261
1	-163.16	172.0198*	0.11424	17.5327	20.2629	18.2899
2	-81.979	64.9437	0.027248*	14.95829*	20.07757*	16.37816*

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level) FPE: Final prediction error; AIC: Akaike information criterion; SC: Schwarz information criterion; HQ: Hannan-Quinn information criterion

Source: computation by Author, 2024, with the assistance of E-view 9.

The Bounds test (co-integration) results

Table 5 shows the results of the Bounds test result for the estimated model for NOXGR and OXGR as dependent variables respectively. For model one, that is, when NOXGR is a dependent variable, the Bounds test results found F-statistics value of 5.2491 is greater than the critical value of 3.61 of the upper bound at the 5 per cent level of the upper bounds. This means that the null hypothesis of no long-run relationship in model one (NOXGR as dependent variable) is rejected, and the alternative hypothesis of the existence of a long-run relationship in the variables of the model (NOXGR as dependent variable) cannot be rejected. This means that at a 5 per cent significance level, there is a co-integration or long-run relationship among the variables in model one (NOXGR as dependent variable). In model two, (OXGR as dependent variable) the Bounds test results found F-statistics value of 4.2663 is greater than the critical value of 3.61 of the upper bound at the 5 per cent level of the upper bounds. This means that the null hypothesis of no long-run relationship in model one (OXGR as dependent variable) is rejected, and the alternative hypothesis of the existence of a long-run relationship in the variables of the model (OXGR as dependent variable) cannot be rejected. This means that at a 5 per cent significance level, there is a co-integration or long-run relationship among the variables in model two (OXGR as dependent variable).

Table 5: Bounds Test Results.

Null Hypothesis: No long-run relationships exist			Critical Value Bounds Significance		
Test Statistic	Value	K		I0 Bound	I1 Bound
F-statistic for model one (NOXGR)	5.24914	6	10%	2.12	3.23
F-statistic model two (OXGR)	4.2663	6	5%	2.45	3.61
			2.50%	2.75	3.99
			1%	3.15	4.43

Source: Computation by Author, 2024, with the assistance of E-view 9.

ARDL error correction and parsimonious results for the non-oil export growth - governance equation

The results for the non-oil export growth -governance equation is shown in Table 6. The short-run coefficient result of the current period of COC is -627.43, with its corresponding probability value of 0.0467. This shows a negative and statistically significant impact of control

of corruption on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.0467 is less than the five percent level of significance. This result implies that a one percent increase in control of corruption index will lead to about 627.43 percent decrease in non-oil export growth, all other things being equal. The short-run coefficient result of lag one period of COC is -541.54, with its corresponding probability value of 0.1255. This shows a negative but not statistically significant lag impact of control of corruption on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.1255 is greater than the five percent level of significance. This result implies that a one percent increase in last year control of corruption index will lead to about 541.54 percent decrease in non-oil export growth, all other things being equal. In the long run, the coefficient of COC is 457.69 with its corresponding probability value of 0.1161. This shows a positive impact of control of corruption on non-oil export growth in the long run, but this is not statistically significant at a five per cent level of significance given that the corresponding probability value of 0.1161 is greater than the five percent level of significance. This result implies that a one percent increase in control of corruption index will lead to about 457.69 percent increase in non-oil export growth, all other things being equal in the long run.

The short-run coefficient result of the current period of EXR is 1.0511, with its corresponding probability value of 0.2471. This shows a negative but not statistically significant impact of exchange rate on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.2471 is greater than the five percent level of significance. This result implies that a one percent increase in exchange rate will lead to about 1.05 percent increase in non-oil export growth, all other things being equal. The short-run coefficient result of lag one period of EXR is -3.1976, with its corresponding probability value of 0.0196. This shows a negative and statistically significant lag impact of exchange rate on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.0196 is less than the five percent level of significance. This result implies that a one percent increase in last year increase in exchange rate will lead to about 3.20 percent decrease in non-oil export growth, all other things being equal. In the long run, the coefficient of EXR is 0.9251 with its corresponding probability value of 0.061. This shows a positive and statistically significant effect of exchange rate on non-oil export growth in the long run at a five per cent level of significance given that the corresponding probability value of 0.0061 is less than the five percent level of significance. This result implies that a one percent increase in exchange rate will lead to about 0.93 percent increase in non-oil export growth, all other things being equal in the long run.

Table 6: The Results for the Non-Oil Export Growth -Governance Equation

Dependent Variable: NOXGR

Selected Model: ARDL(2, 2, 2, 2, 2, 2, 1)

Variable	Coefficient	t-Statistic	Probability		
short run coefficients					
D(NOXGR(-1))	-0.353512	-1.73173	0.1439		
D(COC)	-627.42536	-2.46731	0.0467	Diagnostic test results	
D(COC(-1))	-541.53681	-1.83812	0.1255	Adj. R-squared	0.743346
D(EXR)	1.051065	1.310004	0.2471	F-statistic	12.006041
D(EXR(-1))	-3.19758	-3.38143	0.0196	Durbin-Wat.	2.00201
D(GOVEFF)	54.134936	2.529951	0.012	Prob(F-statistic)	0.026481
D(GOVEFF(-1))	-1091.5976	-4.08947	0.0095		
DLOG(INVS)	130.69231	1.076213	0.331	Breusch-Godfrey Serial Correlation LM	
DLOG(INVS(-1))	-351.33794	-3.1434	0.0256	Test: Obs*R-squared	2.8465
D(POL)	28.742676	2.53879	0.052	Prob. Chi-Square (2)	0.1027
D(POL(-1))	-5.213499	-0.67675	0.5286		
DLOG(RGDP)	-109.21604	-1.62005	0.1661	Heteroskedasticity Test: Breusch-Pagan-Godfrey	
ECT (-1)	-0.4341	-14.2726	0.0136	Obs*R-squared	22.9536
				Prob. Chi-Square(11)	0.2394
long run coefficients					
Variable	Coefficient	t-Statistic			Prob.
COC	457.6921	1.898136			0.1161
EXR	0.925122	2.407535			0.061
GOVEFF	7.671747	2.545499			0.0182
LOG(INVS)	106.07082	1.337216			0.2388
POL	19.24876	1.041899			0.3452
LOG(RGDP)	44.068863	0.863106			0.4275
Constant	3809.0941	2.59829			0.0483

Source: Computation by Author, 2024, with the assistance of E-view 9.

The short-run coefficient result of the current period of GOVEFF is 54.1349, with its corresponding probability value of 0.0012. This shows a positive and statistically significant effect of government effective on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.012 is less than the five percent

level of significance. This result implies that a one percent increase in government effectiveness will lead to about 54.13 percent increase in non-oil export growth, all other things being equal. The short-run coefficient result of lag one period of GOVEFF is -1091.5976, with its corresponding probability value of 0.0095. This shows a negative and statistically significant lag impact of government effectiveness on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.0095 is less than the five percent level of significance. This result implies that a one percent increase in last year government effectiveness index will lead to about 1091 percent decrease in non-oil export growth, all other things being equal. In the long run, the coefficient of GOVEFF is 7.6717 with its corresponding probability value of 0.0182. This shows a positive and statistically significant effect of government effectiveness on non-oil export growth in the long run at a five per cent level of significance given that the corresponding probability value of 0.0182 is less than the five percent level of significance. This result implies that a one percent increase in government effectiveness index will lead to about 7.67 percent increase in non-oil export growth, all other things being equal in the long run.

The short-run coefficient result of the current period of log (INVS) is 130.6923, with its corresponding probability value of 0.331. This shows a positive but not statistically significant effect of total investment on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.331 is greater than the five percent level of significance. This result implies that a one percent increase in total investment will lead to about 1.31 percent increase in non-oil export growth, all other things being equal. The short-run coefficient result of lag one period of log (INVS) is -351.3379, with its corresponding probability value of 0.0256. This shows a negative and statistically significant lag impact of total investment on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.0256 is less than the five percent level of significance. This result implies that a one percent increase in last total investment will lead to about 3.51 percent decrease in non-oil export growth, all other things being equal. In the long run, the coefficient of log (INVS) is 106.07 with its corresponding probability value of 0.2388. This shows a positive but not statistically significant effect of total investment on non-oil export growth in the long run at a five per cent level of significance given that the corresponding probability value of 0.2388 is greater than the five percent level of significance. This result implies that a one percent increase in total investment will lead to about 1.06 percent increase in non-oil export growth, all other things being equal in the long run.

The short-run coefficient result of the current period of POL is 28.7427, with its corresponding probability value of 0.0052. This shows a positive and statistically significant effect of political stability and absence of violence/terrorism on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.052 is less than the five percent level of significance. This result implies that a one percent increase in political stability and absence of violence/terrorism index will lead to about 28.74 percent increase in non-oil export growth, all other things being equal. The short-run coefficient

result of lag one period of political stability and absence of violence/terrorism index is -5.2135, with its corresponding probability value of 0.5286. This shows a negative but not statistically significant lag impact of political stability and absence of violence/terrorism index on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.5286 is greater than the five percent level of significance. This result implies that a one percent increase in last year political stability and absence of violence/terrorism index will lead to about 5.21 percent decrease in non-oil export growth, all other things being equal. In the long run, the coefficient of political stability and absence of violence/terrorism index is 19.25 with its corresponding probability value of 0.3452. This shows a positive but not statistically significant effect of political stability and absence of violence/terrorism index on non-oil export growth in the long run at a five per cent level of significance given that the corresponding probability value of 0.3452 is greater than the five percent level of significance. This result implies that a one percent increase in political stability and absence of violence/terrorism index will lead to about 19.25 percent increase in non-oil export growth, all other things being equal in the long run.

The short-run coefficient result of the current period of log (RGDP) is -109.2160, with its corresponding probability value of 0.1661. This shows a positive but not statistically significant effect of economic growth on non-oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.1661 is less than the five percent level of significance. This result implies that a one percent increase in RGDP will lead to about 1.09 percent decrease in non-oil export growth, all other things being equal. In the long run, the coefficient of log (RGDP) is 44.0689 with its corresponding probability value of 0.4275. This shows a positive but not statistically significant effect of economic growth on non-oil export growth in the long run at a five per cent level of significance given that the corresponding probability value of 0.4275 is greater than the five percent level of significance. This result implies that a one percent increase in economic growth will lead to about 0.44 percent increase in non-oil export growth, all other things being equal in the long run.

The error correction coefficient, otherwise called the speed of adjustment, is -0.4341 with a corresponding probability value of 0.0136. This is a correct sign and statistically significant because the probability value is less than a 5% significance level. This means that about 43.41 percent of the disequilibrium in the short run is corrected in the long run. This is a modest speed of adjustment from the short-run disequilibrium to the long-run. The correctness of the sign and the statistical significance of the error correction coefficient confirm the existence of a long-run relationship between the dependent and the independent variables. The non-oil export growth-governance equation passed the diagnostic tests, as shown in Table 6. The adjusted R-squared is 0.7433. This means that about 74.33 per cent variation in the dependent variable, non-oil export growth, was explained by the variations of the independent variables (NOXGR (-1), COC, EXR, GOVEFF, log(INVS), POL and log(RGDP)). This shows that the non-oil export growth-governance equation has a good fit. Also, the F-statistics for the non-oil export growth-governance equation is 12.006 with its corresponding probability of 0.0265. This shows that all

the independent variables have a significant joint effect on NOXGR, and this is equally good. The Durbin-Watson (D-W) statistics for the non-oil export growth- governance equation is 2.0020, which is approximately two and, by the rule of thumb, shows no presence of autocorrelation in the estimated non-oil export growth- governance model. Breusch-Godfrey for Serial Correlation LM test observed R-Squared is 2.8465 with a chi-Square probability of 0.1027. This is not statistically significant at five per cent, meaning there is no serial correlation in the estimated model. Heteroskedasticity Test: Breusch-Pagan-Godfrey observed R-Squared is 22.9536 with a chi-Square probability of 0.2394. This is not statistically significant at a five per cent significance level, and it shows the presence of homoscedasticity (equal spread or equal variance) in the estimated the non-oil export growth- governance model.

ARDL error correction and parsimonious results for the oil export growth -governance equation

The results for the oil export growth -governance equation is shown in Table 7. The short-run coefficient result of the current period of COC is 130.4826, with its corresponding probability value of 0.0468. This shows a positive and statistically significant impact of control of corruption on oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.0468 is less than the five percent level of significance. This result implies that a one percent increase in control of corruption index will lead to about 130.48 percent increase in oil export growth, all other things being equal. In the long run, the coefficient of COC is 72.88 with its corresponding probability value of 0.0441. This shows a positive and statistically significant effect of control of corruption on oil export growth in the long run, at a five per cent level of significance given that the corresponding probability value of 0.0441 is less than the five percent level of significance. This result implies that a one percent increase in control of corruption index will lead to about 72.88 percent increase in oil export growth, all other things being equal in the long run.

The short-run coefficient result of the current period of EXR is -04616, with its corresponding probability value of 0.1123. This shows a negative but not statistically significant impact of exchange rate on oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.1123 is greater than the five percent level of significance. This result implies that a one percent increase in exchange rate will lead to about 0.46 percent decrease in oil export growth, all other things being equal. In the long run, the coefficient of EXR is 0.1476 with its corresponding probability value of 0.0466. This shows a positive and statistically significant effect of exchange rate on oil export growth in the long run at a five per cent level of significance given that the corresponding probability value of 0.0 466 is less than the five percent level of significance. This result implies that a one percent increase in exchange rate will lead to about 0.15 percent increase in oil export growth, all other things being equal in the long run.

The short-run coefficient result of the current period of GOVEFF is 89.1502, with its corresponding probability value of 0.2552. This shows a positive but not statistically significant effect of government effective on oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.2552 is greater than the five

percent level of significance. This result implies that a one percent increase in government effectiveness index will lead to about 89.15 percent increase in oil export growth, all other things being equal. In the long run, the coefficient of GOVEFF is 49.7946 with its corresponding probability value of 0.2410. This shows a positive but not statistically significant effect of government effectiveness on oil export growth in the long run at a five per cent level of significance given that the corresponding probability value of 0.2410 is greater than the five percent level of significance. This result implies that a one percent increase in government effectiveness index will lead to about 49.79 percent increase in oil export growth, all other things being equal in the long run.

Table 7: The Results for the Oil Export Growth -Governance Equation

Dependent Variable: OXGR				
Selected Model: ARDL(2, 0, 1, 0, 2, 0, 0)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
short run coefficients				
D(OXGR(-1))	0.4726	0.1903	2.4830	0.0275
D(COC)	130.4826	59.4202	2.1959	0.0468
D(EXR)	-0.4616	0.2710	-1.7035	0.1123
D(GOVEFF)	89.1502	74.8981	1.1903	0.2552
DLOG(INVS)	-12.5673	47.2935	-0.2657	0.7946
DLOG(INVS(-1))	89.9407	52.1739	1.7239	0.1084
D(POL)	-3.0663	3.0339	-1.0107	0.3306
DLOG(RGDP)	64.5899	24.7142	2.6135	0.0215
ECT(-1)	-0.7904	0.3032	-2.6069	0.0001
long run coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
COC	72.8808	34.4211	2.1173	0.0541
EXR	0.1476	0.0705	2.0921	0.0566
GOVEFF	49.7946	40.5326	1.2285	0.2410
LOG(INVS)	-59.7326	20.1304	-2.9673	0.0109
POL	-1.7127	1.6827	-1.0178	0.3273
LOG(RGDP)	36.0765	15.1712	2.3780	0.0334
Constant	758.3579	280.3600	2.7049	0.0180
Diagnostic test results				
Adjusted R-squared	0.6553	Durbin-Watson stat		1.9908
F-statistic	7.8239		Prob(F-statistic)	0.0393
Breusch-Godfrey Serial Correlation LM		Heteroskedasticity Test: Breusch-Pagan-Godfrey		
Test: Obs*R-squared	3.1868		Obs*R-squared	5.7585

Prob. Chi-Square (1)	0.2032	Prob. Chi-Square(11)	0.889

Source: Computation by Author, 2024, with the assistance of E-view 9.

The short-run coefficient result of the current period of log (INVS) is -12.5673 with its corresponding probability value of 0.7946. This shows a negative but not statistically significant effect of total investment on oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.7946 is greater than the five percent level of significance. This result implies that a one percent increase in total investment will lead to about 0.13 percent decrease in oil export growth, all other things being equal. The short-run coefficient result of lag one period of log (INVS) is 89.9407, with its corresponding probability value of 0.1084. This shows a positive but not statistically significant lag impact of total investment on oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.1084 is greater than the five percent level of significance. This result implies that a one percent increase in last year total investment will lead to about 0.90 percent increase in oil export growth, all other things being equal. In the long run, the coefficient of log (INVS) is – 59.7326 with its corresponding probability value of 0.0109. This shows a negative and statistically significant impact of total investment on oil export growth in the long run at a five per cent level of significance given that the corresponding probability value of 0.2388 is less than the five percent level of significance. This result implies that a one percent increase in total investment will lead to about 0.49 percent decrease in oil export growth, all other things being equal in the long run.

The short-run coefficient result of the current period of POL is 3.0663, with its corresponding probability value of 0.3306. This shows a positive but not statistically significant impact of political stability and absence of violence/terrorism on oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.3306 is greater than the five percent level of significance. This result implies that a one percent increase in political stability and absence of violence/terrorism index will lead to about 3.07 percent increase in oil export growth, all other things being equal. In the long run, the coefficient of political stability and absence of violence/terrorism index is 1.7127 with its corresponding probability value of 0.3273. This shows a positive but not statistically significant effect of political stability and absence of violence/terrorism index on oil export growth in the long run at a five per cent level of significance given that the corresponding probability value of 0.3272 is greater than the five percent level of significance. This result implies that a one percent increase in political stability and absence of violence/terrorism index will lead to about 1.71 percent increase in oil export growth, all other things being equal in the long run.

The short-run coefficient result of the current period of log (RGDP) is 64.0765, with its corresponding probability value of 0.0215. This shows a positive and statistically significant effect of economic growth on oil export growth in the short run at a five per cent level of significance given that the corresponding probability value of 0.0215 is less than the five percent level of significance. This result implies that a one percent increase in RGDP will lead to about 0.65 percent increase in oil export growth, all other things being equal. In the long run, the

coefficient of log (RGDP) is 36.0765 with its corresponding probability value of 0.0334. This shows a positive and statistically significant effect of economic growth on oil export growth in the long run at a five per cent level of significance given that the corresponding probability value of 0.0334 is less than the five percent level of significance. This result implies that a one percent increase in economic growth will lead to about 0.36 percent increase in oil export growth, all other things being equal in the long run.

The error correction coefficient, otherwise called the speed of adjustment, is -0.7904 with a corresponding probability value of 0.0001. This is a correct sign and statistically significant because the probability value is less than a 5% significance level. This means that about 79.04 percent of the disequilibrium in the short run is corrected in the long run. This is a good speed of adjustment from the short-run disequilibrium to the long-run. The correctness of the sign and the statistical significance of the error correction coefficient confirm the existence of a long-run relationship between the dependent and the independent variables. The oil export growth-governance equation passed the diagnostic tests, as shown in Table 7. The adjusted R-squared is 0.6553. This means that about 65.53 per cent variation in the dependent variable, oil export growth, was explained by the variations of the independent variables (OXGR (-1), COC, EXR, GOVEFF, log (INVS), POL and log(RGDP)). This shows that the oil export growth- governance equation has a good fit. Also, the F-statistics for the oil export growth- governance equation is 7.8239 with its corresponding probability of 0.0393. This shows that all the independent variables have a significant joint effect on OXGR, and this is equally good. The Durbin-Watson (D-W) statistics for the non-oil export growth- governance equation is 1.9908, which is approximately two and, by the rule of thumb, shows no presence of autocorrelation in the estimated non-oil export growth- governance model. Breusch-Godfrey for Serial Correlation LM test observed R-Squared is 3.1868 with a chi-Square probability of 0.2032. This is not statistically significant at five per cent, meaning there is no serial correlation in the estimated model. Heteroskedasticity Test: Breusch-Pagan-Godfrey observed R-Squared is 5.7585 with a chi-Square probability of 0.889. This is not statistically significant at a five per cent significance level, and it shows the presence of homoscedasticity (equal spread or equal variance) in the estimated the oil export growth- governance model.

Stability test results for the estimated models

The stability test using the cumulative sum (CUSUM) in Figure 1 and Figure 2 reveals that the variables in the estimated non-oil export growth- governance equation and the estimated oil export growth- governance equation remained consistent throughout the study period. The swing of the trend within the CUSUM limit at a 5 per cent significant level bound portrays this assertion. This implies, on the other hand, that the parameters of the estimated non-oil export growth-governance model do not suffer from any structural instability over the study period, which means that all the coefficients of the model are stable and can be used forpolicy recommendations.

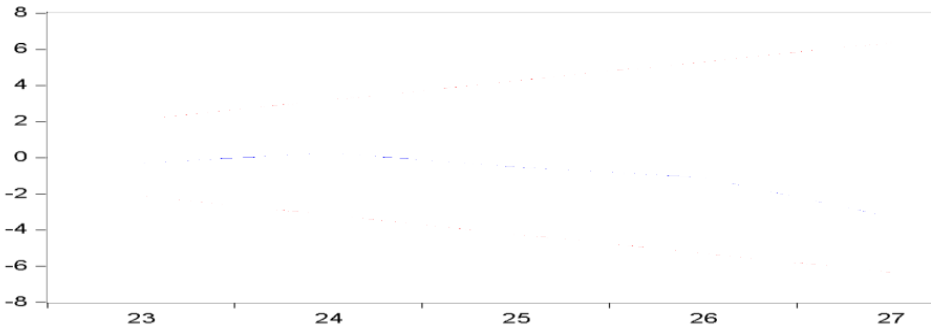

Figure 1: Cumulative sum for test of stability of the non-oil export growth- governance model

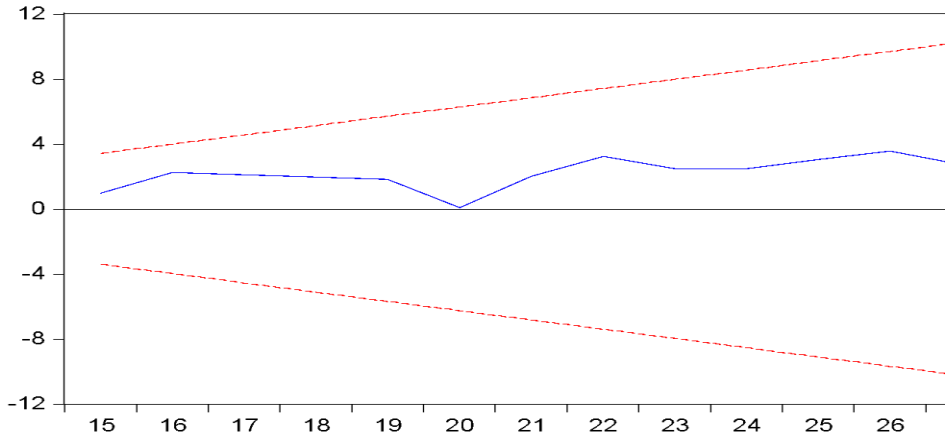

Figure 2: Cumulative sum for test of stability of the oil export growth- governance model

DISCUSSION

The study found a negative and statistically significant impact of control of corruption on non-oil export growth in the short run at a five per cent level of significance. This finding implies that an increase in control of corruption will decrease non-oil export growth, all other things being equal. This suggests that efforts to improve control of corruption may inadvertently hinder the growth of non-oil exports in the short term. But in the long run, the study found a positive but not statistically significant effect of control of corruption on non-oil export growth at a five percent level of significance. This result implies that an increase in control of corruption will lead to an increase in non-oil export growth, all other things being equal in the long run. This means that control of corruption is not a significant factor in promoting non-oil export growth in Nigeria. The study found a positive and statistically significant effect of control of corruption on oil export growth in both the short run and the long run periods at a five per cent level of significance. This means that an increase in control of corruption will lead to an increase in oil export growth, all other things being equal both in the short run and in the long run period. Additionally, the results suggest that efforts to improve control of corruption could potentially have a substantial impact on the economic performance of countries heavily reliant on oil exports. This highlights the importance of addressing corruption issues to promote sustainable

growth in these economies. This finding is in line with Bah *et al.,* (2021) whose study that found political stability and control of corruption have positive effects on exports of goods, in sub-Saharan African countries.

The study found a positive and statistically significant effect of government effectiveness on non-oil export growth in both the short-run and long-run periods at a five per cent level of significance. This result implies that an increase in government effectiveness will lead to an increase in non-oil export growth, all other things being equal. This suggests that improving government effectiveness can have a direct impact on promoting non-oil export growth in the economy. This finding is not in line with Sabry (2022) whose study found that good governance generally boosts Arab exports to Germany relatively more than it does for non-Arab exporters to Germany, but this finding does not agree with Sujianto *et al.,* (2023) whose study found government effectiveness does not affect exports in several ASEAN countries. The study found a positive but not statistically significant effect of government effectiveness on oil export growth in both the short-run and long-run periods at a five per cent level of significance. This result implies that an increase in government effectiveness will lead to an increase in oil export growth, all other things being equal.

The study found a positive and statistically significant effect of political stability and absence of violence/terrorism on non-oil export growth in the short run at a five per cent level of significance. This result implies that an increase in political stability and the absence of violence/terrorism will lead to an increase in non-oil export growth, all other things being equal. Additionally, the findings suggest that addressing political instability and violence could potentially have a direct impact on economic growth through the promotion of non-oil exports. This highlights the importance of maintaining peace and stability for sustainable economic development. But in the long run, the study found a positive but not statistically significant effect of political stability and absence of violence/terrorism on non-oil export growth at a five per cent level of significance. This result implies that an increase in political stability and absence of violence/terrorism will lead to an increase in non-oil export growth, all other things being equal in the long run. The study found a positive but not statistically significant impact of political stability and absence of violence/terrorism on oil export growth in both the short run and the long run periods at a five per cent level of significance. This result implies that an increase in political stability and the absence of violence/terrorism will lead to an increase in oil export growth, all other things being equal.

Conclusion and recommendations

This study examined the effects of governance on export growth in Nigeria from 1996 to 2022 using the ARDL estimation technique. Export growth was disaggregated into non-oil export growth and oil export growth while governance was captured by three World Bank's governance indicators which are the control of corruption index, government effective index and political stability and absence of violence/terrorism index. The study The study found a negative and statistically significant impact of control of corruption on non-oil export growth in the short

run but a positive but not statistically significant effect of control of corruption on non-oil export growth in the long run; a positive and statistically significant effect of control of corruption on oil export growth in both the short run and the long run periods ; a positive and statistically significant effect of government effective on non-oil export growth in both the short run and short run periods; a positive but not statistically significant effect of government effective on oil export growth in both the short run and long run periods; a positive and statistically significant effect of political stability and absence of violence/terrorism on non-oil export growth in the short run but a positive and statistically insignificant effect of political stability and absence of violence/terrorism on non-oil export growth in the long run; and a positive but not statistically significant impact of political stability and absence of violence/terrorism on oil export growth in both the short run and the long run periods at a five per cent level of significance.

Thus, the policy implications of these findings can be summarized: first, there is a need to put in place a mechanism that is capable of reducing corruption and increasing transparency in the Nigerian oil industry. This could be done by implementing the Petroleum Industry Governance Act, which is intended to promote transparency, establish clear obligations, and foster an environment that is conducive to the oil business. Furthermore, the implementation of robust supervision mechanisms and strict enforcement of anti-corruption legislation will serve to deter illicit operations within the sector. In addition to bolstering the protection of whistleblowers, raising public awareness regarding the dangers of corruption will be crucial to fostering accountability. Infrastructure development, including roads, airports, and seaports, should be a government priority to reduce transportation costs and facilitate the flow of products. Enhanced accessibility to global markets will facilitate exporters' operations and bolster the competitiveness of Nigerian goods. The government should conduct consistent monitoring and evaluation of the efficacy of export promotion policies, while also taking appropriate measures to rectify any obstacles that may emerge. The government should improve the security infrastructure of the country to improve the business environment capable of encouraging export activities.

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REFERENCES

Adewale, A. R. (2017). Import substitution industrialisation and economic growth–Evidence from the group of BRICS countries. *Future Business Journal*, 3(2), 138-158.

Ahmed, F. Z., Greenleaf, A., & Sacks, A. (2014). The paradox of export growth in areas of weak governance: The case of the ready-made garment sector in Bangladesh. *World Development*, 56(1), 258-271.

Akpan, O. M. & Udo, E. G. (2022). Private Sector Credit and Selected Macro-Economic Variables. International Journal of Novel Research in Marketing Management and Economics, Vol. 9 (3), Pp. 57-71.

Álvarez, I. C., Barbero, J., Rodríguez-Pose, A., & Zofío, J. L. (2018). Does institutional quality matter for trade? Institutional conditions in a sectoral trade framework. *World Development*, 103(1), 72-87.

Arif, M. N. R. A., Arisman, A., & Harahap, D. (2021). Export, political stability, and growth in developing-8 countries. *Studies of Applied Economics*, *39*(2), 1-10.

Bah, M., Ondoa, H. A., & Kpognon, K. D. (2021). Effects of governance quality on exports in Sub-Saharan Africa. I*nternational Economics*, 167(1), 1-14.

Chand, R., Singh, R., Patel, A., & Jain, D. K. (2020). Export performance, governance, and economic growth: evidence from Fiji-a small and vulnerable economy. *Cogent Economics & Finance*, 8(1), 18-28.

Chishti, M. Z., Hussain, B., & Khursheed, M. A. (2021). Impact of institutional quality on bilateral exports: exploring the role of development. *Journal of Applied Economics and Business Studies*, 5(2), 17-34.

Cooray, A. (2009). Government expenditure, governance and economic growth. *Comparative Economic Studies*, 51(2), 401-418.

De Ferranti, D., Perry, G. E., Lederman, D., & Maloney, W. E. (2002). *From natural resources to the knowledge economy: trade and job quality*. Washington, DC: World Bank.

Dubey, V. K., & Das, A. (2022). Role of governance on SME exports and performance. *Journal of Research in Marketing and Entrepreneurship*, *24*(1), 39-74.

Duma, S. (2023). *Developmental Integration and Industrialisation in Southern Africa*. UJ Press.

Eegunjobi, R., & Ngepah, N. (2022). The determinants of global value chain participation in developing seafood-exporting countries. *Fishes*, 7(4), 186.

Gries, T., & Grundmann, R. (2020). Modern sector development: The role of exports and institutions in developing countries. *Review of Development Economics*, 24(2), 644-667.

Hassan, S. T., Xia, E., Huang, J., Khan, N. H., & Iqbal, K. (2019). Natural resources, globalization, and economic growth: evidence from Pakistan. *Environmental Science and Pollution Research*, 26, 15527-15534.

Hernández, V., Nieto, M. J., & Rodríguez, A. (2022). Home country institutions and exports of firms in transition economies: does innovation matter? *Long Range Planning*, 55(1), 1-17.

Huang, C. J., & Ho, Y. H. (2017). Governance and economic growth in Asia. *The North American Journal of Economics and Finance*, 39(4), 260-272.

Irwin, D. A. (2021). The rise and fall of import substitution. *World Development,* 139(1),1-10.

Isham, J., Woolcock, M., Pritchett, L., & Busby, G. (2005). The varieties of resource experience: natural resource export structures and the political economy of economic growth. *The World Bank Economic Review*, *19*(2), 141-174.

Jackson, E. A., & Jabbie, M. N. (2021). *Import Substitution Industrialization (ISI): An approach to global economic sustainability. In industry, innovation and infrastructure*. Cham: Springer International Publishing

Kamal, D. M., & Batool, D. S. (2021). Institutional failure: A challenge to good governance in Pakistan. *South Asian Studies*, 1(35).

Kauffman, D., Kraay, A., & Mastruzzi, M. (2007). World Governance Indicators. *World Bank*.

Kedir, A. S. (2023). Developmental States in Africa: The Mauritian miracle. *Akademik İncelemeler Dergisi,* 18(1), 123-140.

Lancaster, K. (1957). The Heckscher-Ohlin trade model: A geometric treatment. *Economica,* 24(93), 19-39.

Malefane, M. (2021). Export-led growth hypothesis: Empirical evidence from the Southern African Customs Union countries. *Entrepreneurial Business and Economics Review,* 9(2), 55-69.

Martínez-Zarzoso, I., & Márquez-Ramos, L. (2019). Exports and governance: is the Middle East and North Africa region different? *The World Economy*, 42(1), 143-174.

Mora, J., & Olabisi, M. (2022). Export growth drivers and economic development. *Empirical Economics*, 63(5), 2389-2426.

Moradi, M., Ghodratpanah, A., & Salarmoradi, F. (2020). The effect of corporate governance on export performance of Iranian listed companies. *Iranian Journal of Accounting, Auditing and Finance*, *4*(4), 1-14.

Munemo, J. (2022). The effect of regulation-driven trade barriers and governance quality on export entrepreneurship. *Regulation & Governance*, *16*(4), 1119-1140.

Nguyen, S. T., & Wu, Y. (2020). Governance and export performance in Vietnam. *Journal of Southeast Asian Economies*, 37(1), 1-25.

Qiao, H., Kang, Y., Yan, J., Zhang, J., Zheng, Z., & Liang, Q. (2023). What role does trade expansion play in the natural resource sustainability of highly resource-consuming countries? Testing moderating role of exports and innovation. *Resources Policy*, *82*, 103424.

Sabry, M. I. (2022). Arab-German trade and institutions: The effect of good governance on Arab exports to Germany. *The European Journal of Development Research*, *34*(5), 2400-2437.

Shahzad, U., Madaleno, M., Dagar, V., Ghosh, S., & Doğan, B. (2022). Exploring the role of export product quality and economic complexity for economic progress of developed

economies: Does institutional quality matter? *Structural Change and Economic Dynamics*, 62, 40-51.

Sharma, P., Cheng, L. T., & Leung, T. Y. (2020). Impact of political connections on Chinese export firms' performance–Lessons for other emerging markets. *Journal of Business Research*, 106, 24-34.

Soussi, N. E., Elfathaoui, H., & Agouram, J. (2021). Governance and performance of Agri-Food Exporting SMEs. *Asian Journal of Social Sciences and Management Studies*, *8*(4), 83-91.

Sujianto, A. E., Dwiningtias, K., Luksita, A. C., & Narmaditya, B. S. (2023). Human Development Index, good governance practice and export: Evidence from ASEAN countries. *Journal of Eastern European and Central Asian Research (JEECAR)*, *10*(3), 468-477.

Sultanuzzaman, M. R., Fan, H., Mohamued, E. A., Hossain, M. I., & Islam, M. A. (2019). Effects of export and technology on economic growth: Selected emerging Asian economies. *Economic research-Ekonomska istraživanja*, *32*(1), 2515-2531.

Udo, E. G., Uko, F. E. & Akpan, O. M. (2024). The Sovereign Wealth Fund and Nigerian Economic Development. *East African Finance Journal Vol 3 Issue 1*, Pp. 48-76

Wang, G., Sharma, P., Jain, V., Shukla, A., Shabbir, M. S., Tabash, M. I., & Chawla, C. (2022). The relationship among oil prices volatility, inflation rate, and sustainable economic growth: Evidence from top oil importer and exporter countries. *Resources Policy, 77(3), 22-34.*

Zongo, A. M. I., & Oyelami, L. (2021). The impact of institutional quality on intra-African trade: Evidence from sub-Saharan African countries. Available at SSRN 3866424.