TAX INCENTIVES AND NON-OIL TAX REVENUE IN NIGERIA

Abstract

The study empirically examined the effect of tax incentives on non-oil tax revenue in Nigeria from 1981-2022. Tax incentives was measured by export expansion grant while non-oil tax revenue was measured by total tax revenue, non-oil export, tax rate and real effective exchange rate. Unit root test was conducted using Augmented Dickey Fuller (ADF), Phillip Perron statistics and Kwiatkowski-Phillips-Schmidt-Shin test statistic and it was found that the variables are nit in the same order of integration. Bound test result indicated long run significant relationship within the variables. Autoregressive Distributive Lag Model (ARDL) found that Export expansion grant had short run significant negative effect on non-oil tax revenue in Nigeria (β_9 = -0.07, p-value = 0.0299 < 0.05) but had an insignificant positive effect in the long run (α_8 = 1.29, p-value = 0.3738 > 0.05). Tax rate had positive significant effect on non-oil tax revenue in the short run (β_3 = 0.01, p-value = 0.0027 < 0.05). However, in the long run, tax rate had negative insignificant effect on non-oil tax revenue (α_2 = -0.28, p-value = 0.4822 > 0.05). the study concluded that export incentives have become a drain to government resources over the years. Based on the result, we recommend that export expansion grant processing time frame and payment should be improved.

Key Words: Export expansion grant, Tax incentives, non-oil tax revenue, Tax rate.

1.0 Introduction

Developing countries are faced with institutional challenges due to inefficiency, ineffectiveness and structural weakness. Institutional quality thus is a critical element in the evaluation of policy success and revenue mobilization for effective growth. These institutional inefficiencies are manifested in different ways; from outright embezzlement of funds to creating loopholes for tax revenue manipulation.

A similar challenge on tax revenue mobilization due to trade liberalization is tax avoidance. Dillion (2017) has described it as symptom of globalization gone wrong due to the political climate that tolerates and allows it as a normal behaviour. It is evident from literature that national governments lose billions of dollars due to tax avoidance by multinational corporations and wealthy individuals. Multinational corporations achieve this, through manipulative technique

of misallocation of corporate profits (profit shifting to where tax policy is minimal or non-existent; tax haven). Tax avoidance is pervasive and the challenge is the political climate that normalizes this behaviour, and the entrenched interest of the political class in these multinational corporations (Dillon, 2017). Profit shifting is a global phenomenon. It is estimated that about USD280 billion is lost in revenue globally (Clausing, 2016). Profit shifting of corporate tax base is large in developing countries and accounts for 0.84% of the GDP (Crivelli, Keen & de Moojj, 2015).

Tax exemptions also constitute a serious strain in the revenue base of any economy especially when cost benefit analysis have not been done to show long term benefit to the country (Boakye, Adoko & Adomnab, 2020). Most tax waivers and exemptions arise out of political patronage, corruption and constitute tax evasion. This challenge is not localized in Nigeria alone, it is a common denominator in most developing countries especially in SSA. As noted by Boakye *et al*, (2020), the manner exemptions are granted have become a disincentive to optimization of government revenue. Tax exemptions are abused because of ineffective monitoring due to lack of institutional coordination, and often times, corruption (Boakye *et al*, 2020).

Tax exemptions are intended to motivate companies to improve their performance thereby promote macroeconomic advantages, and thus increase government revenue (Boakye *et al*, 2020). Tax concessions and exemptions have also been used in most African countries as an inducement for FDI. Granting waivers cost government billions in revenues, and it is hoped that the benefit from increased production, employment and profitability will translate to more revenue to the government in the long run. For example, Mali gives 5 years tax exemption, Ghana and Mozambique waives VAT, Kenya gives foreign companies in export processing zone 10 years corporate income tax holiday and Nigeria grants pioneer status, tax holidays and export processing zone and export processing factory, and various degree of rebates on taxes (Boakye *et al*, 2020). But in reality, these objectives have been elusive.

Incentives generally are provided to encourage FDI, protect existing investments from unfair global competition, as well as expand domestic production, and it is expected to affect the firm level performance both volume and value wise (Gnangnon, 2017). Hanson and Lundwin (2004) have shown that export product diversification, as an export strategy had positive effect on firm's performance. This was also confirmed by Solana, Brummer, Engler and Otter (2019) in the study

of 279 firms in fresh fruit sector in Chile between 2010 and 2015, found a positive impact of product diversification and upgrading on those firms' performance. It is therefore, postulated that diversification leads to increase in income for the firms and employees. Consequently, domestic and import consumption increases with increased level of export productivity, and thus, translate into higher direct and indirect tax revenue (vat and excise duty). This postulation however, has been contradicted by Hesse, (2008) that posited a non-linear relationship between export product diversification and economic growth.

Tax exemption, waivers and rebates are part of fiscal incentives which were provided to encourage FDI, protect existing investment from unfair competition, stimulate expansion of domestic productive capacity, and encourage specific sector and product diversification (CBN, 2013). As Zahir (2003) had rightly noted, incentives benefit the companies, the economy in several ways, boosts strategically important sectors for promoting export, generate employment, add value to domestic activities and income, and thus, increase revenue for the government. Unfortunately, however, there is no evidence to support its efficiency and effectiveness in achieving these objectives in most developing countries, especially in Nigeria.

The Nigeria custom service is empowered to collect trade tax (import and excise duties) by the Customs and Excise Management (Amendment) Act 2017 (CEMA 2017). Taxes covered under the CEMA Act include import duty, all levies on certain categories of goods brought into the country. Some of the levies are wheat levy, Rice levy, Cigarette levy, Automotive levy, Cement levy, Steel levy and Sugar levy (Aromoshegbe *et al*, 2017). There was similar effort to reposition the Nigeria Custom Service through CEMA Act 2017 intended to enhance the operational efficiency and revenue generating capacity of the agency. The NCS during the budget 2020 presentation revealed that they generated N1.2tn in 2018 against a budget of N915bn thereby surpassing the expectation by N37.15bn (4.06%). Their revenue proposal for 2020 was N937bn which shows that trade tax still constitutes significant proportion of the revenue stream. In 2021, the tax collections as reported by Finance Minister during the 2022 budget breakdown presentation showed that Company Income Tax (CIT) Value Added Tax (VAT) and Custom duties as at August 2021 were N1.036T, N449.26B and N641.40B respectively (Ahmed, 2021).

Furthermore, in Nigeria, there was a significant fall in trade tax revenue in 2021 compared to 2020, and the same decline was also noticed in VAT which declined from an average of N667B in 2020 to N449.26B in 2021 according to the data from FIRS (2022). Trade tax is one of the important sources of government revenue for developing countries as it is directly linked to international trade transactions. It is more so because it is easy to collect compared to the other types of taxes where the efficiency level is very low due to poor tax structure and high incidence of tax evasion. It is therefore pertinent that the policies which have direct impact on tax revenue generation and collection should be of utmost importance at this point in the life of the economy where Nigeria's debt to revenue ratio is 73% as at August 2021, which is the highest in Africa, evidencing a serious revenue challenge (Balassa, 1978), it was 80.6 % in 2022 and stands currently about 75% according to Debt Management Office (DMO, 2023).

2.0 Literature Review

World Bank (2023) defines tax revenue as the fundamental way countries generate public revenue to finance investment in human capital, infrastructure and provision of other services for the citizens and businesses.

OECD (2023) defines tax revenue as the revenues collected from taxes on income and profits, social security contributions, taxes levied on goods and services, payroll taxes, taxes on the ownership and transfer of property, and other taxes. Total tax revenue as a percentage of GDP indicates the share of a country's output that is collected by the government through taxes. It can be regarded as one measure of the degree to which the government controls the economy's resources. The tax burden is measured by taking the total tax revenues received as a percentage of GDP. National Bureau of Statistics says tax revenue is the entire amount received by government from sources within and outside government entities (internal and external). Myles (2000) affirms that many economists believe that tax revenue is one of the significant factors that contribute to the growth of any country.

Tax revenue in Nigeria is classified into two broad areas. Oil and non-oil revenue. Non-oil tax revenue are revenues generated from sources other than oil producing and related activities (Adeusi *et al*, 2022). They include personal income tax, corporate (company) income tax, value added tax, custom and excise duties, education tax, etc. others are aids, grants, levies and fines (Ndu & Ugwu, 2022)

The operational concept of tax revenue for the study is that tax revenue is the compulsory financial charges imposed by the government of Nigeria on individuals, corporate institutions and on goods and services principally to raise funding for government expenditure. This tax revenue is based only on non-oil activities. There are different categories of non-oil taxes in Nigeria. They include personal income tax, company income tax, value added tax, with-holding tax, education tax, stamp duties, and information technology tax among others (Ibenegbu, 2017). For our study, we define non-oil tax as taxation on corporates, individuals, goods and services produced within and those imported into the country excluding royalties on oil and oil related taxes. We will focus on three major tax components which are collected by the federal government – Custom Duties, CIT, and VAT.

2.1 Export Incentive Schemes

Incentives are economic policy stimulation strategy for achieving set targets and objectives. UNCTAD (2013), defines incentives as any tangible benefit given from government to an organization, company or an enterprise with the understanding that business failures sometimes arise due to investment challenges and outside competition. There are several types of incentives which government gives depending on its objectives. Export incentives are policies government use to encourage participation, growth of export in specific sector or across sectors of the economy in order to achieve set objectives, which include but not limited to economic growth, employment generation, revenue generation, diversification of economic activities amongst others.

Export incentive is any measure taken by government to improve and increase return on export. Such revenue and profit reduce cost of production (Balassa, 1978). Export incentives differ from country to country depending on the aim and objective of government policy. World Trade Organisation (2023) defines export incentives as a subsidy comprising financial contribution by government or a public institution that confers a benefit on the recipient to achieve an objective. Kento (2021) defines export incentives as regulatory, legal and monetary programmes designed to encourage businesses to export certain types of goods and services. It is a regulatory policy to increase tradeable products and create new global markets for the economy. It is an economic assistance that government provide to firms or industries within the national economy in order to help them become more competitive in the global markets. Uwaoma and Ordu (2016) indicates

that incentives for manufacturing industry acts as catalyst for industrial growth in the domestic economy.

There are, however, contentions against incentives generally by neoclassical economists who contend that it is segregative and leads to inefficiency in economic resources (Uwaoma & Ordu, 2016). One of the arguments is that tax rebates benefits violate healthy tax system of horizontal equity, and thus creates imbalances and distorts demand signals potential investors face. This argument nonetheless, has also been deflated by postulation that incentives exist because of the market failures in some sectors, and therefore, government intervention is necessary to encourage investment in such sectors (Suranovic, 2010). Wells and Allen (2001) also noted that tax incentives are easy way for government to compensate for obstacles it created in the business environment. In other words, fiscal incentives are government response to its failure as well as market failure.

But UNCTAD (2005) made an outstanding revelation that calls for reassessment of fiscal incentives. It noted in a report on economic development in Africa that recently, profit remittances in many SSA countries exceed total FDI inflows, and loss to government revenue.

Export incentives can be categorized into three dimensions; i) Regulatory incentives which are policies of government aimed at attracting investment projects by offering derogations from national or sub-national rules and regulations. Examples include free economic zones and export retention scheme. ii) Fiscal incentives- This involves easing of the tax burden on the investing companies so as to encourage more capital inflow. General fiscal incentives take the form of reduced corporate tax rates or tax holidays, encouragement of capital formation and preferential treatment of foreign operators. Examples include pioneer status, capital allowances and tax reliefs. iii) Financial incentives which involve the out of hand public spending to attract or induce companies to invest in fresh businesses or increase the volume and level of existing investments, in order to achieve the target objective (increased tax revenue). Examples include grants, loans and credit guarantees (Dalhat, 2019). Dana *et al*, (2009) reported that USA was the first country to introduce export incentives in 1942 to correct unfavourable external trade.

2.2 Stylised Facts

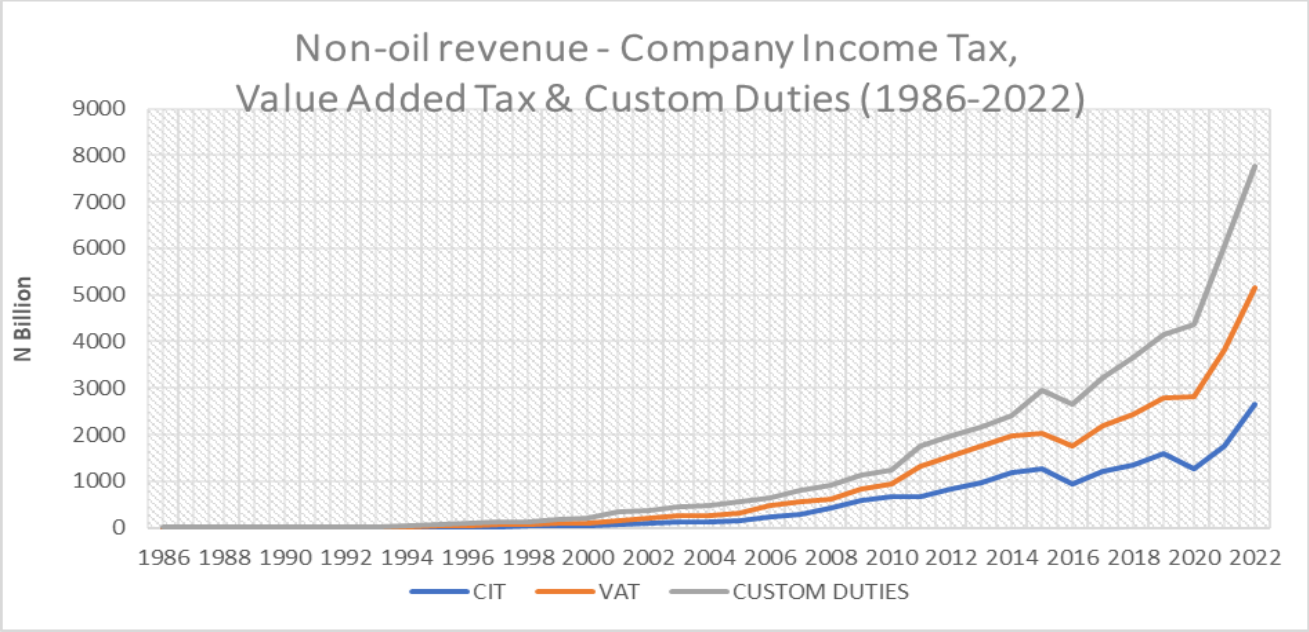


Figure 2.1 showing Non-Oil Tax Revenue - CIT, VAT & CED in Nigeria (1986-2022)
Source: Data from CBN Statistical Bulletin 2022

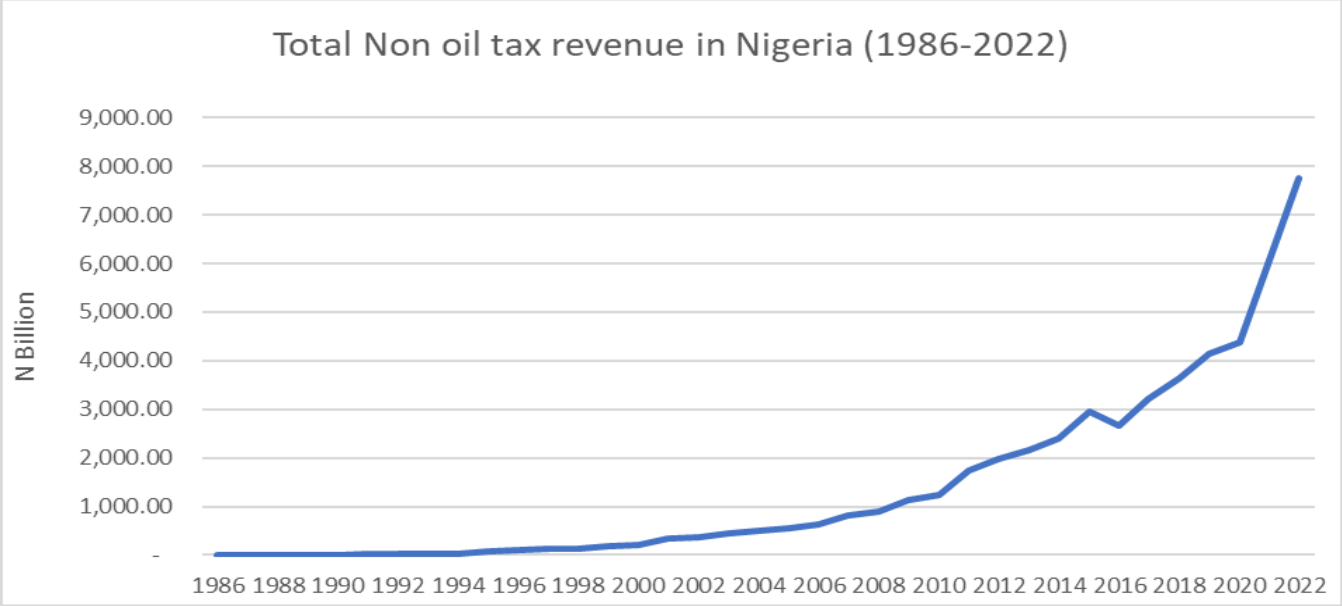


Figure 2.2 showing Total Non-Oil Tax Revenue in Nigeria (1986-2022)
Source: Data from CBN Statistical Bulletin 2022

Total non-oil tax revenue (TTR) trend in figure 2.1B showed an increase from 1996 through to 2001, and there was a leap from 2005 forward. The explanation for these changes emanates from introduction of VAT in 1994, review and changes in tax laws and administration as well as

international trade policy. Custom duties in grey line showed a flat trend from 1999 to 2006. There was progressive increase from 2006 to 2010 with a sharp rise between 2010 and 2014. There was a sharp increase from 2014 upwards which may be due to a number of factors beyond trade openness.

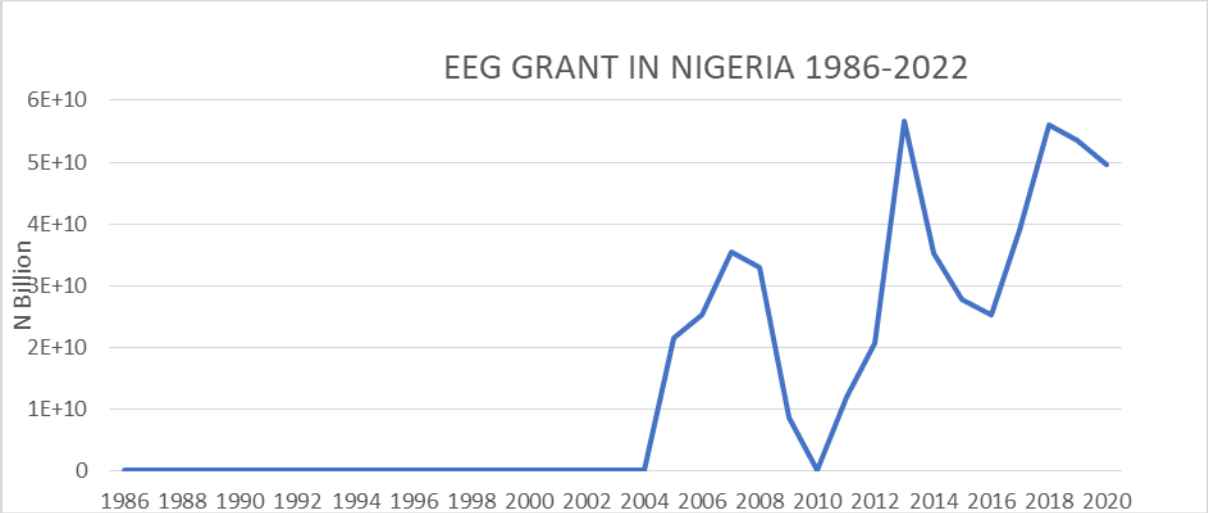


Figure 2.3 Export Expansion Grant (EEG) in Nigeria (1986-2022)
Source: Author's illustration based on data from NEPC 2022

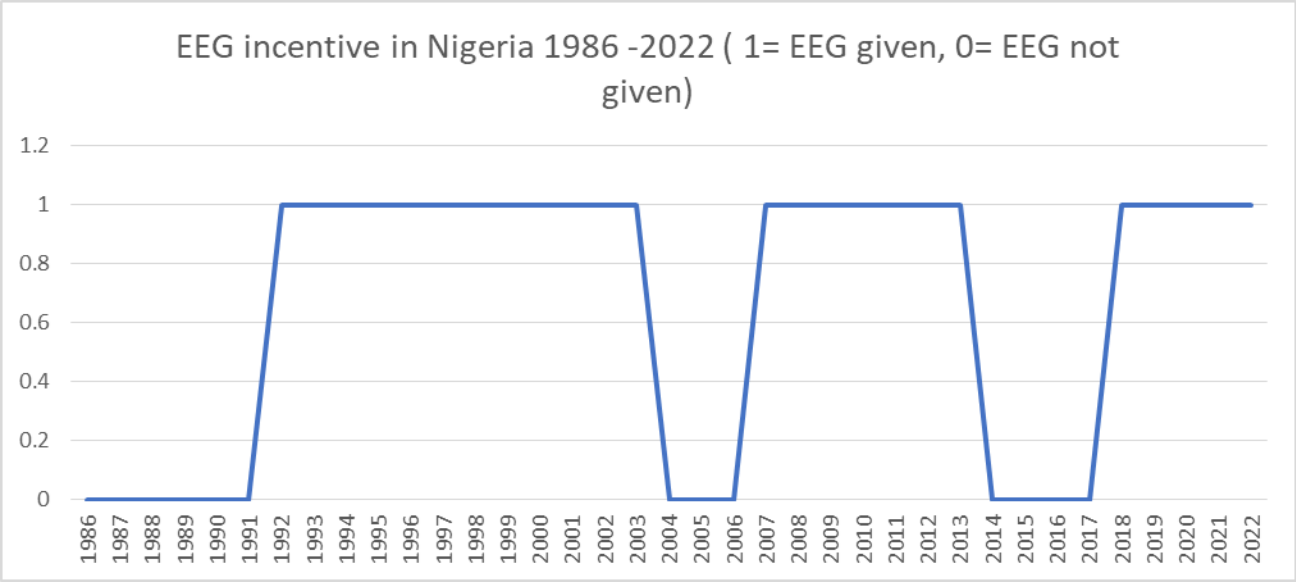


Figure 2.4: Export Expansion Grant (EEG) in Nigeria (1986-2022)
Source: Author's illustration based on data from NEPC 2022

Figure 2.4 shows export expansion grant (EEG) trend was flat from 1986 to 2004. Between 1986 and 1991, the EEG was not operational as depicted in figure 2.5B, however, payment of EEG to exporting companies started in early 1990s, but the NEPC secretariat could not provide record of EEG paid to company between 1992 and 2004 when the incentive was operational. Between 2005 and 2009, there was progressive increase up to 2007, and then a decline in the value of pay-out in 2009. Between 2011 and 2020, we noticed significant increase and decline across the years. It is to be noted also that EEG was suspended between 2004 and 2006, and 2014 to 2017 due to abuse of the incentive as shown in figure 2.4.

2.3 Empirical Review

Uwaoma and Ordu, (2016) examined the impact of tax incentives on economic development in Nigeria between 2004 and 2014. It is a primary- research that focused on selected manufacturing companies in South-south zone of Nigeria. The results show that sufficient tax incentives encourage industrial growth, which invariably leads to more employment, income and tax revenue for the government. It also motivates domestic organizations, as well as foreign companies to invest in the country. The authors claim that tax incentives and corporate growth are inseparable.

Sani and Salihu (2020) analysis of the relationship between exports incentive schemes and manufactured exports in Nigeria covering 1990 to 2014 showed that there is no long run relationship between export incentives scheme and manufactured exports since the effect of EEG and other incentives under study was insignificant. This result was collaborated by Ali and Madueme (2021) on the effect of export expansion grant on the growth of Nigeria's non-oil export covering from 1986 to 2015. The result shows that EEG had no significant effect on non-oil export. This is contrary to studies by Udah (2012) and Usman (2010) which noted that expansion of export yield positive results that spreads across the economy.

Cavusoglu and Usman, (2021) on the impact of trade openness and export expansion grants in Nigerian economy (1986-2019); New evidence from quantile regression examines the effect of trade openness and export expansion grants on Nigerian economy between 1986 and 2019. The result indicates a positive relationship between trade openness and economic growth in the first

and last quantiles, while the remaining quantiles- 2nd to 6th had statistically significant negative relationship with GDP. EEG was positively related with GDP in all the quantiles, but it was statistically significant only in the 6th and 7th quantile. The study also reported a bi-directional causality between GDP and trade openness, but it was unidirectional between GDP and EEG.

Does incentive improve export performance of firms? Onah, Amuka, Asogwa, Onuigbo,and Ezeudeka, (2022) study involving sixty firms that had benefitted from the EEG incentive was seen to have significantly improved their export performance. Although, the period of study was too short to make a valid conclusion. Cage and Gadenne (2016), in their novel work involving a panel dataset of tax revenues covering 130 developed and developing countries from 1792 to 2006. The study shows that in the period since 1970, developing countries are more likely than rich countries to experience a fall in total tax revenues as they decrease trade taxes. It observed similar decreases in trade tax revenues in today's rich countries when they were at earlier level of development in the 19th and early 20th centuries. But they were less likely to experience a simultaneous decrease in total tax revenues than today's developing countries, and that when they did, this decrease was smaller and shorter-lived. The reason may be that developing countries decrease taxes on trade before developing tax administrations capable of taxing domestic transactions.

Karimi (2016) study of the impact of trade liberalization on tax revenue structures in developing countries collaborates positive effect of trade liberalization on total tax revenue in the long run, but that trade tax revenue follows Laffer curve with respect to tariff rate administration. This view was supported partially by Kassim (2016) study covering twenty-eight SSA countries for 30 years (1981–2010) period on the revenue implication of trade liberalization in SSA: Some new evidence. The conclusion is that trade liberalization resulted in overall increase in total tax revenues. Although the reduction in tariffs and freer trade decreased trade tax revenue, it caused a greater increase in domestic tax revenue which also indicated that greater urbanization increases tax revenue leading to higher net tax revenue in SSA countries. Gnangnon (2020) study of export product diversification and tax performance quality in 115 developing countries shows that diversification of export products induces higher quality of tax performance among the developing countries, and that generally, low-income countries among the developing countries

enjoy even a greater tax performance quality due to product diversification, compared to those with higher income level.

2.4 Gaps in Literature

Various research on this topic and related topics have used different approaches and estimation methods to show the relationship between export incentives and tax revenue. To the best of our knowledge, the impact of export incentives scheme on non-oil tax revenue have not been fully investigated. Some studies on the effect of export incentives on economic growth have divergent results. Thirdly, other studies have not investigated the impact of export incentives on non-oil tax revenue in Nigeria. This current study will bridge that gap.

3.0 Methodology

The study covered the period 1986-2022. The choice of this period is based on the remarkable policy changes. It marked the commencement of structural adjustment programme (SAP), which heralded a comprehensive non-oil export strategy in Nigeria. The variables of interest include total non-oil tax revenue (TTR), export expansion grant (lnEEG), real effective exchange rate (REER) and tax rate (TAX). These variables are directly connected with international trade, and they have interrelationship with non-oil tax revenue.

3.2 Model Estimation

$$\Delta \ln TTR_t = \alpha_0 + \alpha_{1i}\sum_{i-1}^{p}\Delta \ln TTR_{t-1} + \alpha_{2i}\sum_{i=1}^{p}\Delta TAX_{t-1} + \alpha_{3i}\sum_{i=1}^{p}\Delta REER_{t-i} + \alpha_{4i}\sum_{i=1}^{p}\Delta \ln NOEX_{t-i} + \alpha_{5i}\sum_{i=1}^{p}\Delta \ln EEG_{t-i} + +\beta_1 TAX_t + \beta_2 REER_t + \beta_3 NOEX_t + \beta_4 \ln EEG_t + \varepsilon_t \ldots\ldots 3.1$$

Table 3.1: Data source and measurement

S/NO	VARIABLE	DESCRIPTION	MEASUREMENT	SOURCE
1	TNTR	Total non-oil tax revenue (the revenue from vat, cit and ced)	Naira	FIRS & NCS
2.	NOEX	Non-oil export (shows the effect of export incentives on non-oil export)	Naira	NEPC
3	TAX Rate	Average weighted tariff rate for all products	Percentage. (%)	WDI
4	REER	Real exchange rate	Percentage (%).	WDI
5	EEG	Export expansion grant. (Proxy for export incentives). It is a grant given for exported non-oil products based on value added.	Naira	NEPC

Source: Author's computation (2024)

4.0 Estimation Results

4.1 Pre-estimation Test

Table 4.1 Augmented Dickey Fuller (ADF)

ADF											
AT LEVELS							AT FIRST DIFFERENCE				
INTERCEPT			TREND AND INTERCEPT		NONE		INTERCEPT		TREND AND INTERCEPT		NC
Variables	ADF statistics	5% Critical value	ADF statistics	5% critical value	ADF statistics	5% critical value	ADF statistics	5% Critical value	ADF statistics	5% Critical value	ADF statistic
LNEEG	-1.98	-2.94	-2.14	-3.55	0.03	-1.95	-5.58	-2.94	-6.09	-3.54	-5.22
LNNEOX	-1.62	2.94	-3.61	-3.20	3.43	-1.95	-10.93	-2.94	-15.68	-3.54	-6.24
LNTTR	-3.26	-2.94	-2.35	-3.55	5.19	-1.95	-5.27	-2.94	-5.83	-3.54	-1.08
TAX	-7.84	-2.97	-5.38	-3.54	-8.29	-1.95	-	-	-	-	-
REER	-4.28	-2.94	-4.23	-3.54	-	-	-7.30	-2.94	-7.06	-3.54	-7.44

Source: Author's computation (2024) using E-Views 10

Table 4.2 Phillip Peron Test

Phillip Peron Test											
AT LEVELS							AT FIRST DIFFERENCE				
INTERCEPT			TREND AND INTERCEPT		NONE		INTERCEPT		TREND AND INTERCEPT		N
Variables	PHP Statistics	5% Critical value	PHP statistics	5% critical value	PHP Statistics	5% critical value	PHP Statistics	5% Critical value	PHP statistics	5% Critical value	PHP statist
LNEEG	-2.90	-2.96	-1.92	-3.56	0.01	-1.95	-5.98	-2.96	-7.45	-3.57	-5.23
LNNEOX	-2.39	2.94	-3.65	-3.53	3.48	-1.95	-10.93	-2.95	-15.68	-3.54	-6.24
LNTTR	-5.30	-2.94	-2.72	-3.54	3.15	-1.95	-5.27	-2.95	-5.93	-3.54	-2.65
TAX	-4.54	-2.94	-5.38	-3.54	-1.94	-1.95	-	-	-	-	-
REER	-4.40	-2.94	-4.35	-3.54	-2.12	-1.95	-	-	-	-	-

Source: Author's computation (2024) using E-Views 10

Table 4.3 Kwiatkowski-Phillips-Schmidt-Shin test statistic

KPSS								
AT LEVELS					AT FIRST DIFFERENCE			
INTERCEPT			TREND AND INTERCEPT		INTERCEPT		TREND AND INTERCEPT	
Variables	KPSS statistics	5% Critical value	KPSS statistics	5% critical value	KPSS statistics	5% Critical value	KPSS statistics	5% Critical value
LNEEG	0.67	0.46	0.18	0.15	0.29	0.46	0.14	0.15
LNNEOX	0.74	0.46	0.16	0.15	0.38	0.46	0.31	0.15
LNTTR	0.73	0.46	0.19	0.15	0.33	0.46	0.12	0.15
TAX	0.62	0.46	0.10	0.15	0.30	0.46	0.20	0.15
REER	0.06	0.46	0.05	0.15	-	-	-	-

Source: Author's computation (2024) using E-Views 10

Table 4.4 Order of Integration

Variables	ADF with Intercept	ADF with trend and intercept	ADF AT NONE	PHILIP-PERRON Intercept	PHILIP-PERRON Trend and Intercept	PHILIP-PERRON AT NONE	KPSS with Intercept	KPSS with trend and intercept
LNEEG	1(1)	1(1)	1(1)	1(1)	1(1)	1(1)	1(1)	1(1)
LNNEOX	1(1)	1(1)	1(1)	1(1)	1(1)	1(1)	1(1)	1(1)
LNTTR	1(1)	1(1)	1(1)	1(1)	1(1)	1(1)	1(1)	1(1)

TAX	1(0)	1(0)	1(0)	1(0)	1(0)	1(0)	1(1)	1(1)
REER	1(1)	1(1)	1(1)	1(0)	1(0)	1(0)	1(0)	1(0)

Source: Author's computation (2024) using E-Views 10

Export (lnNEOX) and total non-oil tax revenue (lnTTR) are stationary at first difference while tax rate (TAX) and real effective exchange rate are stationary at levels. This implies that the variables are integrated in order I(1) and I(0). This justifies the use of Autoregressive Distributive Lag Model (ARDL) for the study.

Table 4.5 Lag Length Criteria Result

Lag	LogL	LR	FPE	AIC	SC	HQ
1	-248.4080	NA	108.1733*	18.85572*	20.03443*	19.22488*
2	-230.6270	23.29925	202.6617	19.35359	21.71099	20.09190
3	-202.2637	27.38525	241.1687	19.12163	22.65774	20.22910

Source: Author's computation (2024) using E-Views 10

4.2 Estimation

Table 4.6 Bound Test

Test Statistics	Value	K
F-statistic	9.484819	8
CRITICAL VALUE BOUNDS		
Significance	10 Bound	11 Bound
10%	1.85	2.85
5%	2.11	3.15
2.5%	2.33	3.42
1%	2.62	3.77

Source: Author's computation (2024) using E-Views 10

Table 4.7 Regression Output

PANEL A: SHORT RUN MODEL				
VARIABLE	COEFFICIENT	STANDARD ERROR	T-STATISTICS	PROBABILITY
LNTTR(-1)**	0.398868	0.183535	2.173248	0.0488
TAX**	0.010214	0.002771	3.686596	0.0027
REER	6.11E-05	0.000600	0.101907	0.9204
LNNOEX	-0.062570	0.073043	-0.856617	0.4072
LNEEG**	-0.073177	0.030030	-2.436817	0.0299
C	1.513615	2.408995	0.628318	0.5407

CointEq(-1)***	-0.056926	0.004493	12.66935	0.0000
PANEL B: LONG RUN MODEL				
TAX	-0.275919	0.381413	-0.723414	0.4822
REER	-0.020123	0.025021	-0.804276	0.4357
LNNOEX	3.363494	4.162018	0.808140	0.4335
LNEEG	1.285471	1.395578	0.921103	0.3738
C	26.58914	60.03863	0.442867	0.6651

Source: Author's computation (2024) using E-Views 10

*, ** and *** denote significant at 10%, 5% and 1% respectively. The dependent variable is non-oil tax revenue (lnTTR), the dependent variables are export expansion grant (lnEEG), tax rate (TAX) and real effective exchange rate (REER)

Short Run:

lnTTR = 1.51 + 0.40lnTTR(-1) + 0.01TAX – 0.00006REER – 0.06lnNOEX – 0.07lnEEG …….4.1

Long Run:

lnTTR= 26.59 - 0.28TAX– 0.02REER + 3.36lnNOEX + 1.29lnEEG ……4.2

From table 4.7, lag value of non-oil tax revenue had a significant positive effect on the non-oil tax revenue (β_1 = 0.4, p-value = 0.0488 < 0.05). The result denoted that the previous value of non-oil tax revenue was significant factor in determining the current value of non-oil tax revenue in Nigeria.

Export expansion grant had short run significant negative effect on non-oil tax revenue in Nigeria (β_9 = -0.07, p-value = 0.0299 < 0.05) but had an insignificant positive effect in the long run (α_8 = 1.29, p-value = 0.3738 > 0.05). A percentage increase in export expansion grant led to 0.04% decrease in non-oil tax revenue in the short run but to 1.29% increase in the long run. This implies that export expansion grant has significantly affected non-oil tax revenue in Nigeria only in the short run within the period under study.

The result further depicted that tax rate had positive significant effect on non-oil tax revenue in the short run (β_3 = 0.01, p-value = 0.0027 < 0.05). However, in the long run, tax rate had

negative insignificant effect on non-oil tax revenue (α_2 = -0.28, p-value = 0.4822 > 0.05). A unit increase in tax rate led to 2% increase in non-oil tax revenue in the short run but to a 28% decrease in non-oil tax revenue in the long run. These imply that tax rate significantly affect non-oil tax revenue in the short run only in Nigeria.

In similar way real effective exchange rate had both short run and long run negative insignificant effect on non-oil tax revenue in Nigeria (β_6 = -0.00006, p-value = 0.9204 > 0.05; α_5 = -0.02, p-value = 0.4357 > 0.05). The findings show that a unit increase in real effective exchange rate led to 0.0006% decrease in non-oil tax revenue in the short run and to 0.02% decrease in the long run though the decrease was not significant to non-oil tax revenue in Nigeria.

Furthermore, non-oil export had negative insignificant effect on non-oil tax revenue in Nigeria in the short run (β_8 = -0.06, p-value = 0.4072 > 0.05) but had an insignificant positive effect in the long run (α_7 = 3.36, p-value = 0.4335 > 0.05). By implication, a percentage increase in non-oil export led to 0.06% decrease in non-oil tax revenue in Nigeria in the short run but to 3.36% increase in the long run. However, both the decrease and increase did not significantly affect non-oil tax revenue in Nigeria within the period under study.

The equilibrium (ECM) version coefficient of -0.056926 which is negative and significant at 1% significant levels shows that approximately 5% disequilibrium in the short run can be corrected in the long run. This implies at the speed up of 0.05, there is possibility of convergence to the long run equilibrium.

4.3 Post Estimation Test

Breusch-Godfrey Serial Correlation Lm Test

Hypothesis:

H_o: The sample data are not significantly different than a normal population

H_1: The sample data are significantly different than a normal population.

Probabilities > 0.05 accept the null hypothesis

Probabilities < 0.05 reject the null hypothesis

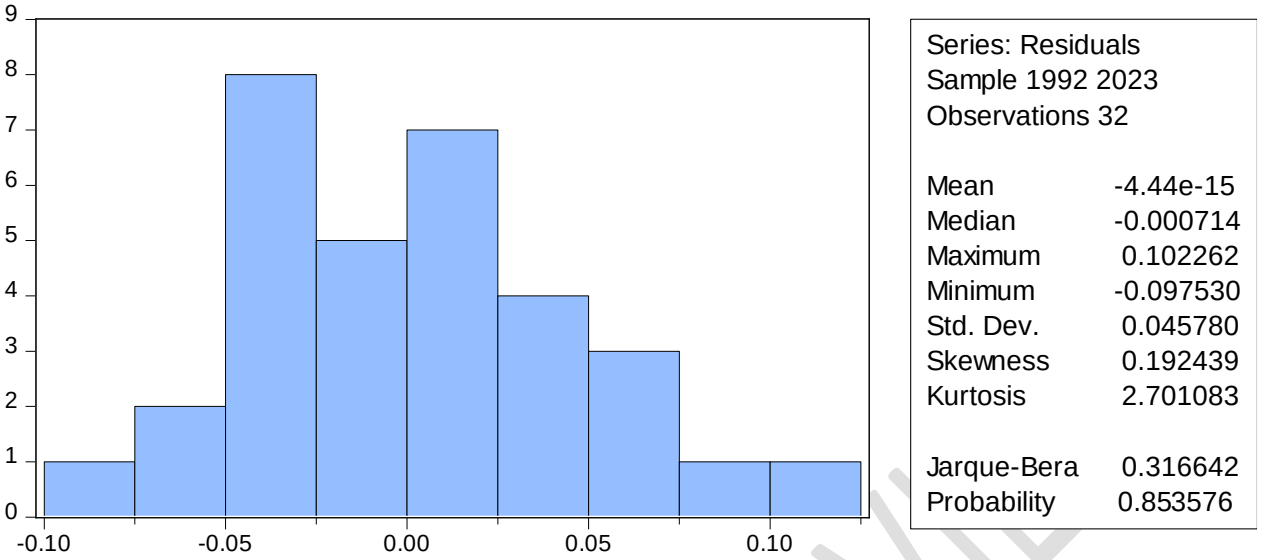


Figure 4.1 Jarque-Bera Normality Test

Source: Author's computation using E-views 10.0 (2024)

From the result, the probability values is 0.854 > 0.05 at 5% significant level. Therefore, the null hypothesis was not rejected. This means that the residuals were normally distributed.

Table 4.8 Other Post Estimation Tests

Panel A: Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.270565	Prob. F(1,12)	0.2817
Obs*R-squared	3.063778	Prob. Chi-Square(1)	0.0801
Panel B: Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	2.015904	Prob. F(11,20)	0.0834
Obs*R-squared	16.82511	Prob. Chi-Square(11)	0.1132
Scaled explained SS	7.656471	Prob. Chi-Square(11)	0.7437
Panel C: Ramsey RESET Test			
	Value	Df	Probability

t-statistic	0.520801	12	0.6120
F-statistic	0.271234	(1, 12)	0.6120

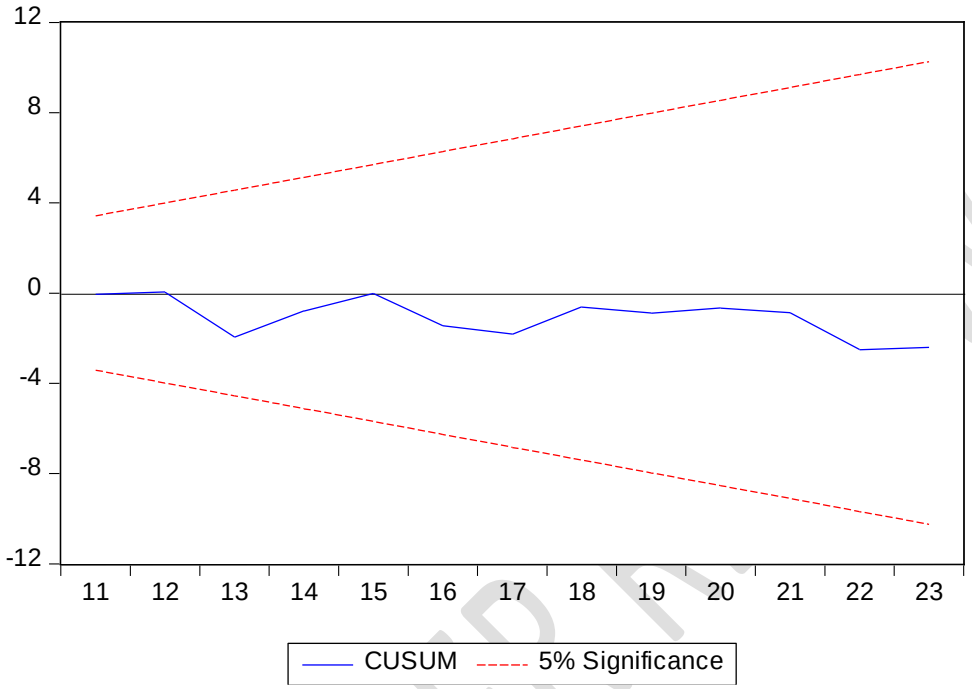
Source: Author's computation using E-views 10.0(2024)

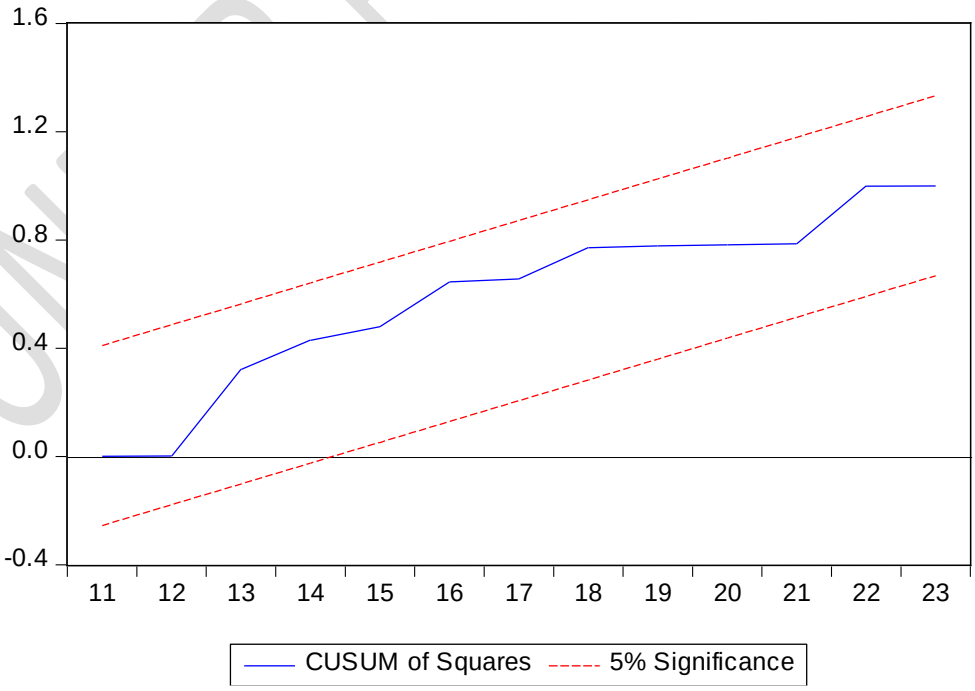
The result in Table 8 panel; A shows the prob. (chi-square) having value of 0.0801 > 0.05 at 5% level of significance. Therefore, we do not reject the null hypothesis which states that there is no serial correlation. This section in conclusion reflected the absence of serial correlation or autocorrelation.

Furthermore, at panel B, the test helps to ascertain whether the variance of the error term is constant. The results showed prob. (chi-square) having value of 0.7437 > 0.05 at 5% level of significance. Therefore, we accept the null hypothesis which states that the variance of the error term is constant. This implies that, there is homoscedasticity.

At panel C, The test for linearity was carried out using the Ramsey RESET Test. The decision criteria for linearity is to accept the null hypothesis when the probability of the F-statistics is significant at 5% level of significance. Therefore, given that the probability of the F-statistics as shown in the table 20 panel C above is 0.6120, we do not accept the null hypothesis, i.e. there is linearity in the model.

Stability Test





There are two important lines in the graphs above. The red lines represent 5% significant level while the blue line represents CUSUM stability line. If the blue line is in-between the two red lines, the model is stable. But if the CUSUM blue line is above or below the two red lines, the model is not stable. Based on the results, the red line lines lie in-between the blue lines in the both graphs. This shows that the model is stable

5.1 Conclusion and Recommendation

Export incentives proxied by export expansion grant (EEG) had negative and significant effect on total non-oil revenue (TTR) in the short run, and positive and insignificant in the long run. The implications of these outcomes are obvious. First, EEG failed in its core objective of being a catalyst to non-oil productive growth that would have generated employment, increase productivity, improve competitiveness of export goods and expand the productive capacity of the economy. The achievement of those expectations would have translated into increased non-oil tax revenue and reflect positive significant impact on the tax handles. The result validates the earlier positions by Ali & Madueme, (2019) and Sanni and Salihu (2020).

These results raise a fundamental concern of policy, implementation and evaluation. Karimi, (2016) posited that incentives can be catalyst or a drain. Studies across the globe have also shown that mismanagement of incentives have led to humongous revenue leakages to governments generally both for developed and developing countries (Boakye, 2020; Dillion, 2017; Clausing, 2016). Tax holidays, waivers, exemptions and rebates which were meant to encourage specific sector products and diversification have become a waste of revenue as the result of this study has shown (EEG was significant and negatively correlated with TTR, it was insignificant with VAT & CIT and negative with CED). Expectedly, Jung (2023) reports that Nigeria lost N6.7 trillion in 2021 to tax waivers, import duty exemptions and rebates. Therefore, export incentives have become a drain to government resources over the years, but studies across the globe have also shown that incentives can be a catalyst to economic growth and development as in the case of Malaysia, Chile and Myanmar (Gnangnon, 2017; Ayres & Freire, 2014; Hanson & Lundwin, 2004).

Furthermore, tax rate (TAX) had positive and significant effect on non-oil tax revenue in Nigeria in the short run, implying that increase in tax rate initially generates a corresponding increase in non-oil tax revenue, but in the long run, tax rate became negative and insignificant. This implies that further increases in tax rate will result in decrease in non-oil tax revenue. This is in line with laffer curve theory (Laffer, 2004). The economic implication is that continuous increment of tax rate does not guarantee increase in tax revenue to government. The economic effect may become negative beyond the point tax payers (even for import) reduce their purchases or production, or resort to tax avoidance, evasion and other tax manipulative tactics to avoid tax payment.

The study therefore recommended that that export expansion grant processing time frame and payment should be improved. There is an urgent to review the implementation of export expansion grant and ensure timely processing, approval and disbursement of the grant to mitigate as loss in time. The present arrangement where export expansion grant approvals are given years after the export transaction had taken place need to be reviewed as it mitigates against the benefits it was intended to provide. It is important to remember that the essence of the export expansion grant was to encourage competitiveness of the export goods, and receipt of the grant within short period after the conclusion of transaction would help the company to maintain a healthy financial position.

References

Adeusi, A.M., Uniamikogbo, E., Erah, O.S. & Aggreh, M. (2020). Impact of tax revenue on economic growth in Nigeria. Research Journal of Finance and Accounting, 11(8). Assessed through online Doi.10.7176/RJFA/11-8-10.

Ali, M., & Madueme, S. I. (2019). Effect of export expansion grant on the growth of Nigeria's non- oil export. *Journal of Economics and Sustainable Development*, *10*(22), 51-59.

Aromoshegbe, A.O., Emmanuel, U. & Osasere, A.O. (2017). Tax revenue and economic growth in Nigeria. *Scholar Journal of Economics, Business and Management*, 3(2), 37-44.

Ayres, S. & Freire, C. (2014). In which industries to invest- Aligning market and development incentives in Myanmar. *Journal of Southeast Asian Economics*, 31(3), 395-411

Balassa B. (1978) Export Incentives and Export Performance in Developing Countries: A Comparative Analysis. Weltwirtschaftliclies Archiv, 1 4, Tubingen, 1978. 24-61.

Boakye, B., Adoko, T.B., & Awomnab, D. (2020). Tax exemptions in Ghana's mining sector. Africa Center for Energy Policy

Boakye, B., Adoko, T.B., & Awomnab, D. (2020). Tax exemptions in Ghana's mining sector. Africa Center for Energy Policy.

Cage, J. & Gadenne, L. (2016). Tax revenues, development, and the fiscal cost of trade liberalization, 1792-2006. *Warwick Economic Research Papers* 1132.

Cavusoglu, B. & Usman, M.A.N. (2021). The impact of trade openness and export expansion grants in Nigerian economy (1986-2019): New evidence from Quantile regression. Research Square, https:// doi.org/10.21203/rs.3.rs-145322/v1

Clausing, K.A., (2016). The effect of profit shifting of corporate tax base in USA and beyond. National Tax Journal, 69(4), 905-935.

Clausing, K.A., (2016). The effect of profit shifting of corporate tax base in USA and beyond. National Tax Journal, 69(4), 905-935

Crivelli, E., Keen, M. & de Mooij, R.A. (2015). Base erosion, profit shifting and developing countries. IMF Working Paper WP/15/118 International Monetary Fund, Washington D.C.

Dalhat, L.S. (2019). Overview of export expansion grant (EEG) scheme. Nigeria Export Promotion Council capacity building programme.

Dillon, S. (2017). Tax Avoidance, Revenue Starvation and the Age of the Multinational Corporation. *The International Lawyer*, 50(2), 275-328.

Gnangnon, S. K. (2017). Multilateral trade liberalization and government revenue. *Journal of Economic Integration*, *32*(3), 586-614.

Gnangnon, S. K. (2020). Export product diversification and tax performance quality in developing countries. *International Economics and Economic Policy*, 17(4), 849-876

Gnangnon, S.K. & Brun, J-F. (2017). Impact of export upgrading on tax revenue in developing and high income countries *Oxford Development Studies*, 45(4), 542-561.

Hansson, P. & Lundin, N.N. (2004). Exports as an indicator or promoter of successful Swedish manufacturing firms in the 1990s. *Development World Economics* 42(12).

Hansson, P. & Lundin, N.N. (2004). Exports as an indicator or promoter of successful Swedish manufacturing firms in the 1990s. *Development World Economics* 42(12).

Hesse, H. (2008). Export diversification and economic growth. (WP.21). Commission on growth and development. *World Bank*, Washington, D.C.

Ibenegbu, G. (2017). History of taxation in Nigeria. Strachan Partners Mondaq. Accessed through www.legit.ng/1119115.

Jung, IL. (2023). Nigeria's tax revenue mobilization: lessons from successful revenue reform episodes. International Monetary Fund

Karimi, M. (2016). The impact of trade liberalization on tax revenue structures in developin countries. Phd Thesis submitted to Universiti Putra Malaysia

Kassim, L. (2016). The Revenue Implication of Trade Liberalisation in Sub-Saharan Africa:Some new evidence. Discussion paper, *Journal of Economic Literature*, June, 1-40

Kento, W. (2021). Export incentives: Definition, types and benefits. Sourced from www.investopedia.com

Myles, G. D. (2000). Taxation and economic growth. *Fiscal Studies.* 21, 141-168.

Onah, B. C., Amuka, J. I., Asogwa, F. O., Onuigbo, F. N., & Ezeudeka, C. F. (2022). Does Incentive Improve Export Performance of Firms? An Evidence. *Journal of Economics, Finance and Accounting Studies*, *4*(1), 437-444.

Sani, M. B., & Salihu, A. (2020). Analysis of the relationship between export incentives schemes and manufactured exports in Nigeria. International Journal of all Research Writings, 3(2), 21-28.

Suranovic, S. (2010). International trade theory and policy. Flat World Knowledge, Inc

Udah, E. B. (2012). Export-Growth Hypothesis: An Econometric Analysis of the Nigerian Case. Interdisciplinary Journal of Research in Business 2(4): 39 – 49.

Uwaoma, I, & Ordu, P.A. (2016). The impact of tax incentives on economic development in Nigeria (Evidence of 2004 – 2014). *International Journal of Economics, Commerce and Management*. iv(3).

Zahir, S. (2003). Fiscal incentives the cost of capital and foreign direct investment in Pakistan. A neoclassical approach. Research submitted to *Pakistan Institute of Development Economics (PIDE)* annual conference.