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IMPACT OF OIL RENTS ON NON-RESOURCE TAX REVENUE: THE MODERATING ROLE OF ECONOMIC INSTITUTIONS IN SELECTED ECOWAS MEMBER COUNTRIES

ABSTRACT

This study examines the impact of oil rents on non-resource tax revenue in selected ECOWAS countries (Nigeria, Ghana, Côte d'Ivoire, Benin, and Niger) over the period 1990–2024, with emphasis on the moderating role of economic institutional quality. Using panel data and applying Panel-Corrected Standard Errors (PCSE) alongside Dynamic Common Correlated Effects (DCCE) for robustness, the findings reveal that oil rents exert a negative and significant effect on non-resource tax revenue, confirming the presence of a fiscal resource curse in the region. Institutional quality, however, shows a positive effect on tax revenue. The interaction term between oil rents and institutional quality is positive and significant in the PCSE model but becomes insignificant under the DCCE robustness check, indicating that the moderating role of institutions is not entirely robust when cross-sectional dependence and dynamic effects are considered. The results further indicate that weak institutional frameworks contribute to low domestic revenue mobilization, while stronger institutions enhance tax performance. The study concludes that improving governance, transparency, and accountability is critical for ensuring that oil revenues complement rather than substitute non-resource tax efforts. Policy recommendations emphasize strengthening institutional capacity, diversifying economic activities, and promoting fiscal stability for sustainable revenue generation in ECOWAS countries.

Keywords: Non-resource tax revenue, oil rents, institutional quality, ECOWAS, resource curse, PCSE, DCCE

JEL Classification: H20, Q33, O55, C33

1. Introduction

There is no doubt that the survival of any country depends on the resources available for the provision of security, infrastructure, and to meet basic required expenditures. Therefore, the nation's revenue sources are crucial challenges that can never be ignored (Usman & Idoko, 2021). Many West African nations' fiscal landscapes have been significantly shaped by their abundance in natural resources, especially oil. The fiscal structure of resource-rich economies has long been a subject of debate in development economics and political economy.

In many countries, particularly in West Africa, the abundance of oil and gas resources presents both opportunities and challenges for sustainable fiscal management. Oil rents defined as the difference between the value of crude oil production at world prices and total costs of production can provide significant revenues that, if well managed, could finance infrastructure, human capital development, and economic diversification (Ross, 2012). However, excessive reliance on such rents often results in fiscal vulnerability, especially in the absence of robust domestic tax systems (Beblawi & Luciani, 1987). Oil rents make up a sizable amount of government revenue in several West African nations, particularly oil producers such as Nigeria, Ghana, and Côte d'Ivoire. This can reduce short-term fiscal strains, but it might also discourage the strengthening of domestic tax structures, which would result in less money coming in from non-oil taxes (Bornhorst, Gupta, & Thornton, 2009). Although natural resource profits can be used to finance profitable investments and raise tax revenues to diversify economies, the exploitation of natural resources necessitates permissions and authorizations, sometimes in complex regulatory environments, which can encourage officials to engage in corrupt practices. For instance, institutional growth in resource-rich nations may be partially reflected in the prevalence of negotiating power through taxes and bribery (Goyette, 2019).

Non-resource tax revenue, which includes taxes such as personal income tax, corporate income tax (excluding oil-related activities), value-added tax (VAT), and customs duties, is essential for sustainable fiscal management. Unlike oil revenues, which are exogenous and volatile, non-resource taxes are more stable and reflect the strength of a country's domestic revenue mobilization capacity. However, many ECOWAS countries exhibit low levels of non-resource tax revenue, often reflected in low tax-to-GDP ratios compared to global benchmarks. A strong tax system broadens the revenue base, fosters fiscal independence, and enhances government accountability by linking state spending to citizens' contributions (Besley & Persson, 2009).

Recent statistics indicate that oil rents remain a significant component of national income in several ECOWAS member countries. Nigeria, the dominant producer in the region, consistently records oil rents averaging 7-10% of GDP, accounting for more than 60% of total government revenue in many fiscal years (World Bank, 2024). Ghana and Côte d'Ivoire also derive substantial income from petroleum resources, with oil rents contributing approximately 3-5% of GDP since the expansion of offshore production (World Bank, 2024). In emerging producers such as Benin and Niger, oil rents remain relatively low often below 2% of GDP yet they continue to form an increasingly important part of national fiscal planning (World Bank, 2024). These figures highlight the heavy dependence of ECOWAS countries on resource-based revenue and underscore the need for strong institutional frameworks to ensure the effective management of oil wealth (IMF, 2023).

Despite these benefits, several ECOWAS member states, especially oil producers such as Nigeria and Ghana, have historically allocated a substantial share of oil rents to finance fuel subsidies. While intended to make energy affordable, such subsidies often create fiscal distortions, benefit wealthier households disproportionately, and divert funds away from productive investment (IMF, 2022). In some cases, subsidies have consumed a significant portion of national budgets, crowding out expenditures on infrastructure, education, and health services that could have been funded through more sustainable fiscal mechanisms, including non-resource taxation. Moreover, subsidies may encourage smuggling and energy overconsumption, thereby exacerbating macroeconomic imbalances. The challenge is further compounded by weak institutional quality in some ECOWAS states, which facilitates rent-seeking, corruption, and mismanagement of oil rents. Weak institutions often lack the capacity or political will to channel resource revenues into productive investments or implement

gradual subsidy reforms. In contrast, countries with stronger governance frameworks are more likely to integrate oil rents into medium-term fiscal strategies, balance the trade-off between subsidies and development spending, and enhance tax collection efficiency. The situation raises several critical questions: 1. What is the impact of oil rents on public tax revenue among West African countries? 2. What are the roles of institutions in moderating the effect of oil rents on public tax?

This study is to provide better understanding regarding the ongoing debate on the resource curse and the role of institution in mitigating its effects, which is crucial to the understanding of how oil rents influence non-resource tax revenue, particularly when moderated by institutional quality within the ECOWAS region. The study focuses on the impact of oil rents on non-resource tax revenue and the moderating role of institutional quality in selected member countries of the Economic Community of West African States (ECOWAS) over the period 1990 to 2024.

The study is structured as follows: Section 2 reviews the concepts, theory and empirical literature, Section 3 outlines the methodology, Section 4 presents and discusses the results, Section 5 concludes, and Section 6 provides policy recommendations.

2. Literature Review

2.1 Conceptual Clarifications

Oil rents refer to the economic returns derived from the extraction and sale of crude oil that exceed the total costs of production, including exploration, development, extraction, transportation, and a normal return on investment (World Bank, 2023). They represent the surplus value obtained from exploiting a finite natural resource due to its scarcity, market value, and the relatively low marginal cost of extraction compared to its selling price. This rent component is often captured by governments through royalties, production-sharing agreements, taxes, and state participation in oil ventures (Collier & Venables, 2011). Also Badeeb, Lean and Clark (2017) explain oil rents as windfall revenues generated from the exploitation of petroleum resources, typically accruing to governments through ownership or taxation. In the word of Mehlum, Moene and Torvik (2021), the unearned revenues derived from natural resources which depending on the quality of institutions can either support development or fuel corruption and rent-seeking behavior In macroeconomic terms, oil rents are typically measured as the difference between the value of crude oil production at world prices and the total cost of production, expressed as a percentage of GDP (Hamilton & Ruta, 2009). For resource-rich economies, such as Nigeria, Ghana, and other oil-producing West African states, oil rents often constitute a significant share of national income.

Non-resource tax revenue refers to government income derived from taxation sources that are not directly related to the extraction or exploitation of natural resources such as oil, gas, and minerals. It includes revenues generated from domestic economic activities through instruments such as personal income tax, corporate income tax (excluding resource-based firms), value-added tax (VAT), excise duties, and customs duties (International Monetary Fund, 2022). This type of revenue is widely regarded as a more stable and sustainable source of government income compared to resource-based

A human-made system of laws and customs that molds and limits social behavior is called an institution. a well-known company or organization, particularly one with a public nature, like a bank or university. Streeck and Thelen (1992) assert that institutions serve as the foundation for social order. They stand for socially accepted, or collectively imposed, standards for the conduct of particular actor types or the execution of particular tasks. They usually entail actors' rights and obligations that are tied

to one another. According to Knight (1992), institutions are "a set of rules that regulate social interactions in certain ways," and members of the relevant group or society must share knowledge of these norms. Also in the word of North (1990), institutions are the system of rules, both official (like laws and regulations) and unofficial (like traditions, customs and social norms), that guide and shape how people interact in society and the economy. They help determine the incentives and constraints faced by individuals and organizations in their decision making processes.

2.2 Theoretical Review

The Rentier State Theory

The Rentier State Theory, which was first put forth by Mahdavy (1970) and further developed by Beblawi and Luciani (1987), explains how resource-rich countries, particularly those endowed with oil and gas, rely heavily on externally generated rents rather than domestic taxation. In such economies, governments finance public spending largely through resource revenues, reducing the need to tax citizens (Neal, 2019). This weakens the fiscal relationship between the state and the populace, often resulting in reduced accountability, weaker institutions, and increased rent-seeking behavior (Oxford University Press, 2019). Nigeria exemplifies this pattern, where dependence on oil revenues has undermined tax system development and encouraged governance challenges.

Resource Curse Hypothesis

The resource curse, also known as the paradox of plenty, was advanced by Auty (1993) to explain why many resource-rich developing countries fail to translate abundant natural resources into sustained economic growth and development (Fleming et al., 2015; Adebora & Buabeng, 2021). Although natural resources generate substantial government revenue and raise expectations of improved welfare, resource-rich countries often experience conflict, authoritarian governance, macroeconomic instability, and slower development compared to resource-poor countries (Paine, 2016). These challenges can undermine non-resource sectors and hinder overall economic progress.

Dutch disease represents a key mechanism of the resource curse, describing how resource booms can negatively affect other sectors through currency appreciation, inflation, and the reallocation of labor and capital away from productive non-resource activities (Davis, 1995; Papyrakis, 2017). As a result, competitiveness in non-oil sectors declines, reducing economic diversification and tax revenue contributions, thereby reinforcing dependence on resource rents.

Institutional Quality Theory

Institutional Quality Theory, advanced by North (1990) and further developed by Acemoglu, Johnson, and Robinson (2001), emphasizes that institutional strength significantly shapes how oil rents affect public tax revenues in West African countries. Strong institutions which are characterized by effective governance, rule of law, transparency, and accountability can mitigate the resource curse by ensuring efficient management of oil revenues, reducing corruption, and strengthening tax administration (Balogun, Obele & Adeniyi, 2024). Such institutions promote economic diversification, broaden the tax base, and enhance tax compliance. In contrast, weak institutions exacerbate rent-seeking and mismanagement, leading to poor tax collection and increased dependence on volatile oil revenues. Empirical evidence from West Africa supports the view that institutional quality plays a critical moderating role in the oil rents–tax revenue relationship.

2.3 Empirical Review

Studies on the effect of oil rents on non-resource tax collection have been carried out in a number of nations using various samples and methodology. For example, David et al. (2024) and Saheed and Omotunde (2024) find that oil rents significantly enhance economic performance and living standards in the long run. Similarly, Adeniyi, Balogun, and Obele (2024) report that oil revenue positively affects economic growth in the short run, though its long-run effect is negative, underscoring the volatility and unsustainability of oil-dependent fiscal systems. These findings align with Otto and Moris (2022) and Omedoro and Alega (2021), who argue that oil rents have failed to translate into meaningful improvements in human and social development in Nigeria.

Beyond Nigeria, cross-country evidence further reinforces the argument that oil rents alone do not guarantee improved tax capacity or sustainable development. Bamoy and Fouopi-Djiogap (2024), using a GMM framework for 44 African countries, find no significant direct effect of natural resource rents on economic growth. Similarly, Aimer (2018) and Knebelmann (2017) report weak or insignificant links between oil rents and tax revenues, especially when oil income crowds out non-oil tax efforts. Slimane (2024) and Coulibali (2019) provide strong evidence of a negative relationship between resource rents and non-resource tax revenues, confirming the presence of a fiscal substitution or “rentier effect.”

Institutional quality emerges as a critical moderating factor in the oil rent–tax revenue nexus. Numerous studies including Umar, Zameer, and Akhtar (2024), Zalle (2022), Lien (2015), and Hussain et al. (2016) consistently show that strong institutions enhance tax capacity, improve revenue mobilization, and reduce rent-seeking behavior. In Africa and other developing regions, political stability, control of corruption, regulatory quality, and government effectiveness are found to significantly improve tax collection (Johnson & Omedoro, 2021; Mohammad & Sanusi, 2020; Sebele-Mpofu, 2020). Conversely, weak institutions exacerbate the negative fiscal effects of oil dependence, as evidenced by Rafiu (2021), Motameni (2021), and Soro (2020).

Recent studies further emphasize the asymmetric and nonlinear effects of oil rents. Adewele (2021), Haque (2020), and Slimane (2024) demonstrate that positive oil revenue shocks often have stronger and more persistent adverse effects on fiscal discipline and non-resource tax effort than negative shocks. This asymmetry suggests that oil windfalls may weaken incentives for domestic tax mobilization, particularly in environments with poor governance.

Despite the empirical literature, notable gaps remain. First, many studies focus either on economic growth or total tax revenue, with limited attention to non-resource tax collection disaggregated from oil rents, especially in a regional West African context. Second, while institutional quality is frequently examined, fewer studies explicitly model its moderating role in the relationship between oil rents and tax revenue using interaction terms. Third, existing evidence is often country-specific or based on broad global samples, thereby overlooking regional institutional heterogeneity within West Africa. Therefore, this study contributes to the literature by systematically examining the impact of oil rents on non-resource tax revenue in West African countries while explicitly accounting for the moderating role of institutional quality. By adopting a regional perspective and robust econometric techniques, the study provides deeper insights into how institutional frameworks can either amplify or mitigate the fiscal consequences of resource dependence.

3. Methodology

This section provides the method used to analyzed the data in this study.

3.1 Data Sources

The study used panel dataset covering five West Africa countries, especially those classified as oil-producing and members of the Economic Community of West African States (ECOWAS) over the period of 1990-2024. The selection of these countries is based on their relevance to the research question and availability of data. The data used in this study includes non-resource tax revenue as percentage of GDP, Oil rents as percentage of GDP, the institutional qualities then Gross domestic product per capital, official exchange rate, trade openness, population rate, foreign direct investment and inflation rate as a control variable. The data were obtained from UNU-WIDER, World-Bank World Development Indicator (WDI) and World Governance Indicators (WGI).

3.2 Model Specification

The specification of the model determined the dependent and independents variables that are included in the model. It expresses the mathematical relationship between dependent and independent variables. To empirically analyze the relationship between oil rents and non-resource tax revenue with institutions as a moderating factor, we adopt the model from the work of Ishak and Farzanegan(2020) with some modifications.

The model for the study is expressed as:

$$NRTR = f(OILR, INST, EXR, GDPC, FDI, TOP, POPG, INFR) \quad (1)$$

Where; NRTR denotes non-resource tax revenue, OILR represents oil rents, INST symbolize Institutions, EXR denote Exchange rate, GDPC represent Gross domestic product per capita, FDI represent foreign direct investment, TOP stands trade openness POPG represent population growth and INFR represent inflation rate.

The Econometric form of the model is expressed as:

$$NRTR_{it} = \beta_0 + \beta_1 OILR_{it} + \beta_2 INST_{it} + \beta_3 LEXR_{it} + \beta_4 LGDPC_{it} + \beta_5 FDI_{it} + \beta_6 TOP_{it} + \beta_7 POPG_{it} + \beta_8 INFR_{it} \quad (2)$$

Where,

NRTR_{it}= Non-resource Tax Revenue as a percentage of GDP for country i at time t

OILR_{it}=Oil Rent as a percentage of GDP for country i at time t

INST_{it}= Institutional quality for country i at time t

LEXR=Log of exchange rate for country i at time t

LGDPC_{it}= log of Gross domestic product per capita for country i at time t

FDI= Foreign direct investment of country i at time t

TOP= trade openness of country i at time t

POPG= population growth of country i at time t

INFR_{it}=Inflation rate for country i at time t

β₀= Fixed effects specific to each country i, accounting for time-invariant country-specific characteristics (e.g., geographic factors, historical factors).

β_1 - β_8 =parameters to be estimated

ϵ_{it} =Error term

Therefore in order to examine the role of institutions in moderating the impact of oil rents on non-resource tax revenue, then the model below shows the interaction terms. The inclusion of institutions as a moderating variable is stated as;

$$NRTR_{it} = \beta_0 + \beta_1 OILR_{it} \times INST_{it} + \beta_2 LEXR_{it} + \beta_3 LGDPC_{it} + \beta_4 FDI_{it} + \beta_5 TOP_{it} + \beta_6 POPG_{it} + \beta_7 INFR_{it} + \epsilon_{it} \quad (3)$$

Where $OILR \times INST$ signifies the interaction term where institution moderates oil rents

3.3 Estimation Methods

This research work employed Panel-Corrected Standard Errors (PCSE) and dynamic Common Correlated Effect (DCCE) as a supplementary estimation techniques in order to analyze the numerical estimate of the co-efficient of the equation and after which the pre-estimation test were conducted to determine the impact of independent variables; oil rents, institutional quality and the control variables which comprises of Exchange rate, GDP per capital, foreign direct investment, trade openness, population growth and inflation rate on non-resource tax revenue in West Africa.

The PCSE framework improves upon the conventional linear panel model by correcting the standard errors of the estimated coefficients to account for contemporaneous correlation across cross-sections and panel-specific heteroscedasticity. This is particularly important in the ECOWAS context, where countries are exposed to common shocks such as global oil price fluctuations, regional policy spillovers, and similar institutional dynamics. By adjusting the variance-covariance matrix of the error term, PCSE produces more reliable statistical inference without altering the coefficient estimates obtained from pooled estimation.

The PCSE model's general form is represented by the equation bellow;

$$Y_{it} = \alpha + \beta_1 X_{it} + \beta_2 Z_{it} + \epsilon_{it} \quad (4)$$

In the above equation, “ Y_{it} ” represents the dependent variable for individual “ i ” at time “ t ”. “ i ” represent the cross-section units, while “ t ” represents the period from 2000 to 2024. The term “ α ” indicate the individual-specific intercept, then “ X_{it} ” and “ Z_{it} ” contain the set of all the independent variables while “ ϵ_{it} ” represent the error term. The PCSE method corrects the estimated variances of the coefficients while allowing flexibility in the covariance structure of the error terms across countries.

The choice of the PCSE estimator is justified on several grounds. First, the results from the cross-sectional dependence tests indicate significant interdependence among ECOWAS countries, which is expected due to shared exposure to external shocks such as oil price volatility, regional integration policies, and similar macroeconomic structures. PCSE effectively accounts for such contemporaneous correlations across panels. Also, the presence of heteroskedasticity across countries is highly likely given differences in economic size, fiscal capacity, and institutional development. The PCSE framework allows for panel-specific error variances, thereby improving the reliability of the estimated standard errors. Also macroeconomic variables such as tax revenue, oil rents, and exchange rates

typically exhibit persistence over time, leading to serial correlation within panels. By incorporating a panel-specific AR(1) process, PCSE adequately addresses this issue and enhances estimation efficiency. Additionally, the Dynamic Common Correlated Effects (DCCE) estimator were employed as a robust technique in order to ensure the reliability, stability, and robustness of the results obtained from the primary CS-ARDL estimation technique.

4. Results and Discussion

This section presents the results of the data analyzed using the techniques highlighted in section three. Table 1 below presents the descriptive statistics of the study’s variables in terms of measures of central tendencies and dispersion including mean, maximum and minimum values as well as the standard deviation.

Table 1: Summary Statistics

| Variable | Mean | Std Dev. | Minimum | Maximum |
|-----------------------------|----------|----------|---------|----------|
| Non-resource tax | 0.094 | 0.024 | 0.042 | 0.1360 |
| Oil Rents | 3.2473 | 5.6018 | 0 | 28.705 |
| Economic Governance Index | -0.299 | 1.559 | -3.663 | 2.924 |
| Official Exchange Rate (ln) | 357.096 | 262.799 | 0.033 | 1478.97 |
| Real GDP Per-cap (ln) | 1298.122 | 625.587 | 392.899 | 2585.734 |
| FDI | 2.072 | 2.338 | -1.119 | 12.165 |
| Trade Openness | 50.948 | 18.262 | 3.031 | 116.048 |
| Pop. Growth | 2.848 | 0.536 | 1.875 | 4.437 |
| Inflation | 9.828 | 12.977 | -7.797 | 72.836 |

Source; Author’s computation using Stata

Table 1 presents the descriptive statistics of the study variables, revealing substantial heterogeneity across West African countries. Non-resource tax revenue (NRTR) has an average value of 9.4% with a standard deviation of 2.4%, indicating relatively low but moderately stable tax mobilization. Oil rents (OILR) record a mean of 3.25% and a high standard deviation of 5.60%, reflecting large disparities in natural resource endowments across countries. Institutional quality (INST) shows an average of -0.30 with a standard deviation of 1.56, suggesting generally weak governance systems with notable variations. The official exchange rate (LEXR) records an average of 357.10 with a standard deviation of 262.80, indicating considerable exchange rate volatility. Real GDP per capita (LGDPPC) averages 1,298.12 with a standard deviation of 625.59, reflecting income disparities across the region. Foreign direct investment (FDI) has a mean value of 2.07% and a standard deviation of 2.34%, showing moderate variability and occasional capital outflows. Trade openness (TOP) records an average of 50.95% with a standard deviation of 18.26%, implying relatively high trade integration. Population growth rate (POPG) averages 2.85% with low dispersion of 0.54%, indicating relative stability, while inflation (INFR) shows an average of 9.83% and a high standard deviation of 12.98%, reflecting significant macroeconomic instability.

Table 2: Pairwise Correlation Matrix

| S/N | Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|-----------------------------|-------|-------|-------|------|-------|-------|-------|
| 1 | Oil Rents | | | | | | | |
| 2 | Economic Governance | 0.48 | | | | | | |
| 3 | Official Exchange Rate (ln) | -0.11 | -0.22 | | | | | |
| 4 | Real GDP Per-cap (ln) | 0.38 | 0.07 | -0.15 | | | | |
| 5 | FDI | -0.01 | 0.46 | -0.24 | - | | | |
| | | | | | 0.08 | | | |
| 6 | Trade Openness | -0.30 | 0.51 | -0.45 | 0.15 | 0.29 | | |
| 7 | Pop. Growth | -0.21 | -0.12 | 0.42 | - | 0.04 | -0.23 | |
| | | | | | 0.60 | | | |
| 8 | Inflation | 0.41 | -0.09 | -0.54 | 0.22 | -0.02 | 0.11 | -0.33 |

Source; Author’s computation Using Stata

Table 2 presents the pairwise correlation matrix, highlighting the degree and direction of association among the study variables. Oil rents (OILR) show a moderate positive relationship with institutional quality (INST) (0.48) and real GDP per capita (0.38), but weak negative correlations with exchange rate (LEXR) (-0.11) and trade openness (TOP) (-0.30). Institutional quality is positively associated with foreign direct investment (FDI) (0.46) and trade openness (0.51), suggesting that stronger institutions enhance investment inflows and trade integration. The official exchange rate exhibits mostly negative relationships with other macroeconomic variables, particularly trade openness (-0.45) and inflation (-0.54), indicating the adverse effects of exchange rate instability. Real GDP per capita (LGDPPC) is negatively related to population growth (-0.60), while FDI shows a positive association with trade openness (0.29). Overall, the correlation coefficients are moderate and below the 0.8 threshold, confirming the absence of serious multicollinearity among the explanatory variables and supporting their suitability for regression analysis.

Table 3: Pesaran Cross-sectional Dependence and Slope Homogeneity Tests

| Variable | Average ρ | Average $ \rho $ | CD Stat | Prob. Value |
|-------------------------------|----------------|------------------|----------|-------------|
| Non-resource tax | 0.540 | 0.540 | 10.11*** | 0.000 |
| Oil Rents | -0.035 | 0.318 | -0.66 | 0.512 |
| Economic Governance Index | 0.487 | 0.487 | 9.10*** | 0.000 |
| Official Exchange Rate (ln) | 0.764 | 0.764 | 14.29*** | 0.000 |
| Real GDP Per-cap (ln) | 0.714 | 0.714 | 13.36*** | 0.000 |
| FDI | 0.096 | 0.341 | 1.80* | 0.071 |
| Trade Openness | -0.053 | 0.180 | -0.99 | 0.324 |
| Pop. Growth | 0.234 | 0.388 | 4.37*** | 0.000 |
| Inflation | 0.572 | 0.572 | 10.71*** | 0.000 |
| Slope Homogeneity Test | | | | |
| Delta | 5.616*** | | | 0.000 |
| Adjusted Delta | 6.645*** | | | 0.000 |

*** p<0.01, ** p<0.05, * p<0.1

Source: Author’s Computation using Stata

Table 3 presents the results of the panel cross-sectional dependence and slope homogeneity tests. The findings reveal that most variables, including non-resource tax revenue (NRTR), institutional quality

(INST), official exchange rate (LEXR), real GDP per capita (LGDPPC), population growth (POPG), and inflation (INFR), exhibit significant cross-sectional dependence, indicating that countries in West Africa are interconnected and exposed to common regional or global shocks. In contrast, oil rents (OILR) and trade openness (TOP) do not show significant cross-sectional dependence, implying that their shocks are largely country-specific. Foreign direct investment (FDI) displays only weak dependence across countries.

Furthermore, the slope homogeneity test shows that both the Delta and Adjusted Delta statistics are significant at the 1% level, leading to the rejection of the null hypothesis of slope homogeneity. This indicates that the relationship between oil rents, institutional quality, and non-resource tax revenue differs across countries. Overall, the results justify the adoption of second-generation panel estimation techniques that account for cross-sectional dependence and heterogeneity across the panel.

Table 4: First and Second Generation Panel Unit Root Tests

| Variable | Pesaran (2007) CIPS | | Maddala & Wu (1999) | |
|-----------------------------|-------------------------------------|-----------------------|-----------------------------|-----------------------|
| | Level | 1 st Diff. | Level | 1 st Diff. |
| Non-resource tax | -1.480* | -5.379*** | 22.520** | |
| Economic Governance Index | 2.957 | -4.059*** | 2.496 | 66.565*** |
| Official Exchange Rate (ln) | -1.617* | -5.608*** | 12.629 | 59.371*** |
| Real GDP Per-cap (ln) | 2.077 | -2.393*** | 2.993 | 43.214*** |
| FDI | -2.526*** | | 8.196 | 60.166*** |
| Pop. Growth | 2.486 | -3.006*** | 26.298*** | |
| Inflation | -3.701*** | | 46.797*** | |
| | ADF-Fisher Test (Chi ²) | | Levin-Lin-Chu Test (t-star) | |
| Oil Rent | 10.452 | 110.733*** | -2.038** | |
| Trade Openness | 13.922 | 91.267*** | -1.062 | -6.884*** |

*** p<0.01, ** p<0.05, * p<0.1

Source: Author’s computation using stata

Table 4 presents the results of the panel unit root tests using the Pesaran CIPS, Maddala and Wu Fisher-ADF, ADF-Fisher Chi-square, and Levin–Lin–Chu (LLC) tests. The findings reveal mixed orders of integration among the variables. Non-resource tax revenue (NRTR), institutional quality (INST), official exchange rate (LEXR), real GDP per capita (LGDPPC), population growth (POPG), oil rents (OILR), and trade openness (TOP) are generally non-stationary at level but become stationary after first differencing, indicating that they are integrated of order one, I(1). In contrast, foreign direct investment (FDI) and inflation (INFR) are stationary at level, implying integration of order zero, I(0). Overall, the results indicate a combination of I(0) and I(1) variables, thereby justifying the use of panel estimation techniques capable of accommodating mixed orders of integration.

Table 5 Panel Cointegration Tests

| Pedroni Test | Modified Perron | Phillips– Phillips–Perron | Augmented Dickey–Fuller test | | | |
|--------------|------------------------|------------------------------|------------------------------|---------------|---------------------|-------|
| Statistics | 1.0052 | -2.486*** | -2.793*** | | | |
| Westerlund | Group T-statistic (Gt) | Group (Ga) | Alpha | Panel (Pt) | T-statistic (Pa) | Alpha |
| Statistics | -2.245 ** | 1.123 | | -2.493** | | 0.190 |

*** p<0.01, ** p<0.05, * p<0.1

Source: Author’s computation using stata

Table 5 presents the results of the Pedroni and Westerlund panel cointegration tests used to examine the existence of a long-run relationship among the variables. The Pedroni test provides mixed outcomes, as the Modified Phillips–Perron statistic (1.005) is insignificant, while the Phillips–Perron statistic (-2.486) and the Augmented Dickey–Fuller statistic (-2.793) are negative and statistically significant, indicating rejection of the null hypothesis of no cointegration.

Similarly, the Westerlund test supports the presence of cointegration, with the Group T-statistic ($G_t = -2.245$) and Panel T-statistic ($P_t = -2.493$) being statistically significant, although the Group Alpha ($G_a = 1.123$) and Panel Alpha ($P_a = 0.190$) statistics are insignificant. Overall, the majority of the cointegration statistics confirm the existence of a long-run equilibrium relationship among oil rents, institutional quality, non-resource tax revenue, and the control variables, thereby justifying the estimation of long-run panel models.

Table 6: Prais–Winsten regression, based on panels corrected standard errors (PCSEs)

| Non-Resource Tax | (1) | (2) |
|-----------------------------|-------------------------|-------------------------|
| Oil Rent | -0.0006*** (0.0002) | |
| Econ. Gov. index | 0.0039*** (0.0008) | |
| Oil Rent*Econ. Gov. index | | 0.0004*** (0.0001) |
| Official Exchange Rate (ln) | 0.0047*** (0.0007) | 0.0046*** (0.0008) |
| Real GDP per-cap (ln) | 0.0186*** (0.0031) | 0.0186*** (0.0034) |
| FDI | 0.0005 (0.0006) | 0.0006 (0.0006) |
| Trade Openness | 0.0004*** (6.90e-05) | 0.0004*** (7.49e-05) |
| Pop. Growth | 0.0004 (0.0021) | 0.0016 (0.0023) |
| Inflation | -9.40e-05 (7.21e-05) | -9.27e-05 (7.31e-05) |
| Constant | -0.0748*** (0.0248) | -0.0829*** (0.0272) |
| R-squared | 0.777 | 0.730 |
| Wald chi ² | 244.51*** | 150.48*** |
| Rhos | 0.7669 | 0.7803 |
| Number of countries | 5 | 5 |
| Number of Years | 35 | 35 |
| Observations | 175 | 175 |

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Source: Author’s computation using stata

Table 6 presents the regression results for the impact of oil rents and institutional quality on non-resource tax revenue (NRTR). In Model (1), oil rents (OILR) exert a negative and statistically significant effect on NRTR, confirming that dependence on oil revenue weakens non-resource tax mobilization. In contrast, institutional quality (INST) has a positive and significant effect, indicating that stronger governance enhances tax revenue performance. In Model (2), the interaction term between oil rents and institutional quality (OILR*INST) is positive and statistically significant, suggesting that better institutions mitigate the adverse effect of oil dependence on non-resource tax revenue. Among the control variables, official exchange rate (LEXR), real GDP per capita (LGDPPC), and trade openness (TOP) positively and significantly influence tax revenue, while foreign direct investment (FDI) and population growth (POPG) are positive but insignificant. Inflation (INFR) shows a negative but insignificant relationship with NRTR.

The models demonstrate strong explanatory power, with R-squared values of 0.777 and 0.730 for Models (1) and (2), respectively, while the Wald chi-square statistics are significant at the 1% level, confirming overall model significance. The rho values of 0.7669 and 0.7803 further justify the panel estimation approach. Overall, the findings highlight the critical role of institutional quality in moderating the negative impact of oil rents on non-resource tax revenue in West Africa.

Robustness Check

To validate the reliability and stability of the PCSE estimation results, this study conducted additional robustness checks using the Dynamic Common Correlated Effect (DCCE). The results are shown below

Table 7 Dynamic Common Correlated Effect (DCCE) (Robustness Check)

| Non-Resource Tax | (1) | (2) |
|---------------------------------|------------------------|---------------------|
| Oil Rent | -0.0022*** (0.0005) | |
| Econ. Gov. Index | 0.0053 (0.0050) | |
| Oil Rent*Econ. Gov. index | | -0.0049 (0.0043) |
| Real GDP per-cap (ln) | 0.0055 (0.0633) | 0.0245 (0.0400) |
| Official Exchange Rate (ln) | -0.0373 (0.0230) | -0.0124 (0.0146) |
| Trade Openness | 0.0009*** (0.0002) | 0.0003 (0.0003) |
| FDI | 0.0027 (0.0026) | 0.0014* (0.0007) |
| Pop. Growth | 0.0367 (0.0448) | 0.0211 (0.0350) |
| Inflation | 0.0002 (0.0004) | 0.0004* (0.0002) |
| Non-Resource Tax _{t-1} | -0.1020 (0.120) | |
| Oil Rent _{t-1} | -0.0012 | |

| | | |
|--|----------|-----------|
| | (0.0014) | |
| Econ. Gov. Index _{t-1} | -0.0015 | |
| | (0.0010) | |
| Real GDP per-cap _{t-1} (ln) | 0.1080** | 0.1290*** |
| | (0.0499) | (0.0286) |
| Official Exchange Rate _{t-1} | 0.0091 | 0.0104* |
| | (0.0075) | (0.0060) |
| Trade Openness | -0.0001 | -0.0002 |
| | (0.0005) | (0.0003) |
| FDI _{t-1} | 0.0006 | -0.0007 |
| | (0.0007) | (0.0008) |
| Pop. Growth _{t-1} | -0.0089 | -0.0007 |
| | (0.0493) | (0.0235) |
| Inflation _{t-1} | 8.35e-05 | 0.0001 |
| | (0.0004) | (0.0002) |
| (Oil Rent*Econ. Gov. index) _{t-1} | | 0.0059 |
| | | (0.0060) |
| R-squared | 0.211 | 0.310 |
| CD Statistic | -1.88* | -1.35 |
| Number of Countries | 5 | 5 |
| Number of Years | 35 | 35 |
| Observations | 170 | 170 |

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Source: Author's computation using stata

Table 8 presents the Dynamic Common Correlated Effects (DCCE) estimation results used as a robustness check for cross-sectional dependence and dynamic adjustments. In Model (1), oil rents (OILR) maintain a negative and statistically significant effect on non-resource tax revenue (NRTR), confirming the robustness of the resource curse argument. Institutional quality (INST), however, is positive but statistically insignificant (0.0053), indicating a weak direct effect under the dynamic specification. In Model (2), the interaction term between oil rents and institutional quality (OILR*INST) is negative and insignificant (-0.0049), suggesting that the moderating role of institutions is not robust under the DCCE framework. Among the control variables, trade openness (TOP) remains positive and significant in Model (1), while foreign direct investment (FDI) and inflation (INFR) become weakly significant and positive in Model (2). The lagged real GDP per capita variable is positive and significant in both models, indicating that past income levels strongly influence current tax revenue performance. Also, the R-squared values of 0.211 and 0.310 are relatively low, which is expected in dynamic models controlling for cross-sectional dependence. Furthermore, the CD statistics of -1.88 and -1.35 confirm that cross-sectional dependence has been adequately addressed, supporting the robustness of the estimation results.

4.1 Discussion of Findings

The findings of this study present a detailed insight into how oil rents affect non-resource tax revenue in selected ECOWAS member countries namely; Nigeria, Ghana, Côte d'Ivoire, Benin and Niger, emphasizing the important role that institutional quality plays in shaping this relationship. The

descriptive statistics indicate that the average non-resource tax revenue in the region is 9.4% of GDP, which suggests that the ability to mobilize domestic revenue is relatively low. Oil rents contribute an average of about 3.25% of GDP, but with substantial variation across countries, indicating that dependence on oil is uneven within the region. The average institutional quality score of -0.299 further reflects generally weak governance systems. Other macroeconomic indicators such as GDP per capita, exchange rate, and inflation reveal moderate economic performance alongside episodes of macroeconomic instability.

The pairwise correlation analysis demonstrates a negative association between oil rents and non-resource tax revenue, suggesting that countries with higher reliance on oil tend to generate less revenue from non-resource taxation. This finding is consistent with the “fiscal resource curse” argument (Bornhorst, Gupta, & Thornton, 2009; Slimane, 2024), which posits that resource inflows reduce governments’ incentives to develop efficient tax systems. In contrast, institutional quality shows a positive relationship with tax revenue, highlighting the importance of governance in strengthening fiscal outcomes, in line with Institutional Theory (North, 1990; Acemoglu, Johnson & Robinson, 2001).

The main regression results confirm that oil rents exert a negative and statistically significant effect on non-resource tax revenue. This supports the Rentier State Theory (Beblawi & Luciani, 1987; Neal, 2019), which argues that governments that depend heavily on resource revenues are less motivated to build effective tax systems. The result is particularly relevant for countries such as Nigeria, where oil revenues dominate fiscal structures, consistent with empirical evidence from studies like Adedoyin et al. (2017) and David et al. (2024).

The interaction between oil rents and institutional quality is positive and statistically significant in the baseline model, indicating that strong institutions can mitigate the adverse effect of oil dependence on tax revenue. This finding supports the conditional resource curse hypothesis, which suggests that the impact of natural resources depends on the quality of institutions (Mehlum et al., 2006; Bhattacharyya & Hodler, 2010). Countries with relatively better governance structures, such as Ghana, tend to experience less crowding-out of non-resource tax revenue, demonstrating that institutional strength plays a critical moderating role. However, the robustness results using the Dynamic Common Correlated Effects (DCCE) approach show that while oil rents remain negatively significant, the interaction term becomes statistically insignificant. This suggests that the moderating role of institutions is not entirely robust when cross-sectional dependence and dynamic effects are considered. This aligns with mixed findings in the literature, where the effectiveness of institutions in mitigating the resource curse is often context-dependent and sensitive to model specification.

Furthermore, real GDP per capita is positively related to non-resource tax revenue, reflecting that higher income levels expand the taxable base and enhance revenue generation. Trade openness also shows a positive and significant relationship, indicating that integration into global markets supports tax mobilization through increased economic activity. On the other hand, variables such as FDI, population growth, and inflation show weak or inconsistent effects, suggesting that their influence on tax revenue is limited in the ECOWAS context. The robustness checks reinforce the main findings, particularly the negative impact of oil rents on tax revenue. However, variations in the significance of institutional quality across models highlight that fiscal outcomes in ECOWAS countries are sensitive to estimation techniques and underlying structural characteristics. This study provides strong support

for the theoretical framework underpinning the analysis. The Rentier State Theory explains how oil revenues can substitute for domestic taxation, the Resource Curse Hypothesis (Auty, 1993; Davis, 1995) highlights the broader economic and institutional challenges associated with resource dependence, and Institutional Theory emphasizes the critical role of governance in shaping fiscal performance.

These findings imply that improving tax revenue performance in ECOWAS countries requires more than just economic growth or resource wealth. It necessitates deep institutional reforms, stronger governance structures, and more effective tax administration systems. The limited robustness of the institutional moderating effect suggests that incremental reforms may not be sufficient; rather, comprehensive and sustained policy efforts are needed to ensure that natural resource wealth complements, rather than undermines, domestic revenue mobilization.

5. Conclusion and Recommendations

This study examined whether oil rents affect non-resource tax revenue and whether institutional quality moderates this relationship in ECOWAS countries. Based on the empirical evidence from the PCSE and DCCE estimations, several conclusions are drawn. First, oil rents significantly reduce non-resource tax revenue, confirming the presence of a resource-tax paradox. This implies that governments relying heavily on natural resource revenues tend to weaken efforts to mobilize domestic tax revenue. This finding is consistent with the Resource Curse Theory, which argues that resource abundance can undermine fiscal discipline and tax system development. Secondly, institutional quality plays a critical role in enhancing tax revenue performance. The PCSE results show that improvements in governance significantly increase non-resource tax revenue, supporting the Institutional Quality Theory, which emphasizes the importance of effective institutions in strengthening fiscal capacity. Moreso, although the interaction between oil rents and institutional quality is positive, it is not statistically significant in both PCSE and DCCE models. This indicates that institutional frameworks in ECOWAS countries are not yet strong enough to effectively mitigate the negative fiscal effects of oil dependence. Weak governance structures continue to limit the ability of institutions to transform resource wealth into sustainable tax revenue.

Furthermore, inflation consistently has a negative effect on tax revenue, highlighting the damaging impact of macroeconomic instability. GDP per capita shows weak and inconsistent effects, suggesting that economic growth alone is insufficient to improve fiscal performance without strong institutional support.

Overall, the study concludes that strengthening institutional quality is essential for improving non-resource tax revenue in ECOWAS countries. Without meaningful institutional reforms, oil wealth is unlikely to translate into sustainable domestic revenue mobilization.

Based on the research findings, this study provides several policy interventions aimed at enhancing the non-resource tax revenue and strengthening institutional frameworks in ECOWAS countries.

First, governments in the region should prioritize institutional reforms that enhance transparency, accountability, and regulatory quality. Strengthening anti-corruption institutions, improving judicial

independence, and modernizing tax administration through digitalization will improve tax compliance and efficiency.

Second, ECOWAS countries should improve the governance of natural resource revenues. This includes adopting international transparency standards such as the Extractive Industries Transparency Initiative (EITI), strengthening sovereign wealth funds, and implementing fiscal rules to ensure transparent and productive use of oil revenues.

Third, there is a need to broaden the tax base by diversifying economic activities beyond oil dependence. Expanding non-oil sectors such as agriculture, manufacturing, and services, as well as formalizing the informal sector, will enhance sustainable revenue generation. In addition, given the consistent negative effect of inflation, policymakers should strengthen macroeconomic stability through credible inflation-targeting frameworks, fiscal discipline, and improved coordination between monetary and fiscal authorities.

Finally, regional cooperation within ECOWAS should be strengthened to harmonize tax systems, improve policy coordination, and reduce harmful tax competition, thereby enhancing collective fiscal capacity.

References

- Abdelwahed, L. (2020), more oil, more or less taxes? New evidence on the impact of resource revenue on domestic tax revenue. *Resources Policy*, 68, 101747
- Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review*, 91(5), 1369–1401.
- Adedoyin F.F., Liu C., Adeniyi O.A & Muhammad K. (2017) Oil rents and fiscal balance in oil dependent economies: Do fiscal rule matter?. *Asian journal of empirical research* 7(2)
- Adebayo, A. (2018). oil Revenue and tax performance in Nigeria; Empirical Evidence. *Journal of economics and international finance*, 10(2), 15-25
- Adeniyi, A. R. (2020). Revenue Beyond Oil Reliance: Can Nigeria Leverage Non-Oil Tax Revenue for Inclusive and Pro-Poor Growth? *International Journal of Academic Research in Business and Social Sciences*, 10(12), 1–15.
- Akeju, K.F., Olusanjo, O.J., & Akode, T. (2022). Impact of infrastructure and institutional quality on economic growth in ECOWAS countries. *International Journal of Social Sciences Perspectives*, 10(1), 9–16.
- Andersson, P.F. (2017). Democracy, urbanization, and tax revenue. *Comparative Economic Studies*, 59(1), 1-22.
- Aimer M.N (2018), Estimating the impact of oil rents on economic growth of Opec countries. *European journal of management and marketing studies*.
- Alabede, J.O & Onanuga, A.T (2018) Public Governance Factors and Tax Revenue Performance in Sub-Saharan Africa. *International Journal of Management Science Research*. 4 (1), 89.
- Andersson, J., & Lazuka, V. (2019). Long-term drivers of taxation in francophone West Africa 1993–2010. *World Development*, 114, 294- 313.
- Amedanou, Y. M. I. (2021). Politics, Institutions and Tax Revenue Mobilization in West African Economic and Monetary Union (Waemu) Countries
- Arezki, R., Gylfason, T., Sy, A. (eds.) (2012). Beyond the Curse : Policies to Harness the Power of Natural Resources, Washington, DC: *International Monetary Fund*.

- Auty, R. M. (1993). *Sustaining Development in Mineral Economies: The Resource Curse Thesis*. Routledge.
- Beck, N., & Katz, J. N. (1995). What to do (and not to do) with time-series cross-section data. *American Political Science Review*, 89(3), 634–647.
- Badeeb, R. A., Lean, H. H., & Clark, J. (2017). The evolution of the natural resource curse thesis: A critical literature survey. *Resources Policy*, 51, 123–134.
- Balogun A.Q., Obele T.E. &Adeniyi T.M (2024) Oil revenue, institutional quality and economic growth in Nigeria. *Abuad journal of social and management science* 5(2),242-260
- Bamoy, R., & Fouopi-Djiogap, C. (2024). Natural resource rents and economic growth in Africa: The role of transmission channels. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 5(3), 455-473.
- Bilgili, F., & Ulucak, R. (2018). "A Panel Data Analysis of Environmental Degradation: The EKC Hypothesis." *Journal of Environmental Management*
- Bornhorst, F., Gupta, S., & Thornton, J. (2009). Natural resource endowments and the domestic revenue effort. *European Journal of Political Economy*, 25(4), 439–446.
- Coulibaly S. (2019) "Impact of natural resource wealth on non-resource tax revenue mobilization in Africa: Do institutions and economic diversification matter?" *Études et Documents*, n° 16, CERDI.
- Chachu, D.O., Nketiah-Amponsah, E. (2022), The Fiscal resource curse: What's China's natural resource appetite got to do with it? *International Review of Applied Economics*, 36(1), 129-146
- Chenge A.A. and Oigbochie A.E.(2023) Sustaining taxation in rentier economies:Evidence from Nigeria. *Journal of global economics, management and business* 15(2) 27-36
- Crivelli, E., & Gupta, S. (2014). Resource blessing, revenue curse? Domestic revenue effort in resource-rich countries. *European Journal of Political Economy*, 35, 88–101.
- CNUCED. (2020). Les flux financiers illicites et le développement durable en Afrique. *Conférence des Nations Unies sur le Commerce et le Développement*, 173-202.
- David J., Gamal A.M., Noor A.M & Zakariya Z.(2024) Oil rent, corruption and economic growth relationship in Nigeria:Evidence from various estimation techniques. *Journal of money laundering control*. 1368-5201
- Davis, G. A. (1995). Learning to love the Dutch disease: Evidence from the mineral economies. *World Development*, 23(10), 1765–1779
- Dartey-Baah, K., Amponsah-Tawiah, K., & Aratuo, D. (2014). Rent-Seeking Resource and Institutional Challenges in Ghana's Nascent Oil Economy. *International Journal of Law and Management*, 56(5), 363–386.
- Fleming, D. A., Measham, T. G., & Paredes, D. (2015). Understanding the resource curse (or blessing) across national and regional scales: Theory, empirical challenges and an application. *Australian Journal of Agricultural and Resource Economics*, 59(4), 624–639
- Gaspar, V., Jaramillo, L., & Wingender, P. (2016). Tax capacity and growth: Is there a tipping point? *IMF Working Paper No. 16/234*. International Monetary Fund.
- Goyette, J. (2019). Imperfect enforcement of a tax threshold: The consequences on efficiency. *Journal of African Economies*, 28(2), 119-146.
- González, L.I. (2018). Oil rents and patronage: the fiscal effects of oil booms in the Argentine provinces. *Comparative Politics*, 51(1), 101–126.
- Hassan, A.S. (2021). Asymmetric effects of oil revenue on government expenditure: insights from oil-exporting developing countries. *OPEC Energy Review*, 45(2), 257–274.

- Hassan, A.S., Meyer, D.F., &Kot, S. (2019). "Effect of Institutional Quality and Wealth from Oil Revenue on Economic Growth in Oil-Exporting Developing Countries." *Sustainability*, 11(13), 3635.
- Haque, M.I.(2020) Negating the Role of Institutions in the Growth of an oil producing Country. *Internationaljournal of Energy Economics and Policy*,10(5),503-509.
- Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *The Stata Journal*, 7(3), 281–312.
- Hussein, R.M., &Abdallah, Z.M. (2022). "Financial development and tax revenue in Tanzania: analyze the impact of financial depth on tax revenue." *Asian Journal of Economics and Finance*, 4(3), 321–330.
- Hussain, W.N., Ilahi, A., &Muqemul Islam, M. (2016). The impact of institutional quality and governance on tax-GDP ratio: a cross-country analysis. *Journalof Managerial Sciences*, 10(2), 183-203.
- IMF, 2017. ‘Correlates of Non-resource tax revenue in Resource rich countries. *International Monetary Fund, Washington, DC*
- IMF (2023) *Sub-Saharan Africa Regional Economic Outlook*. International Monetary Fund.
- Ishak, P.W.&Farzanegan, M.R. (2020), The impact of declining oil rents on tax revenues: Does the shadow economy matter? *Energy Economics*, 92, 104925.
- Jimoh, B. A. &Adegoriola, A. E.(2020). Empirical analysis of the impact of tax revenue on economic growth in Nigeria.*Bigham Journal of Economics and Allied Studies*, 3(1), 100-110.
- Johnson, P. N., &Omodero, C. O. (2021).Governance Quality and Tax Revenue Mobilization in Nigeria.*Journal of Legal Studies*, 28(42), 1-41
- Kao, C., & Chiang, M. H. (2000). On the Estimation and Inference of a Cointegrated Regression Model with Cross-Sectional Dependence. *Econometric Theory*, 16(3), 1–27.
- Khan, H., Sher, K. &Zuojun, F. (2020). "Institutional quality and financial development: evidence from developing and emerging economies." *Global Business Review*, 23(1), 1–13.
- Knebelmann, J. (2017), Natural Resources’ Impact on Government Revenues. *10th ed., Vol. 2017. Finland: UNU-WIDER*
- Knight, J. (1992). Institutions and social conflict. *Cambridge University Press*.
- Lien N.P (2015) The impact of institutional quality on tax revenue in developing countries. *Journal of statistics and management*.
- Mahdavy, H. (1970). The patterns and problems of economic development in rentier states: *The case of Iran*. In M. A. Cook (Ed.), *Studies in the Economic History of the Middle East* 428–467.
- Mallick, H. (2021). Do Governance Quality and Ict Infrastructure Influence the Tax Revenue Mobilisation? An Empirical Analysis for India.*Economic Change and Restructuring*, 54(2), 371-415.
- Mawejje, J. (2019). Natural resources governance and tax revenue mobilization in sub saharan Africa: The role of EITI. *Resources Policy*, 6(2), 176-183.
- Mbingui, C., Owonda, F., &Diakabana, M. N. (2021).Effects of Oil Rent on Economic Development in the Republic of Congo.*Theoretical Economics Letters*, 11, 587-602.
- Mehlum, H., Moene, K., &Torvik, R. (2006). Institutions and the resource curse. *The Economic Journal*, 116(508)
- Mehlum, H., Moene, K., &Torvik, R. (2021). Institutions and the resource curse. *The Economic Journal*, 121(551), 1–20.

- Mohammad F. & Sanusi S. (2020) quality of governance and tax revenue generation in west Africa; A political process theory perspective. *Journal of management and accounting review* 19(1)
- Musikavanhu, L.T., Tlhalefang, J.B., Ntsosa M. & Bekwena, M. (2021) Does institutional quality influence the oil price economic growth Nexus: Evidence from African oil exporting countries. *European journal of business and management research* 3(5).
- Neal, J. (2019). Resource dependence and fiscal stability in developing nations. *Economic Development Journal*, 27(3), 45–62.
- Nkam, E.N., Effiong, C., & Ekott I. (2024). Land use planning and climate change adaptation in rivers-dependent communities in Nigeria. *Environmental development* 49
- North, D. C. (1990). Institutions, institutional change and economic performance. *Cambridge University Press*.
- Olaniyi, C.O., & Oladeji, S.I. (2021). "Moderating the effect of institutional quality on the finance–growth nexus: insights from West African countries." *Economic Change and Restructuring*, 54, 43–74
- OECD (2019). Government at a Glance. Trust in Government, Policy Effectiveness and the Governance Agenda: General Principles and Approaches: Paris.
- OCDE/UCA/ATAF. (2021). Statistiques des recettes publiques en Afrique 2021. Editions OCDE. doi: 10.1787/c511aa1e-en-fr
- Olaniyi, T.A. & Akinola, B/. (2020). National culture and tax performance in Africa. *Economic Horizons*, 22(1), 3-14
- Olagunde A.I., Kapingura M.F & Sibandak (2020) sustainable development and crude oil revenue: A case study of selected crude oil-producing African countries. *International journal of environmental research and public health*.
- Opoku A. & Buabeng E. (2021) Asymmetrical effect of oil and gas resource rent on economic growth: Empirical evidence from Ghana, *Cogent Economics & Finance*, 9(1)
- Omodero, C.O., & Alege, P.O. (2021). "Crude oil resources, tax revenue and sustainable social development in Nigeria." *International Journal of Energy Economics and Policy*, 11(5), 22–27.
- Paine, J. (2016). Rethinking the conflict “Resource Curse”: How oil wealth prevents center-seeking civil wars. *International Organization*, 70(4), 727–761.
- Papyrakis, E. (2017). The resource curse-what have we learned from two decades of intensive research: Introduction to the special issue. *The Journal of Development Studies*, 53(2), 175–185
- Pesaran, M.H. (2004), General Diagnostic Tests for Cross Section Dependence in Panels. *Working Paper, No. 0435, Faculty of Economics*. Cambridge: University of Cambridge.
- Pesaran, M.H. (2007), A simple panel unit root test in the presence of cross section dependence. *Journal of Applied Econometrics*, 22(2), 265-312
- Pratomo, A. W. (2020). The Effect of Foreign Direct Investment on Tax Revenue in Developing Countries. *Journal BPPK: Badan Pendidikan and Pelatihan Keuangan*, 13(1), 83-95.
- Ross, M. L. (2012). *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations*. Princeton University Press.
- Ross, M.L. (2015). What have we learned about the resource curse? *Annu. Rev. Pol. Sci.* 18, 239–259.
- Rafiu, I.A. (2021). "The institutional role in oil revenue-economic growth nexus in Nigeria." *OPEC Energy Review*, 45(1), 52–84.
- Reed, W. R., & Webb, R. (2010). The PCSE Estimator is Good—Just Not as Good as You Think. *Journal of Time Series Econometrics*, 2(1), 1–26.

- Sachs, J. D., & Warner, A. M. (2001). The curse of natural resources. *European Economic Review*, 45(4–6), 827–838.
- Saheed, Z. & Omotunde L. (2024) Assessing the impact of oil rents on living standard in Nigeria: Evidence from ARDL model. *Journal perspektifpembiayaanpampangunamdaerah* 12(4)
- Sarmidi, T., Law, S.H., & Jafari, Y. (2019). Effect of institutional quality and wealth from oil revenue on economic growth in oil-exporting developing countries. *Sustainability*, 11(13), 3635.
- Sebele-Mpofu, F. Y. (2020). Governance Quality and Tax Morale and Compliance in Zimbabwe's Informal Sector. *Cogent Business & Management*, 7(1), 1794662.
- Slimane S.B. (2024) the impact of resource revenue on non-resource tax revenue in oil exporting countries: Evidence from non-linear analysis. *International journal of energy economics and policy*.
- Soro, S. S. (2020). Institutional Quality and Tax Revenue in Côte D'ivoire: Evidence from Ardl Approach. *International Journal of Economics and Financial Issues*, 10(6), 40-49.
- Streeck, W., & Thelen, K. (1992). Structuring politics: Historical institutionalism in comparative analysis. *Cambridge University Press*.
- Tanzi, V., & Zee, H. H. (2000). Tax policy for emerging markets: Developing countries (*IMF Working Paper No. 00/35*). *International Monetary Fund*.
- Thomas, A., Treviño, J., 2013. 'Resource Dependence and Fiscal Effort in Sub-Saharan Africa', *IMF Working Paper 13/188*. *International Monetary Fund, Washington, DC*.
- Transparency International (2017). FAQs on Corruption.
- Umar A., Zameer S. & Akhar S.M (2024) Institutional quality and tax capacity: Evidence from SAARC countries. *IRASD Journal of economics*.
- Westerlund, J. (2007). Testing for error correction in panel data. *Oxford Bulletin of Economics and Statistics*, 69(6), 709–748.
- World Bank (2023), "World Development Indicators (WDI)", World Bank, Washington, DC, available at: <https://datacatalog.worldbank.org/dataset/world-development-indicators>.
- World Bank. (2024). *World Development Indicators*. World Bank Group.
- Williams, P. D. (2011). The road to humanitarian war in Libya. *Global Resp. Protect*, 3(2), 248.
- Zalle O. (2022) Natural resource dependence, corruption and tax revenue mobilization. *Journal of economic integration* 37(2)
- Zidi, M. & Hamdi, H. (2024) A Panel-corrected Standard Error (PCSE) Framework to Estimate Capital Structure and Banking Performance within the Tunisian Context. *International Journal of Economics and Financial Issues*, 14(1).196 - 202.