

HYDROCARBON TAX VS COMPANY INCOME TAX: ANALYZING THE OVERLAP AND ITS IMPLICATIONS FOR OPERATORS IN NIGERIA'S OIL AND GAS SECTOR.

Authors: **Muhammad Sabiu Idris** – msidrisuu@gmail.com
Segun Ebenezer Ogunwuyi - shegoa7@gmail.com

Abstract

This study investigates the impact of the dual taxation system, consisting of Hydrocarbon Tax (HT) and Company Income Tax (CIT), on the profitability, foreign direct investment (FDI), and operational efficiency of oil operators in Nigeria's oil and gas sector. A mixed-methods approach was used, combining quantitative data from financial reports and tax filings with qualitative insights from interviews with industry professionals. The results indicate that the combined tax burden significantly reduces profit margins, with a majority of respondents reporting negative effects on profitability. Additionally, most participants identified the dual tax regime as a deterrent to foreign investment, highlighting the high tax rates as a major factor. The study also identifies the administrative complexity of managing both HT and CIT as a significant challenge, increasing compliance costs, particularly for smaller operators. While the Petroleum Industry Act (PIA), introduced in 2021, provides fiscal incentives for marginal field operators, the full impact of these reforms remains uncertain. The study concludes with recommendations to simplify the tax system, reduce tax rates, and strengthen the implementation of the PIA to create a more competitive and attractive environment for investment. The findings emphasize the need for a balanced tax policy that promotes long-term growth, improves profitability, and attracts foreign investment in the oil and gas sector.

Keywords: *Hydrocarbon Tax, Company Income Tax, Petroleum Industry Act, Oil and Gas Sector, Tax Overlap.*

Introduction

On August 16, 2021, former President Muhammadu Buhari signed the Petroleum Industry Bill (PIB) into law after over two decades of debates, negotiations, and lobbying. This significant legislation, now the Petroleum Industry Act (PIA), introduced a comprehensive framework designed to enhance governance, regulation, and fiscal mechanisms aimed at improving the efficiency of Nigeria's petroleum sector and promoting local community development in areas where oil is extracted (Ede, 2021; Ogunleye, 2022). Before the PIA, the Petroleum Act had been insufficient in addressing the critical challenges faced by the oil and gas sector, contributing to stagnation within the industry (CBN, 2009; Babayomi, 2023). The long, drawn-out process of enacting the PIA, involving significant lobbying and political tension, has generated considerable excitement among stakeholders, signaling a potential turning point in the sector's future (Babayomi, 2023).

The Nigerian oil and gas sector, categorized into upstream, midstream, and downstream segments (Babayomi, 2023), is dominated by international oil companies (IOCs) such as Chevron, Shell, Mobil, Addax, Agip, and Total, which collectively control over 80% of the country's crude oil production (Okpara, 2009). These IOCs also manage more than 90% of Nigeria's oil reserves through joint venture agreements with the Nigerian National Petroleum Corporation (NNPC), and their operational dominance has largely shaped the country's oil output (Babayomi, 2023). Despite the predominant role of IOCs, smaller operators in marginal fields have increased production at an

annual rate of 15% over the past decade, while the IOCs' output has declined by 4% annually (Babayomi, 2023).

Despite Nigeria's status as Africa's largest oil producer, foreign investment in the sector has decreased significantly, with only 1% of total foreign direct investment (FDI) in 2020 directed towards the oil and gas industry, amounting to a mere \$53.5 million out of a total \$9.68 billion (Mekwunye, 2022). This downturn signals a loss of investor confidence, attributed to inefficiencies, corruption, and political instability (Umenweke & Chukwuma, 2023). Furthermore, the Nigerian oil sector's inability to diversify its revenue base, compounded by governance challenges, has led to missed opportunities for sustainable development (Dirioz & Erbil, 2023).

The PIA has drawn comparisons with similar legislation in countries like Qatar, which has long relied on petroleum revenues but diversified its economy through prudent management (Dirioz & Erbil, 2023). Qatar's legal framework, focusing on fiscal reforms and governance structures similar to those introduced by the PIA, aims to better regulate the oil sector while addressing the challenges of oil dependency. Like Nigeria, Qatar's economy heavily depends on petroleum, contributing 60% to its GDP and over 85% of its exports (Dirioz & Erbil, 2023). While both countries are working to diversify their economies, their legal frameworks reflect shared goals of improving governance within the oil and gas sector.

Petroleum has historically been the backbone of the Nigerian economy, contributing 33% of GDP, 76% of government revenue, and 95% of foreign exchange earnings (Akpan, 2021). Despite this, the wealth generated from oil has not translated into significant improvements in the living standards of the Nigerian population, with mismanagement and corruption hindering equitable growth (Umenweke & Chukwuma, 2023). The lack of effective policies and oversight mechanisms has led to stagnation within the sector, failing to meet the expectations of broad-based economic prosperity (Akpan, 2021).

The Niger Delta region, which hosts the majority of Nigeria's oil reserves, has experienced significant civil unrest due to disputes over resource control and the environmental degradation caused by oil extraction. This unrest contrasts sharply with the more efficient management of oil revenues in countries like the United Arab Emirates, which have leveraged oil wealth to build modern infrastructure (McBain, 2022). In contrast, the persistent pipeline vandalism and militancy in Nigeria's oil-rich region have led to substantial losses, rising operational costs, and a decline in government revenue, with over 1,000 cases of pipeline destruction reported between 2019 and 2020 alone (McBain, 2022).

The downstream sector also faces ongoing challenges, including fluctuating fuel prices, irregular supply of petroleum products, and costly subsidies, which have placed a significant financial burden on the Nigerian government, costing approximately N150 billion monthly (Mekwunye, 2022). The compounded insecurity in the sector, including attacks on oil facilities, has led to

increased operational costs, further exacerbating the industry's challenges and diminishing investor confidence (Adeola, 2023).

The PIA seeks to overhaul the regulatory system by establishing new bodies such as the Nigerian Upstream Regulatory Commission and the Nigerian Midstream and Downstream Regulatory Commission to ensure more effective oversight (CBN, 2009). The creation of the Host Community Trust Fund is another key provision, aimed at improving relationships between oil operators and the communities in which they operate (Ogunleye, 2022). Additionally, the fiscal reforms introduced under the PIA, including changes to the taxation framework, are expected to improve tax administration, streamline regulations, and increase competitiveness within the sector (Adebayo & Olayinka, 2015).

However, the dual taxation regime comprising both hydrocarbon taxes and company income tax (CIT) presents challenges for oil operators. The overlap between these tax types creates complexity in compliance and increases the overall tax burden for oil companies (Adebayo & Olayinka, 2015). This dual system will require careful management to ensure that it does not deter investment in the sector, especially at a time when Nigeria is seeking to attract foreign capital.

This study aims to explore the impact of the Petroleum Industry Act on the Nigerian oil and gas sector, specifically concerning the implications of the hydrocarbon tax and company income tax. The key research questions are:

- i. How does the overlap between hydrocarbon tax and company income tax impact the profitability of oil operators in Nigeria?
- ii. In what ways does the dual tax regime (hydrocarbon tax and CIT) affect the attractiveness of Nigeria as a destination for foreign direct investment (FDI) in the oil and gas sector?
- iii. To what extent have the fiscal reforms introduced under the Petroleum Industry Act (PIA) alleviated the negative impact of dual taxation on oil operators in Nigeria?

Literature Review

Hydrocarbon Tax vs Company Income Tax

The tax regime in the oil and gas sector is multifaceted, with companies subject to both hydrocarbon taxes and company income taxes. Hydrocarbon tax, typically levied on the extraction and sale of petroleum products, is a crucial source of revenue for oil-dependent economies. This tax is often structured as a royalty, a profit-based tax, or an additional charge based on the volume or value of production (Alhassan et al., 2020; Olumide & Akintoye, 2019). The primary objective of hydrocarbon tax is to ensure that the state captures a portion of the value derived from natural resources owned by the nation (Olumide & Akintoye, 2019). This form of tax serves as an essential mechanism for generating government revenue, particularly in resource-rich countries like Nigeria, where oil revenues represent a significant portion of national income (Fadare et al., 2021).

On the other hand, company income tax (CIT) is applied to the profits made by corporations from their operations. This tax is universally applied to all corporate entities, including those in the oil and gas sector, and is levied based on taxable income (Fadare et al., 2021). While the specifics of tax rates and exemptions vary across jurisdictions, both taxes are integral to the fiscal policies of countries like Nigeria, which rely heavily on oil revenues to fund government expenditures (Umar et al., 2021; Ogunleye & Bakare, 2019). The overlap between hydrocarbon tax and CIT can create a complex fiscal environment for oil operators, requiring careful tax planning and compliance (Ogunleye & Bakare, 2019).

Hydrocarbon Tax and its Impact on the Oil and Gas Sector

Research by Smith et al. (2018) indicates that hydrocarbon tax structures vary by country, with governments employing different systems such as royalty-based taxation, profit-based taxation, or a combination of both. In Nigeria, the PIA introduces a new fiscal regime designed to streamline the taxation system and promote investment in the sector (Akpan, 2021). Notably, the PIA introduces tax incentives for marginal fields, offering reduced rates for new entrants, which are aimed at increasing local participation and boosting production (Babayomi, 2023).

However, the impact of hydrocarbon taxes on oil operators is not always straightforward. Studies have shown that high tax rates and complex tax structures can deter investment, particularly in upstream activities where exploration and production costs are high. Uzochukwu and Adediran (2020) found that higher tax burdens on oil companies often lead to a reduction in new investments, especially in countries with unstable political climates and unpredictable fiscal policies, such as Nigeria. The cumulative effect of high taxes, compounded by operational challenges, has contributed to the stagnation of oil production among major international oil companies (IOCs), despite the rise in output from marginal field operators (Babayomi, 2023).

Moreover, high hydrocarbon taxes increase the operational costs for oil companies, thereby reducing profitability and investment attractiveness (Ogunbiyi & Adewumi, 2019). IOCs, in particular, often cite the high tax burden as a key factor influencing their investment decisions, leading to reduced exploration activities. Babayomi (2023) notes that while IOCs have seen a decline in production activities, smaller operators in marginal fields continue to boost their production capacity, driven by favorable tax incentives and lower operational costs.

Company Income Tax and its Role in the Oil and Gas Sector

According to Fadare et al. (2021), CIT is calculated based on the taxable income derived from all operational activities, including upstream exploration, midstream transportation, and downstream refining. This tax applies to profits made by companies, and the rate for oil companies has traditionally been higher than for other sectors in Nigeria (McBain, 2022). The higher CIT rates reflect the substantial profits generated by the oil and gas industry, but they also raise concerns among oil operators, particularly in light of the additional hydrocarbon taxes they must pay. Company income tax (CIT) represents a substantial component of the overall tax burden for oil companies, Fadare et al. (2021),

The dual taxation burden, consisting of both hydrocarbon taxes and CIT, complicates the financial landscape for oil companies. The high CIT rates may discourage foreign investment, as international investors often seek jurisdictions with more favorable tax regimes. Fadare et al. (2021) argue that while the Nigerian government's intention is to capture a fair share of the sector's profits, the high tax rates may reduce the attractiveness of the country as a destination for foreign capital. This is especially critical in the context of global competition for oil investments, where other countries have adopted lower tax rates to attract foreign investors (Umar et al., 2021).

The Overlap and Implications for Operators

The overlap between hydrocarbon taxes and company income tax creates a complex fiscal environment that oil operators must navigate. While both taxes are intended to capture revenue from the oil sector, they differ in their basis of calculation: hydrocarbon taxes are typically levied on the volume or value of extracted petroleum, while CIT is applied to profits (Olumide & Akintoye, 2019). The combination of these two taxes can result in double taxation, which increases the effective tax rate on oil operations, reducing the profitability of companies (Ogunleye & Bakare, 2019).

Research by Ogunleye and Bakare (2019) highlights that the dual tax burden may lead to lower net returns for oil companies, particularly in upstream activities where exploration and production costs are high. This fiscal complexity also increases the administrative burden on oil operators, as they must comply with the intricacies of both tax systems. The need to manage both hydrocarbon taxes and CIT requires a deep understanding of local and international tax laws, which can be particularly challenging for smaller operators with limited resources (McBain, 2022).

From a policy perspective, the overlap between these two tax types underscores the need for comprehensive tax reform in Nigeria's oil and gas sector. A streamlined tax system that minimizes the risk of double taxation while ensuring the state receives a fair share of petroleum revenues could encourage greater investment and operational efficiency. The PIA's fiscal incentives for marginal fields are a step in the right direction, but further reforms may be necessary to fully address the challenges posed by the current tax structure (Akpan, 2021).

Hydrocarbon Tax vs Company Income Tax Rate

Over the last six decades, Nigeria's oil and gas fiscal architecture was primarily governed by the Petroleum Profits Tax Act (PPTA), under which upstream operators, including joint ventures and production sharing contracts, were subjected to a petroleum profits tax (PPT) that could reach up to 85 per cent of chargeable profits for joint ventures and 50 per cent for production sharing contracts (CITN, 2021; FIRS, 2021). However, with the enactment of the Petroleum Industry Act (PIA) in 2021, the PPTA was replaced by a dual-tax regime requiring upstream petroleum companies to pay both Hydrocarbon Tax (HT) and Companies Income Tax (CIT) (Goldsmiths Solicitors Nigeria, 2021; Enradvisory, 2021). Under the PIA framework, HT is applied to profits from crude oil and associated gas for upstream activities in onshore and shallow-water areas, with rates of 30 per cent for Petroleum Mining Leases and 15 per cent for Petroleum Prospecting Licences, while CIT at 30 per cent is universally applicable to all companies within the petroleum industry (Morgan Lewis, 2021; Enradvisory, 2021). Consequently, the combined effective tax

burden for upstream operators can reach approximately 60 per cent (Taxsummaries PWC, 2021). Recent empirical studies evaluating the financial performance of listed oil and gas firms in Nigeria suggest that the shift from PPT to the HT-CIT regime under the PIA has complicated the balance between state revenue mobilisation and firm profitability. While taxation remains crucial for national revenue, high effective tax rates under the new dual regime may compress profit margins, increase compliance costs, and potentially deter investment, especially in marginal fields where returns are more uncertain (Fadare et al., 2021; Ogunleye & Bakare, 2019)

Theoretical Framework

The theoretical framework for understanding the overlap between hydrocarbon tax and company income tax (CIT) in the context of Nigeria's oil and gas sector is grounded in several key economic and taxation theories. These include resource-based theory, fiscal federalism, the theory of optimal taxation, and the theory of tax competition. Each of these frameworks provides unique insights into the challenges and implications of the dual tax system and its impact on oil sector operators.

Resource-Based Theory (RBT)

The resource-based theory (RBT) provides a useful lens for examining the role of natural resources, particularly oil, in economic development. According to Barney (1991), the value of natural resources is not limited to their extraction but extends to how effectively they are managed and utilized. For oil-rich nations such as Nigeria, oil is considered a strategic resource that drives national economic growth (Olumide & Akintoye, 2019). However, the resource-based theory also suggests that the management of natural resources, particularly through fiscal policies such as taxation, plays a pivotal role in ensuring that the wealth generated from these resources contributes to long-term economic stability and development (Olumide & Akintoye, 2019).

In the context of hydrocarbon taxation, the resource-based theory posits that the government must strike a balance between extracting value from oil resources through taxes and ensuring that this does not deter investment or overburden operators. Thus, the overlap between hydrocarbon tax and CIT can be seen as an attempt to optimize the state's capture of value from oil without stifling the operational capacity of oil companies (Olumide & Akintoye, 2019). In Nigeria, where oil dependency has created economic vulnerabilities and a lack of diversification, this balance becomes crucial for ensuring sustainable development (Akpan, 2021).

Fiscal Federalism Theory

Fiscal federalism theory examines the relationship between central and subnational governments concerning resource distribution and taxation (Oates, 1999). In Nigeria, oil and gas resources are a national asset, yet their extraction and exploitation occur within specific regions, notably the Niger Delta. The issue of resource control and equitable revenue distribution has been a central point of contention in Nigeria, where regional disparities in income and development remain significant (Umenweke & Chukwuma, 2023).

From a fiscal federalism perspective, the overlap between hydrocarbon taxes and CIT can be viewed as an attempt to balance national tax collection with the regional benefits of oil revenues. The introduction of the Host Community Trust Fund under the PIA is aimed at ensuring that local community's benefit from the revenues generated by oil extraction activities (Akpan, 2021). However, the dual tax burden on oil operators complicates this dynamic. The complexity of managing multiple tax obligations may reduce the ability of operators to make long-term investments in these communities (Umenweke & Chukwuma, 2023).

Theory of Optimal Taxation

The theory of optimal taxation, as developed by Musgrave (1959) and Ramsey (1927), emphasizes that taxes should be designed to minimize distortion in economic decisions while achieving revenue objectives. According to this theory, taxes should be set at levels that maximize social welfare without discouraging productive activities such as investment and entrepreneurship (Musgrave, 1959).

In the case of Nigeria's oil sector, the combined burden of hydrocarbon taxes and CIT may violate the principles of optimal taxation. High tax rates and a complex tax system can discourage investment, reduce operational efficiency, and lead to capital flight. This is especially problematic in nations with unstable political climates and unpredictable fiscal policies, such as Nigeria (Fadare et al., 2021). As noted by Ogunleye and Bakare (2019), the combined tax burden may result in "tax distortion," where the intended revenue gains from the oil sector are offset by reduced investment and declining operational capacity over time.

Theory of Tax Competition

Tax competition theory, often applied to multinational corporations, posits that countries must set competitive tax rates to attract and retain foreign direct investment (FDI). Zodrow and Mieszkowski (1986) argue that countries engage in tax competition to create favorable environments for attracting capital, technology, and expertise. In this regard, tax rates that are perceived as too high can drive businesses to relocate to jurisdictions with more favorable tax regimes.

The oil and gas sector is particularly susceptible to tax competition. Oil companies can relocate their operations or shift investments based on the fiscal environment (Umar et al., 2021). For Nigeria, the overlap between hydrocarbon taxes and CIT can be seen as part of the broader competitive landscape in global oil markets. However, the high tax burden may discourage new entrants, particularly in a context where countries like Qatar and Saudi Arabia offer more favorable tax regimes (Fadare et al., 2021). As noted by McBain (2022), Nigeria faces the challenge of balancing the need for tax revenue with the necessity of staying competitive in the global oil market.

The Need for a Balanced Tax Policy

The intersection of these theories underscores the necessity of a balanced approach to taxation in the oil and gas sector. While both hydrocarbon taxes and CIT are essential to Nigeria's fiscal policy, their overlap requires careful consideration to avoid overburdening operators or deterring investment. The government must design a tax system that achieves revenue goals without compromising the sector's long-term investment potential (Akpan, 2021).

The PIA, introduced in 2021, seeks to address some of these concerns by offering tax incentives for marginal field operators and simplifying the tax system (Akpan, 2021). However, further reforms may be necessary to fully align the tax system with the principles of optimal taxation, tax competition, and fiscal federalism, while also ensuring that local communities impacted by oil production benefit from the industry's success (Umenweke & Chukwuma, 2023).

Methodology

This study adopts a mixed-methods research design, integrating both quantitative and qualitative approaches to examine the overlap between hydrocarbon tax and company income tax (CIT) within Nigeria's oil and gas sector. The main objective is to assess how the dual taxation system impacts profitability, investment attractiveness, and operational efficiency of oil operators. Specifically, this research aims to determine whether the existing tax burden diminishes profitability, discourages foreign direct investment (FDI), and to evaluate the role of the Petroleum Industry Act (PIA) in mitigating these challenges.

Data Collection

For the quantitative aspect, primary data was collected from the financial reports and tax filings of International Oil Companies (IOCs) and marginal field operators in Nigeria. The data covers a period of five years and includes information on revenues generated from hydrocarbon taxes and CIT payments. These data points, summarized in Appendix B, provide valuable insights into how the tax regime affects the financial performance of oil operators in Nigeria.

Additionally, qualitative data was gathered through in-depth interviews with a diverse group of industry stakeholders, including tax experts, policymakers, economists, and oil operators. These interviews offer a critical understanding of the operational challenges and inefficiencies posed by the overlapping tax systems. Thematic insights from these interviews are provided in

Appendix E, which complements the quantitative findings.

Secondary data were also sourced from publicly available reports from key Nigerian organizations, such as the Nigerian National Petroleum Corporation (NNPC) and the Nigerian Upstream Petroleum Regulatory Commission (NUPRC), which helped contextualize Nigeria's fiscal policy within the broader landscape of global oil markets.

The study is grounded on three hypotheses:

H1: The overlap between hydrocarbon tax and company income tax negatively impacts the profitability of oil operators in Nigeria.

H2: The dual tax regime (hydrocarbon tax and CIT) reduces Nigeria's attractiveness as a destination for foreign direct investment (FDI) in the oil sector.

H3: The fiscal reforms under the Petroleum Industry Act (PIA) have the potential to alleviate the negative impact of dual taxation on oil operators.

Measurement of Variables

The variables of interest were measured as follows, with detailed measurements and data presented in **Table 1**:

Hydrocarbon Tax: The total amount of taxes paid under the new PIA regime by multinational corporations (MNCs), measured in USD (Appendix B).

Company Income Tax (CIT): The tax applied to profits from oil companies' operations, measured in USD (Appendix B).

Profit Margin: Calculated as $\frac{\text{Revenue} - \text{Total Taxes Paid}}{\text{Revenue}}$, to understand the impact of taxes on profitability.

Foreign Direct Investment (FDI): The inflow of foreign capital into Nigeria's oil and gas sector, measured in USD (Appendix D).

Investment Attractiveness: Estimated using FDI inflows and global investment climate rankings (Appendix B).

Data Analysis

Quantitative Data Analysis

The quantitative data collected from financial reports, tax filings, and government data was analyzed using various statistical techniques. Appendix C presents a sample calculation of the profit margin for Company A, which was used to assess the relationship between tax burden and profitability over time. The total tax burden, which is the sum of hydrocarbon tax and CIT, was subtracted from revenue to determine the profit margin for each year and company.

A regression analysis was employed to examine the relationship between the dual tax regime and foreign direct investment (FDI) in the Nigerian oil sector. Appendix D presents the regression results for the total tax burden and FDI inflows. A negative correlation between tax burden and FDI was observed, supporting the hypothesis that higher tax rates deter foreign investment.

Qualitative Data Analysis

In addition to the quantitative analysis, qualitative data from interviews was analyzed using thematic analysis. Thematic patterns were identified to understand the reasons behind the financial impacts observed in the quantitative data. Appendix E provides insights from industry stakeholders, including an IOC executive, a tax expert, and a government official, each of whom identified challenges such as administrative burdens, inefficiencies in the tax system, and the need for policy reforms. These insights help explain the broader operational challenges faced by oil companies due to the dual taxation system.

Model Specification

Several models were proposed to assess the impact of the dual tax system (hydrocarbon tax and CIT) on profitability and investment attractiveness:

Profitability Model: A regression model was developed to examine the relationship between tax burden and profitability:

$$\text{Profit Margin}_{it} = \beta_0 + \beta_1 \text{Hydrocarbon Tax}_{it} + \beta_2 \text{CIT}_{it} + \beta_3 \text{Revenue}_{it} + \epsilon_{it}$$

The model expects a negative relationship between both hydrocarbon tax and CIT, and the profit margin, as higher taxes typically reduce profitability.

FDI Model: This model assesses the relationship between the total tax burden and FDI:

$$\text{FDI}_t = \gamma_0 + \gamma_1 \text{Total Tax Burden}_t + \gamma_2 \text{Macroeconomic Variables}_t + \nu_t$$

A negative relationship is expected between the total tax burden and FDI, as higher taxes are expected to reduce the attractiveness of the sector to foreign investors.

Impact of PIA Model: This model examines the effect of fiscal reforms under the Petroleum Industry Act (PIA) on the reduction of the tax burden:

$$\text{Tax Burden Reduction}_t = \delta_0 + \delta_1 \text{Post-PIA}_t + \delta_2 \text{Hydrocarbon Tax}_t + \delta_3 \text{CIT}_t + \lambda_t$$

It is expected that the implementation of the PIA will reduce the overall tax burden, leading to a positive impact on profitability and investment

Results and Discussion

This section presents the analysis and interpretation of the results obtained from the quantitative and qualitative data, as outlined in the methodology and supported by the appendices. The findings focus on the impact of the dual taxation regime (hydrocarbon tax and company income tax, CIT) on profitability, investment attractiveness, and operational efficiency within the Nigerian oil and

gas sector. The results reflect data collected from financial reports, tax filings, and questionnaire responses, as detailed in **Appendix B** and **Appendix C**.

Analysis of Questionnaire Responses

A total of 108 valid responses were obtained from oil sector operators across the upstream, midstream, and downstream segments of Nigeria's oil and gas industry. Respondents were categorised based on their roles within the sector, and the data showed that the majority of participants were from upstream oil operations, comprising 48.1% of the sample (Appendix A, Table 1). This finding aligns with the predominance of upstream activities in Nigeria's oil sector, which is typically the largest contributor to oil revenue.

Job Descriptions of respondents indicated that 24.1% held positions in finance/accounts, while 16.7% were employed as tax managers/analysts. This high representation of financial and tax professionals highlights the importance of tax knowledge in decision-making processes within the industry (Appendix A, Table 2).

Tax Knowledge & Perception Variables
Familiarity with the Oil & Gas Tax Regime (Appendix A, Table 3) was an important measure. The results indicate that a significant portion of respondents (51.9%) were very familiar with the tax regime, while 37% were somewhat familiar. This suggests that industry professionals have a reasonable level of awareness about the dual tax system, which is crucial for understanding its impact on financial performance and compliance.

In terms of effectiveness of Hydrocarbon Tax, 44.4% of respondents believed it was not effective, and 38.9% considered it somewhat effective (Appendix A, Table 4). These results indicate that there is a lack of consensus on the effectiveness of the hydrocarbon tax, with concerns over its fairness and impact on operational costs. The fair application of CIT also showed mixed responses, with 51.9% of participants feeling the CIT was applied unfairly (Appendix A, Table 5).

Impact of Dual Taxation on Profitability
The impact of dual taxation on profitability was explored in Appendix A, Table 6. A majority of 72.2% of respondents indicated that dual taxation negatively affected profitability, while only 11.1% reported no impact. This finding is consistent with literature suggesting that high tax rates, especially under the current dual system, can significantly compress profit margins (Fadare et al., 2021).

Similarly, when asked if dual taxation discouraged FDI, 75.9% of respondents agreed, indicating a clear link between high tax burdens and reduced foreign investment in the sector (Appendix A, Table 7). This aligns with findings from studies by McBain (2022) and Umar et al. (2021), which highlight that countries with high taxation on oil companies often experience decreased foreign capital inflows.

Investment

Decision

Variables

Regarding the influence of tax rates on investment decisions, 74.1% of respondents believed that the high tax burden had a negative impact on investment (Appendix A, Table 8). This suggests that oil companies may be less inclined to invest in Nigeria's oil sector due to the financial strain caused by dual taxation. Furthermore, 66.7% of respondents indicated that dual taxation affected their long-term investment strategies (Appendix A, Table 9).

Potential of the PIA to Mitigate Tax Burden

The impact of the Petroleum Industry Act (PIA) was also examined in relation to its potential to alleviate the negative effects of dual taxation. While 53.7% of respondents felt that the PIA could reduce the tax burden, 24.1% were skeptical (Appendix A, Table 10). This highlights some uncertainty surrounding the full implementation and effectiveness of the PIA's fiscal reforms, although the PIA's introduction of tax incentives for marginal field operators is seen as a positive step by a majority of respondents.

Financial Data Analysis

The financial data in Appendix B provides a detailed look at the hydrocarbon tax and CIT paid by three representative oil companies (Company A, Company B, and Company C) over five years. The data reveals that hydrocarbon tax rates ranged from \$500 million to \$560 million annually for Company A, and CIT payments ranged from \$150 million to \$190 million (Appendix B). These figures demonstrate the significant tax liabilities faced by oil operators in Nigeria, with some companies paying taxes equivalent to a substantial portion of their revenue.

Profit

Margin

Calculation

The profit margin calculation in Appendix C shows that, for Company A, the total taxes paid annually ranged from \$650 million to \$750 million, depending on the year (Appendix C, Table 1). The profit margin remained constant at 0.74 over five years, indicating that taxes accounted for a large portion of the company's revenue. This highlights the substantial impact of the dual tax burden on profitability, as the fixed tax payments significantly reduced the company's ability to generate higher profits.

Regression Analysis

Regression analysis was used to assess the relationship between the total tax burden (the sum of hydrocarbon tax and CIT) and FDI inflows. The results in Appendix D show a negative correlation of -0.87 between the total tax burden and FDI inflows, supporting the hypothesis that higher taxes reduce the attractiveness of Nigeria as a destination for foreign investment. As the total tax burden increased from \$1 billion in 2020 to \$1.15 billion in 2024, FDI inflows decreased from \$1.5 billion to \$0.8 billion, confirming the deterrent effect of high taxes on investment (Appendix D, Table 1).

Interview Insights

In-depth interviews with industry stakeholders provided valuable qualitative insights into the operational challenges posed by the dual tax regime. As detailed in Appendix E, an IOC executive highlighted the administrative burden created by managing both hydrocarbon taxes and CIT, stating, "The combination of hydrocarbon tax and CIT is overwhelming. It creates an administrative burden, and we often have to divert resources from operations to ensure compliance." A tax expert pointed out the inefficiencies in the tax system, particularly for smaller operators who struggle with managing multiple tax systems. A government official suggested that the government should streamline the tax process and introduce incentives to encourage investment in marginal fields.

Conclusion

This study explored the impact of the dual taxation system, which includes both hydrocarbon tax (HT) and company income tax (CIT), on the profitability, foreign direct investment (FDI), and operational efficiency of oil operators in Nigeria's oil and gas sector. The findings indicate that the combination of these taxes significantly affects the financial performance of oil companies, with high tax burdens contributing to lower profit margins and reducing the ability to attract foreign investment. The analysis of questionnaire responses revealed a widespread belief that the dual tax system has a detrimental effect on profitability, and most respondents also agreed that it discourages FDI. Additionally, the study highlighted the administrative inefficiencies caused by the complex tax system, particularly for smaller operators.

The Petroleum Industry Act (PIA) is seen as a potential solution to address some of these challenges, particularly with its fiscal incentives aimed at marginal field operators. However, there is still uncertainty regarding the full impact of the PIA's reforms on tax burdens and investment attractiveness. While some stakeholders are optimistic about the PIA's ability to mitigate these issues, the study suggests that further reforms may be necessary to streamline the tax regime and create a more investor-friendly environment.

Recommendations

The findings suggest that simplifying the tax system would help reduce the substantial administrative burden and complexity caused by the dual taxation system. Merging the hydrocarbon tax and CIT into a unified tax framework would not only lower compliance costs but also enhance operational efficiency, making Nigeria more attractive for foreign investment. Other oil-producing countries, such as Saudi Arabia, have successfully implemented similar tax simplifications, which have spurred growth in their oil sectors. A reduction in the high tax rates on both hydrocarbon extraction and corporate profits is another key recommendation. The study found that these high rates deter investment in Nigeria's oil sector, and a review of the current rates could improve the profitability of oil operators. Lower tax rates have proven effective in attracting FDI in countries like Qatar and the UAE, and implementing such measures in Nigeria could similarly enhance its competitiveness in the global oil market.

Strengthening the implementation of the PIA is also crucial for ensuring that the benefits of its reforms are fully realized. The provisions related to fiscal incentives, such as the Host Community Trust Fund, need to be effectively executed to foster better relationships between oil operators and local communities. This will help improve the overall stability and attractiveness of the operating environment. Transparency in tax administration is another important area for improvement. The Nigerian government should consider investing in modernizing tax collection systems to reduce administrative inefficiencies and improve compliance. The introduction of automated tax reporting systems, as seen in countries like Norway, would help oil operators understand their tax obligations and streamline compliance processes.

Finally, regular monitoring and evaluation mechanisms should be established to assess the effectiveness of both the dual tax system and the reforms introduced by the PIA. Continuous assessments would allow policymakers to identify any unintended consequences and ensure that the tax system remains conducive to growth and investment while still generating sufficient revenue for the government.

References

- Akpan, A. (2021). The Petroleum Industry Act and its fiscal implications for Nigeria. *African Journal of Oil and Gas Economics*, 8(2), 101-115.
- Alhassan, H., Abubakar, M., & Danladi, Z. (2020). Hydrocarbon tax and its impact on the Nigerian oil sector. *Journal of Petroleum Economics*, 12(4), 45-59.
- Babayomi, O. (2023). Trends in the Nigerian oil and gas industry: Upstream production and investment. *Nigerian Journal of Energy Economics*, 17(3), 220-233.
- CITN. (2021). *Corporate income tax and the oil industry: Examining the implications of tax burdens in Nigeria*. Chartered Institute of Taxation of Nigeria.
- Dirioz, S., & Erbil, H. (2023). Comparative analysis of petroleum laws: A case study of Nigeria and Qatar. *Energy Policy Review*, 29(1), 67-82.
- Enradvisory. (2021). *Petroleum Industry Act 2021: Fiscal implications for the Nigerian oil and gas sector*. Enradvisory.
- Ede, J. (2021). The Petroleum Industry Act: A new era for Nigeria's oil and gas sector. *Journal of Energy and Environmental Studies*, 14(5), 112-125.
- Fadare, O., Ogunleye, J., & Bakare, A. (2021). The role of company income tax in the Nigerian oil sector. *Journal of Business Taxation*, 19(1), 77-90.

- FIRS. (2021). *Federal Inland Revenue Service: Tax regime and oil industry policy*. Federal Inland Revenue Service of Nigeria.
- Goldsmiths Solicitors Nigeria. (2021). *An analysis of the dual-tax system under the Petroleum Industry Act 2021*. Goldsmiths Solicitors Nigeria.
- McBain, B. (2022). *Challenges And Opportunities in The Nigerian Oil And Gas Sector: The role of taxation*. *Global Business Review*, 25(4), 375-389.
- Morgan Lewis. (2021). *The Petroleum Industry Act and its fiscal implications for Nigeria's oil and gas industry*. Morgan Lewis Law Firm.
- Musgrave, R. A. (1959). *The theory of public finance*. McGraw-Hill.
- Ogunleye, T., & Bakare, J. (2019). Corporate tax burdens in Nigeria's oil industry: A review of dual tax regimes. *Nigerian Journal of Business Policy*, 15(2), 98-112.
- Oates, W. E. (1999). An essay on fiscal federalism. *Journal of Economic Literature*, 37(3), 1120-1149.
- Olumide, A., & Akintoye, J. (2019). Corporate income tax and the oil industry: Examining the implications of tax burdens in Nigeria. *International Journal of Business Economics*, 10(1), 56-70.
- Smith, J., Patterson, C., & Davis, R. (2018). A global comparison of hydrocarbon taxation systems. *Energy Economics Journal*, 21(4), 155-170.
- Umar, S., Raza, S., & Fadare, O. (2021). Fiscal policies and their effects on investment in the Nigerian oil sector. *Journal of Economics and Development*, 29(5), 142-157.
- Umenweke, I., & Chukwuma, T. (2023). The Nigerian oil sector: An analysis of governance, policy, and economic development. *Journal of African Energy Policy*, 19(3), 305-320.
- Zodrow, G. R., & Mieszkowski, P. (1986). Pigou, Tiebout, property taxation, and the underprovision of local public goods. *Journal of Urban Economics*, 19(3), 356-370

APPENDICES

APPENDIX A: ANALYSIS OF QUESTIONNAIRE RESPONSES

SECTION 1: GENERAL INFORMATION

1. Oil Sector Segment of Respondents

Sector	Frequency Percentage (%)	
Upstream	52	48.1
Midstream	28	25.9
Downstream	28	25.9
Total	108	100%

2. Job Description / Role of Respondents

Job Description	Frequency Percentage (%)	
Finance/Accounts Officer	26	24.1
Tax Manager / Tax Analyst	18	16.7
Operations/Production Manager	22	20.4
Compliance/Regulatory Officer	12	11.1
Senior Management (GM, AGM, Directors)	10	9.3
Procurement/Logistics Personnel	8	7.4
Technical/Engineering Staff	12	11.1
Total	108	100%

Job Role	Frequency Percent Valid Percent Cumulative Percent			
<i>Finance/Accounts</i>	<i>26</i>	<i>24.1</i>	<i>24.1</i>	<i>24.1</i>
<i>Tax Manager/Analyst</i>	<i>18</i>	<i>16.7</i>	<i>16.7</i>	<i>40.7</i>
<i>Operations/Production</i>	<i>22</i>	<i>20.4</i>	<i>20.4</i>	<i>61.1</i>
<i>Compliance/Regulatory</i>	<i>12</i>	<i>11.1</i>	<i>11.1</i>	<i>72.2</i>
<i>Senior Management</i>	<i>10</i>	<i>9.3</i>	<i>9.3</i>	<i>81.5</i>

<i>Job Role</i>	<i>Frequency</i>	<i>Percent Valid</i>	<i>Percent</i>	<i>Cumulative Percent</i>
<i>Procurement/Logistics</i>	8	7.4	7.4	88.9
<i>Engineering/Technical</i>	12	11.1	11.1	100.0
Total	108	100.0	100.0	100.0

Source: Field Study work's Analysis, 2025

2. TAX KNOWLEDGE & PERCEPTION VARIABLES

2.1 Familiarity with Oil & Gas Tax Regime

Variable: Familiarity (1 = Not Familiar, 2 = Somewhat Familiar, 3 = Very Familiar)

<i>Response</i>	<i>Frequency</i>	<i>Percent Valid</i>	<i>Percent</i>	<i>Cumulative Percent</i>
<i>Not Familiar</i>	12	11.1	11.1	11.1
<i>Somewhat Familiar</i>	40	37.0	37.0	48.1
<i>Very Familiar</i>	56	51.9	51.9	100.0
Total	108	100.0	100.0	100.0

2.2 Effectiveness of Hydrocarbon Tax

<i>Response</i>	<i>Frequency</i>	<i>Percent Valid</i>	<i>Percent</i>	<i>Cumulative Percent</i>
<i>Very Effective</i>	18	16.7	16.7	16.7
<i>Somewhat Effective</i>	42	38.9	38.9	55.6
<i>Not Effective</i>	48	44.4	44.4	100.0
Total	108	100.0	100.0	100.0

Source: Field Study work's Analysis, 2025

2.3 Fair Application of CIT

Response Frequency Percent Valid Percent Cumulative Percent

<i>Yes</i>	<i>30</i>	<i>27.8</i>	<i>27.8</i>	<i>27.8</i>
<i>No</i>	<i>56</i>	<i>51.9</i>	<i>51.9</i>	<i>79.6</i>
<i>Unsure</i>	<i>22</i>	<i>20.4</i>	<i>20.4</i>	<i>100.0</i>
<i>Total</i>	<i>108</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

Source: Field Study work's Analysis, 2025

3. EFFECT OF DUAL TAXATION

3.1 Profitability Impact

Response Frequency Percent Valid Percent Cumulative Percent

<i>Yes</i>	<i>78</i>	<i>72.2</i>	<i>72.2</i>	<i>72.2</i>
<i>No</i>	<i>12</i>	<i>11.1</i>	<i>11.1</i>	<i>83.3</i>
<i>Maybe</i>	<i>18</i>	<i>16.7</i>	<i>16.7</i>	<i>100.0</i>
<i>Total</i>	<i>108</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

Source: Field Study work's Analysis, 2025

3.2 Does Dual Taxation Discourage FDI?

Response Frequency Percent Valid Percent Cumulative Percent

<i>Yes</i>	<i>82</i>	<i>75.9</i>	<i>75.9</i>	<i>75.9</i>
<i>No</i>	<i>10</i>	<i>9.3</i>	<i>9.3</i>	<i>85.2</i>
<i>Unsure</i>	<i>16</i>	<i>14.8</i>	<i>14.8</i>	<i>100.0</i>
<i>Total</i>	<i>108</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

Source: Field Study work's Analysis, 2025

4. INVESTMENT DECISION VARIABLES

4.1 Tax Rates Influence Investment Decisions

<i>Response</i>	<i>Frequency</i>	<i>Percent Valid</i>	<i>Percent</i>	<i>Cumulative Percent</i>
<i>Positive Impact</i>	14	13.0	13.0	13.0
<i>Negative Impact</i>	80	74.1	74.1	87.0
<i>Neutral Impact</i>	14	13.0	13.0	100.0
<i>Total</i>	108	100.0	100.0	100.0

Source: Field Study work's Analysis, 2025

4.2 Effect on Long-Term Investment Strategy

<i>Response</i>	<i>Frequency</i>	<i>Percent Valid</i>	<i>Percent</i>	<i>Cumulative Percent</i>
<i>Yes</i>	72	66.7	66.7	66.7
<i>No</i>	18	16.7	16.7	83.3
<i>Unsure</i>	18	16.7	16.7	100.0
<i>Total</i>	108	100.0	100.0	100.0

Source: Field Study work's Analysis, 2025

4.3 Will PIA Reduce Negative Impact of Dual Taxation?

<i>Response</i>	<i>Frequency</i>	<i>Percent Valid</i>	<i>Percent</i>	<i>Cumulative Percent</i>
<i>Yes</i>	58	53.7	53.7	53.7
<i>No</i>	26	24.1	24.1	77.8
<i>Unsure</i>	24	22.2	22.2	100.0
<i>Total</i>	108	100.0	100.0	100.0

Source: Field Study work's Analysis, 2025

5. DESCRIPTIVE STATISTICS

<i>Variable</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
<i>Familiarity</i>	<i>108</i>	<i>1</i>	<i>3</i>	<i>2.41</i>	<i>0.69</i>
<i>Effectiveness of Hydrocarbon Tax</i>	<i>108</i>	<i>1</i>	<i>3</i>	<i>2.28</i>	<i>0.74</i>
<i>CIT Fairness</i>	<i>108</i>	<i>1</i>	<i>3</i>	<i>1.93</i>	<i>0.73</i>
<i>Profitability Impact</i>	<i>108</i>	<i>1</i>	<i>3</i>	<i>1.44</i>	<i>0.69</i>
<i>FDI Impact</i>	<i>108</i>	<i>1</i>	<i>3</i>	<i>1.39</i>	<i>0.64</i>
<i>Investment Decision Impact</i>	<i>108</i>	<i>1</i>	<i>3</i>	<i>2.00</i>	<i>0.60</i>
<i>Long-Term Strategy Impact</i>	<i>108</i>	<i>1</i>	<i>3</i>	<i>1.50</i>	<i>0.73</i>
<i>PIA Impact</i>	<i>108</i>	<i>1</i>	<i>3</i>	<i>1.69</i>	<i>0.74</i>

Source: Field Study work’s Analysis, 2025

Appendix B: Financial Data Collected from Oil Companies

Table B1: Hydrocarbon Tax and Company Income Tax Data from Selected Oil Companies

Year	Company A Hydrocarbon Tax (USD)	Company A CIT (USD)	Company B Hydrocarbon Tax (USD)	Company B CIT (USD)	Company C Hydrocarbon Tax (USD)	Company C CIT (USD)
2020	500,000,000	150,000,000	25,000,000	10,000,000	450,000,000	120,000,000
2021	520,000,000	160,000,000	27,000,000	11,000,000	475,000,000	130,000,000
2022	530,000,000	170,000,000	30,000,000	12,000,000	490,000,000	135,000,000
2023	550,000,000	180,000,000	32,000,000	13,000,000	510,000,000	140,000,000
2024	560,000,000	190,000,000	34,000,000	14,000,000	520,000,000	145,000,000

Source: Study’s Analysis, 2025

Appendix C: Profitability and Tax Burden Calculation

Table C1: Profit Margin Calculation for Oil Companies

Year Company A Revenue (USD) Total Taxes Paid (USD) Profit Margin

2020	2,500,000,000	650,000,000	0.74
2021	2,600,000,000	680,000,000	0.74
2022	2,700,000,000	700,000,000	0.74
2023	2,800,000,000	730,000,000	0.74
2024	2,900,000,000	750,000,000	0.74

Source: Study's Analysis, 2025

Appendix D: Regression Analysis Results

Table D1: Regression Analysis - Tax Burden and FDI Inflows

Year Total Tax Burden (USD) FDI Inflows (USD Billion)

2020	1,000,000,000	1.5
2021	1,020,000,000	1.3
2022	1,060,000,000	1.2
2023	1,100,000,000	1.0
2024	1,150,000,000	0.8

Source: Study's Analysis, 2025