



## Corporate Tax Compliance and Its Impact on Operational Efficiency in the Nigerian Oil and Gas Sector

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### ABSTRACT

*This study examined the effect of corporate income tax on the operational efficiency of oil and gas companies in Nigeria. Secondary data are from Conoil, Oando, Ukromi and Sons Limited and Empire Energy Group Limited. Corporate taxation was proxied by corporate income tax, education tax and petroleum profit tax as independent variables, while operational efficiency is proxied using Return on Equity (ROE) and Return on Assets (ROA). Using secondary data collected from audited financial statements and regulatory bodies, the study employed multiple regression analysis and the ordinary least square (OLS) to establish the relationship between corporate tax and operational efficiency. The results show that corporate income tax had a negative and insignificant effect on the ROA and ROE of oil and gas companies in Nigeria. Education Tax (EDT) had a negative and insignificant effect on the ROA of oil and gas companies in Nigeria. Education Tax (EDT) had a positive and insignificant effect on the ROE of oil and gas companies in Nigeria. Petroleum Profits Tax (PPT) had a positive and insignificant effect on the ROA and ROE of oil and gas companies in Nigeria. The results show that corporate tax had a positive and insignificant relationship on operational efficiency of oil and gas companies in Nigeria. Therefore, the study recommended, among other things, that the government considers a review of tax policies that reduces the tax burden hence enhancing the operational performance in the oil and gas sector.*

**Keywords:** Corporate Tax, Operational Efficiency, Company Income Tax, Education Tax, Petroleum Profit Tax, Return on Equity, Return on Assets.

### I. BACKGROUND OF THE STUDY

Companies aim for high net income to increase their earnings per share (EPS), but a number of factors can have an impact on their income and the amount of money they can return to shareholders (dividend). One of these aspects is tax. Ojukwu (2017) defined tax as a compulsory

contribution to state revenue imposed by the government on the earnings of workers and business profits or added to the cost of certain goods, services and transactions. According to Appah (2011), the development of any nation depends on the amount of revenue generated by the provision of infrastructure for the common good of all. One of the main sources of generating this income is tax. One major source of generating this revenue is taxation. Bello, Idris and Adejumobi (2018) stated that tax is a major source of government revenue all over the world, including Nigeria. Mintz (2010) explains that industries tax for oil and gas concerns is imposed on the incomes made from the sale of oil and gas, net of the production costs which comprise current mining costs, capital cost allowances, as well as exploration and development costs. Okafor (as cited in Osho, Omotayo & Ayorinde, 2018) viewed tax as the charges levied on wealth and income of a person or firms for social, common and economic benefit of the masses or public. Governments use tax proceeds to render their traditional functions such as the provision of public goods, maintenance of law and order, defense against external and internal aggression, regulation trade and business to ensure social and economic justice. Though tax is a major source of revenue to government in generating additional revenue needed in discharging its pressing obligations, tax system offers itself as one of the most effective means of mobilizing a nation's internal resources and it lends itself to creating an environment conducive to the promotion of oil and gas firms in Nigeria (Attama 2004). Bello, Idris and Adejumobi (2018) stated that taxes are a major source of government revenue worldwide, including Nigeria. Governments use tax revenues to carry out their traditional functions, such as providing public goods, maintaining public order, protecting against external and internal aggression, regulating trade and business to ensure social and economic justice. Brown (2016) also argued that the economic effects of taxation include microeconomic effects on income distribution and resource efficiency, as well as macroeconomic



effects on the level of output, employment, prices and growth. Brown (2016) also argued that the economic effects of taxation include microeconomic effects on income distribution and resource efficiency, as well as macroeconomic effects on the level of output, employment, prices and growth. Corporate tax is one imposed by the government on the profits of corporations, including those in the oil and gas industry. Corporate tax is seen as a tax levied on the profit earned by a company. The impact of corporate tax on the performance of oil and gas companies can be substantial and far-reaching, influencing factors such as investment, exploration, production, and overall profitability. Governments can mitigate the negative impact of corporate taxes on the oil and gas industry by providing tax incentives for investment in the industry. For example, tax credits for drilling, exploration, and production activities can encourage investment and increase the competitiveness of the industry (Smith, 2017; 2018). Corporate tax is a tax imposed by the government on the profits of corporations, which can have a significant impact on the performance of the oil and gas industry. The oil and gas industry is capital-intensive and generates large profits, making it a prime target for corporate taxation. Ali (cited in Ibeh and Ezech, 2021) has argued that corporate tax is an important tool to regulate business activities and promote sustainable development. He suggests that the government carefully designs corporate tax policies to ensure that they are effective in promoting the public interest. Nigeria is a country with a rich oil and gas sector, which contributes significantly to its economy (Adenikinju, 2013). In determining the performance of oil and gas industries, there are accepted variables along which it is discussed. The major two of these variables are the returns on asset and returns on equity. Return on Asset (ROA) refers to a financial ratio that measures the profitability of a company in relation to its total assets. It is calculated as net income divided by total assets (Olaleye & Abdu-Raheem, 2020). Similarly, Return on Equity (ROE) refers to a financial ratio that measures the profitability of a company in relation to its shareholder equity. It is calculated as net income divided by shareholder equity (Ademola & Ogbaji, 2021). The government of Nigeria implements various tax policies on the oil and gas industry in order to increase revenue and promote socio-economic development (Central Bank of Nigeria, 2020). Of the obvious impact of the proceeds of corporate tax, education, company income tax and petroleum profit tax are key indices. Education tax refers to a tax levied by the

government to fund educational services and infrastructure, while corporate tax refers to a tax levied on the taxable income of a business entity. Petroleum Profits Tax is a specific tax levied on upstream operations of the oil and gas industry. It covers taxes on rents, royalties, margins and profit-sharing elements related to petroleum exploitation, exploration and prospecting leases. It is considered the most important tax in Nigeria, as it accounts for between 95% and 70% of foreign exchange earnings and government revenue respectively. However, the impact of these tax policies on the financial performance of listed oil and gas companies in Nigeria is not fully understood (Bello et al., 2019). Corporate tax is a key element of the tax policies implemented by the Nigerian government (Adenikinju, 2013). Petroleum profit tax is a specific tax levied on upstream operations of the oil and gas industry. It covers taxes on rents, royalties, margins and profit-sharing elements related to petroleum exploitation, exploration and prospecting leases. It is considered the most important tax in Nigeria, as it accounts for between 95% and 70% of foreign exchange earnings and government revenue respectively. Corporate tax is a key component of the tax policies implemented by the government of Nigeria (Adenikinju, 2013). The tax burden of companies can affect their financial performance (KPMG, 2016), because companies have to allocate resources to pay taxes (PWC, 2019). Therefore, the relationship between the tax rate and the financial performance of the company is of great interest to policy makers, investors and stakeholders in the oil and gas industry (Bello et al., 2019). The impact of corporate tax on the oil and gas industry can be both positive and negative. High corporate tax rates can discourage investment in the industry and reduce the profitability of oil and gas companies, leading to reduced exploration, development and production activities. However, scholars differ on the outcome of these opinion. Specifically, the oil and gas industry faces numerous challenges in addition to its workload, including challenges related to the fluctuation of crude oil prices, uncertainty, and inadequate infrastructure (Ogaji, Owhoko, and Obi 2020). Therefore, this study was conducted to ascertain corporate tax and performance of listed oil and gas companies in Nigeria. Therefore, the relationship between the tax rate and the financial performance of the company is of great interest to policy makers, investors and stakeholders in the oil and gas industry (Bello et al., 2019). There is no gainsaying the fact that the tax burden placed on corporate companies affects their performances positively or negatively. It is not uncommon to hear



companies complain of high taxes from the government. To this end, Abdul-Rahman, Taufiq, and Razak (2019) found that high corporate tax rates can reduce a company's profitability, while lower tax rates can increase it. Similarly, Agbebi and Ajayi (2018) reported that corporate tax has a significant negative impact on the return on assets (ROA) of Nigerian companies, especially those in the oil and gas sector. Onyekuru and Uche (2020) are of the view that due to heavy tax burden, oil companies were unable to engage in research and development (R&D), which would have increased their marginal output. Adeleye and Abdu-Raheem (2020) found that investment opportunities for oil companies decreased due to the high tax burden. However, although there are many studies that have investigated the nexus between corporate tax and performance of oil and gas industries in Nigeria, there is an obvious dearth of empirical studies on specific variables of performance. Therefore, it will be difficult to speak in specific terms how corporate tax affects oil and gas industries. Against this backdrop this study was conducted to find out how corporate tax impacts the performance of oil and gas industries in Nigeria from 2012-2021.

## II. OBJECTIVES OF THE STUDY

The main objective of the study is to evaluate the effect of corporate tax on performance of listed oil and gas companies in Nigeria.

Specifically, the study was conducted to:

- 2 assess the effect of corporate income tax on return on assets in Nigeria.
- 3 examine the effect of company income tax on return on equity in Nigeria.
- 4 evaluate the influence of education tax on return on asset in Nigeria.
- 5 investigate the influence of education tax on return on equity in Nigeria.
- 6 ascertain the effect of petroleum profit tax on return on asset in Nigeria.
- 7 evaluate the effect of petroleum profit tax and return on equity in Nigeria.

## Research Questions

In line with the objective of the study the following are the research questions.

1. What is the effect of company income tax on return on assets in Nigeria?
2. What is the effect of company income tax on return on equity in Nigeria?
3. To what extent does education tax influence return on asset in Nigeria?
4. What is the effect of education tax on return on equity in Nigeria?

5. What is the effect of petroleum profit tax on return on asset in Nigeria?
6. To what extent does petroleum profit tax affect return on equity in Nigeria.

## Research Hypothesis

The following hypotheses were developed

H<sub>01</sub>: There is no significant relationship between company income tax and return on asset in Nigeria.

H<sub>02</sub>: There is no significant relationship between company income tax and return on equity in Nigeria.

H<sub>03</sub>: Education tax has no significant relationship with return on asset in Nigeria.

H<sub>04</sub>: There is no significant relationship between education tax and return on equity of oil and gas companies in Nigeria.

H<sub>05</sub>: There is no significant relationship between petroleum profit tax on return on asset in Nigeria.

H<sub>06</sub>: There is no significant relationship between petroleum profit tax and return on equity in Nigeria.

## Scope of the Study

This study evaluated corporate tax and performance of listed oil and gas companies in Nigeria. These include Conoil, Oando, Ukoromi and Sons Limited and Empire Energy Group Limited. Data were sourced from their annual reports for a period of 10 years (2012-2021). Ten year study period became necessary since studies cited did not cover corporate tax and performance of listed oil companies up to 2021. The performance variables were delimited to return on equity and return on assets as the dependent variable while corporate tax was studied against the backdrop of company income tax, Education tax and petroleum profit tax as the independent variable.

## III. Literature Review

### Conceptual Review

#### Corporate tax

Nwezeaku (2005) postulated that tax is a compulsory payment made by a citizen for which there is no immediate commensurate return.

Tax is a compulsory levy imposed on a subject individual or cooperate or upon his property income or consumption for the government to generate revenue to provide security, social amenities and create condition for economy growth (Appah, 2011). Danbatta (cited in Appah, 2011) defined tax as a compulsory contribution made by an individual and organization towards defraying the expenditure of the government, these taxes can be direct or indirect tax which are impose on the income or consumption of a tax payer who bear the burden of



taxation. The indirect tax are imposed on the goods and services on which the tax payer does not bear the burden of taxation, but it can be transferred to the final consumer who bears the burden in form of price. Nzotta (cited in Adebayo, 2019) maintained that tax is a compulsory levy contribution made by the citizens to the state or even an alien, subject to the jurisdiction of the government, for reasons of residence or property and this contribution is for general common use.

Based on the definitions given above, tax or taxation, in the researcher's view, is a mandatory levy the government requires from taxable individuals, corporate entities and goods and services for developmental purposes. The government of a country generate most of its revenue through taxation and it is from this revenue that they (the government) use to provide essential services like, road, electricity, pipe-borne water etc every corporate organization is expected as a requirement to pay taxes, from their profit and until taxes are paid dividend cannot be paid because dividend is paid from profit after tax of company. Corporate Tax is a tax imposed by a government on the profits earned by companies, calculated as a percentage of the company's net income (Khan & Jain, 2015). Corporate Tax is a crucial source of government revenue, used to finance public goods and services, and support economic development (Smith, 2018). It can also play a role in shaping the behavior of companies and improving tax compliance (Davis & Parker, 2017).

Furthermore, Corporate Tax is a tax that is levied on the profits of a corporation or company. It is usually calculated as a percentage of the company's net income (Brown, 2016). Corporate Tax is a dynamic and constantly evolving area of taxation that requires companies to have a thorough understanding of the tax laws and policies in the countries where they operate (Smith, 2017).

#### Corporate Performance

Corporate performance refers to the operating efficiency and performance of the company during a certain period of operation. (Guangguo, et. al., as cited in Ouyang, 2020). Measurement of firm's performance is a continuous process and it is paramount for companies that want to survive for a long period to consider the profit level in all activities. From the economist perspective, profit is the amount derived or gained from operating activities. Similarly, return on equity (ROE) refers to a financial ratio that measures a company's profitability relative to its shareholders' equity. It is calculated as net profit divided by shareholders'

equity (Ademola and Ogbaji, 2021). The Nigerian government implements various fiscal policies in the oil and gas industry to increase revenue and promote socio-economic development (Central Bank of Nigeria, 2020).

#### Education tax

Introduced on 1st July 1983, 'Education Tax' is a compulsory wage based contribution system, the proceeds of which are used to assist the Ministry of Education with needed finance. Everyone within the workforce pays Education Tax, including employers, employees and the self-employed.

Education tax in Nigeria is a type of tax that is used to finance the country's education system (Adewole & Ojo, 2019). The tax is primarily levied on individuals and businesses, with the revenue generated being used to support public schools, colleges, and universities. In Nigeria, the education sector has long faced challenges, including inadequate funding and a lack of access to quality education for many students. As a result, the introduction of education tax in the country has been seen as a crucial step towards improving the state of education in Nigeria.

#### Petroleum Profit Tax (PPT)

A cardinal form of corporate tax levied on the oil and gas industry is petroleum profit tax (PPT). It is considered as a major revenue contributor to Nigeria (Usman & Adegbite, 2015). This has made the government pay great attention to such tax. Its proceeds affect both gross domestic product (GDP) and foreign exchange earnings of Nigeria significantly. According to Ngu (2021), petroleum profit tax is defined as an act of the Federal Government of Nigeria (FGN) on oil and gas companies for the profits derived from oil mining and exploration activities. Olatunji and Adegbite (2014) opined that petroleum profit tax is a specific tax levied on upstream operations of the oil and gas industry. It covers taxes on rents, royalties, margins and profit-sharing elements associated with oil mining, prospecting and exploration leases. It is considered as the most important tax in Nigeria since it accounts for between 95% and 70% of foreign exchange earnings and government revenue respectively (Ezugwu & Akubo, 2014).

The major essence of the PPT, as hinted by Gbegi, Adebisi and Bodunde (2017), revolves around the upstream sector that is responsible for oil prospecting, mining, and production. The petroleum profit tax Act stipulates that crude oil production is taxed at the rate of 85% on export and 65.75% on



domestic sale of oil within the periods under review. According to Lawal (2013), the Federal Inland Revenue Service (FIRS) is saddled with the responsibility for collecting and administering the PPT according to the authority vested on it by the PPT Act. Thus, the FIRS is statutorily responsible for the assessment and collection of taxes in the oil and gas sector of the economy. Collection of this tax is justified on the grounds that oil is Nigeria's economy mainstay, which yields the revenue needed by the government to meet her obligations to the citizens and the nation (Ilaboya & Ofiafor, 2014).

### **Operational Efficiency**

Operational efficiency refers to how effectively oil and gas companies in Nigeria manage their resources to achieve maximum output and profitability while minimizing costs.

### **Laffer Curve Theory**

The Laffer Curve is an economic theory that illustrates the relationship between tax rates and tax revenue. It suggests that there is an optimal tax rate that maximizes government revenue. The theory is named after economist Arthur Laffer, who popularized it in the 1970s. Arthur Laffer (1979) propounded the Laffer Curve Theory to show the relationship between official tax rates and tax revenue obtained by government. The theory explained that changes in taxable income will result to changes in rate of taxation, which is the concept of taxable income elasticity. It also reveals that an extreme tax rate of 0% and 100% will be raised due to no tax revenue and government can maximize tax revenue through at least having one tax rate. The theory is related to the study because it will help firms to examine the extent of effects of tax rate increase on profitability as the curve explained that increase in taxes from zero

level will result to increase in tax revenue collected by the government.

In Nigeria, the oil and gas sector is a significant contributor to government revenue through corporate taxes, royalties, and levies.

The Laffer Curve suggests that if corporate tax rates are too high, oil and gas companies might reduce their investments, cut production, or engage in tax avoidance strategies, leading to lower tax revenue. Conversely, if tax rates are too low, the government may not generate sufficient revenue from the sector, despite increased activity. Furthermore, high tax rates can reduce the operational efficiency of oil and gas companies by limiting the resources available for reinvestment in exploration, infrastructure, and technology. When taxes are optimized (at the Laffer

Curve's peak), companies retain more earnings, which can be reinvested to improve efficiency, reduce costs, and enhance productivity.

In a competitive global market, oil and gas companies in Nigeria are sensitive to tax policies. High tax burdens may discourage foreign direct investment (FDI) and lead companies to shift operations to more tax-friendly jurisdictions. A balanced tax regime, informed by the Laffer Curve, could encourage investment in Nigeria's oil and gas sector, fostering growth and operational efficiency. An optimal tax rate based on the Laffer Curve could increase government revenue without overburdening oil and gas companies. This balance promotes a healthier business environment and economic stability. The theory assumes that higher tax rates can discourage economic activity (like working, investing, or spending), which may reduce the tax base.

### **Tax Preference Theory**

Tax Preference Theory is a tax theory that suggests that individuals and companies make economic decisions based on the tax implications of those decisions. The theory proposes that taxpayers consider the tax consequences of their actions when making decisions, and that taxes can influence the choices they make. This theory has implications for the design of tax policy, as tax incentives and disincentives can be used to influence behavior.

The theory was first propounded by Stanley Surrey, a leading tax scholar, in the 1950s. Surrey's work focused on the idea that tax considerations play a role in economic decisions, and that taxes can be used to shape economic behavior. Surrey's ideas about tax preference were influential in shaping the development of modern tax policy, and his theories continue to be relevant today.

The relevance of this theory to this study lies in the fact that the rate of tax burden on oil and gas industry can affect their overall attitude towards corporate. Where the burden is beyond their income vis-à-vis input and output, tax evasion may be last resort for the company.

Adeleye and Abdu-Raheem (2020) aimed to investigate the impact of corporate tax on the investment decisions of Nigerian oil and gas companies. They collected data from a sample of 30 companies operating in the Nigerian oil and gas industry over a period of 10 years from 2008 to 2018. The researchers used regression analysis to analyze the data and determine the relationship between corporate tax and investment decisions. The findings of the study suggested that high tax burdens can discourage investment and reduce the



long-term growth potential of the industry. Specifically, the results showed that an increase in corporate tax by 1% leads to a decrease in investment by 0.64%. The reviewed study was carried out in Nigeria just like the present one. Companies studied are all situated in Nigeria. However, the time periods of both studies differ: the reviewed study covered 2008-2018 whereas the present covered 2012-2021. More so, whereas the reviewed study involved 30 oil and gas companies, the present one covered only two. The reviewed study did not also cover the variables of returns and equity and did not use education tax to measure corporate tax.

Onyekuru and Uche (2020) conducted a study to investigate the impact of corporate tax on the competitiveness of Nigerian oil and gas companies. The study analyzed the financial statements of 10 selected oil and gas companies listed on the Nigerian Stock Exchange (NSE) from 2010 to 2018. The study employed descriptive statistics and correlation analysis to examine the relationship between corporate tax and competitiveness of the companies. The findings of the study revealed that high tax burdens can reduce the competitiveness of oil and gas companies in Nigeria. The study found a negative correlation between corporate tax and research and development (R&D) expenditure, which indicates that higher tax burdens limit the ability of companies to invest in R&D activities. Additionally, the study found a positive correlation between tax incentives and R&D expenditure, which indicates that tax incentives can encourage companies to invest in R&D activities. The reviewed study differs from the present one in terms of period of time covered as well as design and instrument for data analysis. While the former used descriptive survey design and correlation statistics, the present study used ex-post facto design and secondary data as well

as regression statistics. The former study also was delimited to tax and company expenditure, research and development and tax incentives whereas the present one was delimited to returns and equity as well as education and company income tax.

#### IV. RESEARCH DESIGN

The study utilized secondary data to collect data from Conoil, Oando, Ukoromi and Sons Limited and Empire Energy Group Limited. The quantitative data collected covered the various proxies for independent and dependent variables of the study; namely, company income tax, education tax, return on equity and return on assets for the period of 10 years covering (2012-2021).

The data collected in the course of the research were analyzed using some statistical tools in line with the nature of the study's problem and objectives. A multiple regression model guided the analysis of the data collected on the key variables of the study. The study utilized the ordinary least square (OLS). The ordinary least square technique was adopted due to the properties of BLUE (Best, Linear and Unbiased Estimators). T-statistics was employed in establishing the individual relationship of each of the exogenous variable on the identified endogenous variable while F-statistics established the combine effect or relationship of the three exogenous variables on the endogenous variable. 0.05 level of significance was utilized in the study.

#### V. DATA ANALYSES

The company income tax (CIT), education tax (EDT) and petroleum profit tax (PPT) are proxies for Corporate tax, which is the independent variable while the Return on assets (ROA) and Return on equity (ROE) are proxies for performance, which is the dependent variable.

To standardize to equal base the log of numbers is used

Year	ROA	ROE	CIT	EDT	PPT
2012	-1.07	0.758	5.5888	4.6983	6.1266
2013	0.5682	1.2309	6.3724	5.2404	6.9988
2014	-0.0164	0.7157	6.1782	4.9491	6.4550
2015	0.5229	1.1157	6.2265	4.7887	6.7001
2016	0.6063	1.1875	6.3617	5.2033	7.0007
2017	0.3980	0.9454	5.6236	4.5454	6.1265
2018	0.4721	0.9912	5.8201	4.8542	6.5011
2019	0.4910	1.0057	5.8545	4.8803	6.1041
2020	0.4721	0.8742	5.8285	4.7927	6.1000
2021	0.7533	1.1503	6.0473	4.9759	6.8000



### Results of Regression Analyses

The multiple regression models of this study as stated in chapter 3 were analyzed using the ordinary least square (OLS) regressions. The results of the analysis are detailed in the appendix but have been summarized in table 4.2

**Table 4.2 Results of the Regression Analysis**

@ 5% level of significance	MODEL 1 (ROA)	MODEL 2 (ROE)
(Constant) $b_0$	-4.754	-1.504
(CIT) $b_1$	1.038	0.224
(EDT) $b_2$	-0.234	0.237
(PPT) $b_3$	1.888	0.777
<b>Durbin Watson stat</b>	1.785	2.508

Source: Extracts from Appendix

Table 4.2 shows that the intercept ( $b_0$ ) of the regression model 1, and 2 is negative at -4.754, and -1.504 respectively, the result shows that when the proxies for independent variable in the models are zero, the dependent variable, (ROA) and (ROE) will be negative. Results from the table 4.2 also indicate that the coefficient of the first (CIT) independent variables in model 1 is positive as shown in the value (1.038), the second (EDT) is (-0.234) is negative and the third, (PPT) is positive (1.888) respectively. This indicated that the independent variables from the model 1 have a positive and negative relationship with the dependent variable (ROA).

On the other hand, in the second model the first (CIT), 0.224 independent variable shows a positive relationship with the dependent variable

(ROE), the second (EDT) independent variable as indicated in the value 0.237 shows positive relationship with the dependent variable (ROE) and (PPT) is positive (0.777) respectively.

The Durbin Watson result for the model confirms that the data used in the analysis is free from autocorrelation or serial correlation shown in the value (1.785), and (2.508) respectively since it is close to 2, which further indicates that the data used in the analysis is valid.

### 4.2.2 Test for significance and decisions on the hypotheses of the study

The test for significance results using t-statistics are detailed in the appendix. However, a summary of the significance results which aids the decision for the six hypothesis of the study are summarized on table 4.3

**Table 4.3 Test for significance results (Test of hypotheses)**

@ 0.05% level of significance	Model 1 (ROA)		Model 2 (ROE)			
	HYP 1 (CIT)	HYP 3 (EDT)	HYP 2 (CIT)	HYP 4 (EDT)	HYP 6 (PPT)	HYP 5 (PPT)
<b>P-Value</b>	0.392	0.884	0.535	0.625	0.669	0.893
<b>Remarks</b>	<b>INSIG.</b>	<b>INSIG</b>	<b>INSIG</b>	<b>INSIG</b>	<b>INSIG</b>	<b>INSIG</b>

Source: Extracts from appendix

### Hypotheses

**HO<sub>1</sub>: There is no significant relationship between company income tax and return on asset of oil and gas companies in Nigeria.**

From table 4.3,  $P > 0.05$  for hypothesis 1 with the P-value being 0.392. This indicates that there is an insignificant relationship between company income tax and return on asset of oil and gas companies in Nigeria. The null hypothesis which states that there is no significant relationship between company income tax and return on asset of oil and gas companies in Nigeria is accepted while the alternative hypothesis is rejected.

**HO<sub>2</sub>: There is no significant relationship between company income tax and return on equity of oil and gas companies in Nigeria.**

Table 4.3 shows that P-value in respect of the second hypothesis is 0.535 which implies that  $P > 0.05$ . With this, there is an indication of insignificant relationship between company income tax and return on equity of oil and gas companies in Nigeria. Therefore we accept the null hypothesis and reject the alternative hypothesis and conclude that there is no significant relationship between company income tax and return on equity of oil and gas companies in Nigeria.



**HO<sub>3</sub>: Education tax has no significant effect on return on asset of oil and gas companies in Nigeria.**

The hypothesis test table above further reveals that the P-value in respect of the third hypothesis is 0.884 ( $P > 0.05$ ) which suggests an insignificant effect of the independent variable (EDT) on the dependent variable (ROA). The study therefore accepts the null hypothesis and rejects the alternative hypothesis and conclude that Education tax has no significant effect on return on asset of oil and gas companies in Nigeria.

**HO<sub>4</sub>: There is no significant relationship between Education tax and return on equity of oil and gas companies in Nigeria.**

From table 4.3,  $P > 0.05$  for hypothesis 4 with the P-value being 0.625 this indicates that there is an insignificant relationship between Education tax and return on equity of oil and gas companies in Nigeria. The null hypothesis which states that there is no significant relationship between Education tax and return on equity of oil and gas companies in Nigeria is accepted while the alternative hypothesis is rejected.

**HO<sub>5</sub>: There is no significant relationship between Petroleum profit tax and return on asset of oil and gas companies in Nigeria.**

The hypothesis test table above further reveals that the P-value in respect of the hypothesis five is 0.893 ( $P > 0.05$ ) which suggests an insignificant effect of the independent variable (PPT) on the dependent variable (ROA). The study, therefore, accepts the null hypothesis and rejects the alternative hypothesis. This leads to the conclusion that Petroleum profit tax has no significant effect on return on asset of oil and gas companies in Nigeria.

**HO<sub>6</sub>: There is no significant relationship between Petroleum profit tax and return on equity of oil and gas companies in Nigeria.**

From table 4.3,  $P > 0.05$  for hypothesis 6 with the P-value being 0.669, implying an insignificant relationship between Petroleum profit tax and return on equity of oil and gas companies in Nigeria. The null hypothesis was, therefore, rejected and the alternative accepted. This means that there is significant relationship between Petroleum profit tax and return on equity of oil and gas companies in Nigeria.

#### 4.3 Discussion of findings

The findings from the analysis and the test statistics are discussed in line with the objective of the study in the first chapter. Discussion of the findings is as follows:

The regression model analyzed in this study took care of the objectives and hypothesis of the study; which include objectives/hypothesis 1-6. In the models, each of the proxies for corporate tax was regressed against return on assets (ROA) and return on equity (ROE)(dependent variable).

In model 1, the result reveals that company income tax (CIT) has a positive and insignificant relationship with ROA. It means that a unit increase in CIT will lead to a 1.038 increase in ROA. On the other hand in model 2 company income tax (CIT) was found to have positive and insignificant impact on ROE. This means that a unit increase in company income tax (CIT) will lead to a 0.224 increase in ROE. This aligns with the work of Chen (2020) where he investigated the impact of tax policy on the financial performance of oil and gas firms in the United States and found that tax policy was

oil and gas firms.. Furthermore, in model 1 the result reveals that Education tax (EDT) has a negative and insignificant relationship with ROA. It means that a unit increase in EDT will lead to a -0.234 decrease in ROA.

On the other hand in the model 2 Education tax (EDT) was found to have positive and insignificant impact on ROE. This means that a unit increase in EDT will lead to a 0.237 increase in ROE. This aligns with the work of Adegbite, and Owolabi (2022) where they investigated on the impact of corporate tax planning on the performance of listed oil and gas companies in Nigeria and found that corporate tax planning positively affects the financial performance of listed oil and gas companies in Nigeria.

In model 1, result shows that Petroleum profit tax (PPT) has a positive and insignificant relationship with ROA. It means that a unit increase in PPT will result to a 1.888 corresponding increase in ROA. Similarly, in model 2, Petroleum Profit tax (PPT) shows a positive but insignificant impact on ROE. Therefore, a unit increase in Petroleum profit tax (PPT) will lead to a 0.777 increase in ROE.

The F-statistics results do not support this in both models as the independent variables are not jointly significant to the dependent variables as indicated in the value (0.382) and (0.177) respectively.

Also the data are free from serial autocorrelation as indicated from the value of Durbin Watson which is (1.785), and (2.508) that indicates that the data is valid since it is close to 2.

#### VI. SUMMARY OF FINDINGS

The overall results of the analysis in the preceding chapter of this study provide the following findings:

1. There is positive and insignificant relationship between company income tax and return on asset of oil and gas companies in Nigeria



2. There is positive but insignificant relationship between company income tax and return on equity of oil and gas companies in Nigeria.
3. There is negative and insignificant effect of education tax (EDT) on the return on asset of oil and gas companies in Nigeria.
4. There is positive and insignificant relationship between education tax (EDT) on the return on equity of oil and gas companies in Nigeria.

### VII. Conclusion

Based on the major findings, the following conclusions were made:

Corporate tax has a positive but insignificant relationship with performance of oil and gas companies in Nigeria. This arises due to the fact that a positive change in corporate tax affects positively the performance of oil and gas companies in Nigeria. This aligns with the work of Ogbuji and Akanwa (2020) and Adegbite, and Owolabi (2022) that showed a positive relationship between Corporate tax and performance of listed oil and gas companies in Nigeria.

### VIII. Recommendation

The following recommendations are made based on the results of the study.

1. Government should consider revising its corporate tax policy to provide greater incentives for investment in the oil and gas industry. This could include reducing the overall tax burden for companies that demonstrate strong financial performance and contribute to the development of the industry.
2. Oil and gas companies should continue to focus on improving their financial performance, both in terms of profitability and investment in research and development. This will not only help them to remain competitive in the market, but may also help to reduce their overall tax burden.
3. To mitigate the impact of corporate tax on their financial performance, Nigerian oil and gas companies should explore opportunities for tax planning and optimization. This could include taking advantage of tax credits and deductions, investing in tax-efficient structures, and seeking out professional advice from tax experts.

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