

TAXES AND NET INVESTMENT OF LISTED INDUSTRIAL GOODS FIRMS IN NIGERIA

Eze N. Ndah¹ Chizoba M. Ekwueme² Nestor N. Amahalu³ Chinedu J. Ndubuisi⁴

^{1,2,3&4}Department of Accountancy, Faculty of Management Sciences, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.

1. Email: ezeon78@gmail.com
2. Email: cm.ekwueme@unizik.edu.ng
3. Email: nn.amahalu@unizik.edu.ng
4. Email: cj.ndubuisi@unizik.edu.ng

CITATION: Ndah, E.N, Ekwueme, C.M., Amahalu, N.N. & Ndubuisi, C.J. (2024). Taxes and net investment of listed industrial goods firms in Nigeria, *Journal of Global Accounting*, 10(2), 281 - 306.

Available: <https://journals.unizik.edu.ng/joga>

Correspondence: ezeon78@gmail.com

Key words: Capital Gains Tax, Company Income Tax, Industrial Training Tax, Net Investment, Tertiary Education Tax, Value Added Tax.

ABSTRACT

The study examined the effect of taxes on net investment of industrial goods firms in Nigeria. Specifically, it examined the effect of Company Income Tax (CIT), Tertiary Education Tax (TET), Value Added Tax (VAT), Capital Gains Tax (CGT) and Industrial Training Tax (ITT) on Net Investment (NI). Research adopted the ex-post facto research design to study a population of thirteen (13) listed industrial goods firms over a period of 11 years (2013-2023). Data obtained were analysed using the panel regression. The results showed that company income tax and tertiary education tax had insignificant effect on net investment, though positively negatively related respectively. The study further found that value added tax and capital gains tax were negatively significant, while industrial training tax was positively significant. The study therefore concluded that except for company income tax and tertiary education tax, tax liabilities have significant effect on net investment of industrial goods firms in Nigeria. Based on these findings, the study recommended that to sustain the positive relationship between company income tax and net investment, the government should sustain the current company income tax rate, as an attempt to increase this rate may distort this relationship. Moreso, government should invest more in the overall educational demand of her citizens not only from tax revenues but from other oil and non-oil sources to reduce the burden on firms. Also, the VAT rate paid by firms should be reduced or reversed back to 5% in order to free up more cash for the firms to reinvest in the business. The companies should also be encouraged to dispose all its idle lying assets. Industrial training tax should be introduced to other sectors where not applicable. enough time to take decisions that are efficient and effective in enhancing better firm performance, as well make sure that the businesses are adherence to policies, rules, procedures code of conduct and regulations.

1. INTRODUCTION

Tax can be simply seen as a charge imposed by governmental authority upon property, individuals or transactions to raise money for public purposes. Gwangdi and Garba (2015) defined tax as a compulsory exaction of money by a public authority for public purposes, and taxation as a system of raising money for the purposes of government by means of contributions from individual person or corporate body (Amahalu, Obi, Okudo & Okafor, 2022; Nwoye, Obiorah, & Chidiebere, 2023). A tax may be direct or indirect. It is direct where it is levied on the person who is intended, should pay the tax. This is usually the case in the taxation of income such as companies' income tax and personal income. It is indirect if the levy is imposed on one person who pays with the expectation to pass the burden unto third parties. Custom duties and value added tax are example of indirect taxes because the levy imposed by the government is factored into the price of the item upon which they are levied and passed unto the consumer. Taxes are imposed and applicable to both individuals and companies in Nigeria. The Federal Inland Revenue Service (FIRS) collect taxes on behalf of the Federal Government in Nigeria. There are several taxes mandated by law to be payable by companies doing business in Nigeria, which includes but are not limited to Company income tax, capital gains tax, value added tax, industrial training fund tax, education tax among others. It is also important to note that failure for companies to pay any of the taxes as at when due attracts various penalties. The relevance of the industrial sector remains crucial in any economy, considering its effectiveness in driving innovation, promoting economic growth and development, and alleviating poverty. Specifically, the industrial sector generates employment, improves trade performance, increases income level, and enhances the export competitiveness of an economy in the international flora (Bernard, 2021). The role of the industrial sector is more pronounced through the enhancement and steady transition of many developing economies from traditional productions and sectors such as agriculture to the curtain-edge manufacturing sector driven by technology and innovation (United Nations Industrial Development Organization [UNIDO], 2020). Empirical evidence has affirmed that the industrial sector maximizes a nation's factor endowments, thereby minimizing its dependence on the external sector for sustained growth and survival (Dauda and Odior, 2016). Unfortunately, the Nigerian industrial sector falls short of the above expectations.

Data from the Central Bank of Nigeria (CBN, 2022) statistical bulletin shows that over the years, capital has been devoted to create enabling environment for industrial sector since 1990s till date yet, Nigeria remains solely dependent on foreign industrial goods for survival. The Nigerian economy has witnessed a slow pace of industrial growth of less than 5% over

the past three decades. The industrial sector in Nigeria has continued to experience dwindling growth after the introduction of the Structural Adjustment Programme (SAP) in 1986. Unimpressively, the highest contribution of industrial sector to the nations GDP was noticed in 1995. Within that year the sectors contribution to GDP stood at 7.44%. This performance was not however sustained as the sector experience abrupt decline to 5% in 2000. In that same year, the industrial goods export was barely 0.4% of exports, while imports of manufactured goods were about 15% of GDP or more than 60% of total import. The industrial goods sector's contribution to real GDP growth which declined from over 5 percent in 2005 to about 3.96 percent in 2009, however edged up to 4.14 % in 2010. Ever since then till date, the contribution of the industrial sector to real GDP has never gotten up to 5%. This is despite various policy efforts over years and more recently, which has attempted to facilitate the industrialization process through investment, but the industrial sector has failed to record appreciable growth improvement afterwards. Since the investment in the sector from various governments has failed to yield intended result, it is therefore necessary to analyse the various investments made by the various firms in the sector to boost their production capacity. An improved production capacity both in quantity and quality will reduce the importation level of the country and hitherto catalyse the industrialization of the country. However, for firms to be able to invest in its production facilities, the firm must have substantial amount of resource at its disposal. This however may not be possible given the various taxes expected from these companies such as the company income tax, value added tax, capital gains tax, education tax, industrial training fund tax, police fund tax and so on. The linkage between tax and net investment has received persistent attention in both the academic literature and policy debates. One of the main drivers of economic growth is investment and how taxes affect investment behavior of firms is, indeed, a question of great importance. It is well understood that company taxation can have large effects on firms' investment decisions. Taxes impinge directly on the incentive to accumulate capital, perform research and to invest back.

Prior studies showed that the research on taxation is dominated with studies that examined the nexus between tax revenue and economic growth. Some few studies however examined taxation at the micro level. Some of these few studies include: Oshiole, Okoye and Amahalu (2024) that examined the nexus between taxes and net investment of listed Communication firms in Nigeria; Adefunke and Uslomon (2022) that examined the impact of company income tax on corporate performance of firms in Nigeria; Adedayo, Awoniyi, Ogundele and Ibi-Oluwatoba (2020) that ascertained the effect of company income tax on firm's performance especially the consumer goods firms in Nigeria; Eyide and Nzewi (2020) that investigated the

effect of taxes on net investment of quoted health care firms in Nigeria; and Abiahu and Nworgu (2020) that analysed the effect of corporate tax on the sustainable financial performance of listed firms in Nigeria. The closest study to this present study is that of Oshiole, Okoye and Amahalu (2024) and Eyide and Nzewi (2020). While these two studies focused on communication sector and health-care sector respectively, our study filled the sectorial gap by concentrating on the industrial goods. Our study also filled a variable gap by introducing total tax which is the summation of all taxes paid to firms, this was not seen in prior studies. Finally the time scope of this study was extended to 2023 while the most recent of the prior studies ended in 2022.

1.1 Objectives

The general objective of the study is to investigate the effect of taxes on the net investment of listed industrial goods firms in Nigeria. Specifically, the study intends:

1. to ascertain if Company income tax significantly affects the net investment of industrial goods firms in Nigeria
2. to determine the extent to which Tertiary Education Tax affects the net investment of industrial goods firms in Nigeria
3. to evaluate the effect of Value Added Tax on the net investment of industrial goods firms in Nigeria
4. to investigate the effect of Capital Gain Tax on the net investment of industrial goods firms in Nigeria
5. to determine how Industrial Training Tax affects the net investment of industrial goods firms in Nigeria

1.2 Hypotheses

The following hypotheses were formulated:

- H₀₁: Company income tax does not significantly affect the net investment of industrial goods firms in Nigeria
- H₀₂: Tertiary Education Tax does not significantly affect the net investment of industrial goods firms in Nigeria
- H₀₃: Value Added Tax does not significantly affect the net investment of industrial goods firms in Nigeria
- H₀₄: Capital Gain Tax does not significantly affect the net investment of industrial goods firms in Nigeria

H₀₅: Industrial Training Tax does not significantly affect the net investment of industrial goods firms in Nigeria

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Company Income Tax and Net Investment

The net earnings of firms are subject to a levy known as the company income tax, which is calculated as the excess of receipts over authorized costs (Kagan, 2022). A corporation's profits are subject to a corporate tax. Taxes are paid on a business's taxable income, which is calculated as revenue less depreciation, selling and marketing expenses, general and administrative costs, cost of goods sold, and other operating costs (Walters, 2022). The main legislation that governs how Nigerian firms are taxed is the Company Income Tax Act (CITA). The Companies Income Tax Act (CITA), Cap C21, LFN 2004 (as modified), governs CIT. The administration of corporate income taxes is under the purview of the Federal Inland Revenue Service (FIRS). Nigerian registered firms are subject to a tax on their profits known as firms Income Tax (CIT). It also covers the tax on the earnings of international businesses operating in Nigeria. Limited liability firms, including public limited liability companies, are responsible for paying the CIT. Companies that are residents are required to pay corporate income tax (CIT) on their worldwide earnings, whilst non-residents must pay CIT on their earnings that originate in Nigeria. Accounting profits serve as the basis for corporate income tax. Currently, businesses with a turnover of more than N100 million Naira are subject to a 30% CIT tax. Additionally, businesses having a turnover of between N25 million and N100 million are subject to a 20% charge. The tax is levied on profits for the accounting year that ends in the year before to assessment, meaning that it is assessed based on the previous year. The Finance Act of 2021 states that businesses with a turnover of less than N25 million are exempt from paying company income tax. A non-resident corporation with a permanent establishment or fixed base in Nigeria is subject to taxation on its business profits that can be traced back to that fixed base. It is therefore necessary to register for CIT and file its tax returns ((Berry-Johnson, 2022).

According to Meyer (2018), businesses typically use borrowed funds to finance their investments. As long as the marginal efficiency of capital (MEC), or rate of return on capital, is higher than the interest rate applied to borrowed funds, businesses would always prefer to add to their existing capital, which would be equal to the rate of discount and result in a series of annuities whose present value would be equal to the supply price given the expected returns

from the capital assets over their life. The profitability of businesses is the focus of marginal efficiency of capital (MEC), which measures the benefits that greater capital will have for businesses. Therefore, it is inappropriate to assume that the company is cognizant of a component such as direct taxation on the anticipated rate of capital aspect. Therefore, it is assumed that taxes will result in fewer investment expenditures since they lower expected returns (Choi and Park, 2022). Research from Montenegro (2021); Kang (2018); Hong, Ko, and Park (2018) demonstrated that taxes and economic growth are positively correlated. On the other hand, Shevlin, Urcan, and Vasvari (2020); Lee, Kim, and Kim (2021); discovered a negative correlation between taxes and economic growth. From the foregoing, the first hypothesis can be written as:

2.1.2 Tertiary Education Tax and Net Investment

In order to contribute to the Education Tax Fund, all companies registered in Nigeria are required to pay tertiary education tax at chargeable profits. This implies that a portion of the assessable profit of each Nigerian registered business must be paid into the Education Tax Fund. 2.5% is the tax rate (Oladosu, 2022). Every Nigerian business must pay tertiary education tax, which is calculated as 2.5% of the assessable profit for each assessment year. Act No. 7 of 1993, as amended by Act No. 40 of 1998 (since repealed and replaced with the Tertiary Education Trust Fund Act 2011), established the Tertiary Education Trust Fund initially as the Education Trust Fund (ETF). It is an intervention organization created to offer further assistance to public university institutions at all levels. Its primary goal is to use money and project management to promote the consolidation, rehabilitation, and restoration of postsecondary education in Nigeria (James, 2022). According to the 2021 Finance Act, the Federal Government raised the education tax for postsecondary institutions from two percent to 2.5 percent (Olaoluwa, 2022). The Education Tax, or EDT, is the main source of funding used by the postsecondary Education Trust Fund (TETFund) to carry out its statutory intervention initiatives and programs in Nigerian postsecondary institutions.

The 2.5 percent education tax paid by enterprises registered in Nigeria from their assessable profit is the primary source of funding for the intervention agency. For the benefit of the Fund, this tax is collected by the Federal Inland Revenue Services (FIRS). In Nigeria, EDT is the magic wand for educational intervention. Many Nigerian universities, polytechnics, and Colleges of Education (CoEs) have undergone new aesthetic changes as a result of the EDT. Several public tertiary schools use the EDT to construct staff offices, lecture halls, science labs, student residences, and senate buildings, among other facilities (Oladosu, 2022). Since

other socioeconomic sectors of the nation have a significant demand for funding, financing higher education has proven to be problematic. According to Oraka, Ogbodo, and Ezejiofor (2017) and Ordu and Nkwoji (2019), if education, that is higher education in particular is seen as a public investment, societies or a country will allocate resources in exchange for social benefits like qualified labor, which boosts overall economic development and national productivity, and a stable and supportive political environment. If, however, it is considered a private investment in which people pay for their education in order to receive a higher salary as the primary advantage, then people ought to be required to cover the cost of their education. The assumption made by the funding of Nigeria's higher education institutions is that the public and private sectors of the system are gravely underfunded. Nigeria's higher education system is under increasing pressure to increase its capacity due to the nation's citizens' unwavering need for access to higher education (Ogoun & Ekpulu, 2020). Economic growth and education taxes were found to be negatively correlated by Dim, Okafor, Eneh, and Amahalu (2022); Wadesango and Mwandambira (2018); Ding, Xu, and Yang (2021); and Gotorá and Samuel (2018). However, Agung, Alghamdi, and Nurwanto (2021); Gombár, Korauš, Vagaská and Tóth (2022) found a correlation between economic growth and education taxes that was favorable. Given the above considerations, hypothesis two is written as:

2.1.3 Value Added Tax

Value-added tax, or VAT, is an indirect tax that is applied to goods and services based on the value added at each stage of the manufacturing or distribution cycle, from the procurement of raw materials to the point of final retail sale (Alex-Adedipe & Akinyanmi, 2022). A Value-added tax, or VAT, is a consumption tax that is repeatedly applied to a product at each point of sale where value is added. In other words, the tax is applied at each stage of the supply chain: from the manufacturer of raw materials to the factory, from the factory to the wholesaler, from the wholesaler to the retailer, and lastly, from the retailer to the end user, who is the customer. VAT is ultimately paid by the retail customer. The next customer in the chain reimburses the buyer at each previous stage of the product's manufacture for the VAT (Barnier, 2022).

VAT is a consumption tax that is applied to all products and services that are imported or supplied in Nigeria. VAT is now levied at a rate of 7.5% and must be paid by individuals, businesses, and government entities. Certain products and services are free from VAT, such as pharmaceutical and medical goods, medical services, basic food items, books and

educational materials, exports, and so on. Value Added Tax Act Cap V1, LFN 2004 (as modified) governs VAT (FIRS, 2022). Most developing nations' income structures have not produced as much as intended. There are now significant disparities in the supply and demand of public budgetary resources as a result of the rise in revenue not keeping up with the pressures on government spending (Chiamogu & Nzewi, 2020). The primary factor behind the popularity of VAT is that it offers a stable revenue base that often generates a lot more money than other consumer taxes. It is challenging to prevent and comparatively simple to administer. Since purchasing power rises with economic growth, the return from VAT is a reasonably good indicator of an economy's size (Okeke, Mbonu & Amahalu, 2018).

The federal, state, and local governments bemoan the lack of funding for projects, and the populace has long bemoaned the state of inadequate infrastructure, high rates of unemployment, low per capita income, and other social ills that have resulted in a low standard of living, a high crime rate, and other social ills. This is in spite of the contributions and enormous revenue generated by VAT. Nigeria continues to be classified as a third-world nation (Orisadare & Fasoye, 2022). A significant correlation between VAT and economic growth was demonstrated by Mu, Fentaw, and Zhang (2022); Harelimana (2020) also discovered a positive correlation, as did Masunga, Mapesa, Mwakibete, Derefa, Myava, and Kiria (2021). The above empirical details give rise to the third hypothesis which is:

2.1.4 Capital Gains Tax

Capital gains tax is one of the sources of tax revenue in Nigeria. It was introduced in Nigeria in 1967 just before the Nigerian civil war as another source of government revenue. Capital gains tax is a charge on the gains realized as a result of a capital asset disposal. According to Oserogho (2014), capital gains tax is a tax payable by the owner of a capital asset on the profit he derived from selling the asset over and above the original cost of purchasing and maintaining the asset and the cost incurred in the disposal of the asset. That means capital gains tax is only charged on capital assets as spelt out by the Capital Gains Tax Act of 2004. Capital asset here is defined to include property of any kind, whether fixed, circulating, movable, immovable, tangible or intangible and whether or not they are used for business or profession. Ojo (2015) asserts that when a capital asset is sold, the difference between the cost price of the capital asset (purchase price including the cost of acquisition) and the price of selling the asset represents a capital gain or a capital loss. A capital gain arises when the sales price is higher than the cost of sales. However, when the cost of disposal is higher than the selling price, a capital loss is said to have occurred. It is therefore clear that capital gains tax

is only applicable when there is a gain or profit from the disposal of a capital asset. Capital gain presupposes that an asset is sold at a price higher than the price it was originally acquired. However, if there are expenses incurred in the disposal of the asset, they are to be deducted before arriving at the capital gain.

The capital assets chargeable to capital gains tax may be corporeal or incorporeal, and it does not matter whether such assets are situated in Nigeria or not. Where however the taxpayer whether the company or individual is not residing in Nigeria, the tax will only be charged on the amount received or brought into Nigeria (Nwaeze, 2009). Corporeal property according to Business Dictionary refers to real estate or personal property having a tangible form and structure such as building, equipment, vehicle as opposed to intellectual property such as copyrighted works of authorship. Incorporeal assets, on the other hand, are tangible personal property having value but lacking physical substance such as leases, mortgages, copyrights, patent rights, and stocks. Capital gains are taxed on an actual year basis as against preceding year basis, that is, the year the asset was disposed and the gain realized. This means that the tax is imposed only when a chargeable person or investor decides to sell the asset and realize a gain. Hence, a taxpayer can decide to retain his asset or investment until when he or she feels like selling.

In Nigeria, capital gains tax is under the management of the Federal Board of Inland Revenue Service (FBIRS) and administered by the Federal Inland Revenue Service (FIRS) in respect of corporate organisations throughout the country, and individuals resident in the Federal Capital Territory (FCT) Abuja including members of the armed forces, police, and foreign affairs officers. The States Internal Revenue Service also administers capital gains tax in respect of individuals resident in the various states. The Tax Appeal Tribunal (TAT) is vested with the responsibility of resolving conflicts between aggrieved taxpayers and tax authorities through the interpretation of the tax laws. According to Ojo (2015), capital gains tax was first enacted in Nigeria in 1967 via Decree No. 44 of 1967. It was initially applied to only the Federal Capital Territory of Lagos which was latterly applicable to the whole of Nigeria through subsequent amendments. The Capital Gains Tax Act was consolidated in 1990, resulting in the Capital Gains Tax Act Cap 42 LFN, 1990. However, many tax reforms were carried out in 2004 which also included the Capital Gains Tax Act, in a drive by the government to make capital gains tax more effective and efficient. Hence, the Capital Gains Tax Act Cap C1 LFN, 2004 came to be. The Act provides for the taxation of capital gains accruing on the disposal of capital assets in Nigeria. The Capital Gains Tax Act provides that

capital gains tax should be charged at a flat rate of 10% on gains arising from assets disposal. It must be noted that Nigeria is one of the countries with the lowest capital gains tax rate in the world. For instance, in the African continent, only Kenya charges lower than Nigeria at the rate of 5%, with South Africa having the highest rate of 40%.

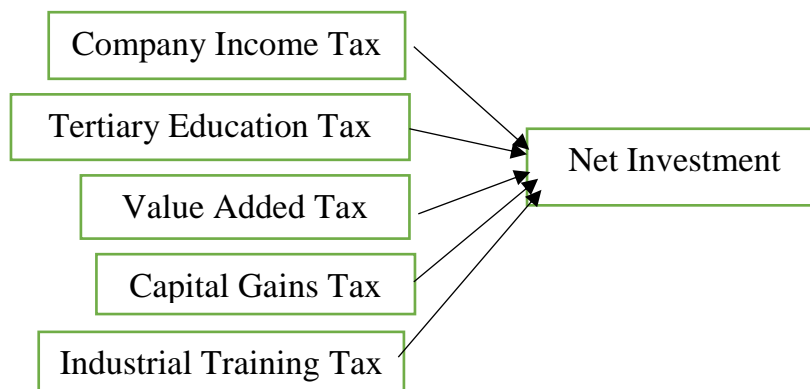
2.1.5 Industrial Training Tax

The industrial training tax applies to every employer having 25 or more employees. Such employer is required to remit 1 percent (1%) of its total annual payroll not later than the 31st of March every year to the Industrial Training Fund (ITF). Employees in the Industrial Training Fund Act are defined as Nigerians or non-Nigerians who work for more than 30 days in a single calendar year on a full-time or part-time basis in return for a salary, wages, or other consideration, as the case may be. Furthermore, the definition of “payroll” in the Industrial Training Fund Acts means the sum total of all basic pay allowances and other entitlements payable within and outside Nigeria to any employee in an establishment, public or private. Businesses with fewer than 25 employees are not mandated to contribute training funds to the ITF. Any supplier, contractor, or consultant bidding on soliciting contracts, businesses, goods, and services from any Federal Government Ministry, Department, Agency, Commercial, Industrial and Private entity shall fulfill the statutory obligation of its employees for payment of training contribution to the Fund. Companies that are registered in any of the free trade zones in Nigeria are now exempt from contributing to the ITF. An employer that fails to provide adequate training for their indigenous employees or fails to accept students for industrial attachment purposes is liable on conviction to a fine of N500,000 for the first breach and N1,000,000 for each subsequent breach for a body corporate. While for the principal officers (e.g., chief executive, secretary) of the company that are found guilty, such officers are liable to a fine of N50,000 or two years imprisonment for a first breach and two years imprisonment without an option of fine for each subsequent year. This also applies to the provision of false/incorrect returns or information.

In Nigeria, the Industrial Training Fund (ITF) stands as a beacon of hope for individuals seeking to enhance their skills in various industries. Established under the Industrial Training Fund Act of 1971, the ITF has been instrumental in bridging the gap between education and industry by providing avenues for practical training and skill development. The ITF operates under the mandate to promote the acquisition of skills in industry and commerce, thereby bolstering productivity and efficiency in the Nigerian economy. Its core objectives include providing training facilities, establishing standards in industrial training, and fostering

vocational guidance. Through a range of programs, the ITF strives to equip individuals with the requisite skills and knowledge to excel. The Industrial Training Fund serve is a cornerstone of skills development and capacity building in Nigeria, offering a myriad of opportunities for individuals and organizations alike. By understanding its programs, initiatives, and access procedures, individuals can unlock the full potential of the ITF to enhance their skills, advance their careers, and contribute to the growth and development of the Nigerian economy.

Figure 1: Tax Liabilities and Net Investment



Source: Researcher’s Conceptualised Framework, 2024

3. MATERIAL AND METHOD

The research design employed in this study is the *ex-post facto* research design. The population of this study consist of all the thirteen (13) listed industrial goods firms as at 31st December, 2023. Judgmental sampling technique being a type of non-probability sampling method was used to select nine (9) firms that were sampled. The selection was based on the firms that have their annual reports on their websites for the period under study. The firms that formed part of the sample size are: Austin Laz and Company PLC, Berger Paints PLC, Beta Glass PLC, CAP PLC, CUTIX PLC, Dangote Cement PLC, Lafarge Africa PLC, Meyer PLC, and Triple Gee and Company PLC. This study made use of secondary data precisely. The data set were sourced from publications of the Nigerian Exchange Group (NGX), fact books and the annual report and accounts of the sampled listed industrial goods firms from 2013 – 2023. Descriptive Statistics was employed in this study to summarily describe the mean, median, kurtosis, skewness, maximum and minimum values of the variables. Inferential statistics was also be utilized in this study with the aid of STAT 15 using:

Correlation Matrix: which is a good measure of relationship between two variables that tell us about the strength of relationship and the direction of the relationship as well. Shapiro-Wilk W test for normal data: was used to check for normality of data. Breusch and Pagan Lagrangian multiplier test for random effects: helped to choose between fixed effects model (FEM) or a random effects model (REM). The null hypothesis is that the preferred model is random effects; the alternate hypothesis is that the model is fixed effects. Panel Least Square (PLS) regression analysis: was used to predict the value of the dependent variable based on the value of the independent variable.

Table 1: Operationalisation of Variables

Variables	Operational Definition
Net Investment (NI)	Capital Expenditure – Depreciation
Company Income Tax (CIT)	30% of taxable profit
Tertiary Education Tax (TET)	3% of net profit
Value Added Tax (VAT)	7.5% of gross sales
Capital Gains Tax (CGT)	10% of chargeable gains (Net sales proceed – cost of acquisition)
Industrial Training Tax (ITT)	1% of annual staff cost

To ascertain the effect of taxes on net investment of listed industrial goods firms, this study adapted and modified the model of Oshiole, Okoye and Amahalu (2024):

$$NI_{it} = \beta_0 + \beta_1 CIT_{it} + \mu_{it} \dots\dots\dots \text{Eqn 1.}$$

$$NI_{it} = \beta_0 + \beta_1 TET_{it} + \mu_{it} \dots\dots\dots \text{Eqn 2.}$$

$$NI_{it} = \beta_0 + \beta_1 VAT_{it} + \mu_{it} \dots\dots\dots \text{Eqn 3.}$$

$$NI_{it} = \beta_0 + \beta_1 NITDL_{it} + \mu_{it} \dots\dots\dots \text{Eqn 4.}$$

$$NI_{it} = \beta_0 + \beta_1 PTFT_{it} + \mu_{it} \dots\dots\dots \text{Eqn 5.}$$

Where:

β_0 stands for the intercept term.

$\mu_{i,t}$ = component of unobserved error term of firm i in period t

$\beta_1 - \beta_4$ = Slopes (coefficients) to be estimated of firm i in period t

NI_{it} = Net Investment of firm i for period t

CIT_{it} = Companies Income Tax of firm i for period t

TET_{it} = Tertiary Education Tax of firm i for period t

VAT_{it} = Value Added Tax of firm i for period t

NITDL_{it} = National Information Technology Development Levy of firm *i* for period *t*

PTFT_{it} = Police Trust Fund Tax of firm *i* for period *t*

i = firm identifier (10 firms)

t = time variable (2012, 2013...2022) – (Eleven Years)

Modifying their model to estimate the effect of taxes on net investment of industrial goods firms in Nigeria, their model was restated thus:

$$NI_{it} = \beta_0 + \beta_1 CIT_{it} + \beta_2 TET_{it} + \beta_3 VAT_{it} + \beta_4 CGT_{it} + \beta_5 ITT_{it} + \mu_{it} \dots \dots \dots \text{Eqn 6.}$$

Where:

β_0 stands for the intercept term.

$\mu_{i,t}$ = component of unobserved error term of firm *i* in period *t*

$\beta_1 - \beta_4$ = Slopes (coefficients) to be estimated of firm *i* in period *t*

NI_{it} = Net Investment of firm *i* for period *t*

CIT_{it} = Companies Income Tax of firm *i* for period *t*

TET_{it} = Tertiary Education Tax of firm *i* for period *t*

VAT_{it} = Value Added Tax of firm *i* for period *t*

CGT_{it} = Capital Gains Tax of firm *i* for period *t*

ITT_{it} = Industrial Training Tax of firm *i* for period *t*

i = firm identifier (9 firms)

t = time variable (2013, 2014...2023) – (Eleven Years)

4. RESULT AND DISCUSSIONS

4.1 Data Analysis

4.1.1 Descriptive Statistics

The descriptive statistics of the main independent variables utilized in the study are presented in Table 1 below; the table shows the number of observations, mean, standard deviation, minimum and maximum values of the variables. The description helps in showing the nature of the data.

Table 2: Summary Statistics of Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Company_in~x	99	6339631	2.56e+07	-315	1.56e+08
EDUTax	99	775884.6	2404684	0	1.32e+07
VAT	99	606394.6	1714691	0	1.11e+07
Capital_ga~x	99	7947.242	41389.78	0	358164
Industrial~d	99	61655.44	124660	0	654710
Net_invest~t	99	1.85e+08	4.22e+08	266888	1.80e+09

Source: STATA 15 Outputs, 2024

The Obs. column (i.e., observations) shows the number of observations included in the analysis of the independent variables of the study as ninety nine (99). The Mean is a measure of central tendency which calculates the average of a set of observations; while, the Standard Deviation (SD) is a measure of the average distance between the values of the data in the set and the mean. A low SD indicates that the data points tend to be very close to the mean; a high SD indicates that the data points are spread out over a large range of values.

The mean value for net investment is 1.85, with a SD of 4.22 that shows that the values are spread out over a large range of values, a minimum value of 0.03 and a maximum value of 1.80. The mean value for CIT is 0.63, with a SD of 2.56 which shows that the values are spread out over a large range of values, a minimum value of 0 and a maximum value of 1.56. The mean value for TET is 0.77, with a SD of 0.24 which shows that the values are spread out over a small range of values, a minimum value of 0 and a maximum value of 1.32. The mean value for VAT is 0.61, with a SD of 0.17 which shows that the values are spread out over a small range of values, a minimum value of 0 and a maximum value of 1.11. The mean value for CGT is 0.79, with a SD of 0.04 which shows that the values are spread out over a very small range of values, a minimum value of 0 and a maximum value of 0.41. The mean value for ITF is 61655.44, with a SD of 124660 which shows that the values are spread out over a very large range of values, a minimum value of 0 and a maximum value of 654710.

Table 3: Correlation Matrix

	Compan~x	EDUTax	VAT	Capita~x	Indust~d	Net_in~t
Company_in~x	1.0000					
EDUTax	0.9675	1.0000				
VAT	0.6431	0.7047	1.0000			
Capital_ga~x	-0.0472	0.0016	0.0088	1.0000		
Industrial~d	0.7921	0.8851	0.6871	0.1417	1.0000	
Net_invest~t	0.7917	0.8773	0.7154	0.0526	0.9671	1.0000

Source: STATA 15 Outputs, 2024

Table 3 shows the result of correlation analysis. The table indicates the relationship between variables of the study. From the table, net investment being the dependent variable has more than 50% relationship with all the independent variables except for capital gains tax. Company income tax has more than 50% relationship with other variables except for capital gains tax. Tertiary education tax has more than 50% relationship with other variables except for capital gains tax. Value added tax has more than 50% relationship with other variables except for capital gains tax. Capital gains tax has above 50% relationship with industrial training tax and net investment. Industrial training tax has above 50% relationship with other independent variables except for capital gains tax. The overall result shows a mixed relationship of high and low between the independent variables. This was however taken care of by the panel regression analysis.

Table 4: Shapiro-Wilk W test for normal data

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
Company_in~x	99	0.27310	59.515	9.060	0.00000
EDUTax	99	0.38306	50.512	8.696	0.00000
VAT	99	0.42101	47.405	8.555	0.00000
Capital_ga~x	99	0.33988	54.047	8.846	0.00000
Industrial~d	99	0.55442	36.481	7.975	0.00000
Net_invest~t	99	0.50369	40.635	8.214	0.00000

Source: STATA 15 Outputs, 2024

The Shapiro-Wilk test for normal data result was presented in Table 4. From the table, all variables have probability value of 0.0000 which are all significance at 5% and signify that the data set are not normally distributed. To take care of normality problem the study make used of robust standard error.

Table 5: Fixed-Effect Panel Regression Result

Fixed-effects (within) regression	Number of obs	=	99
Group variable: id	Number of groups	=	9
R-sq:	Obs per group:		
within = 0.9050	min =		11
between = 0.9933	avg =		11.0
overall = 0.8925	max =		11
	F(5,8)	=	1.49e+07
corr(u _i , Xb) = 0.8217	Prob > F	=	0.0000
	(Std. Err. adjusted for 9 clusters in id)		

Net_investment	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
Company_income_tax	4.429116	2.144877	2.06	0.073	- .5169786 9.375211
EDUTax	-25.98971	29.85931	-0.87	0.409	-94.84541 42.86599
VAT	-17.88686	5.082227	-3.52	0.008	-29.6065 -6.167221
Capital_gains_tax	-159.7065	33.20037	-4.81	0.001	-236.2667 -83.14632
Industrial_training_fund	1512.406	44.37831	34.08	0.000	1410.069 1614.742
_cons	9.56e+07	3835242	24.91	0.000	8.67e+07 1.04e+08
sigma_u	2.464e+08				
sigma_e	40027300				
rho	.97428896	(fraction of variance due to u _i)			

Source: STATA 15 Outputs, 2024

The fixed effect panel regression on Table 5 shows the total number of observation as 99 from 9 groups. The Prob> F is 0.00 which is less than 0.05 which shows that our model is perfectly fit for the study. The F-test shows whether all the coefficients in the model are jointly different than zero. The corr (u_i, xb) = 0.8217 shows that the within entity errors u_i are highly positively correlated with the regressors in the fixed effects model. The overall R-square showed a value of 0.8925, meaning that 89.25% of the variation in the dependent variable is explained by the independent variables captured in the study model.

The results from Table 5 further illustrated that: CIT has a positive insignificant effect on NI (p-value = 0.073, $\beta = 4.43$); TET has a negative insignificant effect on NI (p-value = 0.409, $\beta = -25.99$); VAT has a negative significant effect on NI (p-value = 0.008, $\beta = -17.89$); CGT has a negative significant effect on NI (p-value = 0.001, $\beta = -159.71$); and ITT has a positive significant effect on NI (p-value = 0.000, $\beta = 1512.41$).

Table 6: Random-Effect Panel Regression Result

Random-effects GLS regression	Number of obs	=	99
Group variable: id	Number of groups	=	9
R-sq:	Obs per group:		
within = 0.7910	min =		11
between = 0.9901	avg =		11.0
overall = 0.9462	max =		11
	Wald chi2(5)	=	2.78e+06
corr(u _i , X) = 0 (assumed)	Prob > chi2	=	0.0000
	(Std. Err. adjusted for 9 clusters in id)		

Net_investment	Robust				
	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
Company_income_tax	.1541498	6.052734	0.03	0.980	-11.70899 12.01729
EDUTax	1.349161	65.07039	0.02	0.983	-126.1865 128.8848
VAT	19.79832	14.56735	1.36	0.174	-8.753151 48.3498
Capital_gains_tax	-777.9659	296.5439	-2.62	0.009	-1359.181 -196.7506
Industrial_training_fund	3071.286	174.8421	17.57	0.000	2728.602 3413.971
_cons	-1.26e+07	1.18e+07	-1.07	0.285	-3.57e+07 1.05e+07
sigma_u	0				
sigma_e	40027300				
rho	0	(fraction of variance due to u _i)			

Source: STATA 15 Outputs, 2024

The random effect panel regression on Table 6 shows the total number of observation as 99 from 9 groups. The Prob> chi2 is 0.00 which is less than 0.05 which shows that our model is perfectly fit for the study. The chi2 shows whether all the coefficients in the model are jointly different than zero. The corr (u_i, xb) assumed 0 which shows that the within entity errors u_i are not correlated with the regressors in the random effects model. The overall R-square showed a value of 0.9462, meaning that 94.62% of the variation in the dependent variable is explained by the independent variables captured in the study model.

The results from Table 6 further illustrated that: CIT has a positive insignificant effect on NI (p-value = 0.980, $\beta = -0.15$); TET has a positive insignificant effect on NI (p-value = 0.983,

$\beta = 1.35$); VAT has a positive insignificant effect on NI (p-value = 0.174, $\beta = 19.79$); CGT has a negative significant effect on NI (p-value = 0.009, $\beta = -777.96$); and ITT has a positive significant effect on NI (p-value = 0.000, $\beta = 3071.29$).

Table 7: Breusch and Pagan Lagrangian Multiplier Test for Random Effects

Breusch and Pagan Lagrangian multiplier test for random effects

$$\text{Net_investment}[id,t] = Xb + u[id] + e[id,t]$$

Estimated results:

	Var	sd = sqrt(Var)
Net_inv~t	1.78e+17	4.22e+08
e	1.60e+15	4.00e+07
u	0	0

Test: Var(u) = 0

$\chi^2(01) = 0.00$
 Prob > $\chi^2 = 1.0000$

Source: STATA 15 Outputs, 2024

Table 7 reveal the result of Breusch and Pagan Lagrangian multiplier test for random effects test for panel effect among the data set. The overall model has a chi square value of 0.00 with probability p-value of 1.0000 which is not significant at 5%. In the above table, we accept the null hypothesis because the p-value is more than 0.05. We can then conclude that the Random Effects are insignificant. Hence the use of the Random Effects model is inappropriate, thus we used the fixed effects model to test our hypotheses.

4.2 Testing of Hypotheses

4.2.1 Hypothesis One

H_0 : Company income tax does not have significant effect on the net investment of industrial goods firms in Nigeria.

Decision: since the p-value of 0.073 is higher than the margin of error of 0.05, we therefore accept the null hypothesis: company income tax does not have significant effect on the net investment of industrial goods firms in Nigeria. The analysis also revealed a positive relationship between company income tax and net investment. Prior studies such as: Oshiole, Okoye and Amahalu (2024) found that company income tax has a significant but negative effect on net investment of listed Communication firms in Nigeria; Adefunke and Uslomon (2022) found that company income tax has a positive and significant effect on profit after tax

and returns on equity; Adedayo, Awoniyi, Ogundele and Ibi-Oluwatoba (2020) found that company income tax has a positive and significant effect on return on asset; Eyide and Nzewi (2020) showed a significant negative effect of company income tax on net investment of listed health care firms in Nigeria. These mixed results is as a result of different dependent variables and different firms being examined. The time scope of the examination also is a factor.

4.2.2 Hypothesis Two

H₀: Tertiary education tax does not have significant effect on the net investment of industrial goods firms in Nigeria.

Decision: since the p-value of 0.409 is higher than the margin of error of 0.05, we therefore accept the null hypothesis: tertiary education tax does not have significant effect on the net investment of industrial goods firms in Nigeria. The analysis also revealed a negative relationship between tertiary education tax and net investment. Prior studies such as: Oshiole, Okoye and Amahalu (2024) found that tertiary education tax has a significant but negative effect on net investment of listed Communication firms in Nigeria; Eneisik, Obara and Uwikor (2023) showed that Tertiary education taxes has negative and insignificant effect on net profit margin of quoted manufacturing companies in Nigeria; Okoror, Aruwa, Osimiri and James (2023) found that there is a significant relationship between education tax and academic development in tertiary institutions in Nigeria; Uwaifo and Obaretin (2022) discovered that tertiary education tax has a positive and significant impact on economic development in Nigeria; Edori and Atabusi (2022) indicated that significant relationship exists between education tax and total tax revenue; Adedayo, Awoniyi, Ogundele and Ibi-Oluwatoba (2020) found that tertiary education tax has insignificant negative effect on return on asset. These prior studies however showed inconsistencies in findings occasioned by the use of different measurement variables and tools.

4.2.3 Hypothesis Three

H₀: Value added tax does not have significant effect on the net investment of industrial goods firms in Nigeria.

Decision: since the p-value of 0.008 is lower than the margin of error of 0.05, we therefore reject the null hypothesis and accept the alternate hypothesis: value added tax significantly affects the net investment of industrial goods firms in Nigeria. The analysis also revealed a negative relationship between value added tax and net investment. Prior studies such as: Oshiole, Okoye and Amahalu (2024) found that value added tax has a significant but negative

effect on net investment of listed Communication firms in Nigeria; Onoriode, Nwogwugwu, Kalu and Uzonwanne (2024) showed that value added tax exerted significant positive effect on investments in Nigeria; Adedayo, Awoniyi, Ogundele and Ibi-Oluwatoba (2020) found that value added tax have positive and significant effect on return on asset; Eyide and Nzewi (2020) revealed a significant negative effect of value added tax on net investment.

4.2.4 Hypothesis Four

H₀: Capital gains tax does not have significant effect on the net investment of industrial goods firms in Nigeria.

Decision: since the p-value of 0.001 is lower than the margin of error of 0.05, we therefore reject the null hypothesis and accept the alternate hypothesis: capital gains tax significantly affects the net investment of industrial goods firms in Nigeria. The analysis also revealed a negative relationship between capital gains tax and net investment. Prior studies such as: Upaa, Agule and Adeniran (2023) found that capital gains tax did not significantly contribute to total tax revenue in Nigeria; Eneisik, Obara and Uwikor (2023) showed that capital gains tax has positive and significant effect on net profit margin of quoted manufacturing companies in Nigeria; Okerekeoti (2022) reported that capital gain tax has a negative insignificant effect on economic growth in Nigeria; Anisere-Hameed (2021) found that capital gains tax is insignificant in revenue generation towards the economic growth of Nigeria; Kumai (2020) indicated an insignificant positive relationship between capital gains tax and total tax revenue/economic growth in Nigeria. Interestingly, most prior studies on capital gains tax at the macro level agreed to an insignificant effect. Whereas, at the micro-economic level, a significant effect was mostly seen.

4.2.5 Hypothesis Five

H₀: Industrial training tax does not have significant effect on the net investment of industrial goods firms in Nigeria.

Decision: since the p-value of 0.000 is lower than the margin of error of 0.05, we therefore reject the null hypothesis and accept the alternate hypothesis: industrial training tax significantly affects the net investment of industrial goods firms in Nigeria. The analysis also revealed a positive relationship between industrial training tax and net investment. Prior studies such as: Hanappi, Millot and Turban (2023) found that business investment rates are negatively related to corporate total taxation inclusive of industrial levy in OECD countries; Kaewsopa, Fu and Tan (2022) discovered that industrial taxes in both China and Thailand

have a negative impact on economic growth; Abiahu and Nwaorgu (2020) revealed that corporate industrial levy has no significant effect on the return on equity of firms, they further revealed a positive and significant effect of corporate training levy payment on the debt to equity ratio of the listed firms.

CONCLUSION AND RECOMMENDATION

The linkage between tax and net investment has received persistent attention in both the academic literature and policy debates. One of the main drivers of economic growth is investment and how taxes affect investment behavior of firms is, indeed, a question of great importance. It is well understood that company taxation can have large effects on firms' investment decisions. Several studies have taken turns to examine the effect of tax liabilities on various performance indices of different industries and the nation at large. This study examined the effect of tax liabilities on net investment of industrial goods firms in Nigeria. Ex post facto research design was adopted for this study because of the unalterable nature of the independent variables utilized in the study. The population of the study comprised the industrial goods firms listed on the Nigerian Exchange Group. The sample was delimited to nine (9) firms that have their annual reports from 2013-2023 online. The study employed the fixed effect regression technique. This study majorly found significant effect of value added tax, capital gain tax and industrial training tax on net investment and a non-significant effect of company income tax and tertiary education tax on net investment of industrial goods firms in Nigeria.

The study made several contributions and recommendations based on the findings:

- a. To sustain the positive relationship between company income tax and net investment, though not significant, the government should sustain the current company income tax rate, as an attempt to increase this rate may distort this relationship;
- b. Since an increase in tertiary education tax paid by firms negatively affect their net investment, Government should invest more in the overall educational demand of her citizens not only from tax revenues but from other oil and non-oil sources to reduce the burden on firms. The government may however consider a reduction in the tertiary education tax rate;
- c. Considering the negative relationship that exists between value added tax and net investment, the VAT rate paid by firms should be reduced or reversed back to 5% in order to free up more cash for the firms to reinvest in the business;

- d. To reverse the negative significant relationship between capital gains tax and net investment, the government should consider reducing the rate slightly to enable firms have some cash-flow for reinvestment when they dispose of their assets. The companies should also be encouraged to dispose all its idle lying assets;
- e. To sustain the positive significant effect of industrial training tax on net investment, firms should be consistent in paying this tax as the funds are being used to manpower training. Similar tax should be introduced to other sectors where not applicable.

REFERENCES

- Abiahu, M.C. & Nwaorgu, I. A. (2020). Effect of corporate tax on sustainable financial performance of listed firms in Nigeria. *Journal of Taxation and Economic Development*, 19(1), 50-63
- Adedayo, O., Awoniyi, O. C., Ogundele, A. T., & Ibi-Oluwatoba, O. T. (2020). Company income tax and firm performance in Nigeria: A case of selected consumer goods sector (2010-2018). *International Journal of Innovative Research and Development*, 9(5), 88-95. DOI: 10.24940/ijird/2020/v9/i5/MAY20047
- Adefunke, A. B., & Usiomon, A. O. (2022). Impact of company income tax on corporate profitability in Nigeria. *Indian Journal of Finance and Banking*, 9(1), 104-114. <https://doi.org/10.46281/ijfb.v9i1.1567>
- Agung, S., Alghamdi, T., & Nurwanto, N. (2021). Empirical analysis on public expenditure for education and economic growth: Evidence from Indonesia. *Economies* 9(2), 146.
- Alex-Adedipe, A., & Akinyanmi, F. (2022). Nigeria's value added tax regime; Regulatory update. <https://www.mondaq.com/nigeria/sales-taxes-vat-gst/1110590/nigeria39s-value-added-tax-vat-regime-regulatory-update>. Accessed 01/03/2022.
- Amahalu, N.N., Obi, J.C., Okudo, C.L., & Okafor, O.O. (2022). Effect of 2011 personal income tax (amendment) on revenue generation in Anambra state. *International Journal of Business Marketing and Management (IJBMM)*, 7(5), 138 -147.
- Anisere-Hameed, R. A. (2021). Impact of taxation on the growth and development of the Nigerian economy. *European Journal of Accounting, Auditing and Finance Research*, 9(4), 1-11.
- Barnier, B. (2022). What is value added tax? <https://www.investopedia.com/terms/v/valueaddedtax.asp>. Accessed 11/07/2022
- Berry-Johnson, J. (2021). What is income tax? <https://www.investopedia.com/terms/i/incometax.asp>. Accessed 01/03/2022

- Chiamogu, A.N., & Nzewi, U.C. (2020). Value added tax and Nigerian economy: An empirical analysis. *International Journal of Advanced Academic Research, Social and Management Science*, 6(4), 53-78.
- Choi, J., & Park, H. (2022). Tax Avoidance, Tax Risk, and Corporate Governance: Evidence from Korea. *Sustainability*, 14(3), 469.
- Dauda, I. A., & Dauda, I. M. (2020). An assessment of the extent of contribution of capital gain tax to internally generated revenue profile of Nasarawa state of Nigeria: 2015–2019. *International Journal of Accounting Research*, 5(2), 37-45.
- Dim, K.C., Okafor, T.G., Eneh, O., & Amahalu, N.N. (2022). Effect of public expenditure on economic development of Nigeria. *International Journal of Management Studies and Social Science Research*, 4(1), 113-130.
- Ding, K., Xu, H., & Yang, R. (2021). Taxation and enterprise innovation: Evidence from China's value-added tax reform. *Sustainability* 13(5), 5700.
- Edori, D. S., & Atabusi, M. (2022). The nexus between direct taxes and total tax revenue of the federal government of Nigeria. *European Journal of Accounting, Finance and Investment*, 8(12), 49-60.
- Eneisik, G. E., Obara, L. C., & Uwikor, M. K. (2023). Effect of companies' income tax on financial performance of listed manufacturing companies in Nigeria. *Int J Econ Financ Manage*, 8, 25-49.
- Eyide, M.U. and Nzewi, U.C. (2020). Effect of company income and value added taxes on net investment of quoted health care firms in Nigeria. *Proceedings of the 3rd Annual International Academic Conference of the Chartered Institute of Taxation of Nigeria*, 138-151
- FIRS (2022). Value added tax <https://www.firs.gov.ng/value-added-tax-vat/>. Accessed 05/05/2024
- Gombár, M., Korauš, A.; Vagaská, A., & Tóth, Š. (2022). Analytical view on the sustainable development of tax and customs administration in the context of selected groups of the population of the Slovak Republic. *Sustainability*, 14, 1891.
- Gotora, P., & Samuel, O.M. (2018). The influence of tax payer education on voluntary tax compliance in Tanzania a case study of Monduli district office. *International Journal of Management and Commerce Innovations*, 6(1), 341-346.
- Gwangdi, M.I. & Garba, A. (2015). Administration of companies' income tax in Nigeria: Issues of compliance and enforcement. *European Journal of Business and Management*, 7(8), 18-25

- Hanappi, T., Millot, V., & Turban, S. (2023). How does corporate taxation affect business investment: Evidence from aggregate and firm-level data? *OECD Economics Department Working Papers*, No. 1765, OECD Publishing, Paris, <https://doi.org/10.1787/04e682d7-en>.
- Harelimana, J.B. (2020). Effect of value added tax reforms on revenue performance in Rwanda revenue authority. *Open Access J. Biog. Sci. Res.*, 1(1), 1–11.
- Hong, O.H., Ko, J.K., & Park, H.J. (2018). The effect of internal information environment on tax avoidance and tax risk. *Korean Account. J.* 27(5), 79–112.
- James, M. (2022). Education tax. <https://www.investopedia.com/terms/e/education-credit.asp>. Accessed 16/05/2022
- Kaewsopa, W., Fu, Q., & Tan, X. (2022). The impact of personal income tax on economic growth: The case of China and Thailand. *Asia-Pacific Social Science Review*, 22(2), 38–49.
- Kagan, J. (2022). Corporate tax. <https://www.investopedia.com/terms/c/corporatetax.asp>. Accessed 11/05/2024.
- Kang, J. (2018) Tax avoidance, firm value and tax risk. *Korea Int. Account. Rev.* 78(12), 245–270.
- Lee, J., Kim, S., & Kim, E. (2021). Designation as the most admired firms to the sustainable management of taxes: Evidence from South Korea. *Sustainability*, 13(2) 7994.
- Masunga, F.J., Mapesa, H.J., Mwakibete, A.N., Derefa, M.J., Myava, J.E., & Kiria, J.S. (2021). The role of mediating effects of user satisfaction and behavioural intention on the influence of the e-tax system on tax compliance behaviour: An application of bootstrapping technique. *TIJAB (The Int. J. Appl. Bus.)*, 5(1), 137–154.
- Meyer, K. (2018). Effect of corporate income taxation on unemployment levels in the European Union. *The Park Place Economist*, 16(1), 88-96.
- Montenegro, T.M. (2021). Tax evasion, corporate social responsibility and national governance: A country-level study. *Sustainability* 13(3), 11166
- Mu, R., Fentaw, N.M., & Zhang, L. (2022). The impacts of value added tax audit on tax revenue performance: The mediating role of electronics tax system, evidence from the Amhara region, Ethiopia. *Sustainability* 14(4), 6105.
- Nwaeze, L. (2009). Capital Gains Tax in Nigeria: Exemptions and Reliefs. Retrieved from [Capital%20Gains%20Tax/capital%20gains.htm](https://www.unizik.edu.ng/journals/unizikjournalofaccounting/article/view/2020Gains%20Tax/capital%20gains.htm). Accessed on 6/6/2024.

- Nwoye, U.J. Obiorah, J.N. & Chidiebere, A.C. (2023). Illegal taxation versus tax holiday: implications on the performance of Small and Medium Enterprises In awake, Anambra state, *Journal of the Management Sciences*, 60 (3), 1 – 25.
- Ogoun, S., & Ekpulu, G. A. (2020). Educational level and tax compliance: Empirical evidence from Nigeria. *International Journal of Accounting and Financial Reporting*, 10(1), 160-176.
- Ojo, O.V. (2015). Contractual Option Interests and Capital Gains Tax in Nigeria. Retrieved from *Capital%20Gains%20Tax/CONTRACTUAL%20OPTION%20INTERESTS%20AND%20CAPITAL%20GAINS%20TAX%20IN%20NIGERIA%20_%20Viyonlaw%20Blog.htm*. Accessed on 6/6/2024.
- Okeke, M.N., Mbonu, C.M., & Amahalu, N.N. (2018). Tax revenue and economic development in Nigeria: A disaggregated analysis. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 8(2), 178-199.
- Okerekeoti, C. U. (2022). Tax structure and economic growth: an empirical study in Nigeria. *African Journal of Business and Economic Development*, 2(8), 1-9
- Okoror, Justina. A. Aruwa, S.A.S., Uche Jack Osimiri & Ilaboya Ofuan James (2023). Effect of education tax on academic development of tertiary institutions in Nigeria. *Journal of Money, Banking and Finance*, 8(1), 87-103.
- Oladosu, R. (2022). Supporting tertiary education through increased taxation. <https://www.premiumtimesng.com/opinion/517942-supporting-tertiary-education-through-increased-taxation-by-rahma-oladosu.html>. Accessed 20/05/2024.
- Olaoluwa, J. (2022). In new Finance Act, FG increases education tax to 2.5%. <https://www.icirnigeria.org/in-new-finance-act-fg-increases-education-tax-to-2-5/>. Accessed 08/05/2024.
- Onoriode, H., Nwogwugwu, U.C., Kalu, C. & Uzonwanne, M.C. (2024). Effect of tax revenue on investment in Nigeria. *International Journal of Research and Innovation in Social Science*, 8(3), 2501-2520.
- Oraka, A.O., Ogbodo, C.O., & Ezejiofor, R.A. (2017). Effect of tertiary education tax fund in management of Nigerian institutions. *International Journal of Trend in Scientific and Research Development*, 2(1), 140-150.
- Ordu, P.A., & Nkwoji, N.O. (2019). Impact of education tax on economic development in Nigeria. *International Journal of Innovative Development and Policy Studies* 7(3), 1-17.
- Orisadare, M.A., & Fasoye, K. (2022). The effect of value-added tax on economic growth of Nigeria. *AJER* 10(1), 158-169.

- Oserogho, E.O. (2014). Capital Gains Tax and You. *An online Article Retrieved from Capital%20Gains%20Tax/108-capital-gains-tax-you.htm*. Accessed on 6/6/2024
- Oshiole, S., Okoye, P.V.C & Amahalu, N.N. (2024). Taxes and net investment of listed communication firms in Nigeria, *Journal of Global Accounting*, 10(1), 132 – 143.
- Shevlin, T., Urcan, O., & Vasvari, F.P. (2020). Corporate tax avoidance and public debt costs. *J. Am. Tax. Assoc.*, 42(15), 117–143.
- Upaa, J.U., Agule, E.A. & Adeniran, B.G. (2023). Impact of capital gains tax on Nigeria economy. *International Journal of Economics, Finance & Entrepreneurship (NIRA-IJEFE)*, 9(6), 21-34. DOI: 6472-208-9-125-38-962
- Uwaifo, F. N., & Obaretin, O. (2022). Tax revenue and economic development in Nigeria. *Nigerian Journal of Accounting and Finance*, 14(2).
- Wadesango, N., & Mwandambira, N. (2018). Evaluating the impact of tax knowledge on tax compliance among small medium enterprises in a developing country. *Academy of Accounting and Financial Studies Journal*, 22(6), 1-14.
- Walters, T. (2022). Corporate tax. <https://www.investopedia.com/terms/c/corporatetax.asp>. Accessed 11/05/2024