

TAXES AND NET INVESTMENT OF LISTED COMMUNICATION FIRMS IN NIGERIA

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ABSTRACT:

This study examined the nexus between taxes and net investment of listed Communication firms in Nigeria for eleven (11) years period spanning from 2012-2022. Specifically, this study ascertained the relationship between company income tax, tertiary education tax, value added tax, national information technology development levy and net investment. Panel data were used in this study, which were obtained from the annual reports and accounts of eight (8) listed Communication companies for the periods 2012-2022. Ex-Post Facto research design was employed. Inferential statistics using Pearson correlation coefficient and Panel least square regression analysis were employed to test the hypotheses of the study. The results showed that there is a significant but negative relationship between company income tax and net investment ($\beta_1 = -0.387363$; $p\text{-value} = 0.0000 < 0.05$); a significant but negative relationship between tertiary education tax and net investment ($\beta_2 = -0.715158$; $p\text{-value} = 0.0001 < 0.05$); a significant but negative relationship between value added tax and net investment ($\beta_3 = -0.276994$; $p\text{-value} = 0.0000 < 0.05$); a significant but negative relationship between national information technology development levy and net investment ($\beta_4 = -0.605823$; $p\text{-value} = 0.0119 < 0.05$). Conclusively, the study found a statistically negative relationship between taxes and net investment of listed Communication firms in Nigeria at 5% level of significance. The study recommended amongst others that the tax rate paid by firms should be reduced in order to discourage tax avoidance as VAT payers are ever willing to take advantage of loopholes in the tax system to reduce their tax liabilities.

1. INTRODUCTION

Tax is a compulsory levy by government through its agencies on the income, consumption and capital of its subjects. These levies are made on personal income such as salaries, business profit, interest, dividend, discount or royalties to obtain revenue. It is levied against company profit, petroleum profit, capital gains and capital transfer. Taxes are the major tools required

to control market imperfections, and achieve social justice by wealth redistribution. Against the backdrop of economic globalisation and the associated increase in capital mobility, the political, economic and social development of any country depends on the amount of revenue generated for the provision of infrastructure in that given country. However one means of generating the amount of revenue for providing the needed infrastructure is through a well structure tax system (Amahalu & Okafor, 2023). Corporate taxation have become one way for governments to compete with one another to attract investment and thereby create jobs. Meanwhile, Information and communication technology (ICT) have become part of the foundational infrastructure of business and society, the evidence is the heavy reliance on efficient and widely accessible online communication network and services, data, software and hardware .Enormous data is now generated by these constantly connected users and devices. These data being collected by businesses and government and combined with advanced data analytics and technology diffusion, are providing the insights necessary to transform and shape the way organizations operate (Aniefor & Ndubuisi, 2022). In this changing environment, the challenges for policymaker are complex. For tax matters, this means that policy development and implementation must be designed to allow for the changing environment.

Net investment is the total amount of money that a company spends on capital assets, minus the cost of the depreciation of those assets. Although taxation forms one of the major sources of government, which may affect Communication firms negatively if not properly applied and administered. As higher tax rates serve as disincentive to firms for investment and expansion as it leaves firms with less money to reinvest which might eventually discourage productivity, investment and the level of output ((Mba, Mbonu & Amahalu, 2023) by the Communication industry . It is against this backdrop, that this study sought to examine the relationship between taxes and net investments of quoted communication firm in Nigeria.

1.1 Objectives of the Study

The main objective for this study is to determine the relationship between Taxes and Net Investment of listed Communication firms in Nigeria.

The specific objectives will be to:

- i. evaluate the relationship between Company Income Tax and Net Investment of listed Communication firms in Nigeria.
- ii. determine the relationship between Tertiary Education Tax and Net Investment of listed Communication firms in Nigeria.

- iii. ascertain the relationship between Value Added Tax and Net Investment of listed Communication firms in Nigeria
- iv. assess the relationship between National Information Technology Development Levy and Net Investment of listed Communication firms in Nigeria

1.2 Hypotheses

- H₀₁: There is no significant relationship between Company Income Tax and Net Investment of listed Communication firms in Nigeria.
- H₀₂: There is no significant relationship between Tertiary Education Tax and Net Investment of listed Communication firms in Nigeria
- H₀₃: There is no significant relationship between Value Added Tax and Net Investment of listed Communication firms in Nigeria.
- H₀₄: There is no significant relationship between National Information Technology Development Levy and Net Investment of listed Communication firms in Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Tax

Tax is a compulsory contribution to state revenue, levied by the government on workers' income and business profits, or added to the cost of some goods, services, and transactions. Tax is an amount of money that a government requires people to pay according to their income, the value of their property that is used to pay for the things done by the government (Ndubuisi, Obi, Okudo & Okafor, 2022). Taxes are the primary source of revenue for most governments. The money is spent to improve and maintain public infrastructure, including roads and funding of public services, such as schools, emergency services, and welfare programs.

2.1.2 Company Income Tax

The company income tax is a levy that is imposed on the net profits of corporations, computed as the excess of receipts over allowable costs. A corporate tax is a tax on the profits of a corporation. The taxes are paid on a company's taxable income, which includes revenue minus cost of goods sold (COGS), general and administrative (G&A) expenses, selling and marketing, research and development, depreciation, and other operating costs (Okeke, Mbonu, & Amahalu, 2018a). The Company Income Tax Act (CITA) is the principal law that regulates the taxation of companies in Nigeria. CIT is governed by Companies Income Tax Act (CITA), Cap C21, LFN 2004 (as amended).

2.1.3 Tertiary Education Tax

Tertiary education tax is a tax chargeable on all companies registered in Nigeria at chargeable profits as a contribution to the Education Tax Fund. This means that all registered companies in Nigeria are required to pay a percentage of their assessable profit into an Education Tax Fund. The tax is charged at 2.5% (Aruna, Oshiole & Amahalu, 2020). Tertiary education tax is imposed on every Nigerian company at the rate of 2.5% of the assessable profit for each year of assessment. The Tertiary Education Trust Fund was originally established as Education Trust Fund (ETF) by Act No 7 of 1993 as amended by Act No 40 of 1998 (now repealed and replaced with Tertiary Education Trust Fund Act 2011). It is an intervention agency set up to provide supplementary support to all levels of public tertiary institutions with the main objective of using funding alongside project management for the rehabilitation, restoration and consolidation of Tertiary Education in Nigeria (Okonkwo, Amahalu & Obi, 2022).

2.1.4 Value Added Tax

Value-added tax (VAT) is a type of indirect tax levied on goods and services for value added at every point of production or distribution cycle, starting from raw materials and going all the way to the final retail purchase (Okeke, Mbonu & Amahalu, 2018b). A value-added tax (VAT) is a consumption tax that is levied on a product repeatedly at every point of sale at which value has been added. That is, the tax is added when a raw materials producer sells a product to a factory, when the factory sells the finished product to a wholesaler, when the wholesaler sells it on to a retailer, and, finally, when the retailer sells it to the consumer who will use it (Ashiedu, Okafor, Amahalu & Obi, 2022). Ultimately, the retail consumer pays the VAT. The buyer in each earlier stage of the product's production is reimbursed for the VAT by the subsequent buyer in the chain.

2.1.5 National Information Technology Development Levy (NITDL)

The NITDL is governed by National Information Technology Development Agency Act, CAP N156 LFN 2004 (as amended). The Levy is charged at the rate of 1% of Profit before tax. The Levy is charged on specified companies with turnover of N100 million and above (Bennee, Okoye & Ndubuisi, 2021b). The National Information Technology Development (NITD) levy is payable by companies in Nigeria that have an annual turnover of at least 100 million Nigerian naira. It is calculated as 1% of the profit before tax (PBT) of liable companies (Bennee, Okoye & Ndubuisi, 2021a). The NITDL was established in 2007 under section 12, subsection 2, paragraph (a) of the National Information Technology Development Agency (NITDA) Act.

2.1.6 Net Investment

Net investment is the total amount of money that a company spends on capital assets, minus the cost of the depreciation of those assets. This figure provides a sense of the real expenditure on durable goods such as plants, equipment, and software that are being used in the company's operations (Amahalu & Obi, 2020a). Net investment is the total amount of funds that are spent by a company to purchase capital assets, less the associated depreciation of the assets. The net investment figure provides an accurate depiction of how much is spent on tangible assets such as property, plant and equipment (PP&E) and other capital assets (Amahalu & Obi, 2020b).

2.1.7 Taxes and Net Investment

Taxation is seen as a burden which every citizen must bear to sustain his or her government because the government has certain responsibilities to perform for the benefit of those it governs (Dim, Okafor, Eneh & Amahalu, 2022). Taxation is the most important source of revenue to the government (Ezechukwu, Ndubuisi, & Okudo, 2022). Two categories of tax payers exist in every economy, the Individual and Corporate tax payers. According to Meyer (2018), firms in most cases finance their investment with borrowed funds, as long as the rate of return on capital that is, the marginal efficiency of capital (MEC), is greater than the interest rate charged on borrowed funds, firms would always like to add to their existing capital being equal to that rate of discount which would make the present value of the series of annuities given by the returns expected from the capital assets during its life just equal to the supply price. Montenegro (2021) evidenced the existence of a positive relationship between taxes and economic growth. Conversely, Amahalu, Ezenwaka, Obi and Okudo (2022) found a negative relationship between taxes and economic growth.

2.2 Theoretical Framework

This study is anchored on Free Cash Flow (FCF) Theory

2.2.1 Free Cash Flow (FCF) Theory

Free Cash Flow theory was propounded by Jensen in 1976. Free cash flow (FCF) represents the cash that a company is able to generate after required investment to maintain or expand its asset base. It is a measurement of a company's financial performance and health. Free cash flow (FCF) are the cash flows available to all investors in a company, including common stockholders. FCF provides a useful valuation technique that can derive the value of a firm or the value of a firm's common equity. FCF measures the level of cash available to a company's investors net of all required investments in working capital and fixed capital, or capital expenditures (CAPEX), for a period.

2.3 Empirical Review

Nguyen (2022) investigated the relationship between government revenue and economic growth for a balanced panel of 17 emerging and developing Asian countries over the period 2002–2019 using the difference GMM Arellano-Bond estimators. The results showed that government revenue decreased while governance increased economic growth but their interaction reduced it. Besides, trade openness and inflation are significant determinants of economic growth.

Orisadare and Fasoye (2022) examined the effect of value added tax (VAT) on economic growth in Nigeria between 1994 and 2020 using consumer price index (CPI) as a threshold. A technique of Threshold Vector Autoregressive (TVAR) was employed and the results revealed that a VAT above the 10 percent threshold value endangers the economy while a VAT below the 7.59 percent threshold value does not harm the economy; rather, it improved people's well-being.

Okonkwo, Amahalu and Obi (2022) ascertained the relationship between Tax Revenue and Productivity of Nigeria for sixteen years ranging from 2005-2020. Specifically, the study ascertained the relationship between Value Added Tax, Petroleum Profit Tax, Personal Income Tax and Gross Domestic Product per Capita. The time series data sets used in this study were obtained from Central Bank of Nigeria Statistical Bulletin, Securities and Exchange Commission Office publications, National Bureau of Statistics publications and World Bank Statistical Bulletin for the study period. Longitudinal research design was employed. Inferential statistics using Augmented Dickey-Fuller (ADF) test, Pearson correlation coefficient, Ordinary Least Square regression analysis, Granger Causality test, Johansen Co-integration test and Error Correction Model were applied to test the hypotheses of the study. The specific findings showed that there is a significant but negative relationship between Value Added Tax and GDP per Capita ($\beta_1 = -0.383441$; p-value = 0.0342); a significant but negative relationship between Petroleum Profit Tax and GDP per Capita of Nigeria at 5% level of significance ($\beta_2 = -0.385457$; p-value = 0.0305); a significant but negative relationship between Personal Income Tax and GDP per Capita of Nigeria at 5% level of significance.

3. MATERIAL AND METHOD

The research design employed in this study is the *ex-post facto* research design. The population of this study consists of all the ten (10) Communication companies trading on the floor of Nigerian Exchange (NGX) Group as at 31st December, 2021. They include; Chams Plc, Courtville Business Solutions Plc, Computer Warehouse Group Plc, E-Tranzact International Plc, Mass Telecommunication Innovations Plc, MTECH Communications Plc, NCR (Nigeria) Plc, Omatek Ventures Plc, Tripple Gee and Company Plc and IHS Plc. Eight (8) Communications companies was purposively selected as the sample size of this study with the utilization of Purposive sampling method (that is all the ICT firms that filed their annual financial statements with NGX from 2012-2022 without missing any year would be selected for this study). Data will be gathered from the published financial statements of the eight (8) Communication companies for eleven (11) year period spanning from 2012-2022. They include: Chams Plc, Courtville Business Solutions Plc, E-Tranzact International Plc, Mass Telecommunication Innovations Plc, MTECH Communications Plc, NCR (Nigeria) Plc, Omatek Ventures Plc and IHS 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 selected quoted Communication companies,

Table 1: Operationalisation of Variables

Variables (code)	Operational Definitions
Dependent Variable (Net Investment)	
Net Investment (NI)	Capital Expenditures – Depreciation
Independent Variable (Taxes)	
Proxies:	
Company Income Tax (CIT)	30 % of Taxable Profit
Tertiary Education Tax (TET)	2.5% of Net Profit
Value Added Tax (VAT)	7.5% of Income
National Information Technology Development Levy (NITDL)	1% of Profit Before Tax

The following linear equation was estimated:

$$NI_{it} = \beta_0 + \beta_1 CIT_{it} + \beta_2 TET_{it} + \beta_3 VAT_{it} + \beta_4 NITDL_{it} + \mu_{it}$$

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

i = firm identifier (8 firms)

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

4. RESULT AND DISCUSSIONS

4.1 Data Analysis

Table 2 Pearson Correlation Matrix

	NI	CIT	TET	VAT	NITDL
NI	1.0000				
CIT	-0.1829	1.0000			
TET	-0.0888	0.0675	1.0000		
VAT	-0.1479	0.2030	0.4831	1.0000	
NITDL	-0.1447	0.1065	0.2000	0.3663	1.0000

Source: E-Views 10 Correlation Output, 2024

The Pearson Correlation Matrix in table 2 shows the existence of a negative relationship between CIT, TET, VAT, NITDL and NI as evidenced by the correlation coefficient factors of -0.1829, -0.0888, -0.1479 and -0.1447 respectively.

4.2 Test of Hypotheses

Table 3: Panel Least Square Regression analysis showing the relationship between Taxes and Net Investment

Dependent Variable: NI

Method: Panel Least Squares

Date: 03/25/24 Time: 16:59

Sample: 2012 2022

Periods included: 11

Cross-sections included: 8

Total panel (balanced) observations: 88

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.324673	0.057384	5.657893	0.0000
CIT	-0.387363	0.038946	-9.946092	0.0000
TET	-0.715158	0.166628	-4.291944	0.0001
VAT	-0.276994	0.058148	-4.763586	0.0000
NITDL	-0.605823	0.235100	-2.576874	0.0119
R-squared	0.840678	Mean dependent var	0.566746	
Adjusted R-squared	0.815514	S.D. dependent var	0.134875	
S.E. of regression	0.112399	Akaike info criterion	-1.473062	
Sum squared resid	0.947515	Schwarz criterion	-1.324185	
Log likelihood	63.92248	Hannan-Quinn criter.	-1.413373	
F-statistic	69.88312	Durbin-Watson stat	2.116562	
Prob(F-statistic)	0.000000			

Source: E-Views 10 Correlation Output, 2024

4.2.1 Interpretation

The regressed coefficient correlation result in table 3 shows the existence of a negative relationship between the explanatory/independent variables ($\beta_1=-0.387363$; $\beta_2=-0.715158$; $\beta_3=-0.276994$; $\beta_4=-0.605823$) and net investment. The probability values for the slope coefficient shows that $P(x_1=0.0000<0.05$; $x_2=0.0001<0.05$; $x_3=0.0000<0.05$; $x_4=0.0119<0.05$) are statistically significant with NI at 5% respectively:

$$NI = 0.324673 - 0.387363CIT - 0.715158TET - 0.276994VAT - 0.605823NITDL + \mu$$

The implication of this model is that one naira increase in CIT, TET, VAT and NITDL will exert 38.74%, 71.52%, 27.70% and 60.58% reduction in NI respectively.

The coefficient of determination obtained is 0.815514, which is commonly referred to as the value of adjusted R^2 . The cumulative test of hypothesis using adjusted R^2 to draw statistical inference about the explanatory variables employed in this regression equation, shows that 81.55% of the systematic variations in the dependent variable (NI) can be jointly predicted by all the independent variables (CIT, TET, VAT and NITDL) while 18.45% was explained by unknown variables that were not included in the model. The overall significance of the model $\text{Prob} > F\text{-statistic}$ (0.000000) is statistically significant at 5%. Consequently, this study submits that taxes have a statistically significant effect on net investment of listed communication firms in Nigeria at 5% level.

In consonance with the analysis of this study, the following findings were deduced:

1. There is a significant but negative relationship between company income tax and net investment of listed Communication firms in Nigeria at 5% level of significance ($\beta_1 = -0.387363$; $p\text{-value} = 0.0000 < 0.05$).
2. There is a significant but negative relationship between tertiary education tax and net investment of listed Communication firms in Nigeria at 5% level of significance ($\beta_2 = -0.715158$; $p\text{-value} = 0.0001 < 0.05$).
3. There is a significant but negative relationship between value added tax and net investment of listed Communication firms in Nigeria at 5% level of significance ($\beta_3 = -0.276994$; $p\text{-value} = 0.0000 < 0.05$).
4. There is a significant but negative relationship between national information technology development levy and net investment of listed Communication firms in Nigeria at 5% level of significance ($\beta_4 = -0.605823$; $p\text{-value} = 0.0119 < 0.05$).

CONCLUSION AND RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

- i. In an attempt to reverse the negative relationship between company income tax and net investment, Government should create a steady and strong flow of cash by targeting the companies that are making large profits.
- ii. 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.
- iii. Considering the negative relationship that exists between value added tax and net investment, the VAT rate paid by firms should be reduced in order to discourage tax

avoidance as VAT payers are ever willing to take advantage of loopholes in the tax system to reduce their tax liabilities.

- iv. In order to address the negative relationship between NITDL and net investment, Government at all levels should institute tax cuts during periods of economic hardship in order to encourage savings, growth and investment.

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