

# Tax Planning Strategies and Profitability of Quoted Manufacturing Companies in Nigeria

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**Abstract:** Profitability has been the aim of every commercial enterprise but are often not actualized due to high costs and high Effective Tax Rates (ETR). In order to manage the effects of taxes on the profitability of firms, strategies are employed to plan the taxes. This research work focused on effect of Tax Planning Strategies on Profitability of manufacturing firms in Nigeria. *Ex-post facto* research design was adopted for the study. The main objective of the study was to examine the effect of Tax Planning Strategies on Profitability of Quoted Manufacturing Companies in Nigeria. The population of the Study comprised of 52 manufacturing companies quoted on the Nigeria Stock Exchange as at 17<sup>th</sup> December, 2018 with 46 as the sample size calculated using Taro Yamani's formula. Data were collected from the audited annual reports of the sampled companies for a period of 10 years (2008 – 2017). The validity and reliability were based on the statutory audit of the financial statements. Descriptive and inferential statistics were used to analyze the data. The result revealed that there is no significant effect of TP on Return On Assets (ROA) of Quoted Manufacturing Companies in Nigeria. This is evidenced by the results of the test,  $Adj.R^2 = -0.000527$  and  $F\text{-Statistics} = 0.919439$  and  $P\text{-value}$  of 0.431292. The Study concluded that tax planning strategies have both negative and positive effects on profitability of Quoted Manufacturing Companies in Nigeria. The study recommended that Tax Managers and Finance Officers should reduce thin capitalization and Capital Intensity to balance the source of income of manufacturing firms, while Research and Development costs should be properly managed to increase their contributions to profitability. Professional Tax Practitioners should also be consulted for maximum benefit from tax planning.

**Keywords:** Capital Intensity, Effective Tax Rate, Profitability, Tax Planning Strategies, Tax Practitioners, Thin Capitalization, Research and Development Costs

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## 1. Introduction

### 1.1. Background

Profitability is a major factor to be considered by every business enterprise if such an enterprise desires to continue to operate as a going concern and to the satisfaction of its stakeholders. Profitability is the most common measure of an organizational growth and progress in terms of efficiency and productivity [12]. Despite how important profitability is to firms, it is always affected by costs. Profitability in no small extent, depends on the capacity of the company to grow its earnings and tame its cost profile through cost control techniques [30]. The study [43] stated that profit can provide power for a business's sustainable development but that financial management is needed to achieve the desired

profitability. While tax liability is a major expense in any firm (representing 20 – 30%) in the sources and application of fund in company's financial statement [34].

Corporate tax in Nigeria takes close to one-third of pretax earnings and when other tax levies are included in the tax costs, the total tax obligation is reasonably high making tax obligation of corporate organizations a crucial matter to be looked into [5]. Taxation provides a major source of revenue to all sovereign states in the world of which Nigeria is one of them and all governments impose tax on its citizens including body corporate [27]. The study [41] stated that another major problem facing the development of manufacturing industries is the problem of excessive taxation in the form of high tax rate, double and multiple taxation and these may affect the manufacturing firms negatively if not properly applied and administered.

The overall effect of all these, is the increase in effective tax rate, sometimes over and above the statutory tax rate and may affect the profitability and financial sustainability of the firm [23]. Taxpayers whether individual or corporate have been exposed to multiple levies or fees of tax of the same title but in various forms and this has increased evasion and avoidance as such, payment either consume deep to the profit of the company or affect adversely, the distributable income of the taxpayer [29]. Tax planning principle proclaimed that corporations have every right to make financial planning to avoid or reduce their tax liability as long as what they do is not forbidden by authorities or law [44]. Corporate Tax Planning has existed throughout history and will likely continue for as long as corporations are subject to tax depending upon whether corporations perceive that the benefits of such practices exceed their costs [14].

High tax rates, unfavorable tax policies, inefficient and effective tax administration system, multiplicity of taxes, non-refund of excess tax paid and non-issuance of tax credit are some of the issues emanating from the taxation system of Nigeria that threaten the profitability of manufacturing firms in Nigeria coupled with other costs from the operations of the firms. These tax issues demand that the tax managers apply tax planning strategies to ensure the going concern of these firms. Thus, this study is designed to carry out a research on Tax Planning Strategies employed by Quoted Manufacturing Companies in Nigeria to bring about profitability.

### **1.2. Statement of the Problem**

Taxes constitute a high chunk of the costs that enterprises incur and stand to reduce the profitability of firms and this needs to be minimized to its barest minimum especially in the manufacturing sector of the economy. The study [26] opined that firms which receive tax incentives pay less tax and therefore recorded a higher Return On Equity (ROE) as well as Return On Assets (ROA). Tax planning, just like any other business management activity, has the aim of contributing to the improvement of the economic and financial performance of firms thereby helping to maximize return to owner's investment [36]. Reduction in tax liability should lead to reduction in the Effective Tax Rate (ETR) of such firms which on its own is an advantage to the firms in increasing their profitability. But, has the manufacturing sector really maximized this strategy?

According to the study [32], lower ETRs are significantly related to highly leveraged companies and greater investment. Also, Research and Development investments lead firms to generate innovations that increase firm's profits [6]. Firms that invest in Research and Development will generate innovations that will increase their assets and a positive relationship exists between capital intensity and firm value. It is therefore, a matter whether the quoted manufacturing companies in Nigeria are utilizing this thin capitalization tool as a tax planning tool to enhance their profitability.

A substantial body of the literature has focused on the impact and effect of tax planning on firm value as well as firm performance at various levels and sectors of the

economy. However, one of the main factors that these studies on tax planning have seldom considered the relationship that could exist between tax planning strategies and firm's profitability. While other studies had employed Effective Tax Rates (ETR), Book-Tax Difference (BTD) and Tax Savings as a proxy to tax planning to the outcome on the performance of firms and their value, others have worked on some of these tax planning strategies and how they affect the performance of firms in Nigeria and beyond using mediating factors. Following all these mentioned above and more, this research work focused on how Tax Planning Strategies can be utilized to bring about Profitability of firms in the manufacturing sector of the Nigerian economy.

### **1.3. Objective of the Study**

The main objective of this study was to examine the effect of Tax Planning Strategies on Profitability of Companies Quoted in Nigeria and specifically to evaluate the effect of Tax Planning Strategies on profitability.

### **1.4. Research Hypotheses**

H<sub>01</sub>: There is no significant effect of Tax Planning Strategies on profitability of Quoted Manufacturing Companies in Nigeria.

## **2. Literature**

### **2.1. Conceptual Review**

#### **2.1.1. Tax Planning**

Tax Planning (TP) has been variously defined by different authors. Though these definitions may appear to differ from one to another, the underlying meaning is all the same. The study [16] defined TP as any action that must be taken by a business entity to inflate taxable income or reported earnings in a given period before tax loss expires. Another definition holds that TP include not only strategies aimed at minimization of tax liability, but also considers the cash flow effect on the business in terms of when it is most advantageous for a business to settle tax liability without incurring any penalty [7]. The study [3] also posited that, TP is a tool at the disposal of tax payer to reduce the burden of tax paid or payable. TP is the arrangement of one's financial affairs in such a way that without violating the legal provisions, full advantage is taken to allow tax exemptions, deductions, concessions, rebates, allowances and other benefits permitted under the Income Tax Act [42].

The study [9] stated that the inability of tax payers to plan their taxes leads to high tax liabilities and companies in an attempt to avoid tax, end up paying more than what is statutorily required to tax fraudsters because they lack adequate knowledge of tax planning. The study [2] tax avoidance is the active means by which the taxpayer seeks to reduce or remove altogether his liability to tax without really contravening the law. The study [8] opined that Tax avoidance simply involves structuring your affairs legally so that you are paying less tax than you might otherwise pay.

Tax avoidance may simply be defined as the deliberate act to reduce or minimize a person's tax liability by carefully arranging one's affairs in such a way as to take advantage of loopholes and provisions in the tax law. It is the intentional act of a tax payer to pay less than what he ought to pay to the tax authority and it is legal [11].

### 2.1.2. Tax Planning Strategies

The corporate tax planning points or strategies as contained in the Nigerian tax laws include: Choice of business type, choice of area of location and operation, choice of appropriate date of commencement and cessation of business, choice of accounting date, choice of financial structure, choice of method and method of non-current assets acquisition and choice of mode of compensating suppliers of capital [23]. The following will be used as tax planning strategies proxies. They are: Thin capitalization, Capital intensity and Research and Development cost.

#### 2.1.3. Thin Capitalization

The study [10] maintained that a company is thinly capitalized if its capital structure constitutes of a greater percentage of debt when compared to the equity. The positive benefit of high leverage is the corporate tax shield as the interest paid on borrowed fund is a tax deductible expense which implies that the greater the debt of a firm, the more interest it pays and the lesser the tax payable [4]. Thin capitalization for the purpose of this study, is measured using the solvency ratio which is measured as: (Total Debt/Total Assets). Solvency ratio is used to show the relationship between a firm's total debt and total assets. It helps to show the impact of debt on firm's performance [39].

##### *Thin Capitalization Policy*

Nigeria current has no thin capitalization rules or policy. However, interest charged between related parties is expected to reflect arm's-length transactions of which related-party interest considered to be excessive is disallowed by the tax authority [28].

#### 2.1.4. Capital Intensity

Capital intensity is the amount of investment made by business on their fixed assets and a positive relationship exists between capital intensity and firm value [37, 15]. Capital Intensity is the level of a company's investment in fixed assets and by implication the level of capital assets related incentives a company can enjoy and it has been found to be a good tax planning point and this is because allowances and incentives based on capital intensity can be enjoyed by the firms ([26, 24]. Capital intensity is the amount of money invested in order to get one Naira output and the more the capital applied to produce that same unit, the more capital intense the firm is said to be. Capital Intensity is measured as non-current assets divided by total assets [33].

#### 2.1.5. Research and Development Cost

Research and Development (R&D) cost is related to firms' investment decisions which contribute to lower Effective Tax Rates and there are many fiscal incentives through multiple

jurisdictions that promote the investment in R&D thus aiding R&D programs to be conditional on tax rates and incentives [13]. The expenses on Input related R&D are allowed thereby creating tax incentives that decrease the price of R&D inputs faced by firms, which makes it more attractive to engage in R&D while output-related R&D tax incentives increase the returns from innovative products [38]. Companies engaged in R&D activities are given 10% Investment Tax Credit (ITC) on their qualifying capital expenditure. In order to take into consideration the effect of investment tax shield associated to R&D cost, R&D cost is defined as R&D expense divided by total sales [31].

#### 2.1.6. Return on Asset

Profitability is a major component of this study. Profitability has been defined as the firm's earnings net of costs and is commonly measured by Return On Assets (ROA), Return On Capital Employed (ROCE) and Return On Sales (ROS) (Zhang, Cheong & Rajah, 2016). The ROA is the most often used accounting measure of performance in financial research [25]. This is because it has shown to represent a firm's performance well and it represents the ability of firms to use their assets to generate profit. Notwithstanding, some other previous studies such as found a negative relationship between ETR and ROA. It indicated that highly profitable companies bear lower income tax burdens since they utilized tax incentives and other tax provisions to reduce their taxable [32]. It is defined as:

$$ROA = PBT/TA$$

Where;

ROA = Return On Capital;

PBT = Profit Before Tax

TA = Total Assets.

## 2.2. Theoretical Review

### 2.2.1. Hoffman's Tax Planning Theory

Hoffman's Tax Planning Theory was propounded by Hoffmann in 1961. The theory posits that taxation, mostly are based on business or accounting concepts, thus a firm can modify such activities towards the attainment of reduction in tax liability. Hoffmann identified some ambiguity and loopholes in tax laws due to unclear intentions of the legislators and concluded that successful tax schemes work with the legal concepts and precise wording of the statute and complying with these concepts very precisely as it relates to individual firm tends to be advantageous to firms in form of tax savings [25]. Hoffman highlighted four important points of tax planning. They are: Firstly, in the case of properly handled, tax planning is not a simple process. Secondly, much gain will be obtained if the if the process of tax planning is conducted as a formalized procedure. Thirdly, many tax planners do not practice tax planning to the greatest possible advantage and finally, tax planning could benefit many tax payers but few are aware of its advantage [1]. The theory further highlighted that tax planning may not be sustained for a long term if the tax planning activities are not

flexible in the sense of a continuity of the strategies which further consolidates its relevance to this study.

### 2.2.2. Stakeholder Theory

The Stakeholder theory was propounded by Freeman in 1984. The theory describes the relationship that exists between persons that are directly or indirectly connected to a group. They include the employees, shareholders, suppliers, business partners, analysts, investors, political groups, trade associations, government and the community. Stakeholder theory holds that firms can best generate competitive advantage and wealth by taking more than just their shareholders into consideration and that the theory attempted to describe, prescribe and derive alternatives for corporate governance that included a multitude of interests. The theory has drawn considerable attention and support since its early formation. [22]. Stakeholder theory proposes that aside the shareholders of in a firm, there are agents that are interested in a firm's activities and decisions. These stakeholders impact the firm and these interactions impact on specific stakeholders and the firm [40]. This theory is relevant to this study as it tries to highlight all the stakeholders that are affected by tax planning activities and therefore very apt for this study. The effect of tax planning activities on each stakeholder should be considered by tax payers before embarking on it.

#### Theoretical Framework

The theories upon which this research work was anchored are: Hoffman's tax planning theory and stakeholder theory. Hoffman's tax planning theory encourages the employment of tax planning activities by firms as it is legal hence the use in this research work. Stakeholder theory was used because it takes into consideration all that are related to the manufacturing firms and the effect that tax planning activities could have on them both directly and indirectly. Stakeholder theory expands the scope of managers' responsibilities to all parties that can be affected by a company's operations of which stakeholders' perceptions on the inclusiveness of the 'impacting parties' definition can have significant influence on the company's success, both economically and otherwise [18]. This is in accordance with the works of The studies [23, 25, 7] and [21]. The decision on tax planning and the strategies to employ to ensure the financial sustainability of the firm does not affect only the firm's internal stakeholders, but also the universal stakeholders and so such decisions should be made with caution. The theory advocates a balanced action in handling tax planning matters

### 2.3. Empirical Review

The study [17] assessed the effect of company income tax on the financial performance of listed consumer goods companies in Nigeria from 2006-2016 and regression analysis was used as a technique for data analysis. The study finds that there is an insignificant negative relationship between corporate tax and financial performance using ROA as a measure. Age and risk however exhibits a positive but

not significant relationship with ROA. Size on the other hand shows a positive and significant relationship with performance confirming prior expectations. The study recommends that to improve the financial performance of listed Nigerian consumer goods, services of tax experts are needed to engage in legal tax planning like transfer pricing or structuring intra-company debt in order to reduce the net tax payment. The implication of this is tax planning is needed to help boost the ROA of manufacturing firms which a component of financial sustainability.

A study was conducted on how tax planning affects the financial performance of small scale enterprises in Kenya having a total population of one hundred and forty nine respondents and a sample of 30 percent was drawn from each stratum and multiple linear regression was employed to analyze the data. The study found the influence of tax planning by capital structure, in investment, capital asset planning through advertisement expenditure and found that there is a significant relationship existing between them [20]. The study [9] examined the impact of tax planning on firms' performance of listed companies in Nigeria and adopted survey and *ex-post-facto* design. The period covered was 2003 to 2012 and three sectors which are Manufacturing, banking and insurance sectors with a sample size of 15 out of 240 listed companies. To analyze the data, multiple regression analysis technique was employed. The findings show that tax planning exerts insignificant positive effect on reported earnings.

The study [24] conducted a study that examined the effect of tax planning on firm value. Ex-post facto research design was adopted. The study covered 50 firm-year observations for the period, 2010-2014. Data were drawn from the published financial statements of the sampled companies and analyzed using descriptive and inferential statistics centered on specified panel regression model. The joint effect of the considered tax planning proxies on the firm value was significant. While Effective tax rate, Dividend and Firm age are positively and significantly related to firm value, firm size, leverage and tangibility exert negative effect on firm value. The study concluded that holistic approach to tax planning and optimal mix of tax planning strategies are important determinants of their effect on firm value. Their research work suggests the need to properly employ tax planning strategies and when this is done, the result will lead to better firm value and financial sustainability.

### 2.4. Justification for the Study

When it comes to Tax Planning, a lot of focus has been on the tax planning outcomes other than Tax Planning Strategies. Theories and studies available show the relationship between tax planning and firm performance and firm value. The study [19] worked on the effects of tax incentives on firm performance having evidence from Uganda, while the study [20] researched on tax planning and financial performance of small scale enterprises in Kenya. The study [24] worked on Tax Planning and Firm Value: Empirical evidence from Nigerian Consumer Goods Industrial Sector. The study [34]

carried out a granger causality test between corporate tax planning and firm value of non-financial companies quoted in Nigeria among others. These researchers tend to establish the determinants of Effective Tax Rates examining various variables such as firm size, leverage, investment in assets, inventory intensity, corporate governance style, firm location etc. while this study on the other hand was designed to focus on how tax planning activities or strategies employed by manufacturing firms would influence the profitability of the firms.

### 3. Methodology

#### 3.1. Population and Sample Size

The population for this study was the 52 Manufacturing Companies Quoted in Nigeria as at 17<sup>th</sup> December, 2018, for a period of 10 years (2008-2017). Forty six (46) companies were selected out of the 52 manufacturing companies listed on the Nigeria Stock Exchange as at 17<sup>th</sup> December, 2018. Stratified random sampling technique was employed to select forty six companies from the various sectors of manufacturing companies. The sample size of this study was calculated using the Taro Yamane formula which was postulated by Yamane in 1973.

$$n = N/1+N(e)^2$$

The statistical tool for this study was Multiple Regression Model. This was used to predict the value of the variables

with the aid of E-views 7. The adjusted  $R^2$  was used as a measure of explanatory power of the various variables and it was the proportion of the total variation in the dependent variable that was explained by the variation in the independent variable. The data was a panel data and the multiple regression formula was:

$$ROA = \beta_0 + \beta_1 TCN_{it} + \beta_2 CIY_{it} + \beta_3 R\&D_{it} + u_{it}$$

#### 3.2. Mathematical Model

To evaluate

$$Y = f(X)$$

Y = Dependent variable (Profitability) (PY)

X = Independent variable (Tax Planning Strategies) (TPS)

X and Y are broken down as follows:

$$Y = (y_1)$$

$$X = (x_1, x_2, x_3)$$

Where  $y_1$  = Return On Assets (ROA)

and  $x_1$  = Thin Capitalization (TCN)

$x_2$  = Capital Intensity (CIY)

$x_3$  = Research and Development Cost (R&D)

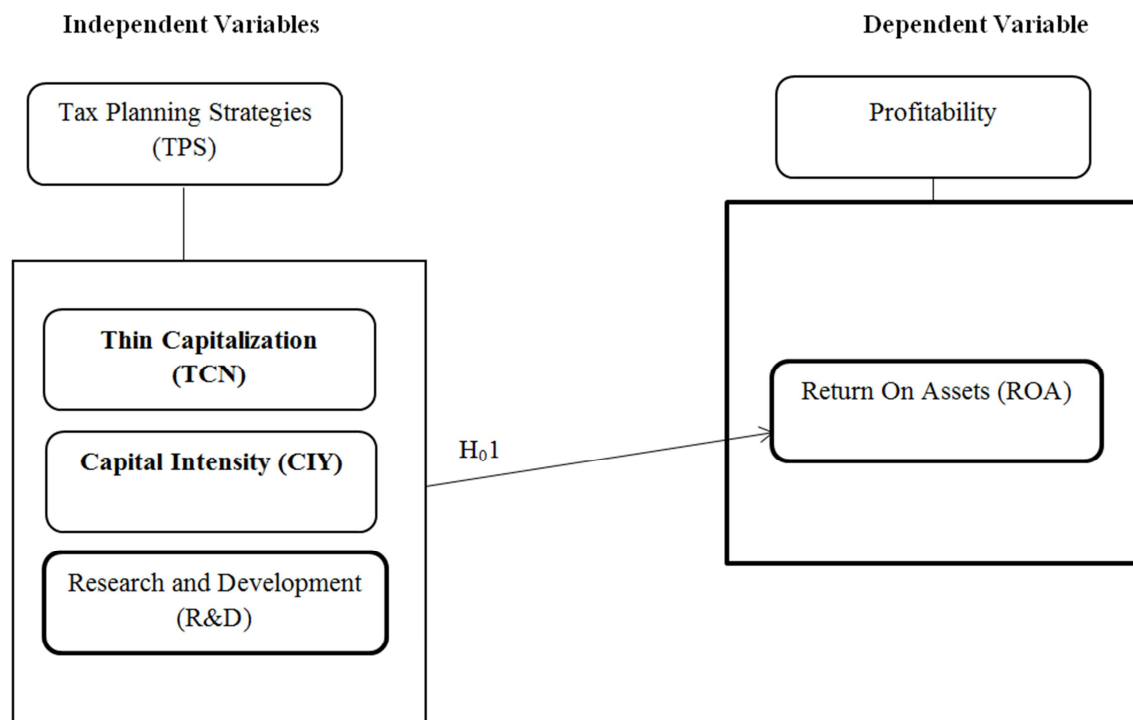
These will result to an expanded functional model of:

$ROA = f(TCN, CIY, R\&D)$  -----Function 1

Which is expressed as:

$$ROA = \beta_0 + \beta_1 TCN_{it} + \beta_2 CIY_{it} + \beta_3 R\&D_{it} + u_{it}$$

#### 3.3. Researcher's Conceptual Model



Source: Candidate's Concept (2018)

**Figure 1.** Conceptual Model Summary.

## 4. Results and Discussion of Findings

### 4.1. Descriptive Analysis

This section of the analysis provides an overview on the data set while attempt is also made to describe the main attributes of the data. The descriptive analysis of the panel data obtained is done through numerical representation shown on Table 1. The numerical representation shows the mean, maximum, minimum, and standard deviation of Return on Assets (ROA), Thin Capitalization (TCN), Capital Intensity (CIY) and Research and Development Cost (R&D).

Table 1. Descriptive statistics.

|              | ROA       | TCN      | CIY      | RD       |
|--------------|-----------|----------|----------|----------|
| Mean         | -0.589932 | 0.835315 | 0.552013 | 0.165222 |
| Median       | 0.065881  | 0.559817 | 0.550825 | 0.000000 |
| Maximum      | 21.27127  | 17.97722 | 2.618771 | 16.89080 |
| Minimum      | -123.2749 | 0.000000 | 0.000000 | 0.000000 |
| Std. Dev.    | 8.095938  | 1.802557 | 0.278083 | 1.371217 |
| Observations | 460       | 460      | 460      | 460      |

Source: Researcher's Study, 2019

#### Interpretation

Table 1 shows the summary statistics of all the variables obtained from the sampled listed companies for the period under study. The maximum value of profitability measure of Return On Assets (ROA), is 21.27127. The profitability of the sampled firms, has a positive value for the foreseeable future. ROA has a mean value of -0.589932 and standard deviation of 8.095938. The standard deviation measures the extent of dispersion from the mean and depicts the level of volatility of the series. In this regard, there is a high presence of volatility to the tune of 8.095938 in ROA. This is further

seen and confirmed from the difference and distance between the minimum value (-123.13621) and maximum (21.27127). This depicts that the ROA for the sampled companies for the sampled period varied over the period under review. While some companies in some years were seen to have negative returns as shown from the minimum value lower than 0, some companies in some years are seen to have improved their returns with maximum value higher than the value of 1.

TCN, CIY, and RD show mean values of 0.835315, 0.552013 and 0.165222 respectively, and standard deviation values of 1.802557, 0.278083 and 1.371217 respectively. This depicts a lower dispersion of all measures of Tax Planning Strategies from their mean values. These suggest a lower variation and volatility in the measures of Tax Planning Strategies. This is further confirmed from the difference and distance between their minimum values (0.000000, 0.000000 and 0.000000 respectively) and maximum values (17.97722, 2.618771 and 16.89080 respectively) as shown in table 1. This depicts that some sampled companies for the sampled period had varied level of thin capitalization, capital intensity, research and development cost amongst themselves.

However, the direction and extent of relationship among these variables cannot be determined from the numerical representation. As such, the regression analysis in the next section shows the extent and direction of this relationship in line with the stipulated objectives of the study.

### 4.2. Testing of Hypotheses

Research Hypothesis 1 ( $H_01$ ): There is no significant effect of Tax Planning Strategies on Return On Asset of Quoted Manufacturing Companies in Nigeria.

Table 2. Regression Analysis for Model One.

| Variable                                 | Coefficient | Std Error | t-Stat.   | Prob.       |
|--|-------------|-----------|-----------|-------------|
| C  | 0.650171    | 0.852306  | 0.762838  | 0.4460      |
| TCN                                      | -0.049514   | 0.213712  | -0.231687 | 0.8169      |
| CIY                                      | -2.172188   | 1.396046  | -1.555987 | 0.1204      |
| R&D                                      | 0.002013    | 0.277870  | 0.007244  | 0.9952      |
| R-squared                                | 0.006013    |           |           |             |
| Adjusted R-squared                       | -0.000527   |           |           |             |
| F-Statistics                             | 0.919439    |           |           |             |
| Prob (F-Stat)                            | 0.431292    |           |           |             |
| Diagnostic Tests                         | Statistics  |           |           | Probability |
| Hausman Test                             | 0.498868    |           |           | 0.9191      |
| Breusch-Pagan LH Serial Correlation Test | 39.74437    |           |           | 0.0000*     |
| Heteroskedasticity: Breusch-Pagan LH     | 2.815031    |           |           | 0.4210      |
| Normality test: Jarque-Bera              | 4783739.0   |           |           | 0.00000*    |

Dependent Variable: Return On Assets (ROA); Obs.: 460. C = Constant, TCN = Thin Capitalization, CIY = Capital Intensity and R&D = Research and Development Cost. \*significant at 5%

Source: Researcher's Study, 2019

#### Interpretation of Diagnostic Test

The result of the hausman test showed a probability value of 0.9191 which is greater than 5% level of significance hence, the null hypothesis of the hausman specification test cannot be rejected by the study. As such, the model was estimated using random effect estimation technique. The  $p$ -

value of the F-statistics for the Breusch-Pagan LH Serial Correlation Test of 0.0000 is less than the 5% level of significance and this shows that the null hypothesis has no presence of serial correlation and is rejected. Also, the Heteroskedasticity Test shows a  $p$ -value of 0.4210 greater than the 5% level of significance; as such, the null hypothesis

that there is no heteroskedasticity is accepted. Furthermore, the Jarque Bera statistics indicated that the model is not normally distributed as its *p-value* is less than 5% the level of significance for the study.

#### Model 1

$$ROA = f(TCN, CIY, R\&D)$$

$$ROA = \beta_0 + \beta_1 TCN_{it} + \beta_2 CIY_{it} + \beta_3 R\&D_{it} + u_{it}$$

$$ROA = 0.650171 - 0.049514TCN_{it} - 2.172188CIY_{it} + 0.002013R\&D_{it} + u_{it}$$

#### Interpretation

The result of the regression analysis on Table 2 shows that tax planning strategies measured by Thin capitalization (TCN) and Capital intensity (CIY) have negative insignificant effect on profitability measured by Return on asset (ROA) while Research and Development cost (RD) has a positive insignificant effect on ROA. This is indicated by the signs of the coefficients, that is  $\beta_1 = -0.049514 < 0$ ;  $\beta_2 = -2.172188 < 0$ ;  $\beta_3 = +0.002013 > 0$ . The size of the coefficients showed a 1% increase in TCN will lead to a -0.0495% (decrease) in profitability, 1% increase in CIY will lead to a -2.1721% (decrease) in profitability and 1% increase in R&D will lead to a 0.002% (increase) in profitability. TCN and CIY are inconsistent with the *a priori* expectation while ROA is consistent with a *a priori* expectation, as it was expected that measures of tax planning strategies of TCN, CIY and R&D respectively will have positive effects on ROA if they are properly managed. Also, the probability of the individual t-statistics stood at 0.8169, 0.1204, and 0.9942 for TCN, CIY and RD respectively, which shows that measures of tax planning strategies (TCN, CIY and RD) has an insignificant relationship on ROA at 5% level of significance acceptable in this study.

The overall coefficient of determination of adjusted  $R^2$  which is the explanatory power of the model is -0.000527. This implies that within the model context, tax planning strategies are responsible for 0% variations in return on assets while the remaining 100% is explained by other factors that can impact on the dependent variable outside the model. The negative position of adjusted  $R^2$  is the reason for the negative coefficient.

Also, this is further emphasized by the probability of the F-statistic of 0.431292 which shows that the regression result is not statistically significant because this is greater than 5%, the level of significance adopted for this study. In addition, at the level of significance of 0.05, and F-statistics of 0.919439, the *p-value* of 0.431292, the null hypothesis one that Tax Planning Strategies have no significant effect on Return on Asset of Quoted Manufacturing Companies in Nigeria was accepted. Therefore, from the regression estimates, there is no significant effect of Tax Planning Strategies on profitability of Quoted Manufacturing Companies in Nigeria.

#### 4.3. Discussion of Findings

The second section focused on testing the hypotheses

previously stipulated through the use of regression analysis. The first model stated that tax planning strategies measured by Thin capitalization (TCN) and Capital intensity (CIY) have negative insignificant effect on profitability measured by Return on asset (ROA) while Research and Development cost (RD) has a positive insignificant effect on ROA. This is indicated by the signs of the coefficients, that is  $\beta_1 = -0.049514 < 0$ ;  $\beta_2 = -2.172188 < 0$ ;  $\beta_3 = +0.002013 > 0$ . More so, the probability of the individual t-statistics stood at 0.8169, 0.1204, and 0.9942 for TCN, CIY and RD respectively, which shows that measures of tax planning strategies (TCN, CIY and RD) has an insignificant effect on ROA at 5% level of significance acceptable in this study.

The independence of tax planning strategies is responsible for 0% variations on ROA while the remaining 100% is explained by other factors that can impact on the dependent variable outside the model. There is no significant effect of Tax Planning on ROA of Quoted Manufacturing Companies in Nigeria. Therefore, the findings support the studies conducted by the studies [17, 35] and [20]. By stating that there is an insignificant effect of tax planning strategies on return on assets. Conversely, the findings did not align with the studies conducted by the studies [24, 20] and [17] by stating that there is a significant effect of tax planning strategies on return on assets.

#### 4.4. Implication of Findings

The findings of this study have implications for the diverse users of accounting information, standard setters, investors, regulators, policy makers, professionals, scholars and the general public. These implications are outlined as follows:

Government can adopt these findings from this research to review and also make policies on tax planning strategies that will be favorable to companies so as to increase profitability and also ensure compliance to allow for economic growth and encouragement of new businesses to start in any sector since it is an advantage in adopting tax planning strategies.

Manufacturing companies: The implication of these findings to the manufacturing sector is that tax planning strategies especially thin capitalization and capital intensity should be reduced or given a proper management to increase return on assets (profitability). This implies that companies should have a balanced financing method and reduce the amount spent on non-current assets to increase performance and profitability.

Regulators and Standard setters: The implication to regulators is that they have to ensure that companies comply with tax laws to avoid fines and penalties and also ensure that standards are set on tax planning strategies and directives given on the principles to enable companies make effective decisions.

Investors: These findings imply that investors should consider tax planning strategies adopted by the companies to improve profitability and also consider others factors that affect profitability before making investment decisions.

Further researchers: The implication of the study to them

is that the findings will serve as a contribution to knowledge and also serve as an avenue for them to carry out research using other variables and factors that affects profitability and encourage tax planning strategies in both developing and developed countries.

## 5. Conclusion and Recommendation

### 5.1. Conclusion

The study examined the effect of tax planning strategies on profitability of manufacturing companies that are quoted on the Nigerian Stock Exchange. The regression estimates show that Thin Capitalization and Capital Intensity had negative effects on profitability while Research and Development cost had a positive effect on profitability. Thus this research concludes that tax planning strategies have both negative and positive significant effects on profitability of quoted manufacturing firms in Nigerian Stock, especially as it affects the years that were reviewed.

### 5.2. Recommendations

The following recommendations are made based on the findings and conclusion of this study:

Thin capitalization as a finance source should be reduced by Tax Managers and Finance Officers to balance the source of income of a manufacturing firm and it should be properly managed with the help of tax experts to be able to maximize its benefit as a tax planning tool in order to increase its contribution to the profitability.

Capital intensity should be properly managed by Tax Managers and Finance Officers to harness its tax planning benefits to the firm since manufacturing firms make use of Non-Current Assets (NCA) as much as possible. Tax experts should be engaged to manage the acquisition and disposal of NCA in order to maximize its benefit as a tax planning tool in order to increase its contribution to the profitability of manufacturing firms in Nigeria.

Research and Development should be harnessed and properly managed by Tax Managers and Finance Officers to increase its contribution to the profitability of manufacturing firms.

### 5.3. Contribution to Knowledge

This study made the following contributions to knowledge:

**Concept:** The study was on tax planning strategies and profitability of manufacturing companies that are listed on the Nigerian Stock Exchange. The overall result showed that there is no significant relationship between tax planning strategies and profitability of Quoted Manufacturing firms in Nigeria but the Research and Development as a tax planning tool in particular has been discovered to be beneficial to profitability of manufacturing firms and as such should be enhanced for maximum benefit.

**Theory:** The study discovered that tax planning strategies are still been employed by firms to modify as many activities as possible within the ambits of the tax laws so as to reduce

their tax liabilities and to benefit the owners and part-owners of the business irrespective of the tax rate. Supporting that Hoffman's tax planning theory is still quite relevant as well as Agency and Stakeholder's theory.

**Literature:** The findings of the study brings to the limelight that Research and Development as a tax planning tool can affect positively the profitability of quoted manufacturing firms in Nigeria when properly managed and contributes to enhance existing literatures on this particular school of thought. It should also serve as a reference point to other scholars and researchers.

**Empirics:** This work contributes to existing findings and empirics that except for Research and Development, that tax planning strategies have no significant effect on profitability of manufacturing firms in Nigeria and that these strategies should be reconsidered.

**Policies:** In the course of this work, it was observed that Nigeria does not have a policy on thin capitalization and contributes that a thin capitalization policy that will be friendly to the manufacturing companies should be considered and flexible enough to benefit the manufacturing firms in Nigeria.

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