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Tax Obligations and Financial Performance of Listed Manufacturing Firms in Nigeria

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A B S T R A C T

The study examined the impact of tax on the financial performance of some listed manufacturing companies in Nigeria. A simple panel and linear regression were used to analyse the data collected through secondary source. It was found out from the results of the regression analysis that probability value of the independent variable as (0.0001) is less than 5% significance level that tax had significant impact on the investment of manufacturing firms likewise tax has significant impact on the profitability of manufacturing firms. It was recommended that the government should ensure they make tax policies that would favour the manufacturing firms and not force them out of businesses which would also affect the economy as a whole.

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INTRODUCTION

Government involvement in economic activities in a nation is greatly determined and influenced by the type of economic system the county operates. In a mixed economic system, which is primarily practiced by most developing countries including Nigeria, where the public and private sector are in control of the management of the system. The public sector being the coordinating agent for manufacturing industry and others, it also stimulate and influence the market forces of demand and supply through its policy instruments (Chude and Chude, 2015).

The two main government policy instruments are monetary and fiscal policy through which it controls the developmental roles of the manufacturing industry. The most controversial component of fiscal policy is the tax policy because of its role on the performance of manufacturing firms. Developing countries study shows that reduction of marginal tax rates, or by replacing the federal income tax with a consumption tax, the work effort, saving and investment can be increased, resulting in a great increased, resulting in a great increase in a firms output performance. An increase on the tax rate on the producer side tends to discourage investment in terms of capital accumulation and other assets needed to increase the capacity of the organization which may be detrimental to output in the long-run (Junaidu and Hawau, 2018).

The activities of manufacturing firms significantly affect the development process of any economy which reflects openly in job creation and improved tax contribution in the developed economies. In recent times, there has been a declining performance of manufacturing firms in Nigeria which have caused a decrease in the rate of productivity despite multifarious strategies and corrections put in place by government (Ogbeiwi and Okoughenu, 2020). This sluggish performance has led to unemployment, which is as a result of inadequate electricity supply, high exchange rate, inadequate financial support and lack of proper harmonization and coordination of tax policy and this has resulted to multiplicity of taxes (Salawu and Adedeji, 2017).

Government keeps complaining of shortfall of tax revenue from manufacturing industry, this unpleasant performance in the industry has been linked to problem of multiplicity of taxes. In the last decade, the performance of manufacturing industry has been subject to various debates among scholars due to its ability to encourage pro-poor growth(Adu, 2023).

The effect of tax on the investment of manufacturing firms has been a great concern to many persons. Tax policies in Nigeria are making manufacturing firms to be forced out of business which would affect the economy as a whole. Tax is a liability to be incurred by firms; they need to look at ways in which their tax burden can be reduced. Mismanagement of tax revenues brings negative effect on the investment decision of the firm. Business tax reflects on business costs. Multiplication of tax and high tax rates are problems facing manufacturing firms in Nigeria. Though the primary aim of any firm is to make profit, so taking more of their profits into the purse of the government in the name of tax would discourage them. Since what is left to invest back to the firm will now be little.

Tax cuts encourage firms to invest more while increase in tax does the opposite (Oladele and Agbaje, 2017).

Objectives of the Study

This main objective of this study is to examine the effect of tax payment on the financial performance of manufacturing companies in Nigeria while the specific objectives are to:

1. Examine the effect of tax payment on manufacturing firm's investment
2. Examine the effect of tax payment on profitability of manufacturing firms

Research Questions

This study examined the following questions:

1. To what extent does tax have effect on manufacturing firms' investment?
2. How does taxhave effect on the profitability of manufacturing firms?

Research Hypotheses

The hypotheses tested in this research are stated below as:

Hypothesis 1

H_0: Tax has no significant effect on the investment of manufacturing firms.

Hypothesis 2

H_0: Taxhas no significant effect on the profitability of manufacturing firms.

LITERATURE REVIEW

Conceptual Review

Tax

Tax is the compulsory transfer or payment (or occasionally of goods and services) from private individuals, institutions or groups to the government. Tax is defined as a compulsory levy by the government through its agencies on the income, consumption and capital of its subjects. Tax is a concept and the science of imposing tax on citizens. Tax can simply be defined as the process of levying and collection of tax from taxpayers (Ogudu, Kingsley and Akinlosotu, 2018).

Investment

Investment is the commitment of current funds or other resources in the expectation of reaping future benefit. Investment decision has to do with an efficient allocation of capital. Investment decisions by their nature usually involve the allocation of huge funds to investment proposals to yield future benefits. Since the future is uncertain, investment proposals necessarily involve risk. Moreover, long term investment, which is mainly our focus, must have some influence on the perceived value of the company and maximization of profit (Adu and Williams, 2023). Maximization of profit regarded as the proper objective of the firm, thus, since firms must move towards its objectives in a rational manner, they must select from the range of alternative course of action. Before the year 2000; corporate investments continuously increased and highly encouraged. Investment decision making relates to how funds of a firm are to be invested into different assets, in order for the firm to be able to earn highest

possible return. These decisions affect the day to day working of a business and also have financial implications(Adu, 2016).

The investment decision revolves around return on investment (ROI). A firm decides whether to use internal or external funds, debt or owner funds and long term or short term financing. A firms investment decisions are alternatively known as capital budgeting, investment appraisal or capital expenditure decisions (Omodero and Ogbonnaya, 2018).

METHODOLOGY

Source of Data

The study used secondary source of data collection for the two companies.

- **Method of Analysis**
  Regression model is used to examine the effect of tax on manufacturing firms' investment and profitability. The regression models specified in the model are estimated using Panel data regression analysis which involved estimating Random-effect panel analysis and Fixed-effect panel analysis, after which the Hausman test was used to determine which model is best. Analysis were conducted using E-Views 10.0 statistical software.
- **Regression Analysis**
  A simple panel and linear regression model is specified is used to examine the effect of taxation on manufacturing firms' investment and profitability. Based on the objectives, two regression models are specified in the study; investment model and profit model.

Model Specification

- **Investment Model**
  This model was used to examine the effect of tax on manufacturing firms' investment. A panel data regression model is specified due to the nature of variables in the model. As data on two manufacturing firms between 2010 and 2019 is used in the study.
  $Investment_{it} = \beta_0 + \beta_1 Taxation_{it} + \mu_{it}$
- **Profit Model**
  This model was used to examine the effect of tax on profitability of manufacturing firms.
  $Profit_{it} = \beta_0 + \beta_1 Taxation_{it} + \mu_{it}$
  β_0 = Constant of the models
  $\beta_{1,}$ = Marginal rate of the taxes, it is also the coefficient of the independent variables in the models.
  i is the individual firm
  t is the time period

Method of Evaluation

- **A-Priori Expectations**

The expected signs of the coefficient of the regressors are mathematically as follows:

$\beta_1<0$, $\beta_2<0$ and $\beta_3<0$

From theory, it is expected that more or increased level of taxes would reduce the level of profit generated by firms. As a result of this, the independent variable tax predicted negative coefficients.

$\alpha_1 < 0$, $\alpha_2 < 0$ and $\alpha_3 < 0$

From theory, it is also expected that increase in level of taxes would affect investment decision of firms. Based on this, the independent variable in the taxation model is expected to have negative coefficients.

P-value test: It is used to test the individual significance of each of the regressors or independent variables in a model. It is defined as the observed level of significance.

Decision rule: If P-value of coefficient of the variable is less than 5% significance level, then the variable is statistically significant but if If P-value of coefficient of the variable is greater than 5% significance level, then the variable is not statistically significant

F-Statistics test: It is used to test the overall significance of all the independent variables in a model.

Decision rule: If P-value of F-stat in the regression results is less than 5% significance level, then it can be said that in overall, the model is statistically significant. If the probability value of F-stat is greater than 5% significance level, then the model is not statistically significant

RESEARCH RESULT

Descriptive Analysis

This section presents the descriptive analysis employed in this study. The summary statistics analyses the data using some measures of mean and measures of dispersion (Standard deviation, minimum and maximum).

Table 1. Descriptive Analysis of Taxation, Profit and Investment of Dangote Cement Plc

	Mean	Maximum	Minimum	Std. Dev.
Taxation	30272.6	89233	5270.94	34108.5
Profit After Tax	235299	481456	106605	115214
Investment	889650	1404994	310144	409413

Source: Annual Reports of Company between 2010 and 2019

Descriptive analysis of taxation, profit and investment of Dangote Cement Plc is presented in Table 1 above. The table shows that the average value of tax paid by the firm between 2010 and 2019 is ₦30.272 billion, maximum value of tax paid between the periods is ₦89 billion while minimum tax paid between the period is approximately ₦5.3 billion. Mean profit over the period (2010 – 2019) is ₦235 billion, maximum profit is ₦481 billion while minimum profit is ₦106 billion. Average level of investment between the period of study (2010 and 2019) is ₦889 billion, maximum investment between the period is ₦1.4 trillion while the least value of investment is ₦310 billion.

Table 2. Descriptive Analysis of Tax, Profit and Investment of Nestle Plc

	Mean	**Maximum**	**Minimum**	**Std. Dev.**
Tax	9482.491	25440.71	1730.905	8016.805
Profit After Tax	24911.88	45683.11	7924.968	12347.47
Investment	84579.16	169585.9	40241.74	41136.43

Source: Annual Reports of Company between 2010 and 2019

Table 2 above presents the summary statistics of taxation, profit after tax and value of investment of Nestle Plc. The mean value of tax paid between the period of consideration (2010 and 2019) is approximately ₦2.5 billion, maximum value of tax paid by the organization between this period is ₦25 billion while minimum is ₦1.7 billion. Average profit of the firm between the period is approximately ₦25 billion, maximum profit is ₦45.6 billion while minimum is ₦7.9 billion. Mean value of investment of the firm between 2010 and 2019 is ₦84.5 billion, maximum value is ₦169.5 billion while least investment level is ₦40 billion.

Regression Analysis

Panel regression analysis was conducted to achieve the objectives of the study which include; examining the effect of tax on manufacturing firms' investment and examining the effect of tax on profitability of manufacturing firms. Panel regression analysis was adopted in estimating result of the analysis.

Regression Analysis Showing the Impact of Tax on Investment of Manufacturing Firm

$$Investment_{it} = \beta_0 + \beta_1 Taxation_{it} + \mu_{it}$$

Table 3. Regression Analysis Showing Impact of Tax on Investment of Manufacturing Firms

Variables	**Coefficients (β)**	**T-Statistics**	**Prob. Value**
Taxation	-7.262429	-3.244594	0.0048*
C	343000	4.974607	0.0001*
Dependent Variable Investment			Sample: 2010 - 2019 (20 Obs)
R-squared	0.802487		Adjusted R-squared 0.779251
F-statistic	34.53522		Prob(F-statistic) 0.000001
*indicates significance at 5% significance level			

Source: Author's Computation Using E-Views 10.0 (2021)

Table 3 above presents the regression analysis on the impact of taxation on investment of manufacturing firms. From the regression analysis, the coefficient of the independent variable (taxation) is -7.26, this implies that taxation has negative impact on investment. A billion-naira increase in value of tax paid by manufacturing firms will result in 7.26 billion-naira decrease in investment of manufacturing firms. The probability value of the independent

variable (0.0001) is less than 5% significance level and therefore implies that the variable has significant impact on investment.

The R-squared of the analysis (0.802) implies that 80% variations in dependent variable (investment) is explained by the independent variable in the model. This shows that the model is a good fit. The F-statistic of the model (34.535) with probability value of 0.00001 which is less than 5% significance level shows that the model is significant.

Regression Analysis Showing the Impact of Tax on Profitability of Manufacturing Firm :

$Profit_{it} = \beta_0 + \beta_1 Taxation_{it} + \mu_{it}$

Table 4. Regression Analysis showing Impact of Tax on Profitability of Manufacturing Firms

Variables	**Coefficients (β)**	**T-Statistics**	**Prob. Value**
Taxation	-2.030916	-3.208263	0.0052*
C	89735757	4.605108	0.0003*
Dependent Variable Profit			Sample: 2010 - 2019 (20 Obs)
R-squared	0.780016		Adjusted R-squared 0.779251
F-statistic	30.13925		Prob(F-statistic) 0.000003
*indicates significance at 5% significance level			

Source: Author's Computation Using E-Views 10.0 (2021)

The regression analysis showing the impact of taxation on profitability of manufacturing firm is summarized in Table 4 Results of the analysis summarized in the table shows that taxation has negative impact on profitability in the model. This is evident from the coefficient of the independent variable (-2.03). This implies that a billion-naira increase in value of tax paid by manufacturing firms will result in 2.03 billion-naira decrease in profit of manufacturing firms.

The probability value of the independent variable (0.0003) is less than 5% significance level and therefore implies that the variable has significant impact on investment.

The R-squared of the analysis (0.780) implies that 78% variations in dependent variable (profit) is explained by the taxation in the model. This shows that the model is a good fit. The F-statistic of the model (30.139) with probability value of 0.00001 which is less than 5% significance level shows that the model is significant.

Test of Hypothesis

Hypothesis One

H_0: Tax has no significant impact on the investment of manufacturing firms

H_1: Tax has a significant impact on the investment of manufacturing firms

Results of the regression analysis summarized in Table 4.3 above presents the probability value of the independent variable as (0.0001), this value is less than 5% significance level. Therefore, the null hypothesis is rejected and

concluded that taxation has significant impact of investment of manufacturing firms.

Hypothesis Two

H_0: Tax has no significant impact on the profitability of manufacturing firms
H_1: Tax has a significant impact on the profitability of manufacturing firms

Impact of tax on profitability of manufacturing firms as analyzed with regression analysis presented in Table 4.4 shows the probability value of independent variable as 0.0001. This value is less than 5% significance level, as a result of this the null hypothesis is rejected and concluded that tax has significant impact of profitability of manufacturing firms.

Summary of the Findings

The result of the regression analysis showed that taxation has a negative and significant impact on the level of investment and profitability of manufacturing firms. Increase in the value of taxes paid by manufacturing firms will result in decrease in the volume of investment and profit of firms. The sole aim or goal of investors while investing in an organization is to maximize profits. Increase in tax rate or introduction of new tax which invariably results into increase in value of tax paid. With increase in the value of tax paid, the expected profit is reduced, investors who are more concerned about profit making will rather not invest their funds in business whose expected profit is reduced.

CONCLUSIONS AND RECOMMENDATIONS

The research concluded that there is a significant relationship between taxation and investment and profitability of manufacturing firms. Firstly through the analysis, it implies that taxation has a negative impact on investment. That is, increase in the value of tax paid by the manufacturing firm will cause a decrease in their investment. Secondly, the analysis shows the impact of taxation on profitability of manufacturing firms. This means an increase in the value of tax paid will lead to a decrease in profit of manufacturing firms. Hence, high rate of tax on manufacturing firms has a negative effect on a firm's profitability and investment. This might also discourage investors.

The study, after being examined, recommends the following:

i) The government should ensure they make tax policies that will favor the manufacturing firms and not force them out of business which would also affect the economy as a whole.
ii) Government can also encourage manufacturing firms through tax cuts.
iii) Manufacturing firms should be updated on the Company Income Tax Act (CITA) so as to make good investment and tax decisions.
iv) Multiplication of taxes and high tax rates should be scrapped out by the government.

ADVANCED RESEARCH

In writing this article the researcher realizes that there are still many shortcomings in terms of language, writing, and form of presentation considering the limited knowledge and abilities of the researchers themselves. Therefore, for the perfection of the article, the researcher expects constructive criticism and suggestions from various parties.

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