Effect of Corporate Governance Mechanisms on Tax Aggressiveness among Quoted Manufacturing Firms in Nigeria

LAMBE, Isaac, Ph.D

Department of Accounting,
Bingham University,
Karu, Nasarawa State. Nigeria
E-Mail: talk2ice@yahoo.com, Phone Number: +234 8027629054

ORBUNDE, Bemshima, Ph.D

Department of Accounting,
Bingham University,
Karu, Nasarawa State
E – Mail: orbundebemshima@yahoo.com, Phone No: +234 8065312098

AKINPELU, Femi Olusegun

Department of Accounting,
Bingham University,
Karu, Nasarawa State. Nigeria
E-Mail: talk2ice@yahoo.com, Phone Number: +234 8027629054

Abstract

This study is necessitated to assess the effect of corporate governance mechanisms on tax aggressiveness among manufacturing firms in Nigeria. The ex-post facto research design was employed and secondary data (corporate governance mechanisms - board size, board diversity, and tax aggressiveness measure of effective tax rate) involving forty-four (44) publicly quoted manufacturing companies were obtained for a period of 2008-2020. The study employed panel data analysis which is a combination of time series and cross sectional data analysis. The multiple regression equation was set up to investigate the hypothesized relationships between the dependent variable (tax aggressiveness) and independent variables (board size, board diversity, independent directors, proportion of non-executive directors to executive directors and return on asset as a control variable) in this study. Based on the analysis of data, it showed that when taken individually, board size and board diversity, both have a positive, but insignificant effect on tax aggressiveness, while return on asset (used as a control variable) has a positive and significant effect on tax aggressiveness. Based on the findings of the study, the study concluded that there exist a significant relationship between corporate governance mechanisms and tax aggressiveness of quoted manufacturing firms in Nigeria and it was recommended among others that Individuals, partnership business, shareholders and government who employ the services of board of directors in Nigeria should ensure that the board members have the right size (coupled with the right competence and experience), that can be brought to bear positively on the organization.

Keywords: Corporate Governance, Tax Aggressiveness, Board Size, Board Diversity, Effective Tax Rate

INTRODUCTION

The relationship between corporate governance mechanisms and tax aggressiveness has in recent time received great attention in the business world, Nigeria not an exception. This renewed interest stems from the fact that, for tax burden of a business concern to be minimized, tax aggressiveness becomes imperative for management. Corporate governance provides the framework for attaining a company's objectives; it encompasses practically every sphere of management, from action plans and internal controls to performance measurement and corporate disclosure. Management are saddled with several responsibilities of which wealth maximization for shareholders is very important. Tax aggressiveness is an effort to apply lawful hitches to circumvent recompensing or minimize the payment of tax. Hairul, Ibrahim and Siti (2014) viewed tax aggressiveness as an intentional reduction in the precise corporate tax liabilities of a firm. Martinez, Ribeiro and Funchal (2015), are of the opinion that tax aggressiveness gave birth to certain terminologies such as tax management, tax planning, tax sheltering and tax avoidance in

accounting literature and these terms are interchangeably used with tax aggressiveness. Tax aggressiveness, the subject matter of the study, is the legitimate and legal way of paying less tax or not paying at all (Oyebanji & Oyebanji, 2017). According to Armstrong, Blouin, Jagolinzer and Larcker (2015), tax avoidance is a deliberate effort to minimize the amount of taxes that should be paid, by looking for legal loopholes so as to imply their actions do not violate laws and regulations in the related state.

Corporate Governance deals with the way the investors make sure they get a fair return on their investment. In Corporate Governance, there is a clear distinction between the role of the owners of a company (the shareholders) and the managers (the executive board of directors) when it comes to making effective strategic decisions which tax planning could be one of those decisions. According to Okafor (2009) posits that the main idea behind corporate governance is to direct and control the activities of corporate entities in order for interested parties have returns on their investment from the companies. In Nigeria, studies on the effect corporate governance mechanisms and tax aggressiveness have remained unexplored as there is dearth of research in this area. Some studies (such as Uniamikogbo, Emmanuel, Bennee, Emmanuel&Adeusi, Sunday Amos(2019), Onyali & Okafor, 2018; Oyesola & Adelabu, 2017; Odoemela, et al., 2016; Olayinka & Francis, 2016; Okoye & Akenbor, 2010) have examined corporate governance and tax planning in Nigeria from different perspective, though with mixed findings and inconclusive. It was in this vein that this study will be carried out to explore the effect of corporate governance mechanisms on tax aggressiveness among publicly quoted manufacturing firms in Nigeria between 2008 to the year 2020.

LITERATURE REVIEW

Conceptual Framework

Tax Aggressiveness

Tax aggressiveness is an act that has the objective to reduce taxable income through tax planning as well as using methods that are either classified or not classified as tax evasion. Although not all actions taken are against the rules, the more the methods used by the company should make the company assumed to be more tax-aggressive (Frank et al., 2009). By doing tax aggressiveness, the company can minimize the payment of income tax they owe. The smaller the amount of the income tax expense paid by the company, the higher level of tax aggressiveness is. Conversely, the bigger the amount of corporate income tax payment, the lower the level of tax aggressiveness. Tax aggressiveness can be done in which anyone does not violate the law (tax planning) as well as breaking the rules (tax evasion), but they should be more tax aggressive to be agents' unlawful actions. Hite and McGill (1992) and Murphy (2004) also argue that the tax aggressiveness reporting is a situation when a company conducts a policy of certain taxes and one day there is a possibility that the tax policy will not be audited or will give rise to a legal

Tax aggressiveness is generally defined as the procedure of arranging one's affairs in order to defer, decrease or even eliminates the amount of taxes to be paid to the government (Pniowsky, 2010). Tax aggressiveness can be described as an act that has the objective to reduce taxable income through tax planning as well as using methods that are either classified or not classified as tax evasion. Tax aggressiveness refers the effort of corporate entities to reduce tax payments using aggressive tax planning activities and tax avoidance (Chen et al., 2010). Frank et al. (2009) noted that tax aggressiveness is the manipulation corporate entities engage themselves in order to lower tax income due to a kind of tax planning that can be considered as tax management. This concept may have multiple conceptualizations, references and even different ways to measure, but most of them have the same meaning and the same purpose but differs in their repercussions on the companies' health. According to Bruce et al. (2007), tax aggressiveness can be defined as a simple trigger of tax management activities that corporate entities utilized for tax planning and have an arrival point for tax evasion. The belief is that tax aggressiveness reduces tax returns. Aggressive tax represents different handling activities to lower taxable income that

can be legal or illegal. This study considered tax aggressiveness as a strategy employed by management of corporate organizations, a set of processes, practices, resources and choices whose objective is to maximize income after all corporate entities as well as their liabilities owed to the state and other stakeholders.

Corporate Governance

Corporate governance is the way or manner in which organizations are controlled and directed. It refers to the collection of mechanisms, processes and relations used by various parties to control and to operate a corporation. Governance structures and principles identify the distribution of rights and responsibilities among different participants in the corporation (such as the board of directors, managers, shareholders, creditors, auditors, regulators, and other stakeholders) and include the rules and procedures for making decisions in corporate affairs. Corporate governance is necessary because of the possibility of conflicts of interests between stakeholders, primarily between shareholders and upper management or among shareholders.

Board Size

This entails the total number of directors that made up the corporate board of an organization which must be of an appropriate mix that could offer diversity and help firms with the security of critical resources, hence, reduce uncertainties in the environment (Pearce &Zahra, 1992; Goodstein, Gautum, & Boeker, 1994). Management policy of the company to a large extent is determined by the sizeof the board. Board size therefore refers to the total number of directors on the board. Board size and tax aggressiveness have a significant relationship as it is reflected that board size has a significant influence on the availability of tax aggressiveness (Lanis & Richardson, 2011).According to SEC (2003), all listed companies in the Nigerian Stock Exchange should have a sufficient board size relative to the scale and complexity of the company's operation and be composed in such a way to ensure diversity of experience without compromising independence, compatibility, integrity and availability of members to attend meetings and that the board size should not be less than five (5) comprising executives and non-executives members. A study by Lanis and Richardson (2011) found a significant association between the number of board size and tax aggressiveness. Furthermore, Dimitropoulos and Asteriou (2010) study found a relationship between the board size and the informational power of the accounting outcomes.

Board Diversity

This is the number of females represented on the board. The female board participation connotes where at least one female director exists on the board. The developing countries, such as Nigeria is beginning to recognize the fundamental role played by board diversity in an organization. Croson and Gneezy (2009) showed that the women are more risk averse than men, particularly in certain economical domains, and they are less involved than men in non-ethics behaviors. Kastlunger, et.al (2010) believed that women should expose higher levels of tax compliance. Nevertheless, the men should show important levels of tax evasion. The tendency of the men for the evasion of taxes is explained by several factors as the social differences.

Return on Asset

Return on Assets (ROA) is a measure of the profitability level of a firm, measured by the relationship between the net income and the total assets. Richardson and Lanis (2007) used another indicator to measure the profitability of the company. They used the relationship between the income before tax and the total assets. It is worth to note that effective tax rates (tax aggressiveness) are connected to the net book income, which justifies the measurement employed in our study. Thus, in this study, ROA was introduced as an intervening variable to moderate the effect of corporate governance on tax aggressiveness among quoted manufacturing firms in Nigeria.

Empirical Framework

Quite a number of studies have examined corporate governance on tax aggressiveness, earnings manipulation and a host of other variables in developed and developing countries. However, there are few studies on the relationship between corporate governance and tax aggressiveness using the manufacturing sector in Nigeria. Martinez, Santana and Sena (2021), investigated Tax Aggressiveness as a determining factor of Accounting Conservatism in Brazil. The study period was from 2010 to 2019 for Brazilian firms from B3. Statistics of the variables used to analyze the relationship between conservatism and tax aggressiveness was the primary regression model. For the research purpose, the Basu model was adopted, adapted with tax aggressiveness controls. The findings show a significant relationship between tax avoidance and conditional accounting conservatism. That is, more tax-aggressive firms tend to use more conservative accounting. The results provide insights that firms with higher effective tax rates are less inclined to use conservatism. It is recommended that the nature of conditional conservatism and tax be appreciated in more detail. Accounting practice indicates that Brazilian firms prefer Goodwill amortization, impairment loss of long-lived assets, and inventory recorded lower in cost and market. Bashiru, Ba'ba and Bukar (2020) in their study examined the impact of Corporate Governance Attributes on Tax planning of listed Nigerian Conglomerate Companies The study adopts ex-post facto research design and utilized panel data from annual reports and accounts of the listed companies for the period of five years (2014-2018). The Data were analyzed using a panel regression technique to assess the effect of the independent variables on the dependent variable. Housman specification test was conducted to choose between fixed and random effect estimation and the p-value is 0.9863 which insignificant. Therefore, results from random effect estimation model was interpreted which indicates a negative and significant relationship between CEOT, FSIZE and ETR and a positive relationship between BSIZE and ETR. Therefore, the study concludes that corporate governance mechanism plays a significant role in tax planning of listed Nigerian Conglomerate Companies. The study also recommends that tax authorities to undertake tax audit and investigation to trace any illegal tax activities that may lead to tax evasion.

Uniamikogbo, Bennee and Adeusi, (2019) investigated the effect of corporate governance on tax aggressiveness in Nigeria covering periods from 2013-2017. They adopted four variables; gender diversity, board size, CEO duality, and ownership structure as proxy for Corporate Governance while Effective Tax Rate was used to represent Tax aggressiveness in the Oil & Gas marketing firms in Nigeria. Data generated were analyzed using descriptive statistics and Ordinary Least Square (OLS) regression. Findings from the study showed that a positive and significant relationship exists between gender diversity, board size and tax aggressiveness while a negative but significant relationship subsists between CEO duality and tax aggressiveness. Negative and insignificant relationship exists between ownership structure and tax aggressiveness in the Nigerian Oil & Gas marketing firms. The study recommended that audit committee of firms should be backed up with the obligation of appraising tax assessment and returns in order to avoid any form of illicit strategic tax behavior by management. Onyali and Okafor (2018) examined the effect of corporate governance mechanisms on tax aggressiveness among selected manufacturing firms in Nigeria using the ex-post facto research design. Data was derived from the financial statements of Forty- four (44) listed manufacturing firms on the Nigerian stock exchange (NSE) and the NSE fact book as at December, 2016 for the period 2005-2016. The data were analysed using the Ordinary Least Square technique with its Best Linear Unbiased Estimate (BLUE) Property. Findings revealed that board size has no significant effect on tax aggressiveness while board diversity, independent director and proportion of nonexecutive directors to executive directors have a significant impact on tax aggressiveness. The study recommended among others that quoted manufacturing firms in Nigeria should pay less attention to the size of their board, but rather focus on the quality and integrity of the members of the board. Besides, SEC and CBN code of corporate governance provisions should be strictly adhered to, by firms which provide that a firm should have one (1) and two (2) independent directors respectively. This is necessitated as the presence of independent directors ensures the independence of the board.

Oyeleke, Erin, and Emeni (2016) investigated the effect of Boards size on corporate tax aggressiveness using a sample of 11 listed banks over the period of 2012-2014. Using cross sectional time-series research design as the blue print for data collection in this study, data collected were analysed using Statistical

Package for Social Sciences (SPSS) 21. The study provides evidence that a positive and non-significant association exist between female directors and tax aggressiveness after controlling for firm characteristics and governance mechanisms. In addition, the interaction of board size with female directors is significantly associated with the reduced level of tax aggressiveness. The results are consistent with the 'women risk aversion' theory which stipulates that the different attitude of females to excessive risks can project upon corporate policies and decisions. However, the low representation of women in executive positions and on the board limits how their influence is perceived. The study also made some recommendations amongst which include that banks should be encouraged, or otherwise mandated to appoint women as board members to take advantage of their expected benefits. Dridi and Adel (2016) examined the influence of corporate governance on earnings manipulations using book-tax differences (BTD). The study found that ownership structure is a fundamental corporate governance measure or variable that affects BTD. Sample of 21 corporations quoted on the Tunisian stock market during the period 2003-2012 were analyzed by employing regression analysis to test the prediction that the governance measures or variable reduces the possibility of earnings and tax aggressiveness. The findings of the study was consistent with prior literature that a higher percentage of the boards' shareholdings and dual service duties performed by the board chairman result in higher book-tax difference (BTD). The study recommends that future research must consider the executive compensation as an element. This study is a new stream of research on tax-accounting divergence in Tunisia.

Kerr, Price and Roman (2016) investigated the relationship between the strength of corporate governance and tax avoidance among Mexican firms prior to the governance reform in 2000. The variable employed were size, changes in cash, market value of equity, tax reform and governance index among others. Using a regression approach, the study found that governance measures is generally unaffected by equity incentives. Also, that tax avoidance decreases significantly following the implementation of the governance reform in Mexico. The implication of their result is that there is a causal link between the strength of governance systems and tax evasion. However, the study did not find a significant relationship between the percentage of independent directors and tax avoidance which may suggest the ineffective role of independent directors among Mexican firms. The study recommends that governance reform and better firm-level corporate governance both lead to lower levels of tax avoidance. On the basis of empirical review, it was found that there are scanty empirical evidence on the relationship between corporate governance and tax aggressiveness, especially in developing country like Nigeria. Hence, the need of the study to investigate whether such scenario that holds in other developed countries may hold in Nigeria and to fill the time gap in literature on the relationship between corporate governance measures of board diversity and size, the study considers period between the year 2008 and 2020.

Theoretical Framework

The theoretical framework of this study is premised on the agency theory (AGT). AGT emphasizes the agency problems arising from the separation of ownership and control. AGT emphasized the connection between providers of corporate finances and those entrusted to manage the affairs of the firm. Extant literature on corporate governance mechanisms has identified the stakeholder theory and agency theory as two prominent theories upon which corporate governance mechanisms can be underpinned. Thus the theoretical framework of this study is premised on the agency theory as propounded by Jensen and Meckling (1976). This is because the agency theory defines the problem of interest divergence that represents a crucial subject to all economic entities due to the separation of ownership and control.

Agency Theory

The agency theory emphasized the connection between providers of corporate finances and those entrusted to manage the affairs of the firm. According to Jensen and Meckling (1976), agency relationship is a contract under which one or more persons (the principals) engage another person (the agent) to perform some service on their behalf which involves the delegation and concentration of control on the board of directors (agent) (as cited in Laniset al, 2011). Furthermore, AGT explained the variations in

decisions; that the two parties often have different goals and, different attitudes toward risk (Cheung, Jiang, & Limpaphayom, 2010). The AGT also assumes that tax management is a firm's strategic choice that is defined by an employment contract (actual or implied) between shareholders and tax managers. Chen and Chu (2005) indicated the suboptimal level of employment contracts resulting from a firm's tax avoidance strategy for two reasons. First, managers should be assured with ex ante compensations for future efforts to reduce tax liabilities. Thus, the level of compensation is not tied with the level of managers' actual effort. Second, managers' attempt to reduce a firm's tax liabilities would compromise the integrity of its internal control systems. Thus, managers could create on purpose and take advantage of the opaque internal control function for their own personal gains at the expense of shareholders, thus making them tax aggressive.

Stakeholders Theory

The stakeholders' theory provides that the firm is a system of stakeholders operating within the larger system of the host society that provides the necessary legal and market infrastructure for the firm's activities (Khurana, & Moser, 2013). The purpose of the firm is to create wealth or value for its stake holders by converting their stakes into goods and services. Jiraporn, Kim, & Davidson (2005) also suggest that stakeholder theory attempts to address the question of which groups of stakeholder deserve and require management attention. Although stakeholder theory can be many things to many people, it should not be seen as "everything non shareholder oriented." Shareholders are stakeholders. It is a slight shift from a narrowed view (shareholders) to a broader view (stakeholders), as management seeks to satisfy the interest of all stakeholders and not just the shareholders alone. According to Umeana (2018) Tax aggressiveness is an act aimed at minimizing tax liabilities in a planned manner. It is thus pertinent to know that the interest of stakeholders is not adequately protected as a firm becomes tax aggressive. Organizations tend to violate the codes of best practices that suggest that they be ethically and morally responsible to their stakeholders; thus they tend not to be socially responsible by minimizing their tax liabilities. In summary, the agency relationship between providers of corporate finances and those entrusted to manage the affairs of the firm is thwarted by conflict. This problem stems from the fact that the principal agents desire to maximize shareholders wealth and the self-interest agent attempts to expropriate funds.

METHODOLOGY

The ex-post facto design is adopted in this study with specific focus on the longitudinal Panel Series design which is a quasi-experimental study examining how an independent variable, present prior to the study in the participants affects a dependent variable. The secondary data-set, was extracted from the annual published financial statements and accounts of the sampled firms from 2008 to 2020. The population for this study consisted of all the manufacturing firms quoted on the floor of the Nigerian Stock Exchange (NSE) at December 2020. These manufacturing firms are those categorized as Conglomerates, Consumer Goods, Industrial Goods and Construction materials, Textiles, and Building materials and Real Estates. The general form of the panel data analysis model is specified as:

Model:

$T_A = \beta 0 + \beta_1 BS + \beta_2 BD + \beta_3 ROA + e_{it}$

Where:

T_A = Tax aggressive measure
$\beta 0$ = constant
β_1 = coefficient of variable
BS = Board Size
BD = Board Diversity
ROA = Return on Asset (control variable)

e_{it} = error term (assumed to have zero mean and is independent across time period)

RESULT AND DISCUSSION

In order to have glimpse of the data used in the study, a first pass at the data in form of Pre-estimation result focusing exclusively on the descriptive statistics as well as the correlation matrix was carried out, as further explained and articulated below.

Descriptive Statistics

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations obtainable.

Table 1: Descriptive Statistics Result

	TAG	BS	BD	ROA
Mean	1.169030	7.117133	354207.9	1.045667
Median	0.531351	6.000000	0.450942	0.543649
Maximum	4.221109	19.00000	1.01E+08	4.221109
Minimum	0.054038	3.000000	0.050573	0.054038
Std. Dev.	1.113089	2.963630	5180082.	1.015121
Skewness	1.498365	1.110417	16.18196	1.648528
Kurtosis	4.355661	3.893606	284.2274	5.155248
Jarque-Bera	257.8339	136.5802	1909915.	369.7901
Probability	0.000000	0.000000	0.000000	0.000000
Sum	668.6854	4071.000	2.03E+08	598.1217
Sum Sq. Dev.	707.4497	5015.152	1.53E+16	588.3990
Observations	572	572	572	572

Source: E-View 10 Output (2021)

Table 1 presents the descriptive statistics of the effect of corporate governance on tax aggressiveness of quoted manufacturing firms in Nigeria, during the period of 2008 to 2020. The table shows that TAG representing the effective tax rate, which is the measure of tax aggressiveness, has a mean of 1.169030, with a standard deviation of 1.113089, as well as the minimum and maximum values of 0.054038 and 4.221109 respectively. With respect to the overall result of the descriptive statistics, which is based on the raw data set and at 5% level of significance, all the variables of the study (TAG, BS, BD, and ROA) showed that individually, their P-values are less than 5%, therefore, the Null Hypotheses is hereby rejected and it can be concluded that the variables are statistically significant.

Correlation Matrix

Table 2: Correlation Matrix Result

	TAG	BS	BD	ROA
TAG	1.00000			
BS	0.04263	1.00000		
BD	-0.04367	0.01463	1.00000	
ID	0.50172	0.01547	-0.0595	
NED	0.17368	0.00728	-0.0536	
ROA	0.93211	0.04224	-0.0502	1.00000

Source: E-View 10 Output (2021)

Table 4.2 shows the correlation between the dependent variables, TAG and the independent variables, BS, BD and ROA. Generally, a high correlation is expected between dependent and independent variables while a low correlation is expected among independent variables. According to Gujarati (2004), a

correlation coefficient between two independent variables 0.80 is considered excessive, and thus certain measures are required to correct that anomaly in the data

Hausman Test

The Hausman test is a test for model specification in panel data analysis and this test is employed to choose between fixed effects model and the random effects model. Due to the panel nature of the data set utilized in this study, both fixed effect and random effect regressions analysis were run (as shown in appendix). Hausman specification test was then conducted to choose the preferred model between the fixed effect and the random effect regression models. The test basically checked if the error terms were correlated with the regressors. Thus, the decision rule for the Hausman specification test is stated thus; at 5% Level of significance:

H_0: Random effect is most appropriate for the Panel Regression analysis

H_1: Fixed effect is not appropriate for the Panel Regression analysis

As encapsulated above, if the p-value is greater than 0.05 the decision rule is to reject the null hypothesis which states that fixed effect is most appropriate for the Panel Regression analysis (meaning that the preferred model is random effects). Similarly, if the p-value is less than 0.05 the decision rule is to accept the null hypothesis which states that fixed effect is most appropriate for the Panel Regression analysis (meaning that the random effect model is to be rejected).

Table 3: Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.445837	3	0.2172

Source: E-View 10 Output (2021)

The Result of Hausman test shows that the cross-section chi-square statistics value is 4.445837 while the probability values of is 0.2172. This implies that there is enough evidence to accept the null hypothesis which states that random effect is most appropriate for the Panel Regression analysis. It thus stands that error component model (random effect) estimator is most appropriate because the random effects are well correlated with the regressors. Thus, the most consistent and efficient estimation for the study is the Random effect cross-sectional model. Consequently, the result suggests that the random effect regression model is most appropriate for the sampled data because the Hausman test statistics as represented by corresponding probability value is greater than 5%.

This study is guided by the hypothesis stated below:

$H0_1$: Board size has no significant effect on tax aggressiveness among quoted manufacturing firms in Nigeria.

$H0_2$: Board diversity has no significant influence on tax aggressiveness among quoted manufacturing firms in Nigeria.

The result of the estimated regression model is presented below.

Table 4: Panel Regression Result (Random Effect)

Dependent Variable: TAG
Method: Panel EGLS (Cross-section random effects)

Date: 09/22/21 Time: 15:27
Sample: 2008 2020
Periods included: 13
Cross-sections included: 44
Total panel (balanced) observations: 572
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.096089	0.052710	1.822971	0.0688
BS	0.001306	0.006489	0.201314	0.8405
BD	8.58E-10	3.31E-09	0.259018	0.7957
ROA	1.016901	0.016999	59.81956	0.0000
	Effects Specification			
			S.D.	Rho
Cross-section random			0.071212	0.0311
Idiosyncratic random			0.397368	0.9689
	Weighted Statistics			
R-squared	0.863106	Mean dependent var		0.981890
Adjusted R-squared	0.862383	S.D. dependent var		1.072528
S.E. of regression	0.397873	Sum squared resid		89.91605
F-statistic	1193.734	Durbin-Watson stat		1.942652
Prob(F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.868834	Mean dependent var		1.169030
Sum squared resid	92.79353	Durbin-Watson stat		1.882411

Source: E-View 10 Output (2021)

From table 4 above, the coefficient of multiple determinations (R^2) is 0.863106. This indicates that about 86% of the total variations in tax aggressiveness (TAG) is explained by the variations in the independent variables (BS, BD and ROA), while the remaining 14% of the variation in the model is captured by the error term. This indicates that the line of best fit is highly fitted. The standard error test is applied in order to measure the size of the error and determine the degree of confidence in the validity of the estimates.This result implies that the overall regression is both positive and statistically significant at 5%. The coefficient of board size (BS) is 0.001306 that of board (BD) is 8.58, while that of ROA is 1.016901. This shows that BS, BD and ROA are positively all related to TAG, such that a unit increase in BS, BD and ROA will lead to a corresponding increase TAG (although slightly for BS). This result is consistent with 'a priori' expectation which hypothesizes that increase in BS, BD and ROA will lead to a significant increase in TAG and the empirical evidence suggests that the relationship between BS, BD, ROA and TAG is statistically significant. Consequently, when taken collectively and based on the F-statistics value of 1193.734 and the probability (F-Statistics) value of 0.000000, which is less than 0.05, the two null hypotheses of the study is hereby rejected. In other words, the empirical analysis of the study shows that there is evidence to reject the following and accept the alternative:

i. Board size has no significant effect on tax aggressiveness among quoted manufacturing firms in Nigeria.
ii. Board diversity has no significant influence on tax aggressiveness among quoted manufacturing firms in Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study examined effect of corporate governance on tax aggressiveness of quoted manufacturing firms in Nigeria, between years 2008 and 2020. Based on the findings of the study, the study concluded that there exist a significant relationship between corporate governance mechanisms and tax aggressiveness of quoted manufacturing firms in Nigeria. The result and the findings of the study present implication for regulators such as security and exchange commission, financial regulating council and professional bodies within the insurance sector of Nigeria. Based on the findings of the study and its implication on the overall activities of the listed manufacturing companies in Nigeria, the following recommendations are made:

i. Individuals, partnership business, shareholders and government who employ the services of board of directors in Nigeria should ensure that the board members have the right size (coupled with the right competence and experience), that can be brought to bear positively on the organization. This is because the right board size, which is a good driver of competence, are associated with less inefficiencies and improved tax planning and administration of manufacturing firms in Nigerian. Those who are saddled with the responsibility of appointing board members in Nigeria should consider the right board size, which will naturally drive competence and experience, as this will go a long way to improve management activities in the company.

ii. Stakeholders who are interested in the services of quoted manufacturing firms in Nigeria should judge organizations on the basis of effectiveness and efficiency of the board diversity and not just on the size of 'earnings of capital'. This is because large 'earnings or capital' is not necessarily associated with performance and quality management of listed insurance companies in Nigerian. Stakeholders should consider in addition to competence and experience of board members, the right and optimum 'board-mix' inters of board diversity, rather than size of 'earnings and capital' that are likely to be susceptible to compromise and high earnings management of firms.

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