ABSTRACT

This study examined corporate attributes and tax aggressiveness in listed Nigerian companies using fifty (50) companies listed on the Nigeria Stock Exchange (NSE) for a period of six (6) years (2012 – 2017). The objective was to determine relationship between firm size, board size, financial performance, firm age and tax aggressiveness. The Ordinary Least Square (OLS) was employed in estimating the data and testing the hypotheses, the findings revealed that profitability and firm size had a positive and statistically insignificant relationship with tax aggressiveness; while board size, company age had a positive and statistically significant relationship with tax aggressiveness. In line with the finding, we recommend that investors in Nigeria Stock Market should make their investment in shares by watching the accounting data of firms, especially the profitability measures of return on equity to increase dividend yield of companies as they are critical factors in predicting tax aggressive behaviour.

Keyword: Firm size, board size, financial performance, firm age and tax aggressiveness

Introduction

Tax is one of the most significant business costs incurred by firms, and it has a direct impact on profitability and shareholder value. In fact, governments appropriate part of the firm’s benefits through taxes to the detriment of shareholders and management. Given the key objective of maximizing shareholder value, firms have financial incentives to adopt tax strategies that allow them to minimize their taxes. According to Sikka (2010), this behaviour is perceived as a normal, legal and common business practice, meant to reduce the tax burden of firm by taking advantage of the technicalities of the tax laws. The significance of firms’ aggressive tax behaviour is noted in a recent OECD report, which concludes that base erosion constitutes a serious risk to tax revenues, tax sovereignty and tax fairness for OECD member countries and non-members alike (OECD, 2013). However, aggressive tax planning does not always maximize firm value, as it may result in large outlays, following a tax audit and it may damage the firm’s reputation as well.

Corporate tax is generally considered a business cost management therefore attempts to minimize tax expenditures that significantly affect the firm’s operating results and financial position. In fact, corporate managers have no legal or moral obligation to pay a maximum amount of tax, nor do democratic societies require them to do so (Hasseldine &Morris, 2013). A variety of tax strategies may be used, including some that respect the spirit of the law and others that are considered aggressive. Aggressive tax planning allows shareholders to maximize their wealth because the
resultant tax savings belong to them (Weisbach, 2002). Nevertheless, tax aggressiveness does not always lead to maximization of firm value when the firm has to pay large outlays including penalties, interest following a tax audit and the ethical consideration of the arguments of tax aggressiveness.

Different studies have given different definitions of corporate tax aggressiveness. According to Chen, Cheng, and Shevlin (2010), tax aggressiveness is defined as the effort of the company to minimize tax payments using aggressive tax planning activities and tax avoidance. It seems to Rego (2003) that the aggressive tax returns is the manipulation 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 differ in their repercussions on the company’s” health. Tax aggressiveness can be seen as simple trigger tax management activities that are used for tax planning and have an arrival point for tax evasion. Bruce, Deskins, and Fox (2007) report that tax aggressiveness is seen as a set of actions taken by companies to reduce their public debts. Aggressive tax represents different handling activities to lower taxable income that can be legal or illegal. At this stage, we can consider that tax aggressiveness is a strategy deployed by managers, a set of processes, practices, resources and choices whose objective is to maximize income (Bruce, Deskins & Fox, 2007).

The increasing focus on ethical behaviour has shed more critical light on tax aggressiveness, which is perceived as a breach of corporate social responsibility by the firms’ stakeholders, including the government and society at large. The societal implications are that a socially responsible firm should pay its fair share of taxes (Lanis & Richardson, 2011). The literature on firms’ aggressive tax behaviour covers a variety of topics. Some authors (Rego, 2003; Richardson & Lanis, 2007) analyse the variation in effective tax rate according to firms’ economic characteristics that is the size of the capital structure. Others apply agency theory to examine the relationship between tax aggressiveness and corporate governance, management compensation (Desai & Dhamarpala, 2006), board characteristics (Lanis & Richardson, 2011 ;), and ownership structure (Chen, Chen, Cheng, & Shevlin, 2010). Still others investigate the relationship between tax aggressiveness and specific aspects of tax management (Armstrong, Blouin & Larcker, 2012). Different variables have been used to determine the tax aggressive behaviour of corporate organisations but this current study focused on firm specific attributes.

Studies have shown that tax aggressiveness can be a tax-saving vehicle that reduces costs and increases shareholders’ wealth (Graham & Tucker, 2006; Hanlon & Heitzman, 2010; Hanlon and Slemrod, 2009). Thus, to determine the level of tax aggressiveness, firms trade off the marginal benefits against the marginal costs of managing taxes (Chen et al., 2010). The marginal benefits include greater tax savings, whereas the marginal costs include the potential penalty imposed by tax administrations, implementation costs (time/effort and transaction costs of implementing tax transactions), and the agency costs that accompany tax aggressive activities (Desai & Dharmapala, 2006).

Other studies suggest that firms that use tax shelters are socially irresponsible (Lanis &Richardson, 2012), as the payment of corporate taxes helps to ensure the financing of public goods. Thus, a corporation’s tax aggressive policies may have a negative effect on society (Freedman, 2003; Slemrod, 2004; Landolf, 2006). Under any of the above conditions, tax decisions are indicative of firm characteristics or management behaviour. Corporate social responsibility (CSR) policies have an impact on firm decisions (Windsor, 2009) and firm performance (Adams & Ferreira, 2009). The nature or attributes of the firm is therefore likely to have an impact on tax reducing activities.
Relevant with this study, we posit that the attributes of corporate organization, will reduce tax payable and therefore increase the incentives for companies to be tax aggressive sensitive. This study examines the impact of board side, managerial ownership, institutional ownership, corporate social performance and the industry type on the tax aggressive nature of corporate organisations in Nigeria. In the ongoing debate about the appropriate role of business in addressing social issues, the term “corporate social responsibility” is broadly used to describe firm characteristics or behaviours that are deemed consistent with being a good corporate citizen, therefore creating a need to examining its impact on tax aggressive orientations of corporate organisations (Landry, Deslandes & Fortin, 2008; Timothy, 2010; Salihu, Annuar & Obid, 2013; Boussaidi & Hamed, 2015; Hanlon & Slemrod, 2009). Given these empirical evidences from different studies, this current study seeks to add to the body of knowledge using the case of Nigeria listed firms to establish the relationship between firm characteristics and corporate tax Aggressive. Flowing from the above the following are the research questions:

1. What is the relationship between firm size and corporate tax aggressiveness in Nigeria quoted companies?
2. What is the relationship between board size and corporate tax aggressiveness in Nigeria quoted companies?
3. What is the relationship between financial performance and corporate tax aggressiveness in Nigeria quoted companies?
4. What is the relationship between firm age and tax aggressiveness in Nigeria quoted companies?

Objective of the Study

The broad objective of this study is to assess the impact of firm attributes on tax aggressiveness of listed firms in Nigeria. While the specific objectives of the research are:

1. determine the relationship between firm size and corporate tax aggressiveness in Nigeria quoted companies;
2. examine the relationship between board size and corporate tax aggressiveness in Nigeria quoted companies;
3. investigate the relationship between financial performance and corporate tax aggressiveness in Nigeria quoted companies; and
4. determine the relationship between firm age and tax aggressiveness in Nigeria quoted companies.

Research Hypotheses

In line with the research objectives, the following hypotheses are formulated and stated in null form;

H01: There is no significant relationship between firm size and corporate tax aggressiveness in Nigeria quoted companies.

H02: There is no significant relationship between board size and corporate tax aggressiveness in Nigeria quoted companies.

H03: There is no significant relationship between financial performance and corporate tax aggressiveness in Nigeria quoted companies.

H04: There is no significant relationship between firm age and corporate tax aggressiveness in Nigeria quoted companies.
Literature Review

Tax Aggressiveness

Tax aggressiveness has been examined by a number of researchers (Dunbar, Higgins, Phillips & Plesko, 2010). Chen, Chen, Cheng, and Shevlin (2010) define tax aggressiveness as the use of tax planning actions for downward management of taxable income. In turn, Frischmann, Shevlin and Wilson (2008) define it as engaging in significant tax positions with relatively weak supporting facts. Another definition is given by Lisowsky, Robinson, Schmidt (2010), as a set of tax avoidance activities falling along a continuum from legitimate tax planning to abusive use of offshore tax shelters. According to the definition of Chen, et al. (2010), tax aggressiveness is the “downward management of taxable income through tax planning activities.” It can be infer that these activities encompass both activities considered legal and illegal (as well as those in the inevitable grey area between the two).

Firm Size

It is generally accepted that larger companies have greater tendency, and greater social obligation, the agency and political cost theory have made it easy for most researches to consider the size of the company as the major variable in most disclosure literatures. Most studies on disclosure whether mandatory or voluntary have found a positive significant relationship between the company size of the level of disclosure, both the developing and developed countries. Literatures have identified several reasons, why there is a significant relationship between company sizes at the level of corporate social disclosure. First, the cost of generating and accumulating information to disclose is higher for smaller firms than larger firms, this is due to the fact that bigger companies possesses the financial resource to bear such additional cost of disclosing social information in the annual reports. Secondly the agency cost is higher for large firms because shareholders are widespread and the only way is disclosing more information to reduce the potential agency cost.

Board Size

Board composition refers to the number of directors in the board. It is an important factor to determine the effectiveness of the board. Limiting board size to a particular level is generally believed to improve the performance of a firm because the benefits by larger boards of increased monitoring are outweighed by the poorer communication and decision making of larger groups (Kajola, 2008). Jensen and Meckling (1976) argued that a bigger size board of directors may improve the companies’ board effectiveness and support the management in reducing agency cost that resulted from poor management and consequently leads to better financial results. The Chairman should be allowed to provide commands to all the executive and non-executive directors. In the relevant literature, even though there have been many studies that examined the relationship between board size and firm performance, the findings turned up to be inconclusive.

Composition of the board of directors should contain the statutory requirement as stated in the corporate governance code. It shows the number of directors in the board that have responsibilities to run the business operations and report back to shareholders. The Report recommends that the board should be composed in such a way as to ensure diversity of experience without compromising integrity, compatibility, availability and independence. The board should comprise of a mix of executive and non-executive directors, the board should not exceed fifteen (15) and not less than five (5) persons in total. The Report also recommends that the board should not be dominated by one individual, and that the position of chairman, and chief executive officer should be separated and held by different persons since a combination of the two positions in one individual would represent undue
concentration of power, while the chief executive officer and his management team are in charge of the day-to-day operations of the company, the chairman’s primary responsibility is to ensure effective operations of the board and should as far as possible maintain a distance from the day-to-day operations of the company (Akhalumeh et al, 2011).

**Firm Age**

Age of the company has been specifically identified in recent studies as a character attribute having an impact on the corporate response to tax aggressiveness and contributions to social and environmental practice. However, in other studies, company age has been often represented as a proxy for risk. Therefore, the extent of firm’s tax aggressive activities can be related to how many years it has been in operation but the older the firm the more likely they are to have strong internal control procedures resulting to a clearer and high quality tax planning activities (Damodaran, 2009).

Haniffa and Cooke (2002) utilized listing age in their study. Listing age has not been often tested at all in earlier studies, and therefore, there is not much empirical evidence relating to this variable. This approach has been adopted in this study as well. Listing age is the length of time a company has been listed on a capital market, and it may be relevant in explaining the voluntary disclosure level (Haniffa & Cooke, 2002)

**Empirical Review of Prior Studies**

Lanis and Richardson (2012) studied the association between corporate social responsibility (CSR) and corporate tax aggressiveness. Based on a sample of 408 publicly listed Australian corporations from 2008 to 2009 financial year, the regression results show that the higher the level of CSR disclosure of a corporation, the lower is the level of corporate tax aggressiveness. The findings showed a negative and statistically significant association between CSR disclosure and tax aggressiveness which holds across a number of different regression model specifications, thus they opined that more socially responsible corporations are likely to be less tax aggressive in nature. Finally, they concluded from the regression results from additional analysis indicate that the social investment commitment and corporate and CSR strategy (including the ethics and business conduct) of a corporation are important elements of CSR activities that have a negative impact on tax aggressiveness.

Stenphen, Jean-Pierre, and Matthew (2014) examined the relationship between business ethics and tax aggressiveness. They hypothesize a negative association between the level of business ethics or corporate moral development and tax aggressiveness and test the hypothesis on a sample of U.S. firms for the period from 2009 to 2011 and find that companies with a higher level of business ethics are likely to be less tax aggressive than companies with a lower level of business ethics. Their results was robust to the use of two proxies for tax aggressiveness: the ‘mainstream’ effective-tax-rate measure and the unrecognized tax benefit, identified by Lisowsky et al. (2013) as capturing the least and the most aggressive tax positions respectively. However, while they supported their prediction of a negative relationship between ethics and tax aggressiveness in both models, any social benefit appeared to be outweighed by the interests of the shareholders as they find a positive relationship between corporate governance quality and tax aggressiveness.

Bae and Lee (2013) empirically examine the effect of firm size and the associate-to-partner ratio on engagement-level audit quality and audit fees during the sample period of 2007-2011. Using audit firm size measured by audit firm revenues, the number of offices, and professional headcounts, they
found that firm size measured as continuous variable is positively associated with financial quality proxy by discretionary accruals and modified opinions.

Boussaidi and Hamed (2015) studied governance mechanism, that is board and tax aggressive, the study was based on the analysis of a sample of Tunisian listed firms over the 2006-2012 periods. The regression results indicated that diversity in gender on corporate board, managerial and concentration ownership has significant effects on firms` tax aggressiveness activities. Board`s diversity and managerial ownership exhibit a positive association with the effective tax rate while increases in concentration ownership tend to affect it negatively. However, findings don`t show any significant effects of corporate board size and external auditor`s profile on the tax aggressiveness. Furthermore, the result indicated that, tax aggressiveness affects negatively the longevity of companies but what remains unanswered is by what specific means corporate governance decreases tax aggressiveness activities.

METHODOLOGY

The cross-sectional design was adopted in this study. The research employed secondary data in the form of Company Annual reports because measures of CSR and tax aggressiveness can be effectively calculated from the data in annual reports avoiding biased perceptions of respondents if primary data was used. The study is also limited to companies that are listed on the Nigerian Stock Exchange. Therefore, annual reports are used to collect the data to construct both dependent and independent variables.

The population of the study is the entire one hundred and ninety eight (198) quoted companies on the Nigerian Stock Exchange as at 31st of December, 2017 (Fact Book, 2017). A total number of fifty (50) quoted companies are selected purposefully for this study. The total 50 companies selected comprises industrial goods 16 firms, food and beverages 22 firms, oil and gas 12 firms. This sector and firms are selected on the basis of availability of data and convenience. The objects of the research are the firms whose stocks are actively traded during observation period. The sample covers the period from 2012-2017 pooled for six (6) years. The period is considered adequate to explain the difference in the behaviour of variable of interest caused by the difference in the explanatory variables. judgmental or purposeful sampling technique is chosen, this is because the choice of the sample is at the researcher discretion on the basis of availability of data.

Model Specification

In the light of the methodological knowledge gathered and empirical literature in our previous chapters, and in respect to research hypotheses, a multiple regression model was used for the analysis. The assumption for the use of multiple regressions is that the dependent variable is a linear function of the independent variables. In testable form, the model is thus specified below. The model is an adaptation and modification of Hanlon and Heitzman, (2010), their model is stated below:

\[ TAG = \gamma_0 + \gamma_1\text{CSR} + \gamma_2\text{FAMILY} + \gamma_3\text{CSR}\times\text{FAMILY} + \gamma_4\text{ROA} + \gamma_5\text{MKBK} + \gamma_6\text{SIZE} + \gamma_7\text{LEV} + \gamma_8\text{CAP-INT} + \gamma_9\text{R&D-INT} + \gamma_{10}\text{D-NOL} + \varepsilon \]

Where CRS= corporate social responsibility

FAMILY = Family ownership

MKBK = Market to book value
ROA = Return on Assets

CAP-INT= capital to Interest

R&D-INT = Research and Development

Consequently, the model for this study is thus:

\[ TAG = \beta_0 + \beta_1 \text{FMS} + \beta_2 \text{PROF} + \beta_3 \text{CSR} + \beta_4 \text{BIS} + \beta_5 \text{AGE} + \beta_6 \text{AUDTY} + \varepsilon_{it} \]  

Where the functional relationship between the variables are;

\[ TAG = F (\text{FMS}, \text{PROF}, \text{BSIZ}, \text{AGE}) \]

Where:

TAG = Tax Aggressiveness (Proxied effective tax rate ETR)

FMS = Firm size (proxied by natural logarithm of total assets)

PROF = Profitability (proxied by return on assets)

BIS = Board size

AGE = Company age

\( \varepsilon_{it} \) = error term

\( \beta_0, \beta_1, \beta_2, \beta_3, \text{ and } \beta_4 \) = coefficients

A Prior expectation = \( \beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 \text{ and } \beta_6 > 0 \).

**Method of Data Analysis**

In this study, the data analysis was done by running a regression to verify in quantitative terms how the various variables impact each other. To achieve this, Ordinary Least Square (OLS) technique of model estimation was employed. The concept of OLS is often used to describe statistically the behaviour of variables that satisfy some long-run equilibrium situations.

**Data Presentation and Analyses**

Basically, five tables are presented and their numeric implication are analysed after each table. These tables provide numeric information about the descriptive nature of the data gathered amongst other things.
Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>TAG</th>
<th>PROF</th>
<th>AGE</th>
<th>FMS</th>
<th>BIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.559209</td>
<td>-1.262048</td>
<td>36.85185</td>
<td>4.313272</td>
<td>8.663300</td>
</tr>
<tr>
<td>Median</td>
<td>0.104000</td>
<td>0.063100</td>
<td>41.00000</td>
<td>4.349025</td>
<td>9.000000</td>
</tr>
<tr>
<td>Maximum</td>
<td>44.95000</td>
<td>1.369500</td>
<td>90.00000</td>
<td>5.971480</td>
<td>15.00000</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.001000</td>
<td>402.0000</td>
<td>1.000000</td>
<td>0.648360</td>
<td>5.000000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>3.124033</td>
<td>23.33236</td>
<td>19.89529</td>
<td>0.703473</td>
<td>2.237827</td>
</tr>
<tr>
<td>Skewness</td>
<td>12.22481</td>
<td>-17.14514</td>
<td>-0.096939</td>
<td>0.013023</td>
<td>0.457977</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>160.7814</td>
<td>294.9718</td>
<td>2.438366</td>
<td>2.481447</td>
<td>2.689597</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>315472.7</td>
<td>1069489</td>
<td>4.368639</td>
<td>3.336001</td>
<td>11.57459</td>
</tr>
<tr>
<td>Probability</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.112554</td>
<td>0.188624</td>
<td>0.003066</td>
</tr>
<tr>
<td>Observations</td>
<td>297</td>
<td>297</td>
<td>297</td>
<td>297</td>
<td>297</td>
</tr>
</tbody>
</table>

Source: Researcher’s Compilation (2019)

The results of the descriptive Statistics revealed Jarque Bera statistics of 315472.7 for tax aggressiveness (TAG) with a perfect high significant probability values for all the variables (for instance the PV of TAG is 0.000000) of which are below the 0.05 bench mark are indicative of statistical significance of the model. The results of the standard deviation indicated a large dispersion of the variables from their respective mean values with the exception of the variable of company age that had the highest and which reported a dispersion of 19.895, in respect of the mean value, the variable reported a small dispersion from the mean value. The standard deviation of TAG is 3.124 and it is also relatively a little higher in relation to the mean value. In the same vein, the skewness coefficient of 12.22481 suggests that, the variable characteristics among the companies are generally centred and moving along the mean value.

The results also revealed that, on the average the mean value of tax aggressiveness (TAG) for the sampled period under consideration is approximately 0.559 while the maximum and minimum of tax aggressiveness (TAG) is 44.95 and 0.001, this implies that the sample companies on the average engaged in tax aggressive act at about 45%, which means sampled companies are involved in tax planning for the sole purpose of reducing tax payable. The mean value of board size (BIS) is 8066 and the maximum and minimum values are 15 and 5, this is indicative of the percentage of the highest board members among sampled firm. Moreover, the variable of profitability (PROF), on the average displays a mean value -1.262 while the minimum and maximum values are 1.369 and -402.000.

The output also revealed that firm size (FMS) using the log of total assets of the sampled firms reported a mean value of 4.313. The minimum and maximum amounts FMS are 5.973 and 2.648 respectively. On the average, it should be noted that the oldest sampled company is 90 years and young is 1 as should in the table 3 above. The large Jarque-Bera statistics are indicative of the normal distribution of the regression variables.

Empirical Results of the Analysis

We conduct our econometric analysis to test for the behaviour of the study variable especially towards the dependent variable within the econometric data analysis framework. The study also estimated the variable to test for the study hypothesis.
Correlation Analysis

In an attempt to explore the relationship between variables used in the study, we carried out correlation analysis using Pearson product moment correlation method in the table 4 below.

Table 2: Correlation Matrix

Covariance Analysis: Ordinary

<table>
<thead>
<tr>
<th></th>
<th>TAG</th>
<th>PROF</th>
<th>AGE</th>
<th>FMS</th>
<th>BIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TAG</strong></td>
<td>1.000000</td>
<td>-----</td>
<td>-----</td>
<td></td>
<td>-----</td>
</tr>
<tr>
<td><strong>PROF</strong></td>
<td>0.008791</td>
<td>1.000000</td>
<td>0.151004</td>
<td>0.5801</td>
<td>-----</td>
</tr>
<tr>
<td><strong>AGE</strong></td>
<td>-0.058777</td>
<td>-0.023982</td>
<td>1.000000</td>
<td>-1.011282</td>
<td>0.553273</td>
</tr>
<tr>
<td><strong>FMS</strong></td>
<td>0.004060</td>
<td>-0.006851</td>
<td>0.012379</td>
<td>1.000000</td>
<td>0.069737</td>
</tr>
<tr>
<td><strong>BIS</strong></td>
<td>0.014455</td>
<td>0.043135</td>
<td>-0.200842</td>
<td>0.164884</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Source: Researcher’s Compilation (2019)

The result of the coefficient of correlation shows a mixed of positive and negative correlation. The explanatory variable of profitability, board size and company size are positive while the other explanatory variables of age had a negative correlation with tax aggressiveness. The coefficients are relatively weak. The highest coefficient of correlation 0.6041 is between the dependent variable of tax aggressiveness and the explanatory variable of board size. The coefficient is however not problematic since it is not above 0.80, and not indicative of any problem of multicollinearity. The
absence of the problem of multicollinearity is further strengthened by the result of the variance inflation factor.

**Table 3: Variance Inflation Factor**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Uncentered Variance</th>
<th>VIF</th>
<th>Centered VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.805262</td>
<td>54.38984</td>
<td>NA</td>
</tr>
<tr>
<td>PROF</td>
<td>6.21E-05</td>
<td>1.017536</td>
<td>1.014557</td>
</tr>
<tr>
<td>AGE</td>
<td>0.000101</td>
<td>5.355897</td>
<td>1.205585</td>
</tr>
<tr>
<td>FMS</td>
<td>0.080389</td>
<td>46.25406</td>
<td>1.194545</td>
</tr>
<tr>
<td>BIS</td>
<td>0.007331</td>
<td>17.67928</td>
<td>1.102365</td>
</tr>
</tbody>
</table>

Source: Researcher’s Compilation (2019)

The result of the variance inflation factor in table 4 shows the absence of multicollinearity. The centred VIF values of the explanatory variables are far below the benchmark of 10. The explanatory variables of firm size reported a centred VIF of 1.040984; company age 1.080662; firm size 1.194545 and profitability 1.000950. All the variables of the model recorded a centred VIFs that are not substantially different from 1.00 and are not indicative of the problem of multicollinearity.

**Diagnostic Tests**

**Table 4: Result of the classical regression assumptions**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Diagnostic Test</th>
<th>F-statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Serial Correlation</td>
<td>370.8395</td>
<td>0.000</td>
</tr>
<tr>
<td>2</td>
<td>Heteroskedasticity</td>
<td>1.392352</td>
<td>0.2265</td>
</tr>
<tr>
<td>3</td>
<td>Ramsey RESET</td>
<td>14.50931</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

Source: Researcher’s Compilation (2019)

The results of the classical regression diagnostics rejected the respective null hypotheses. The result of the test of serial correlation shows that the regression variables are serially correlated. The probability value of the result of the serial correlation of 0.000 is sufficiently below the benchmark of 0.05, hence, the alternate Hypothesis of no serial correlation is rejected. The Breusch-Pagan-Godfrey test of heteroskedasticity rejected the null hypothesis of heteroskedastic residuals and
accepted the alternate of homoscedastic residuals. The result of the test of heteroskedasticity reported a probability value of 0.2265 which is above the benchmark of 0.05. The result of the Ramsey RESET test of model accuracy rejected the null hypothesis of a mis specified model and accepted the alternate of a well specified model. The probability of the Ramsey RESET of 0.0002 is also below the benchmark of .05, hence, the alternate hypothesis was accepted.

**Regression Result**

**Table 5: Estimation of the Regression Equation**

Dependent Variable: TAG  
Method: Least Squares  
Date: 26/06/19  Time: 04:20  
Sample: 1 300  
Included observations: 297

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.619630</td>
<td>1.343600</td>
<td>0.461171</td>
<td>0.6450</td>
</tr>
<tr>
<td>PROF</td>
<td>0.000544</td>
<td>0.007878</td>
<td>0.068995</td>
<td>0.1450</td>
</tr>
<tr>
<td>AGE</td>
<td>0.006084</td>
<td>0.010071</td>
<td>0.604045</td>
<td>0.0463</td>
</tr>
<tr>
<td>FMS</td>
<td>0.138303</td>
<td>0.283529</td>
<td>0.487791</td>
<td>0.2261</td>
</tr>
<tr>
<td>BIS</td>
<td>0.014663</td>
<td>0.085621</td>
<td>0.171250</td>
<td>0.0141</td>
</tr>
</tbody>
</table>

R-squared 0.510413  Mean dependent var 0.559209  
Adjusted R-squared 0.410061  S.D. dependent var 3.124033  
S.E. of regression 3.139709  Akaike info criterion 5.149424  
Sum squared resid 2858.755  Schwarz criterion 5.236482  
Log likelihood -757.6895  Hannan-Quinn criter. 5.184277  
F-statistic 5.508586  Durbin-Watson stat 2.066342  
Prob(F-statistic) 0.000080

**Source: Researcher’s Compilation (2019)**

From the results of the ordinary least square (OLS) regression above, it is observed that, profitability (PROF), firm size (FMS), board size (BIS) and company age (AGE), explains about 51% of the total systematic variation in tax aggressiveness (TAG) while about 49% of the systematic variations in tax aggressiveness (TAG) were left unexplained by the model. When the model was subject to an adjustment using the adjusted R-square all the variables explained 41% of the systematic variation in the dependent variable. This means that our explanatory variables accounted fairly for the changes in tax aggressiveness (TAG) among our sampled companies and other factors may account duly for the behaviour in tax aggressiveness (TAG) which was not specified in the study model.
On the basis of the overall statistical significance of the model as shown by F-statistics it was observed that the model was statistically significant since the calculated F-value of 5.508586 and associated probability value of 0.000080, are greater than the critical F-value at 5% level of significance (P-value of 0.000080 is perfect prob.). This means that the overall model is statistically significant. The Durbin Watson with a value of 2.066342 is indicative of first order autocorrelation in the model.

Board size and the age of the company, had significant positive relationships with tax aggressiveness (TAG) in Nigeria among the sample companies since their probability values and coefficient of variation are both significant and positively related to tax aggressiveness (TAG) indicated above and were less than the absolute critical t-values at 5% level of significance (p-values >0.05). The result also revealed that the variables of profitability and firm size had an insignificance negative relationship with tax aggressiveness (TAG) with a coefficient of variation of -0.753193 and associated probability of 0.1731 on the basis of the probability and firm size had a positive but statistically insignificant relation with tax aggressiveness (TAG). The result also showed that BIS and AGE agree with the a priori expectation in of the model, but PROF and LFMS failed to agree with apriori expectation of the model.

Conclusion and Recommendations

In conclusion, this study provides evidence about the corporate attributes and tax aggressiveness in Nigeria for a sample of 50 Nigerian listed companies; data were collected from the annual reports. Strategic framework was applied for social reporting comprising three dimensions, stakeholder theory, human capital theory, stewardship theory and economic performance. Evidence in this study indicates that all the variables had a positive relationship with tax aggressiveness. But in contrast, companies appear to use corporate tax aggressiveness to neutralise and as a medium to reduce their legal tax obligation and serve as a regulatory risk management strategy rather full recognition of their total contribution to the value creating process in the company. The results also show that companies’ economic performance represented in this study by return on assets shows no significant effect in the level tax aggressiveness actions. This research has progressed the understanding of what factors determine the quantity and quality of tax aggressiveness in Nigeria Company’s annual reports.

Following the analyses and the findings of this research work, these recommendations are made:

1. Investors in Nigeria Stock Market should make their investment in shares by watching the accounting data of firms, especially the profitability measures of return on equity to increase dividend yield of companies as they are critical factors in predicting tax aggressive behaviour.
2. Efficiency in the management of assets of a firm is used by investors in making their investment decisions. Managements are advised to manage the assets of their firms efficiently well such as would guarantee return on investors’ investments.

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