Impact of Company Characteristics on Aggressive Tax Avoidance in Nigerian Listed Insurance Companies

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Abstract: Tax avoidance has been identified as one of the tools companies used legally to pay less to government as corporation taxes. This attributed to low revenue target from taxes, thus, holding the continent back by starving the government of the revenue it needs for development. It is against this background, this study examined company characteristics and aggressive tax avoidance in Nigerian listed insurance companies. It assessed the impact of firm size, profitability, leverage and firm age on aggressive tax avoidance of listed insurance companies in Nigeria. The study adopted ex-post facto research design, and data were drawn from the audited annual reports of twenty (20) random sample listed insurance companies between 2010 and 2018. The model of the study was estimated using a two-step system GMM panel model estimator. The results of the study revealed that firm size (coeff of 0.628) and Leverage (with coeff of 0.549) have a positive and significant (p-value < 1% level of significance) impact on aggressive tax avoidance, while firm’ Profitability (coeff of -0.843) and Age (with coeff of -0.056) have a negative and significant. The study concluded that company characteristics influences aggressive tax avoidance of insurance companies in Nigeria. Specifically, firm’ size and leverage have a positive impact on aggressive tax avoidance in Nigerian listed insurance companies while firm’ profitability and Age have a negative effect on aggressive tax avoidance. Thus, the study recommends among others that firm size should be well formulated in accordance with regulating bodies like the Corporate Affairs Commission and National Deposit Insurance Cooperation.

Keywords: Company characteristic; Insurance; Taxation; Tax avoidance; Tax aggressive

Introduction

Taxes are fundamental and viable source of revenue to governments all over the world. They represent the compulsory contribution from the private sector (both individuals and corporations) to the government purse towards governance, developments and provision of infrastructural facilities for the wellbeing of the country’ citizens. They are also one of the effective ways a nation’s internal resources are assembled and a tool for bridging income inequities (Akwe, 2014). This explains why governments are concerned with proper controlling of amounts collected through taxes.

On the other hand, the company's goals are to maximize profits that ultimately prosper the company owner. In maximizing profit, there are constraints faced by the company in term of the expenses paid by the company, especially taxes to the government that impact on profits earned by the company. Therefore, companies are looking for ways to make taxes paid lessen both legally and illegally (Pasca, Dedy & Tuti, 2018). The two major activities perpetrated by corporation to threaten or reduced amount of revenue collected by governments through taxes are tax avoidance and tax evasion.

Tax avoidance, 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.

Over the years, the Nigerian government neglected the non-oil sector for the oil revenue. This is due to huge revenue from the oil sector to the government, although the oil revenue is large, but unstable. Evidence showed that funds available for distribution among federal, state and local governments in Nigeria have decreased in recent time as a result of decline in oil price (Afuberoh & Okoye, 2014). Non-oil sources of revenue
such as the corporation tax therefore need to be revived.

To broaden the corporation tax base in Nigeria is a concern, as reports from Federal Inland Revenue Service (FIRS) tax statistics showed that, the revenue agent has not been able to achieve its target on corporate income tax collections over several years. In the period 2016 - 2018, to be precise, the agent only met 52% - 85% of its target. Compared to the period 2013 – 2015, the agent achieved 99.6% - 125% of its targets. Several factors had been attributed to the low revenue target. In Africa, tax avoidance has been named as one of the factors holding the continent back by starving the government of the revenue it needs for development (Mayah, 2015).

In the face of the aforementioned, there is a need to find out the influence of company characteristics on corporate tax avoidance. Although, various studies both local and international has made considerable efforts in extent literature on studies that focused on firm characteristics and tax avoidance using different and some similar firm characteristics proxies. However, there are inconsistencies in their results. This study therefore seeks to contribute to knowledge by examining the effect of company characteristics on tax avoidance in Nigerian insurance companies. Doing this will support the Nigerian government’s drive to broaden the tax base required to meet its intended purpose and subsequently save the Nigerian economy from collapse. Also, it will be of benefits to policy makers; those in research and academics; and managers and shareholders.

Therefore, the study focuses on examine impact of company characteristics on aggressive tax avoidance in Nigerian insurance companies as its general objective. While the specific objectives attempt to provide answers to the following research questions: (a) what impact does firm size has on aggressive tax avoidance in Nigerian listed insurance companies?; (b) what impact does firm profitability has on aggressive tax avoidance in Nigerian listed insurance companies?; (c) what effect does firm leverage has on aggressive tax avoidance in Nigerian listed insurance companies?; (d) what influence does firm age has on aggressive tax avoidance in Nigerian listed insurance companies.

**Literature Review**

**Aggressive Tax Avoidance**

The term Aggressive tax avoidance lacks universal definition as it might connote “different thing to different people” (Hanlon & Heitzman, 2010; Annuar, Salihu & Obid, 2014). The concept, aggressive tax avoidance has the same meaning as tax planning, tax avoidance, tax mitigation, tax minimization and tax shelters in terms that they meet the legal and ethical provisions established by the tax authorities (Badertscher, Katz & Rego, 2011; Armstrong, Blouin & Larcker, 2012; Ogbeide & Iyafekhe, 2018). This concept has multiple conceptualizations, references and even different ways to measure, but most of them have the same meaning and purpose but differs in their effect on the companies’ health (Boussaidi & Hamed, 2015).

Given these, they are several definitions of corporate tax avoidance put forward by researchers in recent times. Hanlon and Heitzman (2010) defined tax avoidance broadly as the reduction of explicit taxes. They defined tax avoidance “as a continuum of tax planning strategies where something like municipal bond investments are at one end (lower explicit tax, perfectly legal), then terms such as ‘noncompliance’, ‘evasion’, ‘aggressiveness’, and ‘sheltering’ would be closer to the other end of the continuum”. Tax planning refers to efforts of companies to minimize tax payments using aggressive tax planning activities and tax avoidance (Chen, Chen, Cheng & Shevlin, 2010).

According to Onyali and Okafor (2018) tax aggressiveness is a strategy employed by the management of corporate organizations, which are set of processes, practices, resources and choices whose objective is to maximize income after all corporate liabilities owed to the state and other stakeholders. The implementation of this kind of strategies is geared towards reducing the tax base which allows generation of high potential non-tax cost that arises from agency conflicts or tax-authority, such as penalties and rent extraction (Desai & Dharmapala, 2009). It is clear that tax avoidance goal of every corporation is to
increase the net income of the company which creates a positive signal to foreign investors (Chen et al., 2010).

Annuar et al (2014) summarily put forward that tax aggressiveness benefits the firm and shareholders in form of tax savings, the potential non-tax costs associated with it may also be large depending especially on the structure of corporate ownership and control. These non-tax costs include loss of efficiency in internal control, agency costs of rent extraction, potential penalty, potential price discount and damage to organizational legitimacy.

**Company Characteristics**

Company characteristics are specific financial and operational attributes or indicators that affect both internal and external decisions of firms. They are often analyzed in relation to varying aspects of a company such as financial performance, firm value, corporate social responsibility disclosure, assets disclosure including intangible assets with a view to determining their contribution to shareholders wealth (Ogbeide, 2017).

Different proxies have been used by Researchers to represent company characteristics. Some of the firms’ characteristics commonly examined in extant literature encompass firm size, firm age (which could be incorporation age or managerial age), industry type, ownership concentration, audit firm size, profitability, among others. The interactions of the varying company characteristics influence expense reduction, including tax liability of firm.

**Firm Size**

Firms’ size is one of the characteristics expected to influence tax avoidance usually proxy with Effective Tax Rate (ETR). Firm Size can be measured through several proxies, but the natural logarithm of total assets is widely used. This indicator is largely studied in the literature and almost all the investigations about effective tax rates include it as an indicator with a prediction power over ETRs. The advantage big firms have over smaller ones in term of economic and political power make them more prone to aggressive tax avoidance (Hoi, Wu & Zhang, 2013). This is tandem with the political cost hypothesis in positive accounting theory which reveals that the companies will tend to use accounting methods that can reduce their earnings in the current period to minimize political costs such as the tax burden. However, the direction of the relationship between firms’ size and ETRs can be ambiguous. Minnick and Noga (2010) study showed that firm size positively influences tax if the measure of tax avoidance used is GAAP ETR, but there is no significant influence if the measure used is cash ETR. Taylor and Richardson (2013) also showed no significant influence between size and tax avoidance. However, other studies report that firms’ size has a positive impact on effective tax rates (Rego, 2003; Vieira, 2013; Kraft, 2014; Ogbeide, 2017).

**Firm Profitability**

Majed, Said and Firas (2012) posit that profitability ratios are an indicator for the firm’s overall efficiency. It’s usually used as a measure for earnings generated by the company during a period of time based on its level of sales, assets, capital employed, net worth and earnings per share. Profitability ratios measures earnings capacity of the firm and it is considered as an indicator for its growth, success and control.

Therefore, profitability is seen an intuitive indicator expected to influence effective tax rate specifically, when profitability measure is based on pre-tax income. It is expected that more profitable firms have higher earnings and, consequently, pay more taxes (Ribeiro, Cerqueira & Brandao, 2015). This view of point is evidence in studies of Richardson and Lanis (2007), Minnick and Noga (2010), Armstrong et al. (2012) and Ogbeide (2017), that found a positive relationship between firm profitability and ETR.

By contrast, Manzon and Plesko (2002) argue that profitable firms can benefit from tax exemptions and use tax deductions and tax credits in a more efficient manner which results to greater book-tax differences for the firm.

**Firm Leverage**

Financial leverage is another variable frequently emphasized on in studies of firm
characteristics and tax avoidance. Leverage is the extent to which a firm has been financed by outside or external funds which are purely debt obligations. Leverage could either be an operating or a financial leverage. Operating leverage is the use of assets which forced the company to bear the fixed costs such as depreciation, whereas financial leverage is the use of funds that forced the company to bear the burden of fixed rate of interest.

Leverage premised on the fact that interest payments for debt are tax deductible; as such leverage serves as a sort of tax shield for firms. Strictly speaking, the tax shield, unless aggressively exploited does not constitute an act that is thought to be on the other side of the moralistic argument on tax avoidance. However, in addition to the tax shield, highly levered firms may likely be financially constrained and as such have a motivation to engage in more tax avoidance. This corresponds to the political cost hypothesis put forward in positive accounting theory. Kraft (2014) argues that firms’ financing decisions may contribute to the alignment of shareholders and managers’ interests.

Firm Age

Firm age is the duration in which a firm is in existence. It is measured as number of years the firm is established. According to Pratama (2017), firm age could be incorporation age or managerial age. Scott (2003) argued that the older the company, the broader its business and the higher its reputational risk. Firm will tend to mitigate risk and choose actions that do not trigger higher risk. Political cost theory serves better to explain the association between the age of company and tax avoidance.

Positive Accounting Theory

This study is hinged on positive accounting theory. Positive accounting theory was developed by Watts Ross and Zimmerman Jerold in 1978. The theory seeks to explain and predict accounting practice. It explained the reasons for the observed practice by firm. For example, positive accounting theory seeks to explain why companies continue to use historical cost accounting and why certain companies change their accounting techniques.

Watts and Zimmerman (1990) put forward three hypotheses of positive accounting theory, namely, the bonus plan, debt covenant and political cost. The bonus plan hypothesis suggests that managers will choose accounting procedures that will shift future income to the present period with the aim of getting a bonus. The debt agreement hypothesis suggests that for companies that would violate a debt agreement, the manager would have the possibility to choose accounting procedures that shift future income to the current period so as to increase net income and ultimately avoid technical errors. Political cost hypothesis suggests that companies that have high profitability will tend to shift their income from this period to the coming periods to avoid political costs.

This theory is relevant to this study because firms’ managers seek to minimize expenses including tax paid to government in order to achieve their corporate goal. This is in line with the prediction of the theory hypotheses.

Appreciable efforts in literature have been made in the recent past on Company Characteristics and Tax Avoidance locally and internationally. The following studies have made empirical contributions to this discourse.

Zemzem and Ftouhi (2013), examined the effect of board of director characteristic on tax aggressiveness in France listed companies between 2006 and 2010. Using Regression analyses on 76 sample French listed companies, the study found that board size and percentage of women in the board have a negative significant effect on tax aggressiveness. The study results also revealed that profitability and firm size exerted a positive significant effect on tax aggressiveness.

Ribeiro et al (2015), investigated the effect of firm’ characteristics and role of corporate governance attributes in explaining Effective Tax Rate (ETR) in non-financial firms listed on the London stock exchange between 2010 and 2013. Firms’ characteristics were proxy by firm size,
profitability, leverage, capital intensity and research and development expenses. Corporate governance attributes were proxy by managerial ownership, independent firms from controlling shareholders, board members size and non-executive directors in the board. The study made used of Generalized Leased Square (GLS) cross-section weights to analysis the data collected. The study results showed that larger and more profitable firms have higher ETRs. On the contrary, leverage has a negative impact on ETRs.

Irianto, Sudibyo and Wafirli (2017) determined the influence of firm size, leverage, profitability and capital intensity ratio on tax avoidance in manufacture companies listed on the Indonesian Stock Exchange 2013-2015. Sample of thirty-six (36) listed manufacturing companies in Indonesia were used and data collected were subjected to multiple linear regression. The study result showed that the firm size positively influences the effective tax rate. Leverage, profitability and capital intensity ratio does not significantly influence the tax avoidance.

Pratama (2017), investigated whether company characteristics and corporate governance play a significant role in company’s tax avoidance in Indonesia, for the period 2011-2015. The company characteristics were proxy by profitability, leverage, firm age and firm size. Corporate governance was proxy by the size of the board of commissioners, the proportion of independent commissioners, audit firms and the audit committee. Data were obtained from the companies’ financial statements for the years 2011–2015. Multiple linear regression was used to analysis data collected from 70 listed companies (excluding financial and mining). The research found that several company characteristics proxies, namely firm age, profit and size, significantly affected tax avoidance practices. Several corporate governance proxies, audit firm, audit quality and size of the board of commissioners, were also found to affect tax avoidance.

Chytis, Tasios, Georgopoulous and Hortis (2019), examined the relationship between tax avoidance, company characteristics (return on capital employed, liquidity, leverage and company size) and corporate governance (board independence, auditing firm type and ownership concentration) of sample of 56 listed companies on the Athens stock exchange, Greece covering the period 2011 to 2015. Random effect method of estimation was used and the study result revealed that there is a positive and negative significant relationship of tax avoidance with company size and return on capital employed respectively. The study results also showed that there was no statistically significant impact of corporate governance variables on tax avoidance.

Ogbeide (2017), Examined firm characteristics and tax aggressiveness of listed firms in Nigeria using pool and panel data for the period 2012 to 2016. The study proxies firm characteristics by firm size, external audit quality, leverage and interest charges, while tax aggressiveness was proxies by ETR. The data used was sourced from the annual reports of the selected firms. Both the panel and dynamic panel methods were used to analyze the data generated. Findings from the study revealed that firm size exerts positive and significant effects on tax aggressiveness, while leverage has no significant effects on tax aggressiveness.

Salaudeen and Ejeh (2018), Examined the effect of ownership structure on corporate tax aggressive activities of listed firms in Nigeria. Data were extracted from the annual reports of 40 non-financial firms that made up the sample of the study from 2010 to 2014. The effects of ownership concentration and managerial ownership as independent variables on tax aggressiveness as the dependent variable were observed in fixed effect model including those of the control variables. The study findings reveal that ownership concentration has a positive but insignificant effect on tax aggressiveness while the effect of managerial ownership was found to be significantly negative. Further results show that leverage is negatively related with tax aggressiveness while return on assets (profitability) is positively related. Size has no significant relation with tax aggressiveness.

Uniamikogbo, Atu and Atu (2018), Investigated the effect of firm attributes on tax aggressiveness in Nigeria. The specific
objectives were to assess the effect of firm size, profitability, liquidity and leverage on tax aggressiveness in the Nigerian banking sector. The population of study consists of fifteen (15) Deposit Money Banks (DMBs) whose shares were listed on the Nigerian Stock Exchange as at 31st December, 2017, from which a sample size of ten (10) banks was selected using the judgmental technique based on Banks with international authorization. The secondary source of data collection method was used to generate data from the ten (10) annual reports and accounts of the sampled banks for a period of five years (2013-2017). Ordinary Least Square (OLS) regression analysis was used, and the findings revealed that firm size and leverage have a significant impact on tax aggressiveness while profitability has an insignificant impact on tax aggressiveness in the Nigerian banking sector.

The research gap from the literatures reviewed, it could be pointed out from those previous studies in the field of tax avoidance practices in Nigeria, to the best of researcher’s knowledge, has not included company age as one of the company characteristics and few studies have been conducted on insurance companies. This study sought to close the above observed research gap and contribute to the theoretical framework.

Methodology

The study adopted ex-facto research design to explain the relationship between company characteristics and tax avoidance. This is on the basis that the required data cannot be manipulated by the Researcher, because they have already been existed. Tax avoidance was measured using Effective Tax Rate (ETR) while company characteristics were proxies by Firm size, profitability, leverage and firm age. The study population covered all the thirty-three (33) listed insurance companies on the floor of Nigerian Stock Exchange (NSE). Using random sampling, the sample size of twenty (20) listed insurance companies was selected and data were extracted from their annual audited accounts and reports between 2010 and 2018.

Generalized Method of Moments (GMM) regression technique was employed to evaluate the effect of company characteristics on aggressive tax avoidance in Nigerian listed insurance companies. The GMM estimator was used because of its ability to tackle the issue of endogeneity, it allows for the introduction of lags of the dependent variable in addition to lags of potentially endogenous variables into the estimated function and also controls for both year and company effects (Minnick & Noga, 2010). The data were analyzed using STATA statistical software.

The study formulated a model that was similar to the model previously formulated and used by previous related studies. Thus, the study model

\[
ETR_\text{it} = \beta_0 + \beta_1 ETR_{\text{it}-1} + \beta_2 FS_\text{it} + \beta_3 PE_\text{it} + \beta_4 LE_\text{it} + \beta_5 FA_\text{it} + \beta_6 D-EARN_\text{it} + \mu_\text{it}
\]

Where:

ETR = Effective Tax Rate proxy for Aggressive Tax Avoidance
ETR_{it} = One period lagged value of ETR
FS = Firm Size
PE = Profitability
LE = Leverage
FA = Firm Age
D-EARN = Dummy variable for earnings
\beta_0 = Constant term
\beta_{i,0} = Coefficients of the independent variables

Effective Tax Rate (ETR) is measured as Total tax expense for the period divided by Pre-tax income for the period (ETR = Total tax expense / Pre-tax income) (Zimmerman, 1983; Richardson et al, 2013; Bouassidi & Hamed, 2015).

Firm Size (FS) was measured as the natural log of the total asset of a company. This measurement was considered because previous studies such as Richardson and Lanis, 2007; Minnick and Noga, 2010; Vieira, 2013; Onyali and Okafor, 2018; Ogbeide and Obaretin, 2018 in respect of the subject matter affirm the measurement as most reliable.

Profitability (PE) was measured as Return on Asset (ROA) which is defined as the ratio of pre-tax income and total asset, that is ROA = Pre-tax income/ Total asset. This measure was used in previous studies such as Vieira, 2013; Ribeiro et al, 2015; Irianto et al, 2017; Onyali & okafor, 2018.

Leverage is used in this study to evaluate the influence of debt tax shield of a company
on effective tax rate. Chen et al. (2010), Armstrong et al. (2012), Ribeiro et al. (2015) and Ogbeide, (2018) are some of the authors that include leverage variable in their studies. Leverage in this study, is measured as the ratio of total long-term debt and total assets. That is 

\[ \text{Leverage} = \frac{\text{total long-term debts}}{\text{total assets}}. \]

Firm age variable measured how long a firm has been into legal existence. It was measured as the years of existence since its incorporation. To the Researcher best of knowledge, no study in Nigeria context has included the variable in tax avoidance literature. This measured was also used by Pratama (2017).

D-Earn are a dummy variable needed to control for negative earnings. This is to avoid bias in the analysis of the study. The variable will take 1 if a firm has positive earnings, otherwise 0. This variable was previously adopted in the studies of Minick and Nosa (2010), Vieira (2013) and Ribeiro et al, (2015).

Results and Discussion

The summary statistics show some statistical properties of the variables used in this study. Table 1 shows that the mean value of aggressive tax avoidance which is measured as the percentage of tax expense for the period to pre-tax income is 1.46%. This indicates that, on the average, the listed insurance companies in Nigeria utilize highly aggressive tax avoidance strategies over the period under review. Meanwhile, out of the insurance companies, Guinea Insurance Plc. operates a low tax avoidance strategy with an ETR of 26.15 percent effective tax rate, while Consolidated Hallmark Insurance Plc. utilizes an aggressive tax avoidance strategy with an ETR of 0 percent.

The mean value of the firm size in Table 1 is 16.67, which is slightly higher than the minimum value of 14.4 and slightly lower than the maximum value of 23.07. This indicates that the variance in the size of the selected listed firms is small which implies that they are not significantly different from each other concerning the size. The descriptive statistics of the leverage have a mean value of 1.02 percent, a minimum value of 0.01 percent, and a maximum value of 8.46 percent. This implies that the selected firms were not highly leveraged during the period under consideration.

Profitability has a mean value of 0.09 percent, with Linkage Assurance Plc. being the least profitable company, while Staco Insurance Plc. has the highest return on assets in the period under review. Based on the result as presented in Table 1, the average age of selected insurance companies is 37 years. The standard deviation of 13.35 percent shows that the age of each firm is not too dispersing from the average firm age.

Table 1. Summary Statistics

<table>
<thead>
<tr>
<th>Var</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETR</td>
<td>1.46</td>
<td>3.36</td>
<td>0.00</td>
<td>26.15</td>
</tr>
<tr>
<td>FS</td>
<td>16.67</td>
<td>1.60</td>
<td>14.4</td>
<td>23.07</td>
</tr>
<tr>
<td>PE</td>
<td>0.09</td>
<td>0.22</td>
<td>0.001</td>
<td>2.57</td>
</tr>
<tr>
<td>LE</td>
<td>1.02</td>
<td>1.03</td>
<td>0.01</td>
<td>8.46</td>
</tr>
<tr>
<td>FA</td>
<td>36.6</td>
<td>13.35</td>
<td>15</td>
<td>60</td>
</tr>
<tr>
<td>D-EARN</td>
<td>0.74</td>
<td>0.44</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Authors’ computation (2020)

Test for Multicollinearity

Multicollinearity occurs when there is evidence of a strong linear relationship among the independent variables in a regression model. The test for multicollinearity was determined by performing the Variance Inflation Factors (VIF) test. Using the VIF test, the rule of thumb is that the VIF for a variable must not be greater than 10 to confirm that the variable is not highly collinear. Table 2 presents the result of the VIF test. From Table 2, it can be seen that all the variables have a VIF less than 10, which suggests the independent variables in the model are not highly correlated with each other.

Table 2. Variance Inflation Factors (VIF) Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variance Inflation Factors (VIF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS</td>
<td>1.382</td>
</tr>
<tr>
<td>PE</td>
<td>1.208</td>
</tr>
<tr>
<td>LE</td>
<td>1.244</td>
</tr>
<tr>
<td>FA</td>
<td>1.373</td>
</tr>
<tr>
<td>D-EARN</td>
<td>1.362</td>
</tr>
</tbody>
</table>

Source: Authors’ computation (2020)
Model Estimation Results

The statistical significance of the one-period lagged dependent variable-aggressive tax avoidance (ETR) at 1% level of significance in the table justifies the introduction of dynamism into the model and the use of a dynamic panel data estimator. In a single focus on the constructs of company characteristics and with controlling for the insurance companies’ earnings, firm size -FS showed a significant positive impact of 0.628 (p-value < 1% level of significance) on the aggressive tax avoidance strategies of the listed firms. This implies that a percentage increase in the size of these firms will increase the aggressiveness of their tax avoidance strategies by 0.628 percent.

Leverage-LE is positively and significantly related to aggressive tax avoidance of the selected firms. This finding implies that an increase in leverage of the insurance companies impacts the aggressive tax avoidance of these listed firms by 0.549 percent (p-value < 1% level of significance). Profitability-PE and firm age-FA have a significant negative impact on ETR. This means that a percentage increase in either the profitability or firm age of insurance companies leads to reduced aggressive tax avoidance. The control variable showed an insignificant negative impact on aggressive tax avoidance. This depicts that changes D-EARN neither increase nor decrease the aggressiveness of the insurance companies’ tax avoidance.

The model diagnostic showed the rejection of the first degree of autocorrelation-AR1 at a 1% level of significance and acceptance of AR2. The non-significance of the Sargan test signifies the goodness of the instruments. The significance of Wald test 1468.12(p-value=0.0000) indicates the robustness of the explanatory variables in the model in explaining the dependent variable. It also shows the statistically significant effect of FS, DL, PE, and FA on aggressive tax avoidance at a 1% level of significance. The significant nature of the Wald-test implies that the overall goodness of fit of the model is satisfactory. It further signifies that company characteristics have a dynamic impact on aggressive tax avoidance of the listed insurance companies.

Table 3. Model Estimation

<table>
<thead>
<tr>
<th>Variables</th>
<th>Company Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant ($\beta_0$)</td>
<td>-11.691</td>
</tr>
<tr>
<td>ETR Lag 1</td>
<td>-0.036</td>
</tr>
<tr>
<td>FS</td>
<td>0.628***</td>
</tr>
<tr>
<td>PE</td>
<td>-0.843***</td>
</tr>
<tr>
<td>LE</td>
<td>0.549***</td>
</tr>
<tr>
<td>FA</td>
<td>-0.056***</td>
</tr>
<tr>
<td>D-EARN</td>
<td>-0.374</td>
</tr>
</tbody>
</table>

Model Diagnostics

| AR1 | -1.6107[0.0107] |
| AR2 | 0.21986[0.8260] |
| Sargan | chi2(26) = 15.55074[0.9464] |
| Wald | 1468.12[0.0000] |

No of Instruments 32
No of Groups 20

Notes: *** indicates statistically significant at the 1% significance level. Also, diagnostics are reported in [].

Source: Authors’ computation (2020)

The results in this study signify that company characteristics have a significant impact on aggressive tax avoidance of listed insurance companies in Nigeria. It is in line with the findings of Pratama (2017); Irianto, et al., (2017); Ribeiro et al (2015), that disclosed a significant relationship between the two variables.

Precisely, the study found out that the size of the firm positively and significantly affects aggressive tax avoidance of the insurance companies. This implies that the bigger the size of the firm, the greater the aggressiveness of tax avoidance in the companies. This agrees with Pratama (2017); Zemem and Ftouhi (2013); Chytis et al (2019); Ogbeide (2017); and Uniamikogbo, Atu & Atu (2018) that the size of the board significantly influences the practice of tax avoidance. However, it negates the findings of Salaudeen & Ejeh (2018) that firm size has no significant effect on tax aggressiveness.

In the same vein, profitability showed a significant negative impact on aggressive tax avoidance, which implies that a percentage change in the profitability of a firm will leads to reduction (high) in the firm’ aggressive tax avoidance. This empirical result is in support
of the findings of Ribeiro et al (2015); Zemmz em and F touhi (2013); Salaudeen & Ejeh (2018) that the profitability of firm reduces corporate tax avoidance. This however, negates the findings of Irianto et al (2017); Uniamikogbo et al (2018) that profitability has no significant relationship with tax aggressiveness.

The study also revealed that firm leverage has a positive influence on aggressive tax avoidance of Nigeria listed insurance companies. This implies that as the firms in the industry engage more on leverage, their aggressive tax avoidance intends. This conforms to the findings of Chytis et al (2019); Salaudeen & Ejeh (2018); Uniamikogbo et al (2018); Salaudeen & Eze (2018). Although, this result is against the findings of Ribeiro et al (2015); Irianto et al (2017); Ogbeide (2017) which disclosed that leverage has no significant influence on tax avoidance.

Firm age of the insurance companies has a negative and significant effect on their aggressiveness towards tax avoidance. This entails that the aggressiveness towards tax avoidance of the Nigerian listed insurance firms reduce as the firms age increase. This is in tandem with the findings of Pratama (2017) that Age of a firm has a significant impact on tax avoidance.

Conclusion
As a whole, this study ascertained that company characteristics are useful in explaining aggressive tax avoidance in Nigerian listed insurance companies. Based on the estimation results, this study concludes that company characteristics influence aggressive tax avoidance of insurance companies listed on the Nigerian Stock Exchange. Specifically, firm’ size and leverage have a positive impact on aggressive tax avoidance in Nigerian listed insurance companies which is in support with theoretical and empirical findings while firm’ profitability and Age have a negative effect on aggressive tax avoidance of Nigerian listed insurance companies and it is in compliance with Political cost theory and other empirical findings. Besides, this study evidenced that changes in the insurance companies' earnings are not significant on the aggressive tax avoidance of listed insurance companies in Nigeria.

Recommendations
Based on the findings the following recommendations were made: (a) The firm size should be well formulated in accordance with regulating bodies like the Corporate Affairs Commission (CAC), National Deposit Insurance Cooperation (NDIC); (b) The tax authority should come up with incentives that will discourage aggressive tax avoidance; (c) The Nigerian listed insurance companies should make it a practice to reduce tendency of engaging in renting by its managers which will in turn lower aggressive tax avoidance.

References


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