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**Are There Factors Driving Tax Aggressiveness in Listed Companies? Empirical
Evidence from Nigeria**
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ABSTRACT

This study investigated the factors driving tax aggressiveness of listed companies in Nigeria. A sample of sixty listed non-financial firms was selected for the study using the simple random sampling technique. The data were sourced from the annual reports of the sampled companies in the period (2010-2017) under reference. This study used the descriptive statistics and panel least square and dynamic panel regression methods to analyse the data. The findings from the empirical investigation indicate that managerial ownership and firm size exerts positive effects on tax aggressiveness. Board size, board independence and leverage exerted negative impacts on tax aggressiveness. The study concludes that board size, board independence and amount of leverage in firms contribute to the level of tax aggressiveness in Nigeria. Based on the robust empirical findings, the study suggests that quoted firms in Nigeria should ensure the composition of corporate board contains optimal mix of executive and non – executive directors who are professional accountants, tax experts, business strategists and legal experts. This calibre of persons should be able to bring their wealth of experience and training to positively influence key decision making regarding tax expenses minimization and the strategies.

**Keywords: Board size, Board Independence, Managerial Ownership, Firm Size,
Leverage, Tax Aggressiveness.**



1.0 INTRODUCTION

In these days of stiff global economic challenges, the need to cut down costs, including tax cost by companies cannot be overemphasized. Tax expenses are usually part of operating costs to a firm; they are expenses paid for by a firm as tax liabilities (Ogbeide & Iyafekhe, 2018). Tax expense generally is a significant cost to firms that reduces cash flow level for a period. The International Accounting Standard number 12 (IAS 12) expressly states that tax expense is the aggregate amount included in the determination of profit or loss for a period which could be in respect of current tax and deferred tax. The tax expenses contribute largely in determining a firm's earnings after tax. To ensure the revenue of the firm is maximized, managers play a critical role by employing strategies to reduce tax expenses. Reduction of tax expenses is all about tax aggressiveness (Ogbeide & Iyafekhe, 2018). Shareholders normally have the preference that managers be involved in more aggressive tax in that through it, revenues accruable to the government are transferred to the them; thus promoting wealth maximization goal of the firm. All tax expenses are paid by firms to tax authority. Tax authority is the only body empowered by the Government to collect revenues from taxes in any country. In Nigeria, there exists two types of tax authorities, namely Federal Inland Revenue tax authority, otherwise refers to as Federal

tax authority; and the State Inland Revenue tax authority otherwise refers to as state tax authority (Anyaduba, 1994). The state tax authority collects tax on behalf of the State Governments for onward remission to the state treasury. The Federal tax authority collects all revenues from taxes due to the Federal Government.

All companies are expected to pay their taxes to the Federal Inland Revenue periodically, based on commencement year and failure to do so attracts a penalty. The computation of taxes is made by managers of companies based on the company income tax laws in Nigeria. Adequate caution is usually exercised by managers when computing for tax expenses to avoid tax evasion. In doing this, proper tax planning strategies are put in place for the purpose of ensuring lower tax expenses are paid to the government. According to Chen, Chen, Cheng and Shevlin (2010), for the purpose of tax management, companies do trade-off the marginal benefits of tax savings against the marginal costs of managing taxes. Because the marginal benefits of tax aggressiveness in form of cash saved accrues largely to resources owners, and marginal costs of managing taxes by way of time, effort and reputation are mostly borne by managers (Chen et al., 2010). In theory, a dollar or naira saved in taxes through tax aggressive practice implies extra dollar / naira for shareholders (Dyrenge, Hanlon & Maydew, 2010). Tax aggressiveness is



often detected by the use of effective tax rate (ETR). Effective tax rate expresses the relationship between total tax expenses and pre-tax income, expressed in percentage (Robinson, Sikes & Weaver, 2010), Dyreng, et al. 2010), Minnick & Noga, 2010). The implication is that the higher the effective tax rate, the more aggressive a firm is said to be and viz- versa.

The reduction of tax expenses is a function of the structure and characteristics of a firm in its day to day operation. The structure of a firm used to effectuate its day to day operation is the corporate governance indicators, viz-a-viz size of the board, independence of the board, ownership by managers, among others. These mechanisms play vital role of creating a strategic direction for the firm, minimizing cost, including tax cost with a view to achieving the goal of maximizing share holders wealth. The board of director as a corporate governance mechanism is critical in decelerating tax expenses (Desai & Dharmapala, 2007). According to Zemzem and Flouhi (2013), board size, managerial ownership, board independence, ownership concentration, board diversity, audit committee size, amongst others are interrelated towards influencing the level of tax expenses in a firm. In firms, the board of directors irrespective of the size has the duty to minimize expenses regarding tax and it is always responsible to the resources owners and other stakeholders. The boards of directors and management employ every known and available

strategy to minimize tax expenses in a legal way. What they do is to ascertain the kind of tax expense that are favourable if they minimize it within tax laws and take advantage of them to avoid excess tax payment for a period with the intention to increase net earnings. Board independence refers to non-executive directors. Non – executive directors are always viewed as a balancing force in the board. Independent directors may include any non-employees board members as well as members. Similarly, they could be consultants, lawyers, accountants, amongst others. Board independence is an aspect of corporate board composition whose responsibility includes playing over sight and monitoring functions. Board independence is the percentage of outside directors on a corporate board. Their presence on the corporate board increase the capacity of the board to monitor management effectively in situations characterized by agency problems which arise from the separation of ownership, control and thus help to reduce tax expenses (Zemzem & Flouhi, 2013).

Firm characteristics are attributes which could be categorized into physical, functional and operational. Firm specific characteristics are factors that are mostly under the direct control of managers (Ogbeide, 2017). Firm characteristics consist of ownership concentration, leverage, firm size, audit firm size, profitability, industry type and firm age. Firm age, could be incorporation age or managerial age (Ogbeide, 2017).



Ownership concentration is simply concerned with the degree of ownership in a business based on the level of investment resources. It is worthy of note that ownership structure can be divided into equity concentration and managerial ownership. Further, ownership structure can be segmented into family business, government ownership and foreign ownership structure. In research, each of them can be investigated separately to determine their effect on a defined specific endogenous variable. Ownership or equity concentration is a way of solving the problem of agency between managers and shareholders; however, it creates another type of conflict between minority shareholders and block-holders (Desai & Dharmapala, 2008). Ordinarily, it is presumed that the level of ownership by managers, directors and shareholders should reduce the tendency for rent extraction, leads to avoidance of managers carrying out project with negative net present value, minimize cost, employs effective strategies to decrease tax expense with a view to enhancing the goal of shareholder's wealth, all things being equal. Besides ownership concentration, leverage is one of the firm characteristics that can easily be used to discipline managers to reduce the tendency for rent seeking. Conventionally, managers of companies with higher amount of leverage are subject to the discipline of financing agreements imposed by creditors through the inclusion of limiting clauses (Ribeiro, 2015). These restrictions reduce the leeway available

to managers to take decisions that are not value maximizing only for the purpose of extracting private benefits. Financial leverage otherwise refers to as a firm characteristic reflects the company's ability to repay debts, especially long-term ones. Tax benefits are considered as one of the factors that influence the financing strategy (Graham, 1996). To achieve a certain level of debt, management manipulates financial statements; and as a result, the high level of debt creates the interest tax advantage for these companies. Jensen (1986) emphasized that higher level of debt combat agency problems. DeAngelo (1981) initially surmises that companies substitute between debt and non-debt tax shields at least for the purpose of minimizing tax liability.

Highly levered firm are faced with high-interest expense; and since interest expense is tax deductible; it tends to lower the effective tax rate. Listed companies usually benefit from the advantage of using debt to finance operation which is in the form of debt tax shield. The employment of optimal debt level by firms causes them to take advantage of tax shield. Tax shield revenue contributes to firms' financial performance. But there has to be a trade-off between the cost of debt and the benefit due to bankruptcy or liquidation problem. So, companies that employ debts pay less or no interest charges, thereby minimize tax payment expenses. According to Richardson and Lanis (2007), while for leverage variable, interest cost reduces tax cost, enhances



the value of a company and thereby cause the effective tax rate (ETR) to be lower. Capital structure has been observed as a fundamental factor that can influence effective tax rates (Ribeiro, 2015). A firm in terms of financing decision may choose to finance its operation with debt or equity. If a firm chooses to finance its operation with equity, the implication is that it would pay dividends to investors, which is tax deductible for tax purposes. Tax paid on dividend is referred to as withholding tax. Debt financing is more often preferred by firm because of the non – deductibility of interest expenses (tax shield) unlike the case of equity financing. The non – deductible tax expense is a way of engaging in aggressive tax behaviour to influence earnings and enhance shareholders' wealth. Ribeiro (2015) posited that more leveraged firm exhibit lower effective tax rates (tax aggressiveness). Richardson and Lanis (2007) and Firms that are more capital intensive benefit more from depreciation deductibility and depreciation is a capital allowance items firms can optimize to reduce tax expenses for a period. Due to the existence of varying depreciation methods, more capital – intensive companies can easily manage taxes by accelerating or deterring depreciation expense and as a result, they can take advantage from temporary book differences.

Stickney and McGee (1982) in their study sought to find out what really cause firms to be skewed towards tax

expenses reduction. In the research work, they hold the view that company size tends to determine how tax aggressive managers could be. Richardson and Lanis (2007) reported that larger company all things being equal will lead to lower tax liability payment. They stressed that larger companies are better in using their resources to form good tax planning than smaller companies. Firm with huge investment in physical assets for example tend to use higher value of depreciation expense to reduce their assessable income and therefore pay lower income tax expense. Investment allowance and capital allowance do combine to minimize the tax burden because of the total assets holding; suggesting that firm size proxy as total asset has a correlate with the reduction of tax liability. Similarly, larger firms with track record of success history appear to be exposed to better political scrutiny which tends to minimize the chances of tax minimization. While managers in quoted companies are at worrisome state over the daunting financial challenges rocking company performance, including tax cost, empirical researches on factors driving tax aggressiveness of firms are yet to gain ascendancy specifically in the context of Nigeria; hence this study is undertaken.

2.0 LITERATURE REVIEW

Empirical Review

In the view of Koanantachai (2013), board of directors does determine the level of tax aggressiveness in companies.



The capacity of board of directors to directly determine the level of tax aggressiveness in companies is subject to its size. The empirical research of Minnick and Noga (2010) reported that small boards of directors reduce and determine tax liability of companies while large – boards could prove ineffective due to the difficulties in decision – making about tax aggressiveness policy. Lanis and Richardson (2011) reported that board size does not determine tax aggressiveness in companies. Contrary to expectation, Aliani and Zarai (2012) empirical study revealed non-significance relationship between the size of the board and tax aggressiveness in the American context. Their finding portends that the number of directors does not influence the strategies to minimize tax expenses, thus creating a further gap for empirical investigation. The empirical study of Lanis and Richardson (2011) on the effect of the composition of the board of directors and tax aggressiveness of quoted in firms in Greece revealed that the inclusion of a larger number of independent directors contributes to tax aggressiveness. The study by Zemzem and Flouhi (2013) using panel regression method for a sample of 73 French companies for the period 2006 to 2010 revealed that the higher proportion of outside members failed to determine tax aggressiveness of companies. The empirical study by Ying (2015) showed that the percentage of independent directors failed to significantly determine tax aggressiveness. The study

outcome was a confirmation of the finding by Chen et al. (2010) which states that high percentage of managerial ownership causes a lower level of tax aggressiveness.

Dyreg, Hanlon and Maydew (2010); Richardson and Lanis (2007) ascertained a negative relationship between firm size and tax aggressiveness, proxy as effective tax rates, while Kraft (2014) reported that firms' size has a positive impact on effective tax rates. The outcome of the researches suggested results that these variables determine tax aggressiveness of companies. Didar, Matsusaka and Ozbas (2014) found that there is a negative relationship between financial leverage and tax gap. Also, Frank, Lynch and Rego (2009) show debts is negatively associated to tax avoidance. Ilaboya, Obasi and Izevbekhai (2016) stressed that leverage is a factor that contributes to firm tax aggressiveness. Boussaidi and Hamed (2015) did not find a significant effect of leverage on tax aggressiveness of listed firms in Tunisia. Ribeiro (2015) established that more leverage firms exhibit lower effective tax rates. Richardson and Lanis (2007) document a significant negative relationship between leverage and tax effectiveness. Increase dependent on leverage capital decreases tax expense payment. Therefore, the interest element in leverage financing has a tax shield which tends to reduce the income tax liability. Derashid and Zhang (2003) ascertained a negative relationship between leverage and effective tax rate. Flowing from



above, this study hypothesizes that board size, board independence; managerial ownership, firm size and leverage are not significant determinants of tax aggressiveness in Nigerian listed companies.

3.0 METHODOLOGY

This study uses the causal effect research design. The study concentrates on the entire listed companies in the Nigerian non- financial sector. A sample of sixty listed non- financial firms was selected for the study using the simple random sampling technique. The data were sourced from the annual reports of the sampled companies in the period (2010-2017). This study used the descriptive

statistics and panel and dynamic regression methods to analyse the data.

Model Specification

The study uses the stochastic model detailed below:

$$ETR_{it} = \alpha_i + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 Mgo_{it} + \beta_4 Fsize_{it} + \beta_5 Lev_{it} + \varepsilon_{it} \dots \dots \dots 1$$

Where ETR= Effective tax rate; BSIZE= Board size; BIND=Board Independence; MGO=Managerial Ownership concentration; F size= Firm size and Lev= Leverage (both short and long term debts). ε = error term. $\beta_1 - \beta_5$ = parameters of estimation. The subscripts *i* and *t* refer to individual firms and time period (2010-2017) respectively.

Measurement of Variables

Table A: Procedures used to measure the variables in the construct

S/N	Variables	Type of variable	Measurement	Sources
1.	Tax aggressiveness	Dependent variable	Effective tax rate	Boussaidi & Hamed (2015)
2.	Effective tax rate (ETR)	Dependent variable	Total cash tax expenses divided by pre-tax income, expressed in percentage.	Boussaidi & Hamed, 2015, Oyeleke etal (2016)
3.	Board size	Independent variable	Total number of directors on the corporate board	Oyeleke et al. 2016, Boussaidi & Hamed (2015)
4.	Managerial ownership	Independent variable	Percentage of capital held by the managers divided by the total share outstanding in the company	Boussaidi & Hamed (2015)
5.	Board independence	Independent	Proportion of non-executive directors divided by the total board of directors	Hairul, Ibrahim & Siti (2014)
6.	Firm Size	Independent	Firm total assets	Hairul, 2014
7.	Leverage	Independent	Firm total debts	Ribeiro, 2015

Source: Researcher's compilation, 2019.



4.0 ANALYSIS AND DISCUSSION

Table B: Descriptive Statistics

Variables	Mean	STD	Skewness	Kurtosis	Jarque-Bera
ETR	24.37	90.33	7.83	94.59	140331.3 (0.00)
BSize	98	2.82	1.15	5.80	215.10 (0.00)
BIND	62.24	14.47	-0.52	2.81	18.50 (0.00)
MGO	19.07	24.51	1.15	3.14	87.70 (0.00)
FSIZE	N50908971	90.33	6.468	55.88	48530.53(0.00)
LEV	N29700939	6.76	5.08	39.58	23615.11(0.00)

Source: Researcher's Computation from 2019 from E-Views 8.0 Version

Note: () represents J-B probability value. Presentation of descriptive statistics results of models 1 and on corporate governance mechanisms and tax aggressiveness. Variables definitions are detailed under the methodology of this study.

The descriptive statistics in table above shows that ETR is 24.37%. This figure is far below company income tax rate of 30%. The result is an indication that the sampled firms were very tax aggressive in the period under reference. Intuitively, it can be said that the firms have tax management experts and tax consultants who do employ every legal strategy to minimize tax liability, increase net income and maximize the wealth of the shareholders. The result is consistent with Koanantachai (2013) study which reported 13.98% for ETR in Thailand between 2007 – 2011; Ying (2011) recorded 22.7% ETR in China for the period 2003 to 2009; Aliani and Zarai (2012) reported 17.4% ETR in Tunisia for the period 2000 to 2007. Ribeiro (2015) in a study reported 24.5% for ETR, Boussaid and Hamed (2015) found 12.37% in Tunisia for the period 2006 to 2012. In Nigeria, Oyeleke et al. (2016) reported 12.10% for the period 2012 to 2014 in the financial sector contrary to

expectation; Ilaboya et al (2016) reported 29.88% in Nigeria in the period 2008 to 2014. Sar and Martani (2010) reported 29% for ETR in Indonesia for the period 2005 to 2008. Konstantinos (2016) reported 7.5% ETR in Greece. The standard deviation for ETR reads 90.33. This spells out the risk implication particularly the reputation cost to managers and organization arising from litigation / penalty due to engagement in tax aggressiveness practices. The values of the risk (standard deviation) is higher than 3.28 recorded by Konstantinos (2016); 0.92 by Ilaboya et al. (2016) in Nigeria; 0.08 in Nigeria by Oyeleke et al. (2016); 0.26 and 0.239 by Ribeiro (2015); 0.1865 by Aliani and Zarai (2012); 0.136 reported by Ying (2011). There is positive kurtosis of 94.59 and 365.39. It is an indication that they are very leptokurtic. The Jarque-Bera values of 14033.13 shows that ETR is statistically significant at 1%. It can be said that the



variable was normally distributed. The average board size in the sampled firms is 8. It does not exceed the stipulated 20 board members. The average figure of 8 comprising persons clearly shows that conflicts of interest in decision making is minimized to enhance the operational performance of the firm, including tax expense minimization (tax aggressiveness). Jensen (1993) opined that the impact of the board depends on its size. Minnick and Noga (2010) supported this view. The average number of 8 persons obtained in the sampled firm in this study is quite lower compared to that of previous studies. Oyeleke et al. (2016) obtained 10 members as board size; Ribeiro (2015) reported 11 members; Boussaidi and Hamed (2015) recorded 12 members on the average. This board size differential however varies from sector to sector as observed in existing literature. However, the value of 62.24% BIND appears lower than the 75% found by Ying (2015) for the China; 89.47% reported by Aliani and Zarai (2012). The high representation of board independence on the corporate board of the sampled firms is an indication there is effective monitoring of the actions and practices of the executive board/managers which includes among others the tendency to engage in rent extraction occasioned by agency problem. In consonance with this, the finding is in tandem with Ying (2011), Aliani and Zarai (2012), Lanis and Richardson (2011), Boussaidi and Hamed (2015), and Ribeiro (2015). The standard deviation value of 14.47

pointed out the extent of variability of board independence for the cross – section of companies from the mean. It is negatively skewed (- 0.52). The J-B statistic (18.50) of BIND indicates it satisfies normality. MGO has a mean value of 19.07% in the sampled firms. It suggests that about 19.07, which is approximately 20% of the total shareholding is owned by the management. This ownership stake by the management intuitively implies a minimization of the tendency to engage in managerial opportunism. This could make them carry out strategies to reduce operational expenses, including tax expenses, thus generally promoting the wealth shareholders and other stakeholders. The value obtained in this study is higher than the reported figures of MGO by Boussaidi and Hamed (2015) of 17.03%, but lower than that of Ribeiro (2015) of 28.7% in U.S; Desender, Miguel and Rafel (2008) of 22.5% in Spanish companies, 59% by Gabrielson et al. (2002) in Demark. The Jarque – Bera value of 87.70 with p – value less than 5% is statistically significant at 1%, meaning the variable is normally distributed.

Firm size mean value is 50908971 billion. The figures reported is a pointer that the sampled firms invested heavily in total assets perhaps to enable them optimize the benefit of economy of scale and capital allowance. The implication of this is to reduce tax expense. The result obtained is quite close to the empirical value obtained by Ilaboya et al. (2016) of 7.303577 billion. It is an



indication that the sampled firms are highly capital intensive by way of fixed assets investments. The standard deviation is 1.36, the skewness and kurtosis are positive (6.468 and 55.88). The Jarque – Bera value of 48530.53 ($p < 5\%$) is statistically significant at 1% level. The average value of leverage is 29700939 billion; which implies that the firms which constitute the sample size are highly geared. This affords them to take advantage of tax shield arising from interest expenses to minimize tax liability since interest expense on

leverage is tax deductible. The standard deviation is 67690364. It suggests the risk the firm face for using much leverage to influence their operation and minimize tax liability. The skewness and kurtosis are positive (5.08 and 39.58) while the Jarque – Bera value of 23615.11 is statistically significant at 1% level; an indication that the variable is normally distributed. On the overall, the implication of these descriptive results is that these variables contribute to determining how tax aggressive firms are in the Nigerian context.

Table C: Correlated Random Effects – Hausman Test

Test Summary	Chi-square statistic	Chi-square prob
Cross section random	0.678	0.631

Source: Researcher’s Computation 2019 from E-view 8.0 version

The Hausman test chi-square statistics result indicate the random effect is preferable in this study.

Table D: Presentation of Regression Results
Dependent variables ETR

Variables	Random effect (A)	General Method of Moment (B)
BSIZE	-0.667 [0.008]***	-12.312 [0.003]**
BIND	-13.002 [0.009]***	-3.350 [0.004]**
MGO	0.295 [0.000]***	0.358 [0.005]**
FSIZE	4.200 [0.005]***	7.360 [0.001]**
LEV	-1.120 [0.002]**	-1.490 [0.006]**
R-squared	0.723	-
Adjusted R-squared	0.682	-
F-statistics	5.123	-
Prob (f-statistic)	0.000	0.000
Durbin-watson stat	2.002	2.002
J- Statistics	-	3.628

Source: Researcher’s Computation 2019 from E-view 8.0 version



Table N is concerned with the regression estimations methods of model I. significance levels are reported in three forms. * $p < 0.000$ is statistically significant at 1% level. ** $p < 0.05$ is statistically significant at 5% level. ** $p > 0.05$ is statistically not significant at 1% or 5% level. The [] represents the probability value (p – value)

From the table above, it can be observed that in panel B, the R^2 is 0.723, an indication that the model explained about 72.3% systematic variation in tax aggressiveness (ETR), leaving less 27.7%. The adjusted R^2 value is 0.682 (68.2%). The F – statistic is 5.123 with p – value of 0.000. The D.W statistic is 2.002. This shows the removal of serial correlation problem in the regression result. Using the GMM to estimate the baseline (panel B), for the effect of endogeneity, it can be observed that the Hansen J – statistic test is 3.628. Judging by the results of the R^2 , J – statistic, the F – statistic and Durbin-Watson statistic, it can be deduced that these variables, board size, board independence, managerial ownership, firm size and leverage principally determine the tax aggressiveness of listed companies in Nigeria.

Regarding the individual explanatory variables, BSIZE is seen to have a negative sign (- 1.958) in panel A, (- 0.664) and (- 12.312) in panel B on tax aggressiveness. It is statistically significant in panel B and not significant in panel A. The result connotes that a small board size determines the minimization of tax expenses in firms. The result obtained in this regard is not surprising for instance the average board size of the sampled firms in this study is 8. Generally, small board size smoothen decision making unlike large board size which promote managerial opportunisms

and squabbles. The finding is in line with Minnick and Noga (2010); Lanis and Richardson (2007); Mahenthiran and Kasipilai (2012) who found that small board size is significant and negatively impact on tax aggressiveness. The study finding did not agree with the findings of prior researchers like Aliani and Zarai (2012); Koanantachai (2013); Zemzam and Flouhi (2013). The finding agrees with that of Adams and Funk (2012); Boussaidi and Hamed (2015), Chen et al. (2010). The finding is however contrary to other studies like Aliani and Zarai (2012); Oyeleke et al. (2016).

Managerial ownership (MGO) has a positive effect (0.295) in panel A and (0.358) in panel B on tax aggressiveness. It was statistically significant in both panels at 5% levels. It points to the fact that a specific proportion of ownership by managers determines tax aggressiveness of listed firms in the context of Nigeria. This finding aligns with Florackis (2008). The value of 19.29% of managerial ownership under the descriptive statistics in the sampled firm is an evidence of the positive and significant effect it has on tax aggressiveness. Board independence (BIND) has a positive effect (13.002) in panel A. It has a positive sign in panel B (3.350) on tax aggressiveness of firms in. The P-value of each panel reveals significance of the variable as a determinant of tax aggressiveness among listed companies in Nigeria.



These effects of board independence on tax aggressiveness may be interpreted in two forms. First, the percentage of 62.35% of the non-executive directors in the firm is sufficient to engender positive effect on tax expense reduction premised on the fact that they are actively participating in the monitoring of the actions, practices or behaviours of the insider (executive) directors. Secondly, if they do not get involved in effective playing of oversight function in the firm including checkmating the tendency of insider directors and managers to be rent seeking in the firm, this could result to a negative effect on tax aggressiveness. The finding of this study agrees with Yeung (2010) position that increase in board independence decrease tax expenses. Albeit, the influence of board independence at minimizing tax expense is made possible if they are vast in tax management. The finding is also in consonance with Lanis and Richardson (2007) and Aliani (2013). This study finding fails to agree with other studies like Zemzem and Flouhi (2013) and Ying (2011). Firm size is positively signed (4.200) in panel A and (7.360) in panel B. Firm size is statistically significant with $p = 5\%$ in each of the estimations. The result connotes that the sampled firms are exposed to effective and efficient scrutiny by the various regulatory agencies, stakeholders and particularly the tax authority such that they have little or no chance to aggressively minimize tax expense payment. Managerial ownership exerts positive and significant impact on tax

aggressiveness in firms in the Nigerian non – financial sector. The finding is in tandem with Ying (2011). It is however not in consonance with Chen et al. (2010), Konstantinos (2016), and Florackis (2008). Leverage (LEV) is seen to have a negative effect (-1.120) in baseline panel A and (-1.490) in panel B. It was statistically significant at 5% level ($p = 5\%$) in panels A with the exception of panel B whose p – value is greater than 5% ($p > 5\%$). Conventionally, leverage is expected to exert negative effect on tax liability due to the interest element. The interest element serves as tax shield which firms use to minimize tax liability. Therefore, the negative and significant effect of leverage on tax aggressiveness suggests that the sampled firms in this study use the tax shield of the interest element to reduce their tax burden. . The finding in this regard affirms the result of prior researches of Ribeiro (2015), Lanis and Richardson (2011), Kraft (2014) Boussaidi and Hamed (2015). It did not agree with the finding of Oyeleke et al. (2016), Derashid and Zhang (2003).

5.0 CONCLUSION AND RECOMMENDATIONS

The need to reduce costs, especially tax cost has continued to drive managers of companies to devise varying strategies to achieve the targeted objective. The aim of this study was to examine the factors driving tax aggressiveness of listed companies in Nigeria. The findings arising from the empirical investigation are that managerial ownership and firm



size exerts positive effects on tax aggressiveness while board size, board independence and leverage exerted negative impacts on tax aggressiveness. The study concludes that board size, board independence and amount of leverage in firms contribute to the level of tax aggressiveness in Nigeria. Based on the robust empirical findings, the study suggest that quoted firms in Nigeria should ensure the composition of corporate board contains optimal mix of executive and non – executive directors who are professional accountants, tax experts, business strategists and legal experts. These set of caliber of persons should be able to bring their wealth of experience and training to positively influence key decision making regarding tax expenses minimization and the strategies. Listed firms in Nigeria should make it a practice to adequately compensate managers / board of directors strategically as this will assist to reduce their tendency to engage in rent seeking / managerial opportunism, mitigate agency problem, enhance operational efficiency and lead to lower effective tax rate.

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