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CORPORATE GOVERNANCE AND TAX AGGRESSIVENESS IN NIGERIA

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ABSTRACT

The study investigated the effect of corporate governance on tax aggressiveness in Nigeria. Specifically, four variables; gender diversity, board size, CEO duality, and ownership structure were used as proxy for Corporate Governance while Effective Tax Rate was used to represent Tax aggressiveness in the Oil & Gas marketing firms in Nigeria. The population of study consists of all Oil & Gas marketing firms listed on the Nigerian Stock Exchange as at 31st December 2017.The entire population was adopted as the study sample using the census sampling approach. The secondary source of data collection method was used in generating data from the annual reports and accounts of the selected firms for the period 2013- 2017. Data generated were analysed using descriptive statistics and Ordinary Least Square (OLS) regression. Findings from the study showed that a positive and significant relationship exists between gender diversity, board size and tax aggressiveness while a negative but significant relationship subsists between CEO duality and tax aggressiveness. Negative and insignificant relationship exists between ownership structure and tax aggressiveness in the Nigerian Oil & Gas marketing firms. We therefore recommend that audit committee of firms should be backed up with the obligation of appraising tax assessment and returns in order to avoid any form of illicit strategic tax behaviour by management. Also, Board of directors should clarify their responsibilities and provide recommendations to strengthen the control on the significant variables identified in this study analysis.

***Key Words**:* Tax aggressiveness, corporate governance, effective tax rate, Oil & Gas firms, firm size.

INTRODUCTION

Corporate governance issue in recent times has received great attention. Corporate governance has come to our knowledge as a distinct and expanding field of study (Parker, 2014) and had gained global recognition because of the infamous corporate fraud cases that occurred during the last three decades. According to Okereke (2009), the collapse of WorldCom and Enron corporations in the United States with the consequent establishment of the Sarbanes-Oxley Act in July 2002 brought to limelight issues of corporate governance. Some of the corporate failures and near failures in Nigeria have been attributed to lack of observance of Code of Corporate Governance in place. The financial scandals that rock companies such as Cadbury Nig. Plc., the AP Nig., and some banks in Nigeria have made investors and stakeholders lost confidence in financial reporting as well as the entire financial system. The provisions of the 2011 SEC Code was designed to improve corporate performance among firms as it had evidently focused on Corporate Governance, Law, and Business and other incidental matters in Nigeria. The Nigerian Securities and Exchange Commission (SEC) issued the Code of Corporate Governance of 2011 in Nigeria to agree with the international best practices on corporate governance with a view to resolving some of the gaps and poor display of the Corporate Governance of 2003 issued by SEC (**Ibadin & Dabor, 2015)**. Consequently, "The Code of Corporate Governance, 2018" recently issued by the Financial Reporting Council of Nigeria (FRCN, 2018) which is the board saddled with the responsibility of aligning corporate entities with the new innovations to protect investors and other stakeholders interest and enhance the credibility of financial reporting would further strengthen corporate performance in Nigeria. According to Okafor (2009) posits that the main idea behind corporate governance is to direct and control the activities of corporate entities in order for interested parties have returns on their investment from the companies.

According to Odoemela, Ironkwe, and Nwaiwu (2016), posit that corporate governance is the managerial control of an organization aimed at improving the organization's performance. Necessity is laid on management to function in utmost good faith and discharge their responsibility in a way the shareholders (owners) would have done so as to enhance the market value of the firm. According to Sanusi (2002), respectable corporate governance is an imperative phase towards establishing souk assurance in addition to inspiring steady, long-standing global investment streams into an economy. Managerial control is therefore intended to shield shareholders from any act of expropriation by the board and management team thereby enhancing their confidence in the enterprise. It involves creativity and innovation. Studies (such as Avi-Yonah, 2005; Ribstein, 2006; Averbach, 2006; Oyerinde, 2010) revealed that the utmost interest of shareholders is wealth maximisation, and cost minimisation is one of the assured ways this can be achieved by management. Okoye and Akenbor (2010) claimed that one of the costs of doing business which constitutes a serious barrier to wealth maximization is taxation.

Taxation therefore, is an obligatory payment charged by government on the profits of individuals and businesses. For tax burden of a business concern to be minimized, tax aggressiveness becomes imperative for management. Tax aggressiveness is an effort to apply lawful hitches to circumvent recompensing or minimize the payment of tax. However, when this is achieved through some illegal means, acts or procedures, it is seen as a deceit or fraud and so criminal. According to Kiabel & Nwikpasi (2001), tax aggressiveness is the planning and operation of business activities within the context of existing legislation in such a way that the business realizes the optimal or best tax position while achieving its set goal. In other words, tax aggressiveness include not only the strategies aimed at minimizing tax liability of a business, it also looks at the cash flow consequence on the business regarding when it is most beneficial for a corporate entity to settle its tax liability and not incur any punishment. In summary, tax aggressiveness is an act of transferring value from the state to the firm. To promote corporate governance in business and increase shareholders' wealth, tax aggressiveness plays a very significant role.

In Nigeria, studies on corporate governance and tax aggressiveness have remained unexplored as there is dearth of research in this area. Some studies (such as Onyali & Okafor, 2018; Oyesola & Adelabu, 2017; Odoemela, et al., 2016; Olayinka & Francis, 2016; Okoye & Akenbor, 2010) have examined corporate governance and tax planning in Nigeria from different perspective, though with mixed findings and inconclusive.

The key objective of this study is to examine the effect of corporate governance on tax aggressiveness in Nigeria using four variables; gender diversity, board size, CEO duality, and ownership structure to proxy corporate governance and effective tax rate was used to proxy tax aggressiveness in Nigeria. However, the precise objectives are to: investigate the effect of gender diversity, board size, CEO duality, and ownership structure on tax aggressiveness in the Nigerian Oil and Gas marketing firms. Establishing a link between corporate governance and tax aggressiveness in the Nigerian Oil & Gas marketing firms is the knowledge gap that drives this study.

This paper is structured into five sections. Following the introduction, section two discusses the literature review under three sub-heads as: conceptual frameworks, theoretical frameworks and empirical studies. Section three harps on the methodology. This is followed by section four which focuses on estimation results and discussion of findings, and finally, section five presents the conclusion, and recommendations.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Conceptual Framework on Corporate Governance and Tax Aggressiveness

Cadbury (1992) defines corporate governance mechanism as the system by which companies are directed and controlled. Corporate governance mechanism is an organisational context, the totality of the control, monitory and directory mechanism utilized by strategic management in the best interest of its stakeholders. Corporate governance must be good such that organisations are controlled and directed by top managers with a view to achieving transparency in business, protect shareholders' interest and maximisation of shareholders wealth.

Good corporate governance must have adequate internal control and a high level of compliance to corporate governance codes of conduct and ethics, accounting standards, companies act, and other rules and regulations for the governance of an organization. The features of good corporate governance include; the appointment of knowledgeable and skilled chief executives; appointment of independent non-executive directors; the presence of good risk managers; ability to dialogue and a progressive board practice. Objectives of corporate governance include; promoting and protecting the interest of stakeholders in the company; maintaining and promoting the rule of law in the organization; promoting disclosure, transparency, and accountability.

Tax Aggressiveness

Tax Aggressiveness also known as "Tax Sheltering" or "Tax Planning" has been variously defined by scholars. Hoffman (1961) defined tax aggressiveness as "the taxpayer's ability to organise his financial businesses in such a way as to suffer a minimum tax liability". Tax aggressiveness is generally defined as the procedure of arranging one's affairs in order to defer, decrease or even eliminates the amount of taxes to be paid to the government (Pniowsky, 2010). In Nigeria, Canada, US, and host of other countries, tax aggressiveness is allowed, only if it occurs within the purview of the tax laws as contained in the Income Tax Act (ITA). Furthermore, in order to reduce tax liability within the regulatory guidelines, tax aggressiveness has been recognized as the best alternative. According to Fallan, Hammervold, and Gronhaug (1995) said that tax aggressiveness can be achieved by varying tax rate between different tax environments and business activities, and through some tax incentives as provided for in the tax laws. To add to earlier studies mentioned, Hoffman (1961) claimed that, tax evasion and tax avoidance should be differentiated for proper understanding of the concepts of tax aggressiveness. The inability to make any difference between these two distinct concepts can lead to questioning the allowable tax aggressiveness which could lead to severe legal effect (for example, penalties due to unawareness of a taxpayer on any legal side of tax arrangement). Consequently, it can be concluded that the fundamental terms to clarify the variation between tax avoidance and tax evasion are "legal" and "illegal" (Abdul-Wahab, 2010).

Tax Aggressiveness and Corporate Governance Mechanism

Tax aggressiveness is a form of tax avoidance and it integrates more aspects of the agency conflicts between managers and investors. From the agency viewpoint of tax, management skirting is the major problem that must be resolved by investors. Managerial opportunism or resource diversion is another form of agency problem considered under avoidance (Desai & Dharmapala, 2009). Desai and Dharmapala (2006) maintained that complicated tax avoidance transactions such as earnings managements, related party transactions, and other resource-diverting events can provide management with the apparatuses, covers, and reasons for opportunistic managerial behaviours.

Additional, tax avoidance and managerial diversion most often complement each other.

The earlier study such as Desai and Dharmapala (2009) do not find any relationship between tax avoidance and firm value; though, a positive relationship was found to have existed between tax avoidance and firm value for firms with high institutional ownership. In their findings, tax avoidance has a net advantage in a jurisdiction where monitoring and control effectively restrain managerial opportunism brought about by tax sheltering activities. Also, Hanlon and Slemrod (2009) found that for firms with stronger governance a negative reaction is less pronounced; though, the sensitivity of this outcome relates to how governance is measured empirically.

Measurement of Corporate Governance

The mechanisms considered appropriate to measure corporate governance as used in this study are: Board size, Gender diversity, CEO duality and Ownership structure and are explained below:

Board Size: This entails the total number of directors that made up the corporate board of an organisation which must be of an appropriate mix that could offer diversity and help firms with the security of critical resources, hence, reduce uncertainties in the ***environment*** (Pearce & Zahra, 1992; Goodstein, Gautum, & Boeker, 1994). Boards of directors are institutions whose role is to approve and monitor managerial decisions. The board of directors which comprise of non-executive outside directors and top executives of firms achieve this institutional role with the assistance of non-executive outside directors.

.According to SEC (2003), all listed companies in the Nigerian Stock Exchange should have a sufficient board size relative to the scale and complexity of the company's operation and be composed in such a way to ensure diversity of experience without compromising independence, compatibility, integrity and availability of members to attend meetings and that the board size should not be less than five (5) comprising executives and non-executives members.

Board effectiveness is a function of its size (Jensen, 1993). Management policy of the company to a large extent is determined by the size of the board. Board size therefore refers to the total number of directors on the board. Board size and tax aggressiveness have a significant relationship as it is reflected that board size has a significant influence on the availability of tax aggressiveness (Lanis & Richardson, 2011). On the contrary, in the American context, Aliani and Zarai (2012) affirm that non-significant relationship exists between board size and tax aggressiveness. Their findings revealed that the number of directors on the board does not affect the plans to minimize tax liabilities. Minnick and Noga (2010) are of the view that while large boards proves to be ineffective due to challenges in making decisions on the policy of tax aggressiveness, small boards of directors reinforce good tax management. Hence, the study first hypothesis is assumed thus:

H_{01}*: Board size has no significant effect on tax aggressiveness in Nigeria.*

Gender Diversity: This is the number of females represented on the board. The female board participation connotes where at least one female director exists on the board. The issue of gender diversity has been severally debated by researchers as a major factor responsible for or against quality financial reporting. Although the changes in legal statutes recognized the need for gender balance in the boardroom in Nigeria; they did not clearly specify a required proportion of females on the boards of public companies. In actual practice, a serious question remains about whether the presence of women directors on the Board influences Board decisions regarding the quality and credibility of the financial reports and tax optimization of companies. While some are of the view that the presence of women directors on the Board would help to strengthen the quality of financial reports released as well as optimise tax of corporate entities, others do not.

In general terms, women are known for playing key roles as regards to compliance with the laws and more specifically with regulations that have to do with tax matters. Thus, in the United States, the Higgs Derek Report (2003) states that the effectiveness of the board could be enhanced through diversity, hence, recommends specifically that the existence of professional women in the boards could benefit the companies. Kastlunger, Dressler, Kirchler, Mittone, and Voracek (2010) demonstrate the stickler female standards in the processing of tax matters. Though, Adams and Ferreira (2009) propose that women exercise serious monitoring of managers' actions and have a high proportion of attendance at meetings. Aliani, Hamid, and Zarai (2011) in Tunisian found that gender diversity has a negative effect on the board of directors and tax optimization. Croson and Gneezy, (2009) in line with the studies on gender disparity in risky behaviour and tax compliance, assumed that women should have higher levels of tax compliance. Series of the above mentioned theoretical arguments favoured board gender diversity. Hence, the second hypothesis is presented thus:

***H_{02}*: Gender diversity has no significant effect on tax aggressiveness in Nigeria.**

CEO Duality: Another crucial feature of the ***board is board leadership*** structure. The Chief Executive Officer (CEO) and board chairman are two individuals who serve their different roles independently in an independent structure. According to (Dalton, 1993), where such roles are held by a single individual, it is called CEO duality. This is where the chairperson is still the same as the CEO. While the CEO is the executive director of a firm who takes major and final decisions concerning the operations of an entity, the board chairman organises board meetings and supervises the procedure for recruiting, dismissing and rewarding the CEO (Jensen, 1993).

Researchers (such as Dobrzynski, 1991; Cadbury, 1992) and shareholders activist groups kick against CEOs who double as chairman of the Board. Dalton, Daily, Ellstrand, and Johnson (1998) argue that the preference for separate board leadership was due to fear from management domination of the board which resulted from agency theory. The duality structure according to agency theory can lead the CEO to be entrenched thus, making changes very difficult or unlikely, hence, reducing the boards' monitoring effectiveness (Finkelstein & D'Aveni, 1994) and making the implementation of good corporate governance debilitated. A board chairman who doubles the role of a chairman and CEO may impede the capacity of the board to suitably execute its oversight and governance role as it would mar effective monitoring. However, the CEOs duality roles performed can assist them to make an independent decision which would positively impact on the performance of firm. Where these two leadership structures are combined, it would quicken the organisations decisions made as well as improve effective leadership. On the contrary, separating the role of the CEO and that of the chairman as proposed by agency theory would help to attain more effective control over managers and ensure their interests agree with those of the shareholders.

While the chairperson and CEO is the same person in the US, in the U.K, Nigeria and Canada, these two roles are usually separated (Lin & Liu, 2009). Braun and Sharma (2007) alleged that the net effect of the chairperson duality role has two sides as it was shown by the different countries' practice which is in consonance with the agency and stewardship theories. Richardson, Taylor, and Lanis (2013) show that, if the company uses CEO duality and the CEO has high proportion dominance over decisions made, it is likely to be aggressive for tax purposes. Given the preceding assertion, it is imperative that the leadership structure of an organization may likely influence the company's decisions on tax aggressiveness. Thus, our third hypothesis is as follows:

***H_{03}*: CEO duality has no significant effect on tax aggressiveness in Nigeria.**

Ownership Structure: **Ownership structures** are also of major importance in corporate governance because they affect the incentives of managers, and thereby the efficiency of firms. The **ownership structure** is **defined** by the distribution of equity with regard to votes and capital, and also by the identity of the equity owners. Ownership structure dimensions such as having an individual with sizeable number of shares in a company (block shareholdings), the level of managerial shareholding as well as shares by other corporate bodies (institutional shareholdings) are regarded as key internal governance mechanisms that ought to provide effective oversight over management. This position arises from the fact that in the modern day corporation which has a multitude of owners and whereby the manager is not an owner the self-serving behaviour of the manager needs to be checked.

Agency skirmishes between managers and shareholders can be resolved by means of ownership or equity concentration; though, this has generated a new form of conflicts between the block-holders and minority shareholders (Desai & Dharmapala, 2008). Chen, Chen, Cheng, and Shevlin (2010) discovered that other counterpart firms are more aggressive in tax than family firms. Chen et al., (2010) affirmed that firms owned by family are prepared to avoid non-tax costs of a possible price decrease that may arise from the interest of minority shareholders, coupled with the fact that the essence of them being tax aggressive is to provide an avenue to acquire wealth from them. However, we presume that a higher concentrated equity can improve the strategic level of tax aggressiveness. We therefore interpret our last hypothesis thus:

***H_{04}**: Ownership structure has no significant effect on tax aggressiveness in Nigeria.*

Review of Theories

Agency Theory

Agency theory was propounded by Jensen and Meckling (1976). A contractual relationship that exists between an agent (manager) and the principal (shareholders) in which the shareholders bequeath the responsibilities to run the business to the manager is known as agency theory. Agency theory is about a contractual relationship between two or more persons. The development of corporate governance standards and principles is centred on agency theory (Fama & Jensen, 1983; Vafeas, 1999). The boards' structure, functions and composition are governed by the "principal and agent" with a view to reducing agency costs and ensure that managers maximised shareholder wealth (Conger, Finegold & Lawler, 2005).

Agency theory is a term that explains the relationship that exists when one person or group of persons (agents) act on behalf of the principal (shareholder). The essence of this theory is because of the likely conflict of separating ownership from the daily management of organization (Oye, 2010). According to Jensen and Meckling (1976), agency relationship is a contractual arrangement between one or more person (principals) and another person (the agent) who is engaged and delegated with some decision making authority by the principals to perform some service on their behalf. This theory addresses particularly on one hand the principal-agent relationship between shareholders and directors and on the other hand the relationship between company agents and stakeholders (Hayes, Dassen, Schilder, & Wallage, 1999). The principals and agents in an agency relationship are also presumed to be reasonable economic individuals who have the capability of establishing objective expectations regarding the effect of agency problems in addition to the associated future value of their wealth (Barnea, Haugen, & Senbet, 1985). Jensen et al., (1976) posit that managers, who are agents of the principals (shareholders), are employed to work for maximizing the returns to the shareholders.

Managers of organizations are agents to the shareholders. Therefore, in order to maximize shareholders' wealth they would need to reduce their operating costs. One of such ways to reduce operating costs is to engage in tax aggressiveness to reduce their tax liability. However, in order to reduce the tax burden of firms, tax aggressiveness must be done within the legal framework. The primary reason managers of organisations involve in tax aggressiveness is because of the benefits they derived from an increase in after-tax returns. Similarly, different theories and definitions of aggressive tax have revealed that significantly, after tax returns could be uninterestedly influenced by tax minimization, while minimisation of tax could be seen as tax aggressive benefit.

Empirical Studies

Onyali and Okafor (2018) examined the effect of corporate governance mechanisms on tax aggressiveness among selected manufacturing firms in Nigeria using the ex-post facto research design. Data was derived from the financial statements of Forty-four (44) listed manufacturing firms on the Nigerian stock exchange (NSE) and the NSE fact book as at December, 2016 for the period 2005-2016. The data were analysed using the Ordinary Least Square technique with its Best Linear Unbiased Estimate (BLUE) Property. Findings revealed that board size has no significant effect on tax aggressiveness while board diversity, independent director and proportion of non-executive directors to executive directors have a significant impact on tax aggressiveness.

Lanis, *Richardson*, and *Taylor (2017)* examined the impact of board of director gender diversity on corporate tax aggressiveness. Based on a sample of 418 U.S. firms covering the 2006–2009 period (1672 firm-year observations), The ordinary least squares regression results show a negative and statistically significant association between female representation on the board and tax aggressiveness after controlling for endogeneity.

Salawu and Adedeji (2017) examined the impact of corporate governance on tax planning of non-financial quoted companies in Nigeria between 2004 and 2014. A sample of fifty (50) companies out of 151 non-financial quoted companies for 10 sectors were purposively determined and a stratified random sampling technique used for its selection. The data used in the analysis were collected from the audited financial statements and the Nigeria Stock Exchange Fact books of the selected companies in Nigeria. The data were analysed using generalizes method of moments (GMM). The result showed that there is positive and significantly relationship between effective tax rates (ETR) and firm value (TobinQ). The positive relationship as shown in the result implies that tax planning activities does not have an increase in firms' value.

Odoemela, et al., (2016) examined the association flanked by corporate governance mechanism and tax planning using audited financial statements of banks quoted in the Nigerian Stock Exchange from 1994 to 2014. The data were analysed with the help of Econometric View (E-view statistical package). Findings of the study reveal that there is no significant effect between Board Size and Tax savings of Firms in Nigeria.

Oyeleke, Erin, and Emeni (2016) investigated the effect of Boards size on corporate tax aggressiveness using a sample of 11 listed banks over the period of 2012-2014. A panel regression analysis was conducted on the data and the study result showed that the size of the board has a positive moderating effect on the tax aggressiveness of female occupied boards within the banking industry.

Olayinka and Francis (2016) examined the relationship between board size, gender diversity and tax planning using 85 sampled financial institution listed on the Nigeria stock exchange. The cross sectional time-series research design was used as the blue print for data collection in this study, data collected were analysed using Statistical Package for Social Sciences (SPSS). Findings revealed that while a positive and non-significant association exist between female directors and tax planning, the interaction between board size and female directors is significantly associated with the reduced level of tax planning.

Kiabel and Akenbor (2014) examined tax planning and corporate governance in Nigerian banks, the focus was on corporate governance of the Nigerian banking sector using Ordinary Least Square (OLS) regression techniques. The result showed that tax planning has a positive significant impact on corporate governance in Nigerian banks, but the accruable tax savings do not significantly outweigh tax planning costs.

Zemzem and Khaoula (2013) investigated the effect of board size on tax planning in Nigeria using 73 sampled French companies for the period 2006-2010. Regression analysis was used in the study analysis. Results showed that board size and the percentage of women in the board significantly and positively affect the activity of tax planning.

Okoye and Akenbor (2010) examined tax planning by determining its impact on corporate governance in Nigerian banks. They used Twenty-one (21) recapitalized banks in Nigeria using data generated from the companies' annual reports and accounts for a five-year period (2007-2011) for the study analysis. The data were tested using regression analysis and Pearson Product Moment Co-efficient of Correlation. Findings revealed that tax planning has a positive significant impact on corporate governance in Nigerian banks, but the accruable tax savings do not significantly outweigh tax planning costs.

Flowing from the above empirical review on corporate governance and tax aggressiveness, findings have been mixed and inconclusive. Given the limited number of studies in this area and the mixed findings, this study believes additional evidence would be needed to address whether corporate governance affects tax aggressiveness using firms in the Nigerian Oil & Gas marketing industry listed in the Nigerian Stock Exchange as at 31st December, 2017. The inconclusive research evidence necessitates the need for the study.

METHODLOGY

This study adopted the cross-sectional research design. The secondary source of data collection method was used to generate data from the annual reports and accounts of the sampled Oil & Gas marketing firms in Nigeria. The population of study consists of all the twelve (12) Oil & Gas marketing firms listed on the Nigerian Stock Exchange as at 31st December, 2017. The sample size comprises the entire population of study for a period of five years (2013- 2017) using the census sampling approach. The choice of this sampling technique is premised on the small quantity of firms available in the Oil and Gas marketing sector. The entire population was selected as the study sample with a view to reaching a robust and valid judgement for generalisation. Data generated from the annual reports and accounts were analyzed using descriptive statistic and econometric statistical software (E-view 10+). The statistical tool employed was the Ordinary Least Square (OLS) regression.

The linear regression model was specified and estimated in this study. Given the dynamic nature of the panel data that was used in this study and in line with Minnick and Noga (2010) as cited by Salawu and Adedeji (2017), this study imposed a linear relationship between corporate tax aggressiveness and the explanatory variables which are firm characteristics that potentially explain variation in effective tax rates. Using a linear regression of Effective Tax Rates on the exogenous variables described above, the model is expressed functionally as:

Tax aggressiveness = F (Board size, Gender diversity, CEO Duality, Ownership structure). However, the econometric model is expressed thus:

$$ETR_{it} = \alpha + \beta_1 BS_{it} + \beta_2 CD_{it} + \beta_3 GD_{it} + \beta_4 OS_{it} + \varepsilon_{it}$$

Where;

ETR = Effective Tax Rate {proxy for tax aggressiveness [measured as Total Tax Expenses/Pre- Tax Income] X 100}

BODS = Board size (measured as natural log of total number of directors)

CEOD: CEO duality

GEND: Gender diversity

OWNSTR: Ownership structure

α = constant time from the baseline estimation.

$\beta 1 - \beta 4$ are the coefficient of the parameter estimate.

ε = is the error term.

i (= 1,2,3,…12) is the given Oil & Gas marketing firms.

t = Time

Also, $ß_1, ß_2, ß_3, ß_4 < 0$

ESTIMATION RESULTS AND DISCUSSION OF FINDINGS

Table 1: Descriptive Statistics

	TP	BODS	CEOD	OWNSTR	GEND
Mean	3.424000	7.440000	0.680000	0.572000	0.094000
Median	3.100000	8.000000	1.000000	0.300000	0.100000
Maximum	9.800000	11.00000	1.000000	5.600000	0.250000
Minimum	0.200000	3.000000	0.000000	0.100000	0.000000
Std. Dev.	2.366833	2.678308	0.476095	1.072583	0.087285
Skewness	1.004543	-0.151358	-0.771744	4.351819	0.504579
Kurtosis	3.898846	1.791919	1.595588	20.97062	2.300933
Jarque-Bera	5.046199	1.615726	4.536172	415.3090	1.569891
Probability	0.080211	0.445810	0.103510	0.000000	0.456144
Sum	85.60000	186.0000	17.00000	14.30000	2.350000
Sum Sq. Dev.	134.4456	172.1600	5.440000	27.61040	0.182850
Observations	25	25	25	25	25

Source: *Author's Computation Using E-views 10+*

Table I presents the result for the descriptive statistics for the variables. As observed, the average value for Tax Aggressiveness (TA) for the period under observation was 3.424, with yearly values fluctuating between a maximum of 9.80 and a minimum of 0.20. The standard deviation of 2.366833 suggests that the series is moderately dispersed from the mean, while the kurtosis value of 3.898846 reveals that the distribution is leptokurtic, with a skewness value of 1.004543 indicating that the distribution is positively skewed. The Jarque-bera statistics of 5.046199 with a p-value (0.080211) < 10% indicates that the observations are not normally distributed.

Board Size (BODS) for the period has a mean of 7.44 and a standard deviation of 2.678308 suggesting that the series is moderately dispersed from its mean. The maximum and minimum values of the series were 11.00 and 3.00 respectively. While the distribution is negatively skewed and platykurtic with values of -0.151358 and 1.791919 respectively, the Jarque-bera statistics of 1.615726 with a p-value (0.445810)>10% indicates that the observations are normally distributed.

CEO Duality (CEOD) has a mean value of 0.68 and a standard deviation of 0.476095 suggesting that the series is slightly dispersed from its mean, with minimum and maximum values of 0 and 1 respectively. While the kurtosis value of 1.595588 reveals that, the distribution is platykurtic, with a skewness value of 1.595588 indicating that the distribution is skewed to the right. **The Jarque-bera statistics of 4.536172 with a p-value (0.103510)** shows that the observations do not fit a normal distribution curve.

Gender Diversity (GEND) has a mean value of 0.094 and a standard deviation of 0.87285, suggesting the series is slightly dispersed from its mean, with values fluctuating between a maximum of 0.25 and a minimum of 0. While the kurtosis and skewness value of 2.300933 and 0.504579 suggest that the distribution is platykurtic and positively skewed. The normality assumption is accepted for the observations since it has a Jarque-bera statistics of 1.569891 with a p-value (0.456144) > 10%.

Ownership Structure (OWNSTR) has a mean value 0.572 and a standard deviation of 1.072583 indicating the series is considerably dispersed from its mean. The maximum and minimum values of the series were 5.60 and 0.10 respectively. The distribution is positively skewed and leptokurtic with values of 4.351819 and 20.92062 respectively.

Table 2: Correlation Matrix.

	TP	BODS	CEOD	GEND	OWNSTR
TP	1.000000	-0.495364	-0.473597	-0.405674	0.180656
BODS	-0.495364	1.000000	0.441785	0.181084	-0.327682
CEOD	-0.473597	0.441785	1.000000	0.528401	0.136753
GEND	-0.405674	0.181084	0.528401	1.000000	-0.239975
OWNSTR	0.180656	-0.327682	0.136753	-0.239975	1.000000

Source: *Author's Computation Using E-views 10+*

Correlation is a statistical tool that describes the degree of linear relationship between two or more variables. From Table 3, a negative relationship subsists between TA (Tax Aggressiveness) and BODS (Board Size), CEOD (CEO Duality) and GEND (Gender Diversity) while a positive relationship exists between TA (tax aggressiveness) and OWNSTR (Ownership Structure).

Table 3: Multicollinearity Test (Variance Inflationary Factor)

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
TD	1.023624	9.05760	2.056571
BODS	2.005691	15.05760	3.289101
CEOD	5.30E-05	233.8350	1.212893
GEND	1.09E-05	41.98854	1.275309
OWNSTR	0.006884	16.05760	1.074442

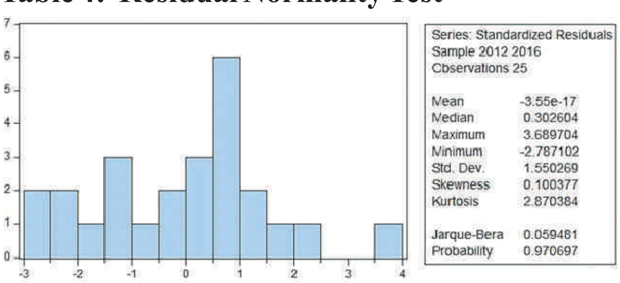
Source: *Author's Computation Using E-views 10+*

Multicollinearity occurs when there is a strong correlation between the independent variables in a model. This study tested for the presence of multicollinearity using both the VIF (Variance Inflation Factor) and the pairwise correlation matrix. If the VIF is greater than 10 or less than 1, then multicollinearity is said to exist in the model. Likewise, according to Gujarati (2006) if the Pair-wise correlation among the independent variables is greater than 80%, then multicollinearity is said to have occurred.

From Table 3, the results show that the VIF (Variance Inflation Factor) ranges from 1 to 4 for all variables. The highest been 3.289101 for Board Size and the lowest been 1.074442 for Ownership Structure.

Furthermore, from Table 2, the result attested to the fact that Pair-wise correlation for all variables are less than 80%. The highest percentage of Pair-wise correlation was 49% between TA (tax aggressiveness) and BODS (Board Size). Therefore, it can be concluded that there is no multicollinearity problem in the model.

Table 4: Residual Normality Test



Source: *Author's Computation Using E-views 10+*

The Jarque-Bera test is a statistical process used to determine if a sample or any group of data fits a standard normal distribution. From Table 4, the results of the Jarque-Bera normality test of (0.059481) with a probability value of 0.970697 indicate that the model residuals are normally distributed.

Table 5: Hausaman's Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.070299	4	0.5461

Variable	Fixed	Random	Var(Diff.)	Prob.
GEND	-11.443433	-9.275711	143.738741	0.8565
CEOD	-0.621270	-1.098845	1.198956	0.6627
BODS	-0.135626	-0.337690	0.044060	0.3357
OWNSTR	0.203727	-0.072117	0.046296	0.1998

Source: *Author's Computation Using E-views 10+*

The Hausman specification test (1978) was conducted to determine whether Fixed or Random effect model is suitable for the study. Fixed effect model is applied to dominate for omitted variables that are constant over time but vary between observations while the Random effect model is used when some omitted variables are constant between observations but vary over time. From Table 5, the Hausman specification test with a probability value of 0.5461suggests that the Random effect model is appropriate, thereby we accept the null hypothesis.

H_{01}: Random effect model is appropriate
H_{02}: Fixed effect model is appropriate

Table 6: Random Effect Model
Dependent Variable: TP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GEND	9.275711	6.765789	1.370972	0.0000
CEOD	-1.098845	1.391749	-0.789543	0.0003
BODS	0.337690	0.194383	1.737242	0.0246
OWNSTR	-0.072117	0.491857	-0.146623	0.8853
C	7.596794	1.464423	5.187570	0.0001

R-squared	0.570979	Mean dependent var	3.424000
Adjusted R-squared	0.356468	S.D. dependent var	2.366833
S.E. of regression	1.898684	Sum squared resid	57.68002
F-statistic	2.661774	Durbin-Watson stat	2.669150
Prob(F-statistic)	0.045498		

Source: *Author's Computation Using E-views 10+*

From Table 6, the co-efficient of determinant (R Square) of 0.570979 indicates that about 57.09% of the variation in dependent variable; Tax Aggressiveness (TA) is explained by the independent variables (Gender Diversity, CEO Duality, Board Size and Ownership Structure). The 42.91% variance in Tax Aggressiveness (TA) is explained by other factors not captured in this study. Also, the standard error of 1.898684 indicates that on the average, 1.89% of changes in the dependent variable; Tax Aggressiveness (TA) will not be explained by the independent variables. Similarly, the F-statistic of 2.661774 with a p-value of 0.045498 suggests that the model is significant at a 5% level while the Durbin-Watson statistic of 2.669150 indicates the absence of autocorrelation in the model.

Discussion of Result

The Random Effect model results presented in Table 6 show that the R^2 and coefficient of determination is *0.570979* which indicates that the model explains about 57.09% of the systematic variations in the dependent variable. The Adjusted R^2 which controls for the effect of inclusion of successive explanatory variables on the degrees of freedom stood at *0.356468*. The F-stat value of *2.661774* and the associated p-value of *0.045498* indicate that the hypothesis of a joint statistical significance of the model is accepted at 5% and the linearised specification of the model is appropriate. The evaluation of the slope coefficients of the explanatory variables reveals the existence of positive and significant relationship between Gender diversity and tax aggressiveness (*9.275711*, P = 0.0000). The result also indicates that there is a negative and significant relationship between CEO duality and tax aggressiveness (*-1.098845*, p-value = 0.0003). The relationship between BODS and tax aggressiveness appeared to be positive and significant (*0.337690*, p-value = 0.0246). The results also indicates that there is a negative and insignificant relationship between Ownership structure and tax aggressiveness (*-0.072117*, p-value = 0.8853).

Flowing from the Random Effect model results presented in Table 6, Gender diversity and Board size have a positive and significant effect on tax aggressiveness. The results imply that the higher the board size and number of female gender on the board, the higher the effective tax rate. This indicates a negative impact on tax aggressiveness; as larger the size of the board and number of female gender on the board, the higher the Effective Tax Rate. CEO duality has a negative and significant effect on tax aggressiveness. This implies that an increasing proportion of CEO duality is associated with decrease in Effective Tax Rate. Ownership structure has a negative but insignificant effect on tax aggressiveness. Since ownership structure has a negatively insignificant effect on tax aggressiveness, it will in no way influence Effective Tax Rate.

CONCLUSION AND RECOMMENDATIONS

This study examined the effect of corporate governance on tax aggressiveness in the Nigerian Oil & Gas marking firms listed in the Nigerian Stock Exchange as at 31st December, 2017. An in-depth empirical analysis and utilisation of panel data spanning 5years (2013-2017) was used to achieve the objectives of this study through the random effect model. The result of this study established a significant and positive relationship between Gender Diversity, Board Size composition and Tax Aggressiveness at 5% level of significance. The results imply that the higher the

Board size and Gender Diversity, the higher the effective tax rate. This indicates a negative impact on tax planning; as larger the size of the board the higher the Effective Tax Rate.

There is a negative but significant relationship between CEO duality and tax aggressiveness. This implies that an increasing proportion of CEO duality is associated with decrease in effective tax rate. There is a negative but insignificant relationship between Ownership structure and tax aggressiveness of Oil & Gas marking firms in Nigeria.

An examination of the result of the ownership structure variable showed that **ownership or equity concentration** is insignificant, suggesting that the type of ownership structure had no effect on the corporate tax sheltering in this study. The study findings should serve as guidance to the board of directors by clarifying their responsibilities and providing recommendations to strengthen the control on the significant variables identified in this study analysis.

REFERENCES

Abdul-Wahab, N. S. (2010). Tax planning and corporate governance: Effects on shareholders valuation. Thesis for the degree of Doctor of Philosophy, University of Southampton, Southampton UK. Retrieved 12 January, 2019, from http://eprints.soton.ac.uk/162801/.

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. Journal of Financial Economics, 94, 291-309.

Aliani, K., & Zarai, M. A. (2012). Demographic Diversity in the board and corporate tax planning in American firms. *Business Management and Strategy, 3(1), 72-86.*

Aliani, K., Hamid, I., & Zarai, M. A. (2011). Diversity in kind in the board of directors and tax optimization: validation in the Tunisian context. *Journal of Management and Global Business Research, 11, 41-50.*

Averbach, J. (2006). Who bears the corporate income tax: A review of what we know in Potorba, T.M (Ed.) tax policy and the economy Cambridge; MIT Press.

Avi-Yonah, R. (2005). The story of the separate corporate income tax- a vehicle for regulating corporate managers: Bank, S.A and Stark, K.J (Ed.) business tax stories; New York; Foundation Press.

Barnea, A., Haugen, R.A., & Senbet, L.W. (1985). Agency problems and financial contracting, New Jersey: Prentice.

Braun, M., Sharma, A. (2007). Should the CEO also be chair of the board? An empirical examination of family-controlled public firms. *Family Business Review 20: 111-126.*

Cadbury A. (1992). The financial aspects of corporate governance: A report of the committee on corporate governance. Gee and Co., London.

Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are family firms more tax aggressive then non-family firms? Journal of Financial Economics, 95, 41-61.

Conger, J.A., Finegold D & Lawler, E.E. (2003). Appraising boardroom performance *(3 ed.), Harvard Business Review.* 76, 136-148.

Croson, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic Literature, 47, 448-474*

Dalton, D. R. (1993). Board of Directors leadership and structures: Control and performance implications. *Entrepreneurship: Theory and practice, vol.1.*

Desai, M. A. & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics, 79, 145-179.*

Desai, M. A. & Dharmapala, D. (2009). Corporate tax avoidance and firm value. *The Review of Economics and Statistics, 91, 537-546.*

Desai, M. A., & Dharmapala, D. (2008). Tax and corporate governance: An economic approach. MPI Studies on Intellectual Property, Competition and Tax Law, 3, 13-30.

Dobrzynski, J. (1991). Chairman and CEO: One hot too many. *BusinessWeek, 12(3), 263-280.*

Fallan, L., Hammervold, R., & Gronhaug, K. (1995). Adoption of tax planning instruments in business organizations: A structural equation modeling approach. *Scandinavian Journal of Management, 11(2), 177-190.*

Fama, E. F. & Jensen, M. C. (1983).Separation of ownership and control. *Journal of Law and Economics, 26*(2), 301-325.

Fama, E. F. & Jensen, M. C. (1983).Separation of ownership and control. *Journal of Law and Economics, 26*(2), 301-325.

Financial Reporting Council of Nigeria. (2018). Code of corporate governance of 2018.

Finkelstein, S., & D'Aveni, R. A. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal, 37, 1079-1108.*

Forbes, D. P. and Milliken, F. (1999). Cognition and corporate governance: Understanding board of directors as strategic decision making group. *Academy of Management Review, 3, 489-505.*

Godard, L. (2002). The size of the board: Determinants and impacts on performance. *Management Science Review, 33, 125-148*.

Goodstein, J., Gautum, K ., & Boeker, W. (1994). The effect of board size and diversity on strategic change. *Strategic Management Journal, 15(*3), 241-250.

Hanlon, M., Slemrod, J. (2009). What does tax aggressiveness signal? Evidence from stock price reactions to news about tax shelter involvement. *Journal of Public Economics, 93:126- 141.*

Hayes, R., Dassen, R., Schilder, A., & Wallage, P. (1999). *Principles of Auditing: An Introduction to International Standards on Auditing* (2nd ed.). Prentice Hall.

Higgs Derek Report, (2003). Review of the role and effectiveness of non-executive directors. London: Department of Trade and Industry.

Hoffman, W. H. (1961). The theory of tax planning. *The Accounting Review, 36(2), 274-281*.

Ibadin, P. O & Dabor, L. E. (2015). Corporate governance and accounting quality: Empirical investigations from Nigeria. *Journal of Policy and Development Studies, 9(2), 64-82.*

Jensen, M. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance, 48(3),* 831-880.

Jensen, M., Meckling, W. (1976). *Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305-360. Journal of Management Studies, 29*(1), 411-438.

Kastlunger, B., Dressler, S., Kirchler, E., Mittone, L., & Voracek, M. (2010). Sex differences in tax compliance: Differentiating between demographic sex, gender-role orientation, and prenatal masculanization (2D:4D). *Journal of Economic Psychology, 31, 542-552*.

Kiabel, B. D., & Nwikpas, N. N. (2001). Selected aspects of Nigerian taxes, Owerri: Springfield Publication ltd.

Lanis, R., & Richardson, G. (2011). The effect of board of director composition on corporate tax aggressiveness. *Journal of Accounting and Public Policy, 30, 50-70*.

Lanis, R., *Richardson*, G., & *Taylor, G. (2017.* **Board of director gender and corporate tax aggressiveness: An empirical analysis.** *Journal of Business Ethics,* 144 (3), 577-596.

Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management? Journal of Corporate Finance, 16, 703-718.

Odoemela, U., Ironkwe, U. I., & Nwaiwu, J. N. (2016). Corporate governance mechanism and tax planning in Nigeria. *International Journal of Advanced Academic Research / Social & Management Sciences 2(9), 45- 59.*

Okafor, C, (2009).Corporate governance in Agbonifoh, B.A. (Ed.) *Introduction to business. A functional view.* Benin City: Mindex Publishing Company.

Okereke, O. (2009). Corporate governance and global competitiveness in financial market institutions, *Journal of Securities and Finance,14*(2), 7.

Okoye, E. J & Akenbor, C. O. (2010). Accounting policy and efficient corporate tax planning in Nigeria". Association of National Accountants of Nigeria (ANAN) – *The Certified National Accountant; 18(2); 42-50.*

Okoye, E. J., & Akenbor, C. O. (2010). Accounting policy and efficient corporate tax planning in Nigeria. Association of National

Accountants of Nigeria (ANAN) – *The Certified National Accountant; 18(2); 42-50.*

Onyali, C. I & Okafor, T. G. (2018). Effect of corporate governance mechanisms on tax aggressiveness of quoted manufacturing firms on the Nigerian stock exchange. *Asian Journal of Economics, Business and Accounting, 8(1), 1-20.*

Oye, M. (2010). Avoiding another enron: The role of the external auditor in financial regulation and supervision. *Munich Personal RePEc Archive*

Oyeleke. O., Erin, O., & Emeni, F. (2016). Female directors and tax aggressiveness of listed banks in Nigeria. *3rd International Conference on African Development Issues*, 293-291

Oyerinde, R. O. (2010). Investigating the principles of corporate governance in Nigeria. *Ceilna Journal of Good Governance; 7 (2); 33-41.*

Parker, L. (2014). Qualitative perspectives through a methodological lens. *Qualitative Research in Accounting & Management, 11(1), 3-3.*

Pearce, H., & Zahra, S. A. (1992). Board composition from strategic contingency perspective.

Pniowsky, J. (2010). Aggressive tax planning- How aggressive is too aggressive? Thompson Dorfman Sweatman LLP, 3, 1-3. Retrieved 12 January, 2019, from http://www.tdslaw.com/newsletter/2010/Oct/articles/aggressive_tax_planning.pdf.

Ribstein, L. E. (2006). Accountability and responsibility in corporate governance. 81 Notre Dame L. Rev 1431.

Richardson, G., Taylor, G., & Lanis, R. (2013). The impact of board of director oversight characteristics on corporate tax aggressiveness: An empirical Analysis. *Journal of Accounting and Public Policy, 32, 68-88.*

Salawu, R. O., & Adedeji, Z. A. (2017). Corporate governance and tax planning among non- financial quoted companies in Nigeria. *An international multi-Disciplinary Journal, Dahir Dar, Ethiopia, 11 (3), 42-59.*

Sanusi, J.O (2002), "Promoting good corporate governance: Issues and challenges". Being a keynote address delivered at the annual directors seminar organized by FITC; June 46th.

Securities and Exchange Commission (2003). Code of corporate governance in Nigeria.

Vafeas, N. (1999) Board meeting frequency and firm performance. *Journal of Financial Economics,* **53**, 113-142.

Zemzem, A., & Khaoula, F. (2013). The effects of board of directors? characteristics on tax aggressiveness. *Research Journal of Finance and Accounting, 4(4),140-147. www.iiste.org*