ABSTRACT

The rate at which corporations are now being expected by the investors to comply with tax rules and regulations is now increasing. This can be traced to awareness on the part of investors of the negative effects of tax aggressiveness on their environmental returns. This paper therefore examined Board Characteristics and tax aggressiveness. Data were sourced from 20 manufacturing companies listed on the Nigerian Stock Exchange for 10 years (2006-2016), the data were analyzed using regression analysis and correlation model with the aid of SPSS software. It was found that there is no significant relationship between board size and tax aggressiveness. It is recommended that companies should focus on businesses and policies that will maximize Shareholders wealth rather than activities that will reduce tax liability.

Keywords: Board Characteristics, Tax Aggressiveness, Shareholders wealth, Tax Liability.
1.0 INTRODUCTION
In the past few years, the taxes have widely been considered as a motivating factor in many corporations decisions. It has received much attention in recent literature. It is increasingly being expected of corporations that they demonstrate to investors that they are complying with tax rules and regulations, because investors are aware that tax aggressiveness has a detrimental effect on their investment returns (Henderson, 2005).

The role that government plays in choosing a tax strategy is a pivotal one. Managers attach a great importance to achieve their objectives following the deployment of tax aggressive activities. Tax aggressiveness is an arrangement which is used for the sole purpose of avoiding tax payment. It results in, noticeable costs and profits for management, in addition to reduction in available cash flow to the company and the shareholders.

Tax planning is the planning and operation of business activities within the domain of the existing laws in a way that the business realizes the best tax position, and also achieving its set objectives. In other words, tax planning include not only strategies aimed at the minimization of tax liability but also considers the cash flow effect on the business in terms of when it is most advantageous for the business to settle its tax liability without incurring any penalty. In a nutshell, tax planning is an act of transferring value from the state to the firm.

The greatest interest of shareholders is profit maximization, and one definite means of achieving this is through cost reduction. Taxation is one of the costs of doing business and therefore constitutes a serious barrier to wealth maximization. Therefore, In order to minimize the cost of taxation, tax planning becomes imperative for management. Tax planning has been established as having pivotal influences on corporate governance by increasing the value of the firm. However, it is important to note that tax planning has its associated costs. Such costs include administrative costs for professionals such as lawyers, accountants and consultants in planning the strategies and the risk of legal challenges and penalty.

Also worthy of note is the fact that the penalty and administrative costs associated with tax planning appear to be greater than its advantages. Besides this, when management engages in transactions which are designed only for minimizing tax liability, government may mischaracterize such transactions through the manipulation of financial and operating results so as to avoid the risk of tax audit and penalty. Such mischaracterization violates the rules of corporate governance which include transparency, accountability and accurate disclosures.

While planning could be said to increase corporate profitability, the payment of appropriate taxes is seen as significant factor of social responsibility. And the interest of shareholders in corporate social responsibility has increased in recent times. Paying a fair amount of taxes infers...
ethical behavior that companies are required to present to the public. The act of minimizing tax liability is therefore considered an unethical behavior.

**Statement of Hypothesis**

Hypothesis 1

The size of the corporate board has no significant effect on tax aggressiveness

Hypothesis 2

The percentage of women in the board has no significant effect on tax aggressiveness

Hypothesis 3

There is no relationship between outside directors on the board and tax aggressiveness

**2.0 LITERATURE REVIEW**

Undoubtedly, tax is one of the major sources of government revenue. According to the revenue generation statistics which was made available by Federal Inland Revenue Service In 2011-2012, profits tax contributed to over 50% of the total tax revenue of the Nigerian government. Consequently, it is important for any government not to be in the dark about the factors which affect the tax revenue. Just like the elasticity appears in demand-supply curve, tax is, from the company's point of view, tax just like an expenses for the companies in which it should be minimized, although the increase in tax rate may not necessarily lead to increase in tax revenue of the government. Recent research shows that the corporate governance is playing an important role in the “tax elasticity”.

Companies tax aggressiveness can be seen in two ways. One is the legal way that is to find out what kinds of transactions are favourable under the current law. It is the legal tax avoidance and it is one kind of the valid services provided by the accountants. The second way is to do tax sheltering.
According to Freedman (2008), tax law can influence corporate governance by offering privileges or imposing penalties. Additionally, they concluded that tax rules usually result in transparent and complicated tax-driven structures. Among other things that also affect tax compliance, according to them, are the size of the business, ownership, competition, and audit controls; industry and age do not have effect on this.

Okpara (2010) defines corporate governance as the manner in which organizations are managed and the nature of accountability of the managers to the owners. It is the technique by which companies are directed and managed. It means conducting the business affairs as per the stakeholders' desires. Governance is undertaken by the Board of Directors and the concerned committees for the company's stakeholders' benefit. It is all about balancing individual and societal goals as well as economic and social goals.

O'Donovan (2003) defines corporate governance as an internal system encompassing policies, processes and people, which serve the needs of shareholders and other stakeholders, by directing and controlling management activities with good business savvy, objectivity and integrity.

The Ultimate Business Dictionary (2003) defines corporate governance as the managerial control of an organization, which can reduce the risk of fraud, improve company performance, leadership, and demonstrate social responsibility. It is the interaction between various participants (shareholders, Board of Directors, and company's management) in shaping a corporation's performance and the way it is proceeding towards. The relationship between the owners and the managers in an organization must be healthy and there should be no conflict between the two. The owners must see that an individual's actual performance is according to the standard performance.

According to Donaldson and Davis (1994) and Hawley and Williams (1996), corporate governance: (i) aims to promote culture in which directors are given privacy to the ethical pursuit of shareholders' interest (ii) allows a review of audit regulation, corporate disclosure framework and shareholders' participation to improve the accountability and transparency of companies (iii) ensures that audit committee assists board of directors in its oversight of the integrity of the financial statement of companies, as well as compliance with legal and regulatory requirement, and the performance of the company's internal audit function (iv) makes companies to be more credible and ensures managerial system that promotes creativity and entrepreneurship (v) helps to maximize corporate value by enhancing the transparency and efficiency of the corporation for the future (vi) prevents theft and fraud through mechanisms designed by the board and management (vii) focuses on improving the organization's regulatory and legal arrangements in order to effectively enforce contracts and protect corporate
property right (viii) builds a system of rules and voluntary practices that guide board members in the execution of their responsibilities, and stipulates conduct of other corporate fiduciaries (ix) ensures the disclosure of relevant and significant information to investors and other stakeholders.

According to the Organization for Economic Co-operation and Development (OECD) (2004), the commonly accepted principles of corporate governance include: (i) rights and equitable treatment of shareholders shall be enhanced through effective communication of information that is understandable and accessible as well as encouraging shareholders to participate in Annual General Meetings (AGM) (ii) organizations should recognize that they have legal and other obligations to all legitimate stakeholders. This entails the protection of stakeholders' interest (iii) the key roles of Chairman and Chief Executive Officer (CEO) should not be held by one person. The board needs a range of skills and understanding to be able to deal with various business issues and have the ability to review and challenge management performance (iv) organizations should develop a code of conduct for their directors and executives that promotes ethical behavior, integrity and rational decision making; organizations should clarify and make public the roles and responsibilities of board and management to provide shareholders with a level of accountability. This is to ensure accurate disclosure and transparency.

Woghiren and Imade (2005) stated that issues involving corporate governance principles include: oversight of the preparation of the entity's financial statements, internal controls and the independence of the entity's auditors, review of the compensation arrangement for the CEO and other senior executives, the way in which individuals are nominated for the position on the board, the available resources to directors in carrying out their duties, oversight and management of risk, and dividend policy.

The effectiveness of the board depends on its size. In fact, the size of the board can influence the management policy of the company. It refers to the number of directors on the board.

The board of directors is the top executive unit of a company and be responsible for supervising of the company's management. And it is legally and ethically responsible for the shareholders.

Studies argued that the board of directors as a significant part of corporate governance code is responsible for the decline in shareholders' wealth, corporate failure and the decline in the performance of firms. This issue to the lack of vigilant oversight functions by the board of directors, the board relinquishing control to corporate managers who pursue their own self interests. So, various corporate governance reforms have specifically emphasized on appropriate changes to be made to the board of directors in terms of its composition, structure and ownership configuration to arrive at a better performance.
According to Tedds (2014), argued that the employees within a specific corporation. Smaller boards are more efficient and faster in decision-making because it is more difficult for the firm to arrange board meetings and for the board to reach a consensus, and when the board size is bigger it will be easier for CEO to have a dominant on the board and increase the CEO power in decision-making. In contrast, board size have a positive impact on firm performance, especially, with larger board size because it contributes more towards firm performance because larger board size means that there are more ideas and skills that can be shared among board members. Large boards can't monitor or control the agency problem as well as smaller boards. He reported that board size is positively related with firm performance.

**Average board sizes**

The size of board differs from one organization to another. Average figures only reflect what exists, not a recommended norm. Newly-formed boards often start cautiously with a small number of members, and expand as the organization gets bigger and the programs and services diversify. It is common to encounter large boards in older, more institutionalized organizations where a principal role of the board members tends to be fundraising. Small community-based nonprofits are often governed by a few devoted volunteers.

**Gender diversity**

Corporate diversity is defined as the variation of the age, race, ethnicity, gender, and social/cultural identities among employees within a specific corporation. Walt and Ingley (2003) defined diversity in the composition of the Board as the varied combination of attributes, characteristics and skills that their members have. This definition is also applied to the top management of an organization.

Women and minorities have historically been under-represented on corporate boards of directors but this began to change in the 1990s (Farrel & Hersch, 2005). Usually two categories of diversity are considered. The first one is demographic diversity. This type is observable, because it is based on easily detectable factors, such as sex, race or level of education. The second type cannot be observed, and needs cognitive considerations because it refers to non-visible attributes such as knowledge, skills, profiles and individual capabilities.

Much of the research about diversity is articulated in demographic terms. The reason for this is that there are reliable databases which make objective measurement possible. Milliken and Martins (1996) find that demographic variables provide objective and valid representations of attributes related to non-observable diversity attributes, such as risk aversion and pro activity. Therefore, many empirical studies assume that cognitive variables are correlated systematically with demographic variables. As a result, gender diversity has generated a considerable amount of literature related to demographic diversity. One of the most frequent approaches is focusing on distributions by gender. Gender imbalance
is a fact, whether at work or within a profession. This also happens in almost every geographical area.

**Corporate tax planning (Tax aggressiveness)**

Many studies have allowed us to detect the different definitions of tax aggressiveness. Tax aggressiveness is defined as the effort of the company to minimize tax payments using aggressive tax planning activities and tax avoidance. It seems to Frank (2009) that the aggressive tax returns is the manipulation to lower tax income due to a kind of tax planning that can be considered as tax management. This concept may have multiple conceptualizations, references and even different ways to measure, but most of them have the same meaning and the same purpose but differs in their repercussions on the companies' health. Tax aggressiveness can be seen as simple trigger tax management activities that are used for tax planning and have an arrival point for tax evasion.

It is an attempt to utilize legal pitfalls to avoid paying taxes on the grounds that no conditions that involve taxes are available. It is described as a set of procedures and policies in which the tax payer follows to minimize the amount of due tax or to be exempted from tax. In a nutshell, tax planning aimed at reducing tax payable to strive for maximum tax benefit. However, when this is achieved through some illegal means, acts or procedures, it is seen as a deceit or fraud and so criminal. This means of reducing tax liability through illegal acts is known as tax evasion.

Sharayri and Momani (2009) stated that tax evasion is the alleviation of tax burden by the tax payer in a way that conflicts with tax legislations in effect. It is manifested through understatement of income and inflation of claims; forgery, fraud, willful default or neglect; non-compliance with the provisions of the Act; failure to answer queries; making of incorrect returns by omitting or understating any profit liable for tax; providing incorrect information; declaring false statements and returns for purpose of obtaining any deductions, set-off reliefs or refund; knowingly making false representations in a return, account or particulars made or furnished with respect to tax (Part XIII, CITA, 2004; Part XI, PITA, 2004). The Nigerian tax laws treat tax evasion as a civil rather than criminal offence.

The possible areas of focus in corporate tax planning are: form, nature and size of business, capital mix, choice of accounting period, market structure, investment policy, dividend policy Alabi, (2001). The form, nature and size of business are given due consideration in tax planning. The sole trading business and the partnership business are not liable to tax as business entities but as individuals while corporations are legal entities and so liable to taxes on their income. The nature of business such as agriculture, drilling, mining, manufacturing, construction, wholesaling, retailing, exportation, importation, transportation, banking, insurance, communication, hospitality, tourism, etc. has some tax implications. The size of business such as large-scale, medium scale, and small scale equally affects tax considerations. An examination
of the forms, nature and size of business revealed the following tax considerations;

(i) A company is exempted under the minimum tax rule if it has at least 25% foreign equity capital or it carries on agricultural trade or business; (ii) Companies engaged in agricultural production and manufacturing are allowed to make a total claim for their capital allowances without restriction whereas for other companies the maximum capital allowances claim is restricted to 662/3% of their assessable profit; (iii) New qualifying capital expenditure on plant and machinery used in manufacturing, agricultural production, ranching and plantations, construction, and public transportation with a fleet of not less than three buses attract additional 5% initial allowance; (iv) Under the Industrial Development (Income Tax Relief) Act (1990), companies granted pioneer status enjoys a tax holiday for a minimum of three years and for an additional two years, maximum. Also dividend declared from a pioneer profit is tax exempt in the hands of the recipient; (v) A company in the agricultural sector can carry forward losses incurred indefinitely while companies in other sectors can carry forward their losses for a maximum of four years; (vi) There is a hundred percent capital allowance on capital expenditure incurred on motor vehicles used for public transportation (intercity); (vii) a company carrying on business as a manufacturing exporter is granted an additional annual capital allowance of 5% on its plant and machinery computed on cost; (viii) A small business with turnover of not more than N1,000,000 engaged in manufacturing, agriculture, wholly export trade or mining of solid minerals, enjoys a lower rate of tax at 20% on its total profit for a minimum period of three years and a maximum of five years from the date of commencement; (ix) Investment allowances are granted under Section 27 of the Companies Income Tax Act (CITA) (2004) (as amended) on qualifying capital expenditure incurred on plant and machinery used in manufacturing business and in agricultural production other than marketing and processing in the first year of acquisition at the rate of 15%. The 15% is computed on the cost of purchase of the asset and is not deducted from the cost of the asset in arriving at the residue of qualifying expenditure for annual allowance purposes.

The form and source of capital employed by a business affects its tax liability. While debt capital attracts interest cost, the cost of equity capital is dividend. Under the tax laws, interest cost is an allowable expense and results in tax savings, but dividend is not a tax deductible expense. To ensure that control is not lost by equity capital providers and for substantial tax savings, an optimum capital mix (i.e. the ratio of debt to equity) should be maintained. (Kiabel and Nwikpasi, 2001). More so, if there is an element of foreign participation in the company amounting to at least 25% of its equity capital, the company will be exempted from the minimum tax provision (S.33 CITA, 2004).

From the date a business commences, periodic reports based on its accounting
date will be prepared until the business ceases to exist. The questions: of what date to commence a business? What accounting date is appropriate for periodic reporting? And what date to end the business, have some tax implications. To provide answers to the above questions, under the Nigerian tax system considerations should be given to the following conditions:

(i) The date of commencement should be planned close to the end of the government fiscal year. This will reduce the basis period and consequently the total profit;
(ii) the date of cessation should be planned close to the beginning of the government fiscal year (iii) the choice for a reporting period should be planned such that the accounting year end is as close as possible to the government tax year. This will give the business a substantial tax advantage in terms of when the tax liability falls due;
(iv) For capital gains tax consideration, disposals should be planned for the earlier period of assessment year so that the proceeds could be utilized for a long time before the tax is due since capital gains are assessed on a current year basis (v) For a new trade, under the commencement rule, the first and second years are assessed on actual basis while the third year is assessed on preceding year basis. But the tax payer has a right to elect to have the second and third years of assessment on actual basis if that leads to lower tax burden. However, the election must be made within two years from the end of the second year of assessment.

To achieve some tax benefits, a company may restructure its market. For example, a manufacturing firm may restructure its market to qualify as a manufacturing exporter, an exporter may restructure its market by engaging in foreign direct investment in manufacturing; a company in foreign trade may restructure its affairs to deal only with those countries where Nigeria has a double taxation agreement so that it could benefit from double taxation relief; and a bank may restructure its lending to earn interest income from tax exempt sources.

When a firm invests its surplus fund, it is advisable to plan such investments in areas where tax is either at its minimum or the investments proceed is tax exempt.

In tax planning, a company has to structure out an optimal mix of dividend bonus issue for maximum tax and cash flow advantage to be achieved. In Nigerian taxation, qualifying capital expenditures attract tax incentives in the form of capital allowances (initial and annual).

According to Alabi (2001), capital expenditures could be incurred by a company to create tax advantage and achieve cash flow improvements in so many ways among others are acquisition of qualifying assets, sell and buy back old asset.

There are costs associated with tax planning. The first cost is the one directly connected with the engagement in such activities. These costs may be internal or external. The internal costs are mainly the time spent by managers and employees on structuring the tax saving opportunities that could not be devoted to other activities. The external costs are the
expenses for tax consultants and the other expenses necessary to set forth the tax planning opportunity. The second cost is the exposure to the uncertainty of an audit and any attendant penalties that may emerge. These include both the risk of overpaying taxes and the risk of being audited by the tax authorities for underreporting the income and thus paying less tax than legally required. The third cost is the implicit taxes that may emerge as consequences of a specific tax planning strategy; the fourth cost is compliance cost; finally, is the so-called corporate governance cost, which is related to the obscuration of these actions from tax authorities and to the increase of the agency costs. In fact, the necessary obfuscation may create an incentive for managers to obtain self-serving objectives at the same time, and will therefore enforce shareholders to induce managers not to engage in such collateral activities, increasing agency costs and transparency issues.

Where a tax planning strategy is illegal, it would be subject to penalties. However, in the case of tax evasion and tax avoidance, the corporation's payoff depends on whether or not it is investigated by tax authorities, and, assuming it is, whether tax authorities consider the strategy as illegal, and therefore subject to penalties or not.

The choice of individual taxpayers is based on three factors: (i) the probability of detection and punishment, (ii) the penalty structure and (iii) the risk aversion of the taxpayer. Nevertheless, if this is true in the individual taxpayers' framework, it does not mean it is necessarily true from the perspective of corporate taxpayers.

In fact, the corporate taxpayers' tax attitude toward risk must be analyzed within the agency framework. Even if shareholders (as principals) may provide general guidance with regard to the corporation's tax attitude toward risk, managers (as agents) make the practical tax choices (Sartori, 2009).

In summary, corporate governance with average board size can reach a decision more quickly thereby achieving the corporate tax planning more effectively which helps in maximizing shareholders wealth. If women are given adequate place on the board, their presence can hold back the tax planning strategy within the firm.

**Theoretical Review**

The debate about corporate governance is typically traced way back to the early 1930s and the publication of Berle and Means' "The Modern Corporation and Private Property". Adolf Berle and Gardiner Means noted that with the separation of ownership and control, and the wide dispersion of ownership, there was effectively no check upon the executive autonomy of corporate managers. In the 1970s these ideas were further refined in what has come to be known as Agency Theory. In a series of now classic articles writers such as Jenesen and Meckling, Fama, and Alchian and Demsetz offered a variety of explanations of the dilemmas faced by the 'principal' who employs an 'agent' to act on his or her behalf. As applied to corporate governance
the theory suggests a fundamental problem for absent or distant owners/shareholders who employ professional executives to act on their behalf. In line with neo-classical economics, the root assumption informing this theory is that the agent is likely to be self-interested and opportunistic. (The assumption of owner/shareholder property rights obviates any need to think about the principal's motives.) This raises the prospect that the executive, as agent, will serve their own interests rather than those of the owner principal. To counter such problems the principal will have to incur 'agency costs'; costs that arise from the necessity of creating incentives that align the interests of the executive with those of the shareholder, and costs incurred by the necessity of monitoring executive conduct to prevent the abuse of owner interests.

It is important to note that agency theory is deductive in its methodology. Its assumptions have been the subject of extensive empirical research but this has typically relied on the testing of various propositions in relation to large data sets. Agency theorists take self-interested opportunism as a given. They feel no need to explore, as we have done in this research, the attitudes, conduct and relationships that actually create board effectiveness. Instead they have busied themselves with exploring the effectiveness of the various mechanisms designed to make executive self-interest serve shareholder interests. To date such studies have proved entirely equivocal in terms of the relationship between good governance and firm performance. Agency theory assumptions have nevertheless been highly influential is shaping the reform of corporate governance systems. Here it is essential to distinguish between external, market-based governance mechanisms and board-based mechanisms.

In relation to market governance then clearly the openness and integrity of financial disclosures is vital to the operation of the stock market in determining a company's share-price and its underlying market valuation. Market governance relies for its effectiveness on the remote visibility such financial information creates, and, as importantly, on the effects on the executive mind of the knowledge of such visibility. Agency theorists point to the important disciplinary effects of two further market mechanisms. The first is the 'market for corporate control', the potential for takeovers to discipline executives by providing a mechanism whereby ineffective executive teams can be displaced by more effective executive teams. The second - 'the managerial labour market' - operates at an individual level; poor executive performance will threaten an individual's future employment potential whilst good performance will have positive reputational and hence career-enhancing effects.

To these external 'market' mechanisms must be added the disciplinary effects on company and executive performance of external monitoring, both direct and indirect. Formally, it is the Annual General Meeting provides an opportunity for directors to report face-to-face to their shareholders. In practice, however, the
formal accountability of the AGM has been augmented and diverted by a variety of other mechanisms. At the time of results announcements, companies will typically conduct presentations for sell-side analysts who then serve as key intermediaries between companies and their investors. These general briefings are then supplemented by a large number of (typically annual) private face-to-face meetings between executives and their key investors.

In addition to these external market and monitoring mechanisms, agency theory has also informed the internal reform of boards of directors. One of its most significant direct contributions came in the form of the widespread adoption of executive share-option schemes, which have only very recently fallen into disrepute in the UK. Such schemes follow directly from the agency assumption that the exercise of executive self-interest must be aligned with the interests of shareholders. Less directly, the influence of agency theory assumptions can be seen in the seminal reforms promoted by the Cadbury Committee 'Code of Best Practice', and its subsequent elaboration by Greenbury, Hampel, Turnbull and most recently Derek Higgs. With the possible exception of Turnbull, the work of these different committees was occasioned by visible corporate failures or perceived executive abuses of power, and has resulted in a progressive elaboration of the 'control' role of the board. The 'independence' of the non-executives directors who must now constitute 50 per cent of the board, their lead role on audit, nominations and remuneration committees where conflicts of interest between executive and shareholder are potentially most acute, along with progressively more stringent provisions around the separation of the roles of chairman and chief executive, are all consonant with agency theory's assumption that the interests of the owner/ shareholder are potentially at risk from executive self-interest, in the absence of close monitoring by independent non-executives.

**Empirical Literature**

Kiabel and Akenbor (2014) examined the impact of tax planning on corporate governance in Nigeria banks. He used regression analysis and Pearson Product Moment Co-efficient of Correlation and found that tax planning has a positive significant impact on corporate governance in Nigerian banks.

Aliani and Zarai (2012) investigated the impact of board of director's attributes on corporate tax planning in a developing country. In using regression analysis, he discovers that tax planning is influenced by duality and diversity on the board of directors. While duality unveils a negative relation with effective tax rates, diversity on the board shows a positive relationship. Lanis, Taylor and Richardson (2015) assessed the effect of Board of Director Gender and corporate Tax aggressiveness. They used 418 U.S firms for 4 years period of 2006 to 2009. They used ordinary least square regression to analyses their data and they found out that, there is a negative and
statically significant association between female representation on the board and tax aggressiveness.

Jalali, Jalali, Morid, Gashasbi and Foroodi (2013) examined the impact of board of directors' structure on firm tax avoidance. Logistic regression method was used in order to evaluate the effect of a number of factors such as board size on the possibility of applying aggressive tax policies by companies and found that board size has no significant impact on effective tax planning.

Ahmed and Khaoula (2013) investigated the effects of board of directors' characteristics on tax aggressiveness. He used regression analysis to determine which variables that can reduce tax aggressiveness and found that the percentage of women in the board does not affect the activity of tax aggressiveness. He also found that return on assets and sizes of the firm are associated in a significant way.

3.0 METHODOLOGY
The technique of sampling employed in the study is segment sampling or part proportion of the total population. The sample size is also adduced to be a representation of the whole population. Thus, the sample of this study is made up of a randomly selected twenty manufacturing companies listed on Nigerian Stock exchange between 2006 to 2016.

Based on the nature of incorporated variables in this study, secondary data were employed for the study. The data were sourced from Fact book of Nigerian Stock exchange and annual published report of various companies on the internet.

In the course of this research work, major data was sourced from Fact book 2012, 2013 and Nigerian Stock exchange (NSE) annual reports as well as unpublished materials from academic journals works earlier done in this area and the internet.

Model Specification
In studying the link between the characteristics of board of directors and tax aggressiveness, logarithmic model is used so as to perform an analysis regarding various parameters included this model. Logarithmic model is one of the transformations that are used in data analysis for obtaining a packet data that most closely matches the standard form (normal distribution).

This following, therefore, is the estimated regression model:

\[ ETR = BSIZE + INDEP + DIV \]

Where,

- \( ETR \) denote the effective tax rate measure,
- \( BSIZE \), \( INDEP \), \( DIV \) are all independent variables measures as discussed in table 1.
Table 1 Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Abbreviations</th>
<th>Measures Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Tax Rate</td>
<td>ETR</td>
<td>Total tax exp/pre tax income</td>
</tr>
<tr>
<td>Board Size</td>
<td>BSIZE</td>
<td>Natural log of the total number of directors</td>
</tr>
<tr>
<td>Independent Directors</td>
<td>INDEP</td>
<td>Natural log of the total number of directors</td>
</tr>
<tr>
<td>Board diversity</td>
<td>DIV</td>
<td>% of women on the board</td>
</tr>
</tbody>
</table>

4.0 DATA ANALYSIS AND TEST OF HYPOTHESES

The data used for the study consist of published financial statements of twenty selected quoted companies. The data were analyzed using regression model and correlation analysis and the results presented in tables and statistical figures.

Table 2: Descriptive Statistics Board size and Tax aggressiveness

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Aggression</td>
<td>28.26</td>
<td>15.530</td>
<td>220</td>
</tr>
<tr>
<td>Board Size</td>
<td>10.06</td>
<td>2.803</td>
<td>220</td>
</tr>
</tbody>
</table>

Source: Output of data analysis by author 2019 using SPSS

Test of hypotheses

Hypothesis 1
H0: The size of the corporate board has no significant effect on tax aggressiveness

Table 3: Model Summary Board size and Tax aggressiveness

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.026a</td>
<td>.001</td>
<td>-.004</td>
<td>15.560</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.001</td>
<td>.142</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>.707</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>218</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.2.259</td>
<td></td>
</tr>
</tbody>
</table>

Source: Output of data analysis by author 2019 using SPSS

Table 4: Coefficientsa

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>29.686</td>
<td>3.917</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board Size</td>
<td>-.141</td>
<td>.375</td>
<td>-.026</td>
<td>-.377</td>
</tr>
</tbody>
</table>

Source: Output of data analysis by author 2019 using SPSS
From table 3 and 4 above, the regression coefficient $R$ is .026 (weak relationship) with $R^2$ of .001 at 2.259 Durbin Watson value. In addition, the significant F change is .707. Thus there is insignificant relationship since the significant F change is higher than .05 Alpha level of significant.

Further analysis of regression coefficient (table 4) shows that the standard coefficient Beta is -.026. Thus the weak relationship that exists between board size and tax aggression is negative. This means that for any unit increase in the size of the board of directors the tax aggressiveness will be not be significantly affected at -.026 weak levels. This fit in with the work which was reported by Aliani and Zarai (2012), “the non-significance between the size of the board and tax aggressiveness in the American context”. In the work, they noticed that the strategies used in minimizing tax expenses are not influenced by the number of directors. Therefore, the H0 hypothesis is accepted

**Hypothesis 2**

H0: The percentage of women in the board has no significant effect on tax aggressiveness

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>26.214</td>
<td>1.742</td>
<td>15.046</td>
</tr>
<tr>
<td></td>
<td>Women on the Board</td>
<td>1.540</td>
<td>1.047</td>
<td>.099</td>
</tr>
</tbody>
</table>

*Source: Output of data analysis by author 2019 using SPSS*

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$R^2$ Change</td>
<td>F Change</td>
</tr>
<tr>
<td>1</td>
<td>.099</td>
<td>.010</td>
<td>.005</td>
<td>15.489</td>
<td>.010</td>
<td>2.161</td>
</tr>
</tbody>
</table>

*Source: Output of data analysis by author 2019 using SPSS*
From tables 6 and 7 above, the regression coefficient R is .099 (weak relationship) with R² .010 at 2.274 Durbin- Watson value. In addition the significant F change is .143 which is higher than .05 Alpha level of significant. Further analysis of regression coefficient table 3 shows that the standard coefficient Beta is .099. This shows a weak relationship between the number of women on the board and tax aggressiveness. The H0 hypothesis is accepted and H1 is rejected. This also confirms the work of Aliani and Zarai (2011) mentioned above.

**Hypothesis 3**

H0: There is no significant relationship between outside directors on the board and tax aggressiveness.

**Table 7: Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>26.214</td>
<td>1.742</td>
<td></td>
<td>15.046</td>
</tr>
<tr>
<td>Women on the Board</td>
<td>1.540</td>
<td>1.047</td>
<td>.099</td>
<td>1.470</td>
</tr>
</tbody>
</table>

*Source: Output of data analysis by author 2019 using SPSS*

**Table 8: Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin- Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R² Change</td>
<td>F Change</td>
</tr>
<tr>
<td>1</td>
<td>.019</td>
<td>.000</td>
<td>-.004</td>
<td>15.563</td>
<td>.000</td>
<td>.081</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Outside Director (Non-Executive)  
b. Dependent Variable: Tax Aggression*

**Table 9: Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>28.036</td>
<td>1.321</td>
<td></td>
<td>21.227</td>
</tr>
<tr>
<td>Outside Director (Non Executive)</td>
<td>.090</td>
<td>.318</td>
<td>.019</td>
<td>.284</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Tax Aggression*
From the above tables (8 & 9), the regression coefficient R is .019 (weak relationship) with R² .000 at 2.254 Durbin-Watson value. In addition, the significant F change is .776. Thus there is insignificant relationship since the significant F change is higher than .05 Alpha level of significant. Further analysis of regression coefficient (table 7) shows that the standard coefficient Beta is .019. Thus there is no significant relationship between independent director and tax aggressiveness. H0 is therefore accepted and H1 is rejected.

**Discussion and Analysis of Findings**

Based on the results of the regression analysis used to test hypothesis 1, it proves that board size (BSIZE) exerts a negative and this conform to the work of Lanis, Taylor and Richardson (2015) and Jalali et al. (2013) that examined the impact of board of directors’ structure on firm tax avoidance.

Logistic regression method was used in order to evaluate the effect of a number of factors such board size on the possibility of applying aggressive tax policies by companies and found that board size has no significant impact on effective tax planning. This statistically insignificant relationship exists as F-change is greater than .05 Alpha levels. Therefore, H0 hypothesis was accepted.

Based on the results of the regression analysis used to test hypothesis 2, it proves that insignificant relationship exist between tax aggressiveness and the percentage of women on the board. At the .05 Alpha levels, the F-change is .143 greater than .05 Alpha level. Therefore null hypothesis is accepted.

The weak coefficient indicates that the more women we have on the board has no significant relationship with corporate tax aggressiveness. This confirms the work of Ahmed (2013) investigated board characteristics and tax aggressiveness. He used regression analysis to determine which variables that can reduce tax aggressiveness and found that the board size and the percentage of women in the board do not affect the activity of tax aggressiveness significantly.

**5.0 SUMMARY AND CONCLUSION**

**Summary**

This study considers board Characteristic and corporate tax aggressiveness. Based on a choice-based sample of 20 manufacturing companies listed on Nigeria Stock Exchange during 2006-2016, our study employed regression analysis to test the prediction that the diversity, size of board and percentage of independent directors have no relationship with the activity of tax aggressiveness. Overall, this study provides unique insights into the association between diversity of board director and tax aggressiveness.

**Recommendations**

Based on the research problems, research questions along with the findings and conclusion reached, the followings are therefore recommended:

1. Companies should focus on businesses and policies that will
maximize shareholders wealth rather than activities that will reduce tax liability.

2. Government should put in place polices that will encourage women to participate in corporate governance instead of caging them in the name of religion and culture.

3. Companies in Nigeria should direct their investments to businesses that grant good tax savings instead of focusing on having independent directors which has no impact on tax planning. Such investment could be in the area of qualifying capital expenditure taking into account the nature, timing and date of acquiring such capital expenditure.
REFERENCES

Alabi, S. (2001). Tax planning; a paper delivered at the workshop on Nigerian corporate and personal income tax management; held in Lagos on 14th August.


Kiabel, B.D and Nwikasi, N.N. (2001). Selected aspects of Nigerian taxes; Owerri; Springfield Publishers Ltd.


