

CORPORATE GOVERNANCE AND TAX AGGRESSIVENESS

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APRIL, 2024.

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**BEING A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF
ACCOUNTING, FACULTY OF MANAGEMENT SCIENCES, UNIVERSITY OF
BENIN, BENIN CITY, IN PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE AWARD OF BACHELOR OF SCIENCES (B.Sc.), DEGREE IN
TAXATION.**

APRIL, 2024.

DECLARATION

1. I, **FAITH** do hereby declare that this project was undertaken by me in the Department of Accounting, Faculty of Management Sciences, University of Benin, Benin City, Edo State under the supervision of **Dr Mrs I. Ogbeide**
2. This project has not been previously submitted for the award of any degree elsewhere,
3. All ideas and views are products of my personal research and that of others have been duly referenced and acknowledged,
4. Any litigation or liability arising from the work is to be wholly borne by me and not that of the supervisor.

FAITH USUNOBUN

DATE

CERTIFICATION

This is to certify that this project work was carried out by **FAITH USUNOBUN** with Matriculation Number: **MGS1907871** in the department of Accounting, Faculty of Management Sciences, university of Benin, Benin City in Partial fulfilment of the requirement for the award of Bachelor of Science (B.Sc.) Degree in Taxation.

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DATE

DEDICATION

This research work is dedicated to God Almighty for His guidance, protection, mercy and favour upon my life throughout my years of study.

ACKNOWLEDGEMENTS

From the depth of my heart, I wish to express my gratitude to GOD Almighty for all he has done for me. I also want to sincerely express my profound gratitude to my parents, Mr and Mrs USUNOBUN for their parenthood, prayer, financial, and moral support.

The value you instilled in me have formed the bedrock of my work ethic, perseverance and passion. This project's completion is a testament to the enduring love and guidance you've provided throughout my journey.

As I reflect on this achievement, I am reminded of the countless moments you believed in me even when I doubted myself. Your contributions have been immeasurable, and I am humbled to dedicate this success you who have been my unwavering champions.

With love, respect and eternal gratitude.

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ABSTRACT

The study takes a cursory look at the relationship between corporate governance and tax aggressiveness. It specifically examines the relationship between board size, board independence, board size, managerial ownership, institutional ownership, foreign ownership, corporate governance compliance and corporate governance disclosure on tax aggressiveness. The study employed the *Ex post facto* research design. Data for the study were collected from annual reports of forty-five (45) non- financial firms listed on the Nigerian Stock Exchange, the scope of this study covers a 10year period ranging from 2010 - 2019. The data collected were analysed using descriptive statistic, correlation and panel data analyses.

Following the results, it is revealed that the relationship between board independence, board size and managerial ownership have insignificant negative relationships with tax aggressiveness, board gender diversity and tax aggressiveness is positive and statistically significant while board foreign ownership and institutional ownership is positive and statistically insignificant with tax aggressiveness, it is also revealed that the moderating effect of agency cost on the relationship between corporate governance compliance and tax aggressiveness is positive and significant, and the moderating effect of agency cost on the relationship between corporate governance disclosure and tax aggressiveness is positive and significant.

Based on the above findings, the following recommendations were made in line with empirical evidence, it was observed that a more gender diversified board will function effectively in reducing tax aggressive policies in Nigeria. This will greatly run in favor of the government and tax authorities whose desires include higher tax revenue which are meant for economic development.

CHAPTER ONE

INTRODUCTION

1.1. Background to the Study

Tax aggressiveness from its origin, is a practice associated with large multinational firm seeking means for profit repatriation has now grown into a strategic cost saving approach employed by corporations of all shapes and sizes globally and no country appears to be immune from the growing practice of tax aggressiveness. Consistent with Maltinez (2017) and Frank, Lynch, and Rego (2009), tax aggressiveness is tax planning that comprises of a great variety of transactions with the aim to reduce taxable income; and is a subset of tax avoidance activities, which may or may not violate income tax law. Tax aggressiveness could be a downward management of taxable income through tax planning regarding reducing tax paid to tax authority (Chen, Chen, Cheng, & Shevlin 2008). Tax aggressiveness is becoming very pervasive amongst Nigerian quoted companies. Evidence of tax aggressiveness among Nigerian quoted firms has also been established by Oyeleke (2016), Ogbeide (2017), Salaudeen and Ejeh (2018), Salawu and Adelabu (2017), Ilaboya (2016) and Uniamikogbo, Atu, and Atu (2017).

These studies arrived at their conclusion by identifying the persistence of declining effective tax rate for several of the companies examined. Understanding the predisposing factors engendering tax aggressive behaviour of companies in an emerging paradigm that emphasises the link between firms' corporate governance mechanisms and their responses

to taxes (Desai & Dharmapala 2009, and Desai et al., 2007) pointed out that the role of corporate governance affects firms' responses to changes in corporate tax rates. They realised that the underlying governance arrangements constitute the major driver for tax aggressive behaviour of management. According to Effiezal, Akmalia, Marziana, and Zuraidah (2017), in the context of corporate tax behaviour, governance mechanisms work toward shaping and monitoring managerial behaviour. The board of directors, which is responsible for allocating resources, improving performance, and increasing shareholder's wealth, has a central role in choosing tax-management strategy. Thus, firms with different governance structures may pursue different tax management strategy.

In these regards, corporate governance and tax aggressiveness has been hypothesised to be related given that aggressive tax strategies represent a firm's value maximising activity as it entails wealth transfer from the government to shareholders of a firm (Khurana & Moser, 2013). Therefore, shareholder's value should increase with the efficacy of corporate tax strategies so long as the expected marginal benefit exceeds marginal cost (Desai & Dharmapala, 2009). Thus, tax aggressive activity will be allowable by shareholders because it results in shareholder wealth maximisation.

Corporate tax aggressiveness can create agency problems because shareholder and manager's interests may not align with regards to tax risks. Shareholders often accept that managers or directors will act on their behalf to focus on maximising profit, which includes a reduction in tax liabilities. However, based on an agency perspective, the

separation of ownership and control can lead to corporate tax decisions that reflect private interests of the directors rather than the shareholders. Consequently, self-interest directors would structure a firm in a complex manner to facilitate transactions that divert corporate resources for private use. This perspective poses a set of issues which are related to the alignment of their interests with those of the shareholders and the associated agency costs (Khurana, & Moser, 2009).

In the light of the agency cost problems in relation to tax planning strategy, this study advances two key propositions. Firstly, that in the presence of significant agency problems, corporate governance will be averse to tax aggressive activities of management because it is purported to reflect private interests of the directors rather than the shareholders. It can be used to mask opportunistic management behaviour such as earnings manipulations, related party transactions and other resource diverting actions. Secondly, in the absence of agency cost problems, tax aggressiveness practices will be allowable by shareholders because it results in shareholder's wealth maximisation.

1.2 Statement of the Research Problem.

One of the most challenging threat facing government is the compliance level of taxation, tax aggressiveness is one of the most severe compliance burden facing government all over the world. The threat is encumbered in reducing tax liabilities of firms.

However, concerns on the need for strong corporate practices were heightened after the collapse of some industries- the highly cases of Enron, Xerox, Cadbury and

Oceanic bank were examples of businesses that collapses as a result of weak corporate governance. As a result of this collapse, lots of legislation has been introduced example of such is the Sarbanes Oxley Act of 2002 introduced in the U.S, Code of best practises on corporate governance 2008 and the Nigerian code of corporate governance (2018).

However, in spite of the reforms in corporate governance and the codes of corporate governance having the most basic element and principle of governance, majority of the firms still indulge in strategy that help them minimise their tax liabilities which has invariably reduced government revenue.

A high proportion of the available studies exploring the relationship between corporate governance and tax aggressiveness have been based on the expectation that since corporate governance protects the interest of shareholders, their disposition towards tax aggressive strategy which is intended to increase shareholder wealth and corporate gains could fall within an allowable region. Consequently, a good number of studies (Minnick & Noga, 2010; Lanis & Richardson, 2011; Aliani & Zarai, 2012; Zenzem & Ftouhi, 2013; Onyali & Okafor, 2018 Arun, Almahrog & Aribi, 2015; Srinidhi, Gul & Tsui, 2011; Taylor & Lanis 2016; Lanis & Richardson, 2015; Oyeleke, Erin & Emeni, 2016; Oyeleke et al. 2016; Ogbeide 2017; Salaudeen & Ejeh, 2018; Salawu & Adelabu, 2017; Ilaboya, et al 2016; and Uniamikogbo, Atu, & Atu, 2017) have examined the relationship between corporate governance and tax aggressiveness without considering the potential effect of agency cost.

The choice of board and ownership structure variables is because the upper echelons theory puts emphasis on importance of decision makers and top management in corporate strategy.

In the light of the above, the following research questions have been raised to guide the study;

- i. What is the relationship between board independence and tax aggressiveness of listed non-financial firms in Nigeria?
- ii. To what extent does board size relate with tax aggressiveness of listed non-financial firms in Nigeria?
- iii. What is the relationship between managerial ownership and tax aggressiveness of listed non-financial firms in Nigeria?
- iv. How does board gender diversity influence tax aggressiveness of listed non-financial firms in Nigeria?
- v. How does foreign ownership influence tax aggressiveness of listed non-financial firms in Nigeria?
- vi. What is the relationship between institutional ownership and tax aggressiveness of listed non-financial firms in Nigeria?

1.3 Research Objectives

The broad objective of the study is to examine the relationship between corporate governance and tax aggressiveness of listed non-financial firms in Nigeria, and by

extention, investigate the moderating role of agency cost on the relationship between corporate governance and tax aggressiveness. The specific objectives are to;

- i. examine the relationship between board independence and tax aggressiveness of listed non-financial firms in Nigeria.;
- ii. examine the relationship between board size and tax aggressiveness of listed non-financial firms in Nigeria.;
- iii. appraise the relationship between managerial ownership and tax aggressiveness of listed non-financial firms in Nigeria.;
- iv. investigate the relationship between board gender diversity and tax aggressiveness of listed non-financial firms in Nigeria.;
- v. examine the relationship between foreign ownership and tax aggressiveness of listed non-financial firms in Nigeria.;
- vi. assess the relationship between institutional ownership and tax aggressiveness of listed non-financial firms in Nigeria.;

1.4 Research Hypotheses

The following null hypotheses are to be tested in the course of this study:

H₀₁. There is no significant relationship between board independence and tax aggressiveness of listed non-financial firms in Nigeria.

H₀₂ There is no significant relationship between board size and tax aggressiveness of listed non-financial firms in Nigeria.

H₀₃. There is no significant relationship between managerial ownership and tax aggressiveness of listed non-financial firms in Nigeria.

H₀₄. There is no significant relationship between board gender diversity and tax aggressiveness of listed non-financial firms in Nigeria.

H₀₅. There is no significant relationship between foreign ownership and tax aggressiveness in quoted firms in Nigeria.

H₀₆. There is no significant relationship between institutional Ownership and tax aggressiveness of listed non-financial firms in Nigeria.

1.5 Scope of Study

The study examines corporate governance and tax aggressiveness; the moderating role of agency cost of listed non-financial firms in Nigeria. The study focuses on corporate governance variables such as board size, board independence, board gender diversity, managerial ownership, institutional ownership, foreign ownership. The dependent variable is tax aggressiveness.

The study covered selected companies listed on the Nigerian Exchange Group for a 10-year period, ranging from 2010 - 2019. The period is selected as it reflects periods of both tax reforms such as the Self -Assessment System and corporate governance reforms in Nigeria after the high profile scandals that led to the collapse of some giant industries in both developed and developing countries as a result of weak corporate governance amongst other factors.

1.6 Significance of the Study

The study will provide useful information to the tax authority in understanding more about tax aggressiveness in companies. In Nigeria, tax audits are performed by tax authority to improve tax compliance and to detect tax evasion or tax avoidance. Various audit programs implemented that ensure the taxpayers comply with the legal provisions and the current tax regulations within the Self-Assessment System. In line with study, it will help tax administration to organise an efficient enforcement task as well as redesign effective tax system.

The study also highlights the important role of corporate governance in the tax aggressive strategies of companies. Also, the evaluation of this relationship under an agency framework is an extra dimension that this study introduces especially in the study environment. Therefore, it will immensely be insightful to show empirically the implications of code of corporate governance on tax aggressiveness and agency cost.

Finally, the study will be beneficial to other researchers in tax and corporate governance areas. The study can provide a good baseline for further researches to extend this line of study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the existing literature related to this topic of study. They are presented in order of conceptual review of tax aggressiveness and its different measurements. The chapter also presents an overview of corporate governance disclosure framework structure in Nigeria. It also captures the conceptualisation of each of the corporate governance variables selected as independent variables of the study. It also has the theoretical review as well as review of prior empirical studies by both foreign and Nigerian authors.

2.2 Conceptual Framework

2.2.1 Tax Aggressiveness

Companies tax aggressiveness can be seen in two ways. One is the legal way to find out what kind of transactions are favourable under the current law. It is the legal tax avoidance and is a valid services provided by the accountants. The second perspective to tax aggressiveness is tax sheltering and it is designed to reduce the company's tax liability (Desai & Dharmapala, 2006). According to Zhu, (2019), the scheme of tax aggressiveness, i.e. forms of employing strategies to reduce company's tax expense by exploiting the loopholes and complexities in extant tax laws, dates back to the origin. The US Congress, Joint Committee on Taxation defined tax aggressiveness as a corporate tax

shelter or arrangement designed principally to avoid or evade income tax without exposure to economic risk or loss (Wilson, 2009).

Tax aggressiveness is defined as a broad continuum of activities that range from benign behaviours that were envisioned by tax policies at one end, to outright tax fraud and tax evasion at the other (Hanlon & Heitzman 2010). While the term has a specific meaning within accounting research, in practice it is used interchangeably with the term tax avoidance, and it is often referred to as aggressive tax planning. According to Chen, Chen, Cheng, and Shevlin (2010), tax aggressiveness is an effort of the company to minimise tax payments using aggressive tax planning activities and tax avoidance. Frank, Lynch, and Rego (2009) were of the view that aggressive tax is the manipulation to lower taxable income through tax planning that can be considered as tax management. Lisowsky (2010) view tax aggressiveness as actions close to the end of a continuum of tax avoidance activities that range from legitimate tax planning to investments in abusive tax shelters.

However, it is admitted that tax aggressiveness is not only the reduction of the tax due but the implementation of such strategies to reduce the tax base that enables high potential non-tax cost which arises from agency conflicts or tax-authority, such as penalties and rent extraction (Boussaidi & Hamed, 2015). Bruce, Deskins, and Fox (2007) opined that tax aggressiveness is seen as a set of actions taken by companies to reduce public debts from shaping and affecting only their scheme financial strategy. Aggressive

tax represents different handling activities to lower taxable income that can be legal or illegal.

The major identifiable disadvantage of tax aggressiveness, according to Desai and Dharmapala (2006), is that tax aggressiveness activities are characterized by complexity and obfuscation, which are practically difficult to detect. In fact, the most significant goal is to increase the net income of the company which creates a positive signal to foreign investors. (Chen *et al.*, 2010). It is simply a strategy deployed by managers, it may also be viewed as set of processes, practices, resources and choices whose objective is to maximise income after all company's liabilities owed to the state and other stakeholders (Boussiadi & Hamed, 2015).

For the purpose of this study, tax aggressiveness can be seen as tax management activities that is used for tax planning adopted by management to minimise its tax obligations in compliance with country's tax position.

This concept has the same meaning as tax planning, tax avoidance and tax shelters in terms that they meet the legal and ethical provisions established by the tax authorities.

2.2.2 Measurements of Tax Aggressiveness

Corporations report taxable income on their tax returns and also report income tax expense and income tax assets and liabilities on their financial statements. Thus, estimates of taxable income and tax payments, important factors in measuring tax avoidance, could be obtained from either source. Most tax avoidance measures are

obtained from financial statement data because tax returns are not publicly available and access is granted to only a few. In essence, there is lack of disclosure in financial statements about taxable income and/or the actual cash taxes paid or to be paid on the current year's earnings. The most usual aggressiveness measures are those related to the effective tax rate.

2.2.3 Effective Tax Rate

The firms' effective tax rate (ETR), is a measure of tax liability divided by income, has long been used in the literature as a measure of active tax planning (Dyreg, Hanlon, & Maydew, 2008; Robinson & Sikes, 2006) we can detect tax aggressiveness by the effective tax rate "ETR". Several authors have considered the measure "ETR" as the most relevant measure of the ability of the company to optimise its tax burden (Ayers, Jiang & Laplante 2009; Chadeaux & Rossignol, 2006; Rego 2003). The effective tax rate on the accounting profit is one of the most common measures of tax aggressiveness used in literature and is calculated as total expense with taxes on profit / profit before taxes. The implication of this ratio is that a low ETR means that a company conducts tax planning more aggressively than companies with higher ETR. As variations of this measure, the total effective (ETR_t) and the current effective rates (ETR_c) can also be calculated, depending on whether or not deferred taxation is considered (Guimarães, Macedo & Cruz, 2016). There are several variants of the ETR based largely on the adjustments to the denominator. Dyreg et al., (2008) introduce the long-run cash

effective tax rate. Long-run cash ETR is the proportion of cash taxes paid to the accounting income before tax. The use of cash amount of tax paid as opposed to tax expense help to minimize the likely effects of items such as valuation allowance and tax cushions (Dyreng et al. 2008). Minnick and Noga (2010) also argue that cash tax measured “ETR takes into account the tax benefits of employee stock options, which accounting ETR does not”. Besides this merit, long-run cash ETR also uses the tax information for multiple years (3-10 years) Hanlon & Heitzman, (2010) which helps to eliminate the volatility in the year level measures. According to Salihu et al. (2014) it should be noted that the volatility in tax avoidance measurement is mostly caused by the timing differences between the treatments of certain items under financial and tax accounting (otherwise known as temporary difference). Lisowsky, (2010) has found that the long-run cash is not significantly associated with tax shelter use, supporting the notion that the cash ETR is more oriented toward measuring general tax avoidance. The long-run cash ETR is also accepted in the accounting literature as a credible method for identifying tax avoidance (Ayers, et al., 2009; Blaylock, et al., 2012; Rego & Wilson, 2012).

The Cash ETR is another developed variant of the ETR (Dyreng et al, 2008; 2010). Like ETR, Cash ETR is a tax rate estimate based on financial statement information. However, Cash ETR includes taxes paid in the numerator and pre-tax income adjusted for extraordinary items and discontinued operations in the denominator.

More importantly, *Cash ETR* is meant to be an average of values over several periods so as to smooth out the measurement error resulting from timing differences in installment, refunds, tax settlements, etc. There is also the current ETR (Ayers, et al., 2009) which is slightly different from accounting ETR, current ETR is calculated as the current-year tax expense to the total accounting income before tax. It reflects the tax deferral strategies of a firm by using the current income tax as against the total tax expense, hence, its advantage over the accounting ETR (Salihu, et al., 2014). According to Ayers, et al. (2009) the current ETR is calculated as cumulative current tax expense (income statement) net of deferred tax expense for a five -year period divided by the sum of pre-tax book income net of special items over the same period.

The ETR-based measures have two important limitations. First, because total tax expense is comprised of current and deferred taxes, the book effective tax rate (BETR) fails to account for tax aggressiveness associated with temporary book-tax differences because decreases in current tax expense are offset by corresponding increases in deferred tax expense. Second, both the (BETR) and current book effective tax rate (CETR) may understate a firm's level of tax aggressiveness if the firm records contingencies associated with uncertain tax benefits that arise from taking aggressive tax positions (De Waegenaere, Richard & Jacco, 2010).

2.2.4 Income effective tax rate

The proportion of income tax expense to operating cash flow has been identified to better measure the tax burden of a firm (Zimmerman, 1983). It is argued that the substitution of accounting earning with operating cash flow helps to reflect the actual tax burden of a firm as “it excludes the effects of accrual accounting procedures” (Zimmerman, 1983). Similar argument is found in a much later study by Buijink, Janssen and Schols (2002).

While this measure overcomes the problem of using accrual accounting item as the denominator, the inclusion of the accounting income tax expense also suffers the effects of accrual basis. Thus, the measure also reflects only the non-conforming tax avoidance. Therefore, Hanlon and Heitzman (2010) proposed a measure which does not measure tax avoidance relative to accrual accounting.

2.2.5 Book-Tax Difference

Book Tax Difference is another common proxy for tax aggressiveness. This is computed as the difference between book and taxable income. Estimating taxable income is typically accomplished by grossing up current tax expense using the statutory rate. Some evidence suggests that BTDs are positively associated with tax shelters (Wilson, 2009). Other studies suggest that BTDs in particular are a good measure for aggressive tax planning. This is based on the assumption that managers prefer tax strategies that reduce income tax expense. Research generally adopts the view that firms’ tax and financial accounting choices are fairly independent. Following this view, it appears

intuitive that BTDs should provide some information about corporate tax avoidance behavior. Nevertheless, BTDs conceptually do not necessarily reflect tax avoidance, especially if the over-reporting of book income (“earnings management”) is the primary cause of a BTD.

As valid tax outcomes are much harder to derive than e.g., earnings quality characteristics, the significant challenge for tax research is to accurately document the tax-related part of a BTD (Hanlon & Heitzman, 2010). Moreover, the existence of firm-specific characteristics independent of aggressive tax or book reporting may further complicate the use of BTDs as a proxy for tax aggressiveness (Wilson, 2009). While caution is thus advisable, there is considerable evidence showing that large positive BTDs might serve as a useful signal of tax avoidance. Considering that both financial and tax income are ultimately based on the same underlying economic transactions, tax authorities might view enormous gaps between the book income and the taxable income as a sign of potential tax aggressiveness.

2.2.6 Discretionary Measures

This approach to tax aggressiveness was introduced by Desai and Dharmapala (2006) and it is based on computing a measure of abnormal book-tax differences by regressing total book-tax differences on total accruals, where total accruals should control for accounting earnings management. The residual is used to proxy for the construct of tax avoidance. In the manner of the Jones’ (1991) model, which proxies a firm’s

engagement in earnings management by estimating the discretionary part of accounting accruals, the literature suggests ways to isolate the discretionary part of a BTD that most likely reflects tax avoidance. Using the residuals from panel data regressions of firms' total BTDs on total accruals, Desai and Dharmapala, (2006) aim to carve out the portion of the BTD that is attributable to tax planning/ These discretionary measures are similar in notion to the Jones (1991) model of discretionary accruals and could be useful conceptually in the sense that the "discretionary" portion attempts to remove underlying determinants that are not driven by unintentional tax avoidance leaving the portion driven by intentional tax avoidance (some notion of intentional actions towards the aggressive end of the tax avoidance continuum) in the residual.

However, one limitation of this approach is that just like the Jones model, regression-based partitions are only as good as the model used and the validity of the proxies employed for the "known" determinants. When it is challenging to identify good structural models of book-tax differences and effective tax rates, the discretionary models could introduce additional error. In addition, because taxes affect many decisions but are rarely first-order drivers it is difficult to know what variables to include in the "known" (not tax driven) determinants and which effects to let fall into the residuals. A good example of this is regarding to whether a firm's foreign operations or amount of research and development spending be classified as items to be included in the first stage regression as known determinants of ETR as it is plausible that these expenses may have

been undertaken for non-tax reason and tax savings were just a byproduct. This has led to some misapplication of the measure and misinterpretation of results on tax aggressiveness using the discretionary measures.

2.2.7 Unrecognized Tax Benefits

In 2006, FASB issued FIN 48 “Accounting for Uncertainty in Income Taxes” with the intention to reduce the diversity in practice related to the reporting of tax reserves. Under FIN 48, publicly traded firms are required to disclose their unrecognized tax benefits (UTB), which represent an income tax reserve for future tax contingencies. Accordingly, UTBs are also referred to as “tax reserves” or “tax contingencies” (Cazier, 2011). Under FIN 48, all uncertain tax positions must be evaluated in a two-step recognition and measurement approach. This approach requires a firm to determine whether its tax position meets the more likely-than-not (MLTN) probability of being legally sustainable upon audit on its tax return, based solely on its technical merits. In cases where the MLTN threshold is not satisfied, no tax benefit will be recorded. For tax positions meeting or beating the MLTN threshold, the recordable tax benefit is the largest amount of benefit that is cumulatively greater than 50% likely to be realized (Rego & Wilson, 2012). The remaining difference between the tax benefits as reported on the tax return and the benefits that passed the two-step recognition and measurement procedure is recorded as an increase in the tax reserve. This approach to accounting for uncertain

tax positions immediately suggests that the FIN 48 tax reserve should at least reflect some scope of uncertainty inherent in a (self-assessed) tax position and hence also some extent of tax-related managerial discretion.

Following this notion, Frischmann., (2008) consider tax reporting to be aggressive if it involves certain risks. Hence, the amount of UTBs accrued under FIN 48 may serve as a reasonable measure of tax aggressiveness. DeWaegeaere, Sansing, and Wielhouwer (2010) provide theoretical analyses of UTBs being adequate proxies for tax aggressiveness. However, problematic is the “dual nature” of the UTB account (Hanlon & Heitzman, 2010) in that while its uncertainty considered from a tax position should provide insights into firms’ tax avoidance behavior, given that the accrual of a tax reserve eventually affects book net income, UTBs can also be useful instrument to engage in earnings management. Hence, managers may have to trade off their aggressive tax and financial reporting incentives when deciding on whether or not to record a tax reserve.

2.3 Corporate Governance

The governance structure of a firm could determine the length to which an organisation performs and trend in any business environment. There is the need for sound and good corporate governance structure arrangement for effective delivery of organisational goals. According to Ahmad and Omar, (2016), corporate governance is a set of relation amongst all stakeholders of a firm that provide a structure to attain a predetermined objective. Corporate governance structure is deemed to safeguard the

interest of all stakeholders, ensures accountability and transparency (Kilic & Kuzey, 2018).

Corporate governance is defined as a process that involves organisational, legal, economic, motivational and social tools, the combination of that provides the unique business environment that entails reduction in cost by minimising the conflicts between managers and owner's goals (Shliefer & Vishney 1997).

Mendez (2003) offered a precise explanation of corporate governance as the framework of laws, rules and procedures that regulate the interactions and relationships between the providers of capital, the governing body, senior managers and other parties that take part to varying degrees in the decision making process and are impacted by the company's disposition and business activities. Corporate governance defines their respective roles and responsibilities and their influences in steering the course of the company.

Corporate governance is defined as a system by which companies are directed and controlled (Cadbury, 1992). It consists of two components: corporate, which refers to corporations, governance, which refers to the act, fact or manner of governing (Lanno, 1999). Ruin (2001) states that corporate governance is a group of people getting together as one united body with the task and responsibility to direct, control and rule with authority. On a collective effort, this body is empowered to regulate, determine, restrain, curb and exercise the authority given to it.

According to Uwuigbe, Olusanmi, and Iyoha, (2015) corporate governance is seen as a system or an arrangement that comprises of a wide range of practices (accounting standards, rules concerning financial disclosure, executive compensation, size and composition of corporate boards) and institutions that protect the interest of corporation's owners.

Corporate governance is a system by which organisations are directed and controlled by the boards of directors companies. The shareholders' function in corporate governance is to appoint the directors and the auditors to give them the sense of satisfaction for an appropriate governance structure. The responsibilities of the board include supervising the management and smooth running of the business, setting the strategic objectives of the company, providing the leadership to put them into effect and reporting to shareholders on their improvement over time. The board's actions are subject to stipulated laws, regulations and the shareholders in general meetings.

According to Hopt (2011), the evolution of the concept of corporate governance had trends, theories and models, which have been picked up by commentators and researchers. The direction and control are the two cornerstones of the corporate governance system, which characterise the system to be either shareholder or stakeholder oriented. In other words, it encompasses several mechanisms that serve to protect shareholders' interests and reduce agency conflicts arising from the separation of ownership and control, such as: board independence, proper audits, nomination and

remuneration committees; as well as capital structure and dividend payout policies (Fatimoh, 2012). It can be seen also as the sum of processes, structures and information used for directing and overseeing the affairs of an organization (Sanda, Mikailu & Garba, 2005).

2.3.1 Corporate Governance Compliance

Corporate governance is a mechanism that intertwine laws, procedures, practices and rules to determine the ability of a firm in order to take effective and efficient decisions.

Regulations and compliance to corporate governance helps to eradicate agency problems between the owners of the firms and managers, and as such enable company to satisfy specific requirement (Collett & Hrasky,2005)

2.3.2 Corporate Governance Disclosure Index

Corporate governance disclosure index are made by companies with the provisions of the company's act of 2020, this helps in capturing the multiple dimensions of the firm's corporate governance structure. Corporate governance index helps regulators to take decisions on how corporate reforms are functioning and also determine firms to realise the enormous gains of adopting effective good corporate governance practices. CGI works as a rating tool and as such helps investors to indicate well

governed firms (Sarkar & Sen 2012) The principal international academic indices includes Cohen and Ferrell's E-Index (2009) Brown and Caylor's Gov-Score Index (2006) etc. Furthermore, CGI is also bedevilled with multiplicity of issues such that the construction of CGI is employed arbitrarily reason for that is due to the fact that there are no agreed theory on CG to guide variable construction or to indicate the basis for allocating weight to the different CG factors.

2.3.3 Corporate Governance models

Corporate governance practices, regulations, and models differ between countries. Generally, these corporate governance models are divided into two types based on different systems of corporate ownership (Shleifer, Vishny, (2000); Shleifer & Vishny, (1997). The first is the outsider model, and the second, the insider model. According to the researchers listed above, notable examples of the outsider model of corporate governance are the US and the UK ones. Therefore, the outsider model is also known as Anglo-Saxon model. The insider model of corporate governance is found in Europe and the Asia-Pacific region. This model is also known as the Continental European model.

In the Anglo-Saxon model, corporate ownership is widely held and there are large numbers of shareholders. The managers in the Anglo-Saxon model are more powerful in the decision making process as opposed to the Continental European model, due to dispersed ownership. Bhasa (2004) finds better investor protection and more professional

directors and managers in the Anglo-Saxon model. One of the major contributors to better investor protection in this model is the powerful authority to provide strong shareholder protection. Corporate disclosures are well regulated to ensure that all investors receive reliable information for their investment decision making. Another distinction of this Anglo-Saxon model, as opposed to the Continental European model, is frequent takeovers. According to Hillman and Dalziel, (2003), external control from the capital market is more effective than control from the board of directors in this model. This is because corporations may be subject to takeover if the managers are unable to maximise the corporation's value.

In contrast, in the Continental European model corporate ownership is concentrated with a single owner or a small group of shareholders having control of the corporation. Unlike the Anglo-Saxon model, where the board of directors and managers mainly focus on corporate value maximisation for their shareholders, in this model the board of directors and managers have to address broad stakeholders' needs (Snyder, 2007). Bhasa (2004), contends that long-term shareholdings and substantial cross shareholdings between corporations are also common in this model. The substantial long-term shareholdings protect corporations from potential takeover threats. Another distinct difference between the Anglo-Saxon model and the Continental European model lies in disclosure issues. In the latter model, disclosures are rather restricted to selected insiders and controlling shareholders. This is very much in contrast with the Anglo-Saxon model

where disclosures are well-regulated to ensure all investors receive similar reliable information.

2.3.4 Corporate Governance Disclosure Framework in Nigeria

The Code of Best Practices on Corporate Governance in Nigeria (Sec, 2003) was the first of corporate governance code issued by the Securities and Exchange Commission in 2003. The Code was applicable to all public companies registered in Nigeria. The happenings and rapid changes in the corporate world made the Code to become inadequate that brought about some regulators of specific sectors issuing industry-specific corporate governance codes to address matters peculiar to their respective sectors. The first was the Code of Corporate Governance for Banks in Nigeria issued by the Central Bank of Nigeria in 2006. The Code was meant to address the identified weaknesses in corporate governance of banks in Nigeria and to resolve the challenges of corporate governance which are bound to occur post-consolidation (CBN, 2006).

The second regulator to issue an industry-specific corporate governance code is the National Pension Commission in 2008. The Code sets out rules to guide pension fund administrators (including closed pension fund administrators) and pension fund custodians on the structures and processes to be used towards achieving optimal governance processes (Pencom, 2008). In 2009, the Code of Good Corporate Governance for the Insurance Industry in Nigeria was issued by the National Insurance Commission.

The Code listed the following as basic principles of good corporate governance: a proactive, responsible, responsive, accountable and committed Board/Management; definite management succession plan; culture of compliance with rules and regulations; good knowledge about business and insurance matters with requisite experience; disclosure and transparency; and effective exercise of shareholders' rights (Naicom, 2009).

In 2011, the Securities and Exchange Commission issued the Code of Corporate Governance for public companies in Nigeria (SEC,2011) to address weaknesses identified in the Code of 2003. The Code was expected to be the minimum standards expected of public companies in Nigeria to comply with. Section 34 of the SEC (2011) Code recommends that certain items and matters should henceforth be included in the annual reports of public companies in Nigeria. Items such as the capital structure of a company, corporate governance report, accounting and risk management issues, the chairman's statement, director's interests in contracts with the company, contracts with controlling shareholders, director's current accounts or loans from the company, other related party transactions, the company's remuneration policy and all material benefits and compensation paid to directors, audit committee report, a statement from the board with regards to the company's degree of compliance with the provisions of the SEC (2011) Code, and where a company engaged a consultant to evaluate its compliance with

the SEC (2011) Code, the consultant name and a summary of the report and conclusions of the consultant.

Furthermore, the SEC (2011) Code recommends that the “Board should use its best judgment to disclose any matter even though not specifically required in the Code to be disclosed if in the opinion of the Board such matter is capable of affecting in a significant form the financial condition of the company or its status as a going concern.” In addition, the Code encouraged companies to have websites or investors portals where information could be access by shareholders and other stakeholders. The Code has enhanced the corporate governance practices and disclosure by making sure the intent of protecting investors is push forward. The revised SEC Code is sufficiently compliant with international best practices on disclosure and transparency.

On the 15th of January 2019, the Vice President of the Federal Republic of Nigeria and the Honourable Minister of Industry, Trade and Investment unveiled the Nigerian Code of Corporate Governance 2018 (The Code) issued by the Financial Reporting Council of Nigeria (FRC). The Code was drafted pursuant to Sections 11(c) and 51(c) of the Financial Reporting Council of Nigeria Act which confer upon the Financial Reporting Council, the powers to ensure good corporate governance practices in the public and private sectors of the Nigerian economy through issuance of the Code. The Code was issued to propel good corporate governance, corporate accountability and business prosperity. Furthermore, the Code seeks to institutionalise corporate governance

best practices by promoting public awareness of essential corporate values and ethical practices that will enhance the integrity of the business environment in companies.

Furthermore, the aim of the code remains to rebuild public trust and confidence in the Nigerian economy resulting in increased trade and investment. Presumably, the mindset behind the establishment of the Code is that Companies with effective boards, competent management and shareholder and stakeholder engagements are better positioned to enhance corporate governance, achieve their business goals and contribute meaningfully to the society. The Code is to be applied in all companies and industries across Nigeria regardless of their sizes and complexities. The implementation and monitoring of the Code will be the responsibility of the FRC of Nigeria through sectoral regulators and registered exchanges. The FRC is not restricted to only monitoring and implementation of the Code, the Council may also conduct reviews on the Code where deviations from the Code persist. In fulfilment of the objectives and aims listed above, the Code is broken down into seven (7) parts and twenty – eight (28) principles which serve as a guide for Directors, Management, Shareholders and Stakeholders on how to effectively and efficiently run the operations of any company. While congratulating the FRC for their innovation and proactiveness there are still areas of potential uncertainty, ambiguity and conflict. One overlap seems to be the lack of sanctions for failure to implement the Code properly and effectively.

The existence of clear sanctions and implementation of same in instances of failure to adhere to same will propel strict compliance with the Code which is essential for the success of business. Another overlap in the Code seems to be the lack of review time frame and process to ensure that the Code remains in line with current and best practices of doing business in Nigeria.

2.4 Corporate Governance Mechanisms

2.4.1 Board Independence

The independence of directors on the board has a number of internal and external directors. The independent directors provide effective control of managers as suggested by the agency theory. Undeniably, external members can ensure the competence and independence at the same time (Onyali & Okafor, 2018). The Nigerian corporate governance code (2018) posits that the board is expected to portray a high level of objectivity for sustaining the confidence and trust of stakeholders and also therefore bring a sound judgement that will restrict unwholesomeness within the board. The independent non-executive directors are always viewed as a balancing force in the board; their existence of them shows a symptom of good corporate governance; shareholders are willing to authorize the management to be tax aggressive (Bhagat & Bolton 2008).

Yeung (2010) also suggests the result that the increase in board independence decreases the effective tax rate. It indicates that under good corporate governance the company follows tax aggressive policy. Literature emphasises the importance of non-

executive directors in monitoring the behaviour of top management in the context of key strategic decisions that affect society as a whole (Rose 2007; Pearce & Zahra 1991). Ibrahim, (2003) claim that in their role, as supervisors of the corporation's strategic decisions, outside directors should actively support greater corporate responsiveness to society's needs. Directors can affect the level of tax aggressiveness. Indeed, Fama and Jensen (1983) argue that the board is a major internal control mechanism, which is responsible for monitoring the equity of management. The claim that outside directors are encouraged to fulfil their spot monitoring and refuse to agree with the direction in expropriating shareholder's wealth. Therefore, they increase the ability of the board to monitor management effectively in situations characterized by agency problems arising from the separation of ownership, control, and can help reduce the tax aggressiveness. It is therefore reasonable to expect that a proportion of outside directors in higher board could significantly reduce the likelihood of tax aggressiveness. Conversely, the study by ZenZem and Fhouti (2013) revealed that the number of outside members do not influence tax aggressiveness behaviour. Ying (2015) posit that there is no significant relationship between corporate governance and tax aggressiveness. However, Khurana,et al (2012) asserts that it is the quality of the board that matters other than their independence has nothing to do with minimizing the likelihood of tax aggressiveness; a pointer that there is ineffectiveness of independent role.

2.4.2 Board Size

The management policy of an organization could be influenced by the size of the board hence, the size of the board depends on the effectiveness of the board (Jensen ,1993). Firth, Fung, and Ruin, (2017), suggests that large boards are often seen as not effective as it could influence exchange of decisions, promoting conflict within same members of the board as this could impinge aggressive tax activities. More so, Gonzalez and Garcia- Meca, (2013), is also of the view that larger board size would also slow down the pace of decision making of the firm because it may result in lack of coordination and ineffective communication with the board members. In regards to the above assertions, Minnick and Noga, (2010) suggests that smaller board size strengthens tax management that a lot of intricacies borders on large boards in taking decisions about tax aggressive policy. Lanis and Richardson, (2013) report that the size of the board has significant influence on tax aggressiveness. In contrast, Aliani and Zarai, (2012) report the non-significance between the size of the board and tax aggressiveness in the American context. They found that the number of directors does not influence the strategies to minimize tax expenses.

2.4.3 Managerial Ownership

Lou and Zeng (2018) asserted that the greater the emolument for managers the higher the likelihood that tax aggressiveness would be employed to obtain hidden benefits. Conversely, Boussadi and Hamed (2015) asserts that firms that have substantial holdings of executives and directors on their boards are less aggressive on tax, hence

managerial ownership contributes to lower ETRs. However, thus Ogbeide and Obaretin (2018) argued that the stake of ownership by the management intuitively implies a minimisation of the tendency to engage in managerial opportunism which could make them employ strategies to reduce tax expense, hence managerial ownership positively affects tax aggressiveness.

Salaudeen and Ejeh (2018) were of the view that managerial ownership is negatively related to tax aggressiveness. Thus the lower the tax aggressiveness the higher the net earnings which will lead to higher value for shareholders.

2.4.4 Board Gender Diversity

Board gender diversity is of great importance in decision making process and it influences good governance structure and clear openness in an entity. It entails taking cognisance of all interest group in decision making process. The influence of women adopting tax strategy, they are more cautious and less motivated to bear excessive risks, the gender of the firm's directors has been suggested to affect corporate policies and outcomes. Arun, Almahrog and Aribi, (2015); Srinidhi, Gul and Tsui (2011) opined that firms with female directors have lower absolute discretionary accruals (or earnings management). Francis, Hasan, Park, and Wu (2013); Jianakoplos, and Bernasek (1998) document that female executives and directors are more conservative in financial reporting. It has also been said that women play an important role in compliance with legal aspects and specifically in tax matters. In this context, Kastlunger *et al.* (2010) and

Fallan (1999) demonstrate the relevance of feminine values in the treatment of tax matters. For example, although tax aggressiveness is a legal activity that aims to minimize the tax burden companies taking advantage of the legal and tax advantages granted by the State, the interpretations of situations and tax regulations differ depending on the masculine and feminine traits. However, Adams and Ferreira (2009) suggest that women exert intensive monitoring of managers' actions and have a percentage of attendance at meetings actually high. In the Tunisian context Aliani *et al.* (2011) found that there is a negative effect between gender diversity on the board of directors and tax aggressiveness. Consistent with the literature on gender differences in risky behaviour and tax compliance, Croson and Gneezy (2009) found that that there is a negative effect of gender diversity of the board of directors on tax aggressiveness.

2.4.5 Foreign ownership

Ownership structure as proposed by the agency theory is one of the most important corporate governance mechanisms to solve agency problems and suggests that concentrated ownership will result in more effective monitoring (Jensen & Meckling, 1976). Ownership structure is a mechanism that aligns the interest of shareholders and managers (Chau & Gray, 2002 Eng & Mak, 2003; Haniffa, and Cooke, 2002). It is believed that one of the most important ways through which a firm maximizes its value is through well-designed and effective ownership structure of the firm's shares (Long, Li, Xu & Fu, 2011).

Foreign ownership involves foreign mutual funds or foreign institutional investors; Seasholes, (2000) argues that these foreign investors ought to have better performance as a result of their being exposed to expertise and talent. Foreign investors play a prominent role in improving firm-level governance. As explained by Kho et al. (2009) its efficiency lies in the fact that foreign investors from “good governance” countries are found to have an advantage when serving as monitors in “poor governance” countries. However, Coval, and Moskowitz (2001) argue that foreign institutions have information disadvantage relative to their local counterparts, stating that local institutions can monitor firms better than foreign institutions.

2.4.6 Institutional Ownership

Institutional shareholders are potentially knowledgeable than their individual counterpart, they spend more time and money in investigating the organisation and its industry, while individual shareholders cannot afford the time and cost needed to investigate the workings of the organisations in terms of its performance. In addition, institutional shareholders are more influential e.g. pension funds, insurance companies etc. they invest a considerable portion of resources into an organisation and this provides the needed motivation to scrutinise their interest in the firms. When the firm performs poorly, the institutional shareholders can mount pressure on the managers of the firm and might withdraw their investment from the company.

In terms of institutional shareholders and the practice of tax aggressiveness, Alves (2012) conducted a study to test this assertion and found out that there is no relationship between institutional owners and tax aggressiveness. Khurana and Moser (2013) found out that firms that have a higher level of institutional ownership are less tax aggressive due to the interest of business owners in the long term consequences of aggressive tax strategies.

2.4.7 Agency Cost, Corporate Governance and Tax Aggressiveness

The inherent conflict between shareholders and managers due to the separation of ownership and control and the agency costs that arise from shareholder's inability to monitor managerial action have been well established in the literature (Jensen & Meckling, 1976). Based on this argument, Jensen (1986) develops the agency costs of free cash flow hypothesis, suggesting that monitoring difficulty by shareholders over opportunistic managerial behaviour creates the potential for managers to spend internally generated cash flow for their own benefit, rather than for maximising firm value. Consistent with this hypothesis, extant literature argued that larger free cash leads to more severe agency problems. The agency theory states that when managers' goals differ from the shareholders' and the firm's controlling mechanism, managers will attempt to accomplish their goals which are not necessarily in line with the shareholders' (Griffin et al., 2010). La Porta et al. (2000) mentioned that in case of company's having free cash

flow, the managers will involve in wasteful practices, even in presence of increased protection for the investor.

The opportunity for accruing benefit to managers is higher among companies with high surplus free cash flow. Past studies show that companies with high surplus free cash flow face major agency problems (Chung, Firth, & Kim, 2005) particularly when the free cash flow is high but investment opportunities are low (Gul, 2001). Managers of these companies act opportunistically for personal gain, and get involved in unprofitable projects, over investments and misuse the funds (Jensen, 1986). They carry out non-value maximizing activities amounting to agency problems (Jensen, 1986). Their activities may bring benefits or rewards for themselves at the expense of the shareholders. These companies are found to have engaged in expenditures that decrease shareholders' wealth (Chung, 2005). Managers may employ accounting procedures that increase reported earnings to hide the negative impact of projects (Chung, et al., 2005). In order to conceal these activities, managers are forced to manage earnings via accounting discretions. However, the managers' opportunistic behaviour may be minimised by the company corporate governance monitoring mechanism (Bedard, Chtourou, & Courteau, 2004). As noted earlier, it is important to note that from the free cash flow theory, the effect of corporate governance on tax aggressiveness will be moderated by the agency cost.

If tax aggressiveness represents a cost saving strategy that transfers wealth to shareholders, then it is likely that corporate governance could support tax aggressive

behaviour of management as it provides shareholder benefits. On the other hand, there is the issue of free cash flow hypothesis which points to the possibility that if tax aggressiveness represents management strategy for opportunism resulting from free cash flow, shareholders will choose to limit manager access to free cash flow in order to mitigate agency conflict and then corporate governance may be seen to resist such tax aggressive practices. Therefore, if tax aggressiveness will generate high free cash flow, theoretically, corporate governance will mitigate such practices to reduce agency cost. Therefore, this study introduces free cash flow into the picture to empirically examine if these theoretical postulations are confirmed by data. In doing this, this study becomes different from earlier studies on corporate governance and tax aggressiveness and will provide more robust understanding on the relationship between tax aggressiveness and corporate governance.

2.5 Review of Empirical Literature

2.5.1 Board Independence and Tax Aggressiveness

Kadir (2018) investigated the impact of corporate tax avoidance in Nigeria listed manufacturing firms. The study employed the panel data regression model using a sample of 23 manufacturing firms. The results revealed that the independence of the board of directors has a negative influence on corporate tax avoidance.

Aburajab, Maali, Jaradat and Alsharairi (2019) investigated a study on board of director's characteristics and tax aggressiveness: Evidence from Jordanian listed firms.

The study used regression analysis to examine the effect of board of directors on tax aggressiveness and the sample was 140 Jordanian firms during the period 2013-2017. They found out that there was a negative relationship between board independence and tax aggressiveness.

Conversely, Ribeiro, Cerqueira and Brandao (2015) investigated the determinants effective tax rate using firm characteristics and corporate governance obtained a positive and significant relationship between the number of independent directors and effective tax rate.

Osebe, Kirui and Naibei (2019) investigated a study on effective tax rate among listed firms in Kenya. The study was for a period of 2011- 2017 with a sample of 40 firms selected from 67 firms in Kenya. The data was analysed using STATA. Board independence was found to have positive and significant effect on corporate tax rate.

2.5.2 Board Size and Tax Aggressiveness

Onyali and Okafor (2018) investigated the role of corporate governance mechanism on tax aggressiveness amongst manufacturing firms. The period of the study was from 2005-2016 and 44 firms were used as sample for the study. They found out that corporate governance attributes, size of the board has no significant relationship with tax aggressiveness while other attributes the independent director, board gender diversity and proportion of non- executive directors to executive directors had a significant relationship with tax aggressiveness.

Zenzem and Ftouhi (2013) carried out a study amongst corporate governance variable that can reduce the level of tax aggressiveness in French companies. The sample of the study is 73 companies on the SBF and it was for period of 5 years from 2006-2010. The study shows that the size of the board positively affects tax aggressiveness.

2.5.3 Managerial Ownership and Tax Aggressiveness

Ogbeide and Obaretin (2018) examined corporate governance mechanisms and tax aggressiveness of listed firms in Nigeria. Eighty- five (85) quoted non- financial firms were selected and data were collected over the period 2012 to 2016. Inferential statistics comprising of General Method of Moment was used for the data analysis. This was after carrying out unit root test and other diagnostic tests respectively. The results revealed that corporate governance mechanisms exert significant impact on tax aggressiveness in Nigeria. Specifically, ownership concentration and managerial ownership were positive and significantly affected tax aggressiveness of listed non- financial firms in Nigeria whereas board size negatively and significantly influence tax aggressiveness over the reference period. Board gender diversity and board independence were significant and exert negative influence on tax aggressiveness of firms in Nigeria.

Alaa, Badi and Nawwaf (2021) examined the impact of foreign ownership and managerial ownership on tax avoidance: Empirical evidence from Egypt. The sample used in the study was 69 firms listed on the Egyptian Stock Exchange between 2015-

2019. The results revealed that managerial ownership has a significant and positive effect on tax aggressiveness.

2.5.4 Board Gender Diversity and Tax Aggressiveness

Oyeleke, Erin and Emeni (2016) examined the relationship between the board of director's gender diversity and tax aggressiveness of quoted banks on the Nigerian Stock Exchange (NSE). A cross sectional time-series research was used for data collection in the study. They found out that a positive and non –significant relationship exists between female directors and tax aggressiveness. Furthermore, a significant but reduced level of tax aggressiveness exist between board size with female directors (Nwezoku & Egbunike 2020). They examined the effect of board diversity on corporate tax aggressiveness of listed firms in Nigeria. The study adopted the ex-post facto research design. The sample size was eleven firms listed under the healthcare sector of the NSE for a period of 2011-2018. The panel estimated generalised least square was used to test the hypotheses. The study concluded that board diversity affects effective tax rate of listed healthcare manufacturing firms in Nigeria.

2.5.5 Foreign Ownership and Tax Aggressiveness.

Chen, Chen, Cheng, and Shevlin (2007) examined tax aggressiveness of firms with foreign ownership in the U.S. They used two effective tax rate measures and two

book-tax difference measures to capture tax aggressiveness, and multiple measures of foreign ownership presence. Using both firm year level analysis on all four tax aggressiveness proxies and firm-level (averages of sampling period) analysis on the two tax rate measures, they find that firms with foreign ownership are less tax aggressive than their counterparts, *ceteris paribus*. They went further to document that firm without long-term foreign institutional investors and firms expecting to raise external capital exhibit even lower tax aggressiveness.

Annur, Salihu and Obid (2014) in a study carried out an empirical investigation on the association between corporate ownership structure and corporate tax avoidance in Malaysia. They asserted that government, foreign and family ownership has a relationship with corporate tax avoidance. The period of the study was between 2009-2013 for five years. They found out that a major determinants of corporate tax avoidance is foreign ownership with interaction with the composition of the board.

2.5.6 Institutional Ownership and Tax Aggressiveness.

Otieno (2014) in a study carried out an investigation into a firm's corporate governance variations explaining the differences in the level of tax avoidance in Kenya. The population and sample size was the 61 companies listed at Nairobi securities exchange. They found out that there was an insignificant relationship between institutional ownership and tax aggressiveness.

Ying, Wright and Huang (2017) investigated a study on ownership structure and tax aggressiveness and sampled non-financial Chinese firms (only) for 2006-2012. They asserted that institutional share ownership is negatively associated with corporate tax aggressiveness, that however institutional investors partially mitigate such influences.

Lukman, Mamman, Abdulmarooph and Aliyu (2020) investigated the effect of institutional ownership, gender board diversification and corporate tax aggressiveness. The population of the study was six conglomerates firms listed on NSE Dec 2019; explanatory research design was used and the period for the study was ten years from 2010-2019. The pooled ordinary least square multiple regression analysis was used and the results revealed a negative significant effect of institutional ownership on tax aggressiveness.

Conversely, Yungun, Haitao and Ran (2020) examined the effect of institutional ownership on listed company's tax avoidance strategies. The sample size was 1108 listed Chinese companies from 2009 – 2017. The results reveals institutional shareholding is positively related to the degree of enterprise tax avoidance and asserts that institutional shareholdings is likely to promote corporate tax avoidance.

2.6 Review of Theories

Some theories relating corporate attributes to tax aggressiveness are discussed in the following sub-sections.

2.6.1 Agency theory

Slemrod (2004) was one of the first in his studies to highlight the agency problems inherent in the corporate tax avoidance decision. Desai, Dyck, and Zingales (2007) along this line built a model that contributed to the growing literature on the cross-sectional variation in corporate tax avoidance. They however went further to state that tax avoidance is a three-party game involving the shareholders, insiders/manager and the State, and as such there is bound to be conflict of interest among these three parties.

According to the agency-view of tax avoidance, conflicts between firms' owners and its management may arise because managers who are expected to make tax-effective decisions may in fact behave opportunistically and divert corporate wealth for their private benefit (Jensen & Meckling 1976; Desai & Dharmapala, 2006). However, the agency-view of tax avoidance is neither undisputed (Blaylock, 2012) nor is it the only interesting theoretical basis for research on the corporate tax-related decision making process.

Tax avoidance strategies are designed by creating information asymmetry between tax authorities and the firm so as to prevent the detection from tax authorities. However, the direct impact of this activity is increased information asymmetry between managers and outside shareholders, and consequently, the increase in information asymmetry will decrease the ability of shareholders to value the firm (Wang, 2010).

However, tax avoidance is not, in and of itself, a reflection of agency problems (Hanlon & Heitzman 2010), as the interests of risk-neutral owners and their installed

managers are to a certain extent aligned in terms of maximizing profits. Nonetheless, managers may be insufficiently motivated to manage taxes to the extent favoured by shareholders. Desai and Dharmapala (2006) suggest an agency-view on tax avoidance, stating that agency costs in form of managerial rent extraction may result from a complimentary relationship between tax avoidance and managerial diversion. Self-interested managers might use tax avoidance strategies to mask the opportunistic extraction of rents (Desai, Dyck, & Zingales (2007). Hence it may prove a considerable task for shareholders and boards to identify and install appropriate incentives and controls to minimize agency costs. It should further be noted that the agency-view of tax avoidance is not universally accepted (Blaylock 2012), and that recent competing theories argue that tax avoidance and rent diversion are not in any case complimentary.

2.6.2 Theories of Taxation

2.6.2.1 Optimal Tax Theory

This theory is the foundational work of Ramsey (1927) and Mirrles (1971). This theory is centered on eight general principles which are the optimal marginal tax rate schedules which depend on the distribution of ability; the optimal marginal tax schedule which could decline at high incomes; a flat tax, with a universal lump-sum transfer, could be close to optimal; the optimal extent of redistribution rises with wage inequality; taxes should depend on personal characteristics as well as income; only final goods ought to be taxed, and typically they ought to be taxed uniformly; capital income ought to be untaxed,

at least in expectation; and in stochastic dynamic economies, optimal tax policy requires increased sophistication.

The standard theory of optimal taxation posits that a tax system should be chosen to maximize a social welfare function subject to a set of constraints. The optimal taxation theory typically treats the social planner as a utilitarian, that is, the social welfare function is based on the utilities of individuals in the society. In its most general analysis, this theory uses a social welfare function that is, a nonlinear function of individual utilities (Mankiw, Weinzierl & Yagan, 2009). This theory focuses more on social welfare utility and utilities of individuals in the society and not on firms.

2.6.2.2 Tax Planning Theory

This study is anchored on the tax planning theory. It was propounded by Hoffman in 1958. The theory posits that the capacity for tax payers to pay tax depends on his capacity to arrange his financial activities in such a manner as to suffer minimum expenditure for taxes. This theory is adopted in this study because tax aggressiveness is as a result of carefully planning one's tax obligations in such a way that tax liability is reduced, by taking advantage of the loopholes in the tax system

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the method and the procedures adopted in carrying out the study. It includes the research design, the population and sample of the study, the method of data collection, the model specification, measurement of the variables and the method of data analysis. They are discussed below:

3.2 Research Design

The *ex-post facto* research design was used in this research. This a kind of research design in which the researcher predicts the possible causes behind an effect that has already occurred. *Ex post facto* research is one in which the independent variable or variables have already occurred and in which the researcher starts with the observation of a dependent variable or variables. Essentially, the researcher studies the independent variable or variables in retrospect for their possible relationship to, and effects on, the dependent variable or variables.

Ex post facto was employed because the data for the study were of different firms and years. It analysis permits the researcher to study the dynamics of change within a short time.

3.3 Population and Sample Selection

The population comprises of all listed non-financial firms on the Nigerian Exchange Group as at December 31, 2019. As at the study period, there were 45 quoted manufacturing companies in the Nigerian Stock Exchange classification (NSE, 2019). Therefore, a census of the 45 non- financial firms listed on the Nigerian Stock Exchange was employed in the study.

3.4 Sources of data

The study made use of secondary data sourced from various annual reports of the sampled companies deposited at the libraries and website of the NSE (The research covered a period of ten (10) financial years (2010-2019). The ten-year period was used because, there were need to generate data for the estimations from the same accounting reporting regime

3.4.1 Corporate Governance Disclosure & Compliance Index Coding Process

Content analysis is used in constructing the disclosure index as this has been used primarily in the disclosure and compliance indexes studies (Beattie et al., 2004). Content analysis is a “research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (Krippendorff, 2004). Following Smith and Taffler (2000), this study adopts both word-oriented and meaning-oriented approaches as suggested by Weber (1990) and Krippendorff (2004) for scoring the disclosure index. For the word-oriented analysis, the occurrence of the word or phrase

connoting the intended meaning is regarded as sufficient disclosure while the meaning-oriented approach considers the sentence(s) before making inference concerning the disclosure item. Overall, disclosure index score sheet was constructed comprising 17 items. Prior researchers have used weighted disclosure indices (Barako et al., 2006; Botosan, 1997) while others chose the unweighted disclosure indices for their studies (Adelopo, 2011; Aljifri, 2008; Gul & Leung, 2004; Hossain & Hammami, 2009; Kamel & Shahwan, 2014). In the views of Barako et al. (2006); Chow and Wong-Boren, (1987) using weighted or unweighted disclosure index methods, the same set of results and conclusions will be arrived at. The justification for this method is based on a well-established theoretical and empirical literature (e.g., Joubert & Fakhfakh, 2012; Newton, 2015), which will allow this study to be compared with the results of past similar studies.

Corporate governance disclosure (CGD) index was constructed in a way to capture the qualitative differences in governance disclosures among different firms. With the quality of the governance mechanisms in mind when designing the governance index, it was inherently designed in a way that it naturally measures quality of the governance mechanisms rather than their mere disclosure in the annual reports. This quality approach mainly explains the relatively large number of items (17) that was captured in the index. The total score (unweighted) from each firm is then divided by the total number of possible scores (17) which gives the weighted CGD score for the companies of interest during the period under investigation. Therefore, following this widely employed binary

(weighted) coding scheme, a firm's overall score of corporate governance disclosure may range between 0 and 17, which is then expressed as a percentage ranging from 0% (poor corporate governance disclosure index quality) to 100% (perfect corporate governance disclosure index quality) with higher compliance with corporate governance disclosure Code. Consequently, this allowed the measurement of the qualitative differences in corporate governance disclosures across firms in this study.

For the variable of corporate governance compliance index, firm's compliance was restricted to only those governance attributes that have been clearly backed up by the provisions and are readily available in the respective annual reports of the selected companies. Hence, in this study, compliance measures are strictly based on audit committee independence where it is statutorily provided that members of the committee should be at least six (6) in number of which 50% of this size should be shareholders. The study employed the variable of audit committee size where there is a statutory provision that the committee size must not exceed six (6) members (Corporate Governance Code of Conduct 2020). Third, the study employed the variable of board meeting where the provision allows for at least four (4) board meeting within a given year. Overall, the compliance quality of board committees, was employed (in this study audit committee), in terms of independence and size together with compliance quality of the board of directors in terms of holding regular board meetings.

3.5 Method of Data Analysis

For the purpose of the empirical analysis, this study employed panel regression analysis. Least Square Dummy Variable regression analyses technique was employed to test the stated hypotheses. The least square dummy variable regression analytical technique was employed when it was realised that in the fixed effect estimator there is a significant *correlation between entity's error term and predictor variables*.

3.5.1 Regression Diagnostic Test

Before the regression analysis, some diagnostic tests were conducted to address some essential assumptions that were fundamental to regression analysis.

Test for Fixed Effect (FE)

When using FE, it is assumed that something within the individual may impact or bias the predictor or outcome variables and there were need to control for this. This is the rationale *behind the assumption of the correlation between entity's error term and predictor variables*. FE removes the effect of those time-invariant characteristics from the predictor variables so that it can assess the predictors' net effect. Another important assumption of the FE model is that those time-invariant characteristics are unique to the individual and should not be correlated with other individual characteristics. Each entity is different; therefore, the entity's error term and the constant (which captures individual characteristics) should not be correlated with the others (Stock & Watson, 2003). Following the rule of thumb, the null hypotheses (H_0) of this test suggest that there is no

presence of fixed effects (no fixed effects) in the model hence adopting the Least Square Regression Estimator yield Best Linear Unbiased Estimates for such model specification (Greene, 2008)

Test for Random Effect

The rationale behind random effects model is that, unlike the fixed effect model, the variation across entities is assumed to be random and uncorrelated with the predictor or independent variables included in the model: "...the crucial distinction between fixed and random effects is whether the unobserved individual effect embodies elements that are correlated with the regressors in the model, not whether these effects are stochastic or not" (Green, 2008). Following the rule of thumb, the null hypotheses (H_0) of this test suggest that there is no presence of fixed effects (no fixed effects) in the model hence adopting the Ordinary Least Square Regression Estimator will yield Best Linear Unbiased Estimates for such model specification (Greene, 2008).

Normality

The Jarque-Bera test was employed to test for normality after being used (normality) to set up the conduct of the regression variable. If the resultant residuals were normally distributed, the structure of the statistical histogram would take the form of a bell-shape. A goodness-of fit test in statistics usually indicates whether sample data have the skewness and kurtosis matching a normal distribution by applying the Jarque-Bera test measurement.

Multicollinearity

Multicollinearity is said to occur in a multiple regression model when at least two or more independent variables are “collinear”, that is, the point at which they remain in an exact or almost exact linear relation to each other. Therefore, if majority or all of the independent or explanatory variables in a multiple regression analysis are highly correlated, the issue of multicollinearity arises. In the course of this study, multicollinearity was tested for using variance inflation factor (VIF).

The model is functionally expressed as:

$$TAG = f(BDIND, BDS, BDGD, MOWN, FOWN, INSTOWN, INCETR) \dots (1)$$

The general econometric model for the study is specified thus;

$$TAG_{it} = \partial_0 + \partial_1 BDIND_t + \partial_2 BDS_{it} + \partial_3 BDGD_{it} + \partial_4 MOWN_t + \partial_5 FOWN_{it} + \partial_6 INSTOWN_{it} + \partial_7 INCETR_{it} + \mu_{it} \text{-----} (2)$$

Introducing agency cost as a moderating variable, we have;

$$TAG_{it} = f(\text{Corporate Governance} * \text{Agency Cost}) \text{-----} (3)$$

But we define corporate governance as in disclosure and compliance quality. Hence, we have;

$$TAG_{it} = \partial_0 + \partial_1 BDIND_t + \partial_2 BDS_{it} + \partial_3 BDGD_{it} + \partial_4 MOWN_t + \partial_5 FOWN_{it} + \partial_6 INSTOWN_{it} + \partial_7 GOVDISC * AGC_{it} + \partial_8 INCETR_{it} + \mu_{it} \text{-----} \\ \text{--} (4)$$

$$TAG_{it} = \partial_0 + \partial_1 BDIND_{it} + \partial_2 BDS_{it} + \partial_3 BDGD_{it} + \partial_4 MOWN_{it} + \partial_5 FOWN_{it} + \partial_6 INSTOWN_{it} + \partial_7 GOVCOMP*AGC_{it} + \partial_8 INCETR_{it} + \mu_{it} \text{-----}$$

(5)

Where:

TAG = Tax Aggressiveness, measured using (Cash effective tax rate)

BDIND = Board independence for a 10-year period

BDS =Board size for a 10-year period

BDGD = Board gender diversity for a 10-year period

MOWN = Managerial ownership for a 10-year period

FOWN = Foreign ownership for a 10-year period

INSTOWN = Institutional ownership for a 10-year period

INCETR =Income effective tax rate for a 10-year period

GOVDISC*AGC = Corporate Governance Disclosure Moderated by Free Cash Flow

GOVCOMP = Corporate Governance Compliance Moderated by Free Cash Flow

AGC= Agency cost

i =ith firm

t = time period

μ_{it} = Model disturbance term

ε_t = Stochastic term.

i = number of sampled cross-sectional firms, t = time period of the sampled companies.

3.6 Operationalisation of the variables

The variables used in the study are defined in this section with their *a priori* signs.

Table 3.1: Operationalisation of Variables

Variables	Notation	Measurements	<i>a priori</i> sign	Used by
<i>Dependent variable: Tax Aggressiveness</i>				
Tax Aggressiveness	TAG	Income tax expenses in profit and loss account divided by profit before tax(cash effective tax rate)	-nil-	Salaudeen & Akano (2018)
<i>Independent variables:</i>				
Board independence	BDIND	Ratio of non -executive to executive directors	+	Onyali and Okafor, (2018)
Board Size	BDS	Nos of individuals on the board	+	Gambo, Bello and Rimanshung (2018)
Managerial Ownership	MOWN	Proportion of management shareholdings by total shareholdings	-	Alaa, Badi & Nawwaf (2021).
Board Gender Diversity	BDGD	Female –male ratio on the board	-	Oyeleke etal(2016)
Foreign Ownership	FOWN	Proportion of shares owned by foreign investors	+	Fernandez-Rodríguez et

				al (2019
Institutional Ownership	INSTOWN	Proportion of shareholdings of institutional shareholders by total shareholdings.	+	Lukman, Mamman, Abdulmarooph & Aliyu (2020).
Agency Cost	AGC	Free cash-flow (operation profit plus depreciation and the non- cash expenses after deducting tax and applying net changes in working capital and fixed asset).	+	Copland(1989)
Corporate Governance Disclosure Index Moderated by Free Cash Flow	GOVDISC* AGC	Corporate governance disclosure index multiplied by free cash flow	+	Jouber and Fakhfakh. 2012; Newton. 2015;
Corporate Governance Compliance Score Moderated by Free Cash Flow.	GOVCOMP *AGC	Corporate governance compliance score multiplied by free cash flow	+	Jouber and Fakhfakh. 2012; Newton. 2015;

Source: Author's Compilation (2020)

CHAPTER FOUR

DATA PRESENTATION AND ANALYSES OF RESULTS

4.1 Introduction

The study evaluates the moderating effect of agency cost on the relationship between corporate governance and tax aggressiveness of listed firms in Nigeria drawing samples from non-financial listed firms for the period 2010 to 2019. While tax aggressiveness (measured as cash effective tax rate) is employed as the dependent variable, the independent variables employed for this study includes: Board Size, Board Independence, Managerial Ownership, Board Gender Diversity, Institutional Ownership, and Foreign Ownership. Furthermore, agency cost was proxied by free cash flow to moderate the relationship between corporate governance (Governance Compliance & Governance Disclosure) and tax aggressiveness for the period under review. Particularly, some pre regression analyses were conducted which include; summary statistics, correlation matrix, and normality of residua analyses. However, the hypotheses were tested using Least Square Dummy Variable regression technique which was observed to be the most suitable regression technique for this study. However, the results obtained from Table 4.1a and 4.1b describes the nature of the data by revealing the mean (average), median, maximum, minimum, standard deviation and sum for each of the variables of interest in relation to fiscal year (time period) and in terms of exchange sector which were chosen. Overall, the result obtained from the descriptive statistics tables provides some

meaningful insights into the selected quoted non-financial companies that were employed for this study.

Table 4.1a Descriptive Statistics by Firm Year

fiscalyear	tag	bdind	bds	bdgd	mown	fown	instown	incetr	govdiscagc	govcompagc
2010	1.892888	69.24133	9.2	6.323556	.1179044	.5111111	.4668889	.8535557	.8157778	3.473733
	11.27	70	9	7.69	.0163	1	.52	-17.34	1	3.0351
	91.62	93.33	15	20	.6127	1	.95	300	1	34.22
	-607.21	37.5	5	0	.0003	0	0	-52.47	.33	-51.22
	94.81591	16.4674	2.50998	6.445943	.1769555	.505525	.259981	57.94877	.2194879	17.51364
	85.17998	3115.86	414	284.56	5.3057	23	21.01	38.41001	36.71	156.318
2011	22.67267	69.46467	9.133333	6.448889	.1256711	.5111111	.4722222	-7.932667	.8008889	1.630667
	18.73	70	9	7.69	.0382	1	.52	-19.5	1	1.2261
	216.91	93.33	15	22.22	.7484	1	.95	74.06	1	46.37
	-2.53	42.86	5	0	0	0	0	-51.28	.33	-50.22
	37.02812	16.11452	2.491805	6.912069	.1801918	.505525	.2638258	29.58345	.2292163	19.16552
	1020.27	3125.91	411	290.2	5.6552	23	21.25	-356.97	36.04	73.38
2012	30.39578	65.17044	8.933333	9.076222	.1249289	.4888889	.4835556	1.350666	.8008889	3.14678
	18.59	66.67	9	7.69	.0465	0	.52	-10	1	3.6716
	299.82	85.71	13	33.33	.5895	1	.95	215.04	1	28.29
	-15.64	25	5	0	.0002	0	0	-89.35	.33	-29.26
	61.1795	12.56155	2.071451	10.38915	.1643399	.505525	.2566671	47.53231	.2292163	11.60568
	1367.81	2932.67	402	408.43	5.6218	22	21.76	60.77998	36.04	141.6051
2013	8.865556	63.938	9	8.243778	.13012	.4888889	.5071111	-5.404667	.8008889	5.45722
	14.86	66.67	9	0	.0389	0	.54	-25.48	1	5.6012
	61.95	84.62	13	33.33	.8432	1	.91	806.68	1	47.17
	-370	25	5	0	.0002	0	0	-150.68	.33	-49.35
	60.18934	12.68784	2.215647	10.3027	.2007932	.505525	.2437176	126.9121	.2292163	18.38799
	398.95	2877.21	405	370.97	5.8554	22	22.82	-243.21	36.04	245.5749
2014	11.90244	62.91844	9.377778	8.489111	.1243844	.4888889	.52	-22.90733	.7786667	2.187078
	15.17	66.67	9	0	.0209	0	.57	-23.83	.67	1.0032
	48.78	85.71	19	33.33	.8444	1	.91	34.76	1	28.6425
	-190.42	25	4	0	.0001	0	0	-134.27	0	-24.74
	34.58121	14.19211	3.277256	10.9605	.2010571	.505525	.2341911	28.61487	.2563432	10.30411
	535.61	2831.33	422	382.01	5.5973	22	23.4	-1030.83	35.04	98.4185

2015	15.16022	64.916	9.488889	11.39111	.1379022	.5111111	.5248889	-15.71156	.8084445	5.546669
	12.25	66.67	9	8.33	.0142	1	.62	-19.05	1	5.29
	82.95	83.33	17	40	.8444	1	.91	135.33	1	85.42
	-32.73	25	4	0	.0001	0	0	-53.55	.33	-29.3
	21.92565	12.56646	3.130656	12.41277	.2204	.505525	.2444253	31.48664	.2187044	18.83343
	682.21	2921.22	427	512.6	6.2056	23	23.62	-707.02	36.38	249.6001
2016	23.65933	66.17156	9.111111	10.24978	.1366111	.5111111	.5331111	-3.081556	.786	4.518773
	10.28	66.67	9	10	.0142	1	.62	-27.12	.67	5.6682
	336.93	90	17	40	.7184	1	.91	1179.32	1	43.01
	-81.58	25	4	0	.0001	0	0	-174.06	.33	-33.26
	66.44229	12.95774	3.016788	10.87725	.2125405	.505525	.2445852	184.1541	.2375959	15.77508
	1064.67	2977.72	410	461.24	6.1475	23	23.99	-138.67	35.37	203.3448
2017	50.17311	75.41422	9.222222	11.614	.2010889	.4888889	.5688889	-113.8493	.8302222	4.850871
	17.68	77.78	9	11.11	.0283	0	.62	-27.45	1	4.76
	762.49	94.44	18	40	2.5496	1	1	586.55	1	51.3756
	-10.01	25	4	0	.0001	0	0	-4108.4	.33	-87.91
	151.0989	13.32396	3.132592	11.32655	.4312468	.505525	.2462466	627.8191	.2317472	20.24467
	2257.79	3393.64	415	522.63	9.049	22	25.6	-5123.22	37.36	218.2892
2018	8.590454	75.16333	9.355556	13.224	.2028133	.475	.5442222	-23.46136	.8304445	7.258378
	4.725	77.78	9	12.5	.0254	0	.6	-27.835	1	3.9597
	120.42	94.12	18	40	2.5457	1	.9	75.09	1	76.52
	-249.19	0	4	0	.0001	0	0	-160.58	.33	-78.34
	49.90666	15.63605	3.549363	11.44163	.426356	.5057363	.2413079	36.50412	.2202989	21.67299
	377.98	3382.35	421	595.08	9.1266	19	24.49	-1032.3	37.37	326.627
2019	13.01614	74.50067	9.555556	12.98911	.2472156	.4888889	2.052444	-24.23955	.86	8.317816
	7.375	75	9	11.76	.0402	0	.63	-26.295	1	4.5359
	109.32	92.86	18	40	2.5457	1	68	74.25	1	124.1
	-36.21	44.44	5	0	.0001	0	0	-124.66	.33	-74.54
	26.48015	12.53081	3.448027	11.35238	.4616655	.505525	10.05756	34.01863	.2067277	30.36503
	572.71	3352.53	430	584.51	11.1247	22	92.36	-1066.54	38.7	374.3017

Descriptive Statistics by Firm Year Continued

Total	18.66781	68.68987	9.237778	9.804956	.154864	.4966292	.6673333	-21.42761	.8112222	4.638798
	11.165	70	9	9.09	.0264	0	.57	-23.3	1	4.24
	762.49	94.44	19	40	2.5496	1	68	1179.32	1	124.1
	-607.21	0	4	0	0	0	0	-4108.4	0	-87.91
	71.23038	14.58703	2.903633	10.57499	.2911169	.5005514	3.190884	214.0647	.2270447	19.04085
	8363.18	30910.44	4157	4412.23	69.6888	221	300.3	-9599.57	365.05	2087.459

Author's Computation (2021)

From the Table 4.1a, it was observed that the average cash effective tax rate is 30.395 in year 2012. However, a reduction in the value of income effective tax rate from -0.92 in year 2012 to -3.11 in year 2013, -23.62 in year 2014, and -98.66 in year 2017 was noticed. For the variable of board size, it was observed that 9 members made the average board size across the years under the study. Board independence increased from 63% in year 2012 to 64% in year 2015, 66% in year 2016, 76% in year 2017 and year 2018. On average it was observed that the level of managerial ownership rallied around 0.15 and 0.16 during the period under investigation except in year 2017 and year 2018 where it showed an increase to 0.22 and 0.21 respectively. For the variable of board gender diversity, on the average, the ratio of female directors to male directors on the board for the firms under consideration was 10% in year 2012, against 9% in year 2013. The descriptive statistics also revealed that on average, more females were constituted into the board for the firms in our sample in year 2018. Institutional ownership on average is seen to be 50% in year 2012 and showed an increase in the period after the base year as

revealed] by the Table; year 2013 (51%), year 2014 and 2015 (52%), year 2016 and 2017 (53%), as well as 56% in both year 2017 and 2018. Foreign ownership on the other hand fell from 51% in the year 2012 to 49% in year 2013. However, it was observed that foreign ownership was highest for the firms in our sample during the period 2015 and 2016. The moderator variable of free cash flow on average showed a constant increase from 3.59 in year 2012 to 5.21 in year 2013, 6.00 in year 2015 to 6.84 in year 2016, peaking at 7.28 in year 2018. For the control variable of cash effective tax rate, there was an average of 26.84 in year 2012, 8.21 in year 2013, 11.93 in year 2014, 14.63 in year 2015, 22.17 in year 2016, 43.10 in year 2017, and 2.46 in year 2018. A further comparative statistic of the different sectors in this study is presented in the table 4.1b:

On average all the sectors within the sample had positive cash effective tax rate (18.667). However, firms within the consumer goods sector had an average cash effective tax rate of (27.55), followed by firms within the health care sector (21.32), industrial sector (14.48), conglomerate (10.8022) and agricultural sector (8.163). For the variable of board size, it is noticed that firms in the consumer goods sector had more members on the board (11) compared to other sectors such as Agricultural sector (9), Healthcare (9), and Industrial sector (9). Notably, firms in the industrial and agricultural sector appeared to be more independent on their boards while firms within the Natural Resources sector had the lowest independent board (61%) during the period under investigation.

On average managerial ownership was highest for firms in the healthcare sector (0.36) compared to firms in the industrial sector (0.13%), agricultural sectors (0.21), and conglomerate sector (0.17). More than this, on average, firms in the Natural Resources sector had a gender diverse board of 0.73% compared to firms in other sectors; consumer goods 12%, industrial sector 11.02%, agricultural sector 8.0%, healthcare sector 10.55%, and conglomerate 5.47%. this leads to a simple conclusion that corporate boards within the natural resources sector were more gender based during the period under review. Furthermore, it was observed, on average firms within the conglomerate industry (1.79) showed more interest in institutional shareholding closely followed by those within the consumer goods industry (0.61%) and then those within the industrial goods industry (0.53%). However, for the variable of foreign ownership, it is revealed that on average consumer goods sector has the highest size of foreign ownership (62%) while firms in the Natural Resources had the least (25%).

4.1.2 Normality of Residua Test

In all branches of knowledge, it is necessary to apply statistical methods in a sensible way. In literature, statistical misconceptions are conventional. The most commonly used statistical methods are correlation, regression and experimental design. But all of them are based on one basic assumption, that the observation follows normal (Gaussian) distribution. So, it is assumed that the populations from where the samples are collected are normally distributed. For this reason, the inferential methods required checking the

normality assumption (Bera & Jarque 1982). However, the null hypothesis is that “sample distribution is normal.” If the test is significant, the distribution is non-normal. Following the results of Mendes and Pala (2003); who concluded that Shapiro-Wilk test is the most powerful normality test under the condition that the observation must not be less than 10 and not greater than 4000. Consequently, the test for normality of residua was conducted as shown in the table 4.2

Table 4.2 Test for Normality of Residua

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
tag	448	0.40995	179.817	12.419	0.00000
bdind	450	0.96602	10.397	5.602	0.00000
bds	450	0.95995	12.254	5.995	0.00000
bdgd	450	0.97561	7.464	4.809	0.00000
mown	450	0.55940	134.809	11.732	0.00000
fown	445	0.99978	0.067	-6.474	1.00000
instown	450	0.05150	290.213	13.566	0.00000
incetr	448	0.15181	258.484	13.287	0.00000
govdiscagc	450	0.97808	6.707	4.553	0.00000
govcompagc	450	0.89470	32.219	8.308	0.00000

Author’s Computation (2021) STATA 16 Output

From the results obtained in table 4.2, it was observed that the dependent variable of tax aggressiveness (Prob > z = 0.00000) is not non-normally distributed since the probability of the z-statistics is significant at 1%. The same can be said for the independent variables of board size (Prob > z = 0.00000), board independence (Prob > z = 0.00000), managerial ownership (Prob > z = 0.00000), board gender diversity (Prob > z = 0.00000),

institutional ownership (Prob > z = 0.00000), governance disclosure moderator (Prob > z = 0.00000) governance compliance moderator (Prob > z = 0.00000) and the control variable of income effective tax rate (Prob > z = 0.00000). However, it was observed that the independent variable of foreign ownership (Prob > z = 1.00000) is normally distributed since the probability of the z-statistics is neither significant at 1% or 5%. The justification of this conclusions/interpretations followed the study of Bera and Jarque (1982).

Table 4.3 Spearman Rank (r) Test for Collinearity

	tag	bdind	bds	bdgd	mown	fown	instown	incetr	govdiscagc	govcompagc
tag	1.0000									
bdind	-0.1550*	1.0000								
	0.0011									
bds	0.0370	0.2205*	1.0000							
	0.4372	0.0000								
bdgd	0.1613*	-0.0435	0.1536*	1.0000						
	0.0007	0.3607	0.0012							
mown	-0.2041*	-0.1055*	-0.1810*	-0.0964*	1.0000					
	0.0000	0.0264	0.0001	0.0425						
fown	0.0646	0.0607	0.1832*	-0.0645	-0.5453*	1.0000				
	0.1747	0.2024	0.0001	0.1756	0.0000					
instown	0.0255	0.1084*	0.1431*	-0.0362	-0.4155*	0.2978*	1.0000			
	0.5927	0.0225	0.0025	0.4474	0.0000	0.0000				
incetr	-0.2089*	-0.0113	0.0135	-0.1191*	0.1170*	0.0108	-0.1342*	1.0000		
	0.0000	0.8121	0.7771	0.0121	0.0138	0.8203	0.0047			
govdiscagc	0.1412*	0.1378*	0.4163*	0.1770*	-0.0657	0.1337*	0.2328*	-0.0463	1.0000	
	0.0029	0.0037	0.0000	0.0002	0.1675	0.0048	0.0000	0.3307		
govcompagc	0.1937*	-0.0951*	-0.0009	0.1610*	-0.1195*	0.0919	0.1156*	0.0206	0.0893	1.0000
	0.0000	0.0455	0.9853	0.0007	0.0119	0.0532	0.0150	0.6647	0.0603	

Author's Computation 2021

4.1.3 Correlation Analysis

Correlation is a bivariate analysis that measures the strength of association between two variables and the direction of the relationship. In terms of the strength of relationship, the value of the correlation coefficient varies between +1 and -1. A value of ± 1 indicates a perfect degree of association between the two variables. As the correlation coefficient value goes towards 0, the relationship between the two variables becomes weaker. The direction of the relationship is indicated by the sign of the coefficient; such that a positive sign indicates a positive association while a negative sign indicates a negative association. With non-normal data which the test result reveals, alternatives to the Pearson approach might be justified. The robustness of Spearman's versus Pearson's test has received relatively less empirical scrutiny. One of the few studies, Fowler (1987) found that Spearman's r is more powerful than Pearson's r across a range of non-normal bivariate distributions. The power benefit of Spearman's r may be the result of rank-ordering causing outliers to contract toward the centre of the distribution (Gauthier, 2001). Upon this understanding and based on the fact that the data set followed a non-normal distribution, the Spearman Rank Correlation technique was employed to conduct the correlation analyses between the variables of interest shown in the table 4.3

Specifically, the analysis from the spearman rank correlation in table 4.3 showed that board size (0.0370), board gender diversity (0.1613) institutional ownership (-0.1429), foreign ownership (0.0646) as well as governance disclosure moderator (0.1412) and

governance compliance moderator (0.1937) are positively correlated with tax aggressiveness. However, for board independence (-0.1550), managerial ownership (-0.2041), as well and the control variable of income effective tax rate (-0.2089) are negatively correlated with tax aggressive tax rate during the period under investigation. However, the strength of associations among them is seen to be weak (less than 80%) as posited by Gujarati (2003) after such point there is room to suspect the presence of multicollinearity in the estimated model.

Table 4.4: Variance Inflation Factor (VIF) Test

Variable	VIF	1/VIF
fown	1.28	0.780052
mown	1.21	0.826550
bds	1.16	0.859957
bdind	1.08	0.930125
bdgd	1.05	0.949775
incetr	1.02	0.981693
instown	1.01	0.991723
Mean VIF	1.12	

Author’s Computation, (2021)

Multicollinearity occurs in multiple regression models and it applies to a situation where two or more independent variables are found to be collinear. Multicollinearity occurs if some of the independent variables are highly inter-correlated. In a nut shell, if multicollinearity is found among the independent variables of interest, it means that they are perfectly co-linear. When this happens, the parameter coefficients will be

indeterminate and the standard error of the estimated coefficients becomes bloated. In this study the variance inflation factor was employed, one of the most celebrated technique (Variance Inflation Factor (VIF) to test for the presence or absence of multicollinearity in the specified model.

According to Gujarati (2003), there is no consequence of multicollinearity if the mean VIF is less than 10 or $1/VIF$ is less than 0.10. However, the VIF result in table 4.4 depicts the absence of multi-collinearity since the mean VIF (1.12) is within the region of 10 against which the presence of multicollinearity may be suspected.

4.1.5 Regression Analysis

Table 4.5 Least Square Dummy Variable Regression Analyses Result

Variable	Un-Moderated Model	Governance Disclosure Moderated Model	Governance Compliance Moderated Model
Board Independence	-.1495901 -0.74 0.4566	-.10515083 -0.52 0.6009	-.12534373 -0.62 0.5322
Board Size	-.67949583 -0.64 0.5254	-.50087095 -0.47 0.6391	-.45391197 -0.42 0.6721
Board Gender Diverity	.7793243 2.84 0.0045	.68319716 2.47 0.0134	.70207022 2.54 0.0109
Managerial Ownership	-9.1245939 -0.86 0.3902	-7.6801097 -0.73 0.4684	-8.2720622 -0.78 0.4348
Foreign Ownership	4.6165624 0.72 0.4720	4.0775069 0.64 0.5237	3.4207585 0.53 0.5945
Institutional Ownership	-.66694055 -0.77 0.4438	-.6933205 -0.80 0.4239	-.73161531 -0.84 0.3996
Income Effective tax Rate	-.17023203 -13.00 0.0000	-.17123697 -13.13 0.0000	-.17092834 -13.09 0.0000
Gov. Disclosure Moderated		.69193895 2.23 0.0259	
Gov. Compliance Moderated			.29715717 1.98 0.0472
Constant	22.508506 1.45 0.1477	17.134772 1.09 0.2740	18.701242 1.20 0.2310
N	443	443	443
r2	0.2855	0.2906	0.2895

Author's Computation, (2021)

First, the study carried out Panel Least Square Regression analysis and proceeded to check for the presence of fixed and random effect. The fixed effect estimator employed for the unmoderated tax effective model, corporate governance disclosure/agency cost moderated model and corporate governance compliance/agency cost moderated model clearly suggest the presence of fixed effects from the fixed effect estimators but an absence of random effects noticeable from the random effect estimators. The result obtained from the significant probability values (Unmoderated Corporate governance tax effective model = Prob > F = 0.0269), corporate governance disclosure/agency cost moderated model (Prob > F = 0.0326) and corporate governance compliance/agency cost moderated model (Prob > F = 0.0261) shown in the respective fixed effect models. Furthermore, the Breusch and Pagan Lagrangian multiplier test for random effects clearly supports the absence of random effects which is visible from (Unmoderated Corporate governance tax effective model = Prob > chibar2 = 0.0595), corporate governance disclosure/agency cost moderated model (Prob > chibar2 = 0.0666) and corporate governance compliance/agency cost moderated model (Prob > chibar2 = 0.0556). Consequent upon the results obtained, fixed effect was corrected upon which the hypotheses of the study were tested by introducing Least Square Dummy Variable (LSDV) Regression. This technique has been previously employed by Jizi, Salama, Dixon and Stratling (2014) in similar situations. However, the results obtained from the

Least Square Dummy Variable regression analyses for all three models of this study is summarized in the table 4.5;

A careful examination of the results provided by the least square dummy variable regression analyses suggest appropriateness as it relates to the dependent variable of effective tax rate for the period under investigation. Particularly, the *Within R²* value of 0.2855 of the unmoderated corporate governance tax aggressiveness model indicate that about 29% of the variation in the dependent variable is explained by all the independent. It translates to the fact that the variation in the dependent variable is left unexplained but have been captured in the error term. The model goodness of fit as captured by the Wald statistics $\{(9) = 226.36\}$ with corresponding probability value 0.0000 suggests that the overall model is fit and good for policy recommendation (Gujarati 2003). Therefore, this model is relied on for interpretation and subsequent policy formulation.

4.2 Test of Hypotheses

Hypotheses 1: *There is no significant relationship between board independence and tax aggressiveness of listed non-financial firms in Nigeria.*

The result obtained from the least square dummy variable regression model revealed that board independence has no significant relationship with tax aggressiveness during the period under investigation. This is shown as; Board Independence (*un-moderated*; Coef. = -0.1495, z = -0.74 and P -value = 0.4566). Following the results above, it is revealed

that the relationship between board independence and tax aggressiveness is negative and statistically insignificant even at 5% level. However, this finding is consistent with the null hypothesis which states that *there is no significant relationship between board independence and tax aggressiveness of listed non-financial firms in Nigeria.*

Hypotheses 2: *There is no significant relationship between board size and tax aggressiveness of listed non-financial firms in Nigeria.*

The result obtained from the least square dummy variable regression model revealed that board size has no significant relationship with tax aggressiveness of listed non-financial firms in Nigeria during the period under investigation. This is shown as; Board Size (*un-moderated*; Coef. = -0.6794, $z = -0.64$ and P -value = 0.5254). Following the results above, it is revealed that the relationship between board size and tax aggressiveness is negative and statistically insignificant even at 5% level. However, this finding is consistent with the null hypothesis which states that *there is no significant relationship between board size and tax aggressiveness of listed non-financial firms in Nigeria.*

Hypotheses 3: *There is no significant relationship between board gender diversity and tax aggressiveness of listed non-financial firms in Nigeria.*

The least square dummy variable regression model revealed that board gender diversity has a significant positive relationship with tax aggressiveness of listed non-financial firms in Nigeria during the period under investigation. This is shown as; Board gender diversity (*un-moderated*; Coef. = 0.7793, $z = 2.84$ and P -value = 0.0043). Following the

results above, it is revealed that the relationship between board gender diversity and tax aggressiveness is positive and statistically significant even at 5% level. The result implies that *ceteris paribus* a more gender balanced (unbiased) board is tax aggressive. However, this finding is inconsistent with the null hypothesis hence we accept the alternate hypotheses which states that ***there is a significant relationship between board gender diversity and tax aggressiveness of listed non-financial firms in Nigeria.***

Hypotheses 4: *There is no significant relationship between managerial ownership and tax aggressiveness of listed non-financial firms in Nigeria.*

The result obtained from the least square dummy variable regression model revealed that managerial ownership has no significant relationship with tax aggressiveness of listed non-financial firms in Nigeria during the period under investigation. This is shown as; Managerial Ownership (***un-moderated***; Coef. = -9.1245, z = -0.86 and P -value = 0.3902). Following the results above, it is revealed that the relationship between managerial ownership and tax aggressiveness is negative and statistically insignificant even at 5% level. However, this finding is consistent with the null hypothesis which states that ***there is no significant relationship between managerial ownership and tax aggressiveness of listed non-financial firms in Nigeria.***

Hypotheses 5: *There is no significant relationship between board foreign ownership and tax aggressiveness of listed non-financial firms in Nigeria.*

Furthermore, the result obtained from the least square dummy variable regression model revealed that board foreign ownership has no significant relationship with tax aggressiveness of listed non-financial firms in Nigeria during the period under investigation. This is shown as; Board Foreign Ownership (*un-moderated*; Coef. = 4.6165, $z = 0.72$ and P -value = 0.4720). Following the results above, it is revealed that the relationship between board foreign ownership and tax aggressiveness is positive and statistically insignificant even at 5% level. However, this finding is consistent with the null hypothesis which states that *there is no significant relationship between board foreign ownership and tax aggressiveness of listed non-financial firms in Nigeria.*

Hypotheses 5: *There is no significant relationship between institutional ownership and tax aggressiveness of listed non-financial firms in Nigeria.*

For this hypothesis, the result obtained from the least square dummy variable regression model revealed that institutional ownership has no significant relationship with tax aggressiveness of listed non-financial firms in Nigeria during the period under investigation. This is shown as; Institutional Ownership (*un-moderated*; Coef. = -0.6669, $z = -0.77$ and P -value = 0.4438). Following the results above, it is revealed that the relationship between institutional ownership and tax aggressiveness is positive and statistically insignificant even at 5% level. However, this finding is consistent with the null hypothesis which states that *there is no significant relationship between institutional ownership and tax aggressiveness of listed non-financial firms in Nigeria.*

Hypotheses 7: *Agency cost has no significant moderating effect on the relationship between corporate governance compliance and tax aggressiveness of listed non-financial firms in Nigeria.*

The results obtained from the least square dummy variable regression revealed that agency cost proxied by free cashflow has a significant moderating effect on the relationship between corporate governance compliance and tax aggressiveness during the period under investigation. This is shown as; Corporate governance compliance moderator (*compliance model*; Coef. = 0.2971, $z = 1.98$ and P -value = 0.0472). Following the result above, it is revealed that the moderating effect of agency cost on the relationship between corporate governance compliance and tax aggressiveness is positive and significant at 5% level. This finding implies that as managers imbibe compliance practices of good corporate governance together with higher free cash flow the firm tends to benefit from tax aggressive practices. This finding is inconsistent with the stated null hypothesis which leads us to accept the alternative hypotheses noting that agency cost has a significant moderating effect on the relationship between corporate governance compliance and tax aggressiveness of listed non-financial firms in Nigeria.

Hypotheses 8: *Agency cost has no significant moderating effect on the relationship between corporate governance disclosure and tax aggressiveness of listed non-financial firms in Nigeria.*

The results obtained from the least square dummy variable regression revealed that agency cost proxied by free cashflow has a significant moderating effect on the relationship between corporate governance disclosure and tax aggressiveness during the period under investigation. This is shown as; Corporate governance disclosure moderator (*disclosure model*; Coef. = 0.6919, $z = 2.23$ and P -value = 0.0259). Following the result above, it is revealed that the moderating effect of agency cost on the relationship between corporate governance disclosure and tax aggressiveness is positive and significant at 5% level. This finding compliment good corporate governance compliance model described above. Furthermore, the finding implies that ceteris paribus managers that adequately disclosure corporate governance information together with a simultaneous increase in free cash flow will significantly benefit from tax aggressive practices. This finding is inconsistent with the stated null hypothesis which leads to accepting the alternative hypotheses noting that agency cost has a significant moderating effect on the relationship between corporate governance disclosure and tax aggressiveness of listed non-financial firms in Nigeria.

4.3 Discussion of Findings

The result from the least square dummy variable regression is consistent with the stated null hypothesis which connotes that board size has no significant relationship with tax aggressiveness of listed non-financial firms in Nigeria. This result negates prior findings of Minnick and Noga (2010), they noted that larger boards tend to strengthen good tax management, promoting less aggressive tax policies and practices. Furthermore, findings from this study is evidenced to be inconsistent with the findings of Ogbeide and Obaretin (2018) Lanis and Richardson (2007), Vafeas (2010); Mahenthiran and Kasipilai (2012) who concluded that larger boards are effective towards tax compliance, noting that although it attracts huge cost, they will consequently make sound policies regarding tax planning strategies that are within the ambit of the rules and regulations to the authorities. However, our result is seen to be consistent with those of Odoemela Ironkwe and Nwaiwu (2016) Onyali and Okafor (2018) Fakunle and Josiah (2019), Aliani and Zarai (2012) Koanantachai (2013); Zemzam and Flouhi (2013) who documented a non-significant relationship between board size and tax aggressiveness. They found that larger board of directors' does not significantly influence the strategies to minimize tax expenses.

Furthermore, findings from this study analyses implies that a more independent board has no significant relationship with tax aggressiveness which is inconsistent with those of Ibrahim et al. (2003) who conclude that independent directors have a crucial role in the reduction of managerial opportunism due to the effective control of a firm's

management policy. It was observed that our result negates the claims of Minnick and Noga (2010); Erle (2008) who noted that board of directors bears the ultimate responsibility for fulfilling the tax obligations of the corporation, since they are involved directly in corporate tax planning strategy. However, our finding is in line with those of (Chan et al. 2013).

Particularly, the results obtained from this study indicate that the relationship between managerial ownership and tax aggressiveness is insignificant. This outcome varies from those of Ogbeide and Obaretin (2018); Ribero et al., (2015), Khurana and Moser, (2013); Chen, et al., (2010); Chan et al (2013) and Boussaidi and Hamed (2015); Armstrong, et al. (2011); Ying (2011), Chan et al. (2013) who document a significant positive relationship between managerial ownership and tax aggressive activities indicating that managerial ownership is used to remedy agency problems and conflict of interest between managers and shareholders. But our result is seen to be consistent with those of (Landry, Deslandes & Fortin 2013).

Specifically, the positive significant relationship between board gender diversity and tax aggressiveness is seen to be consistent with the position of Onyali and Okafor (2018) Croson and Gneezy (2009) as well as with those of Hasseldine (1999) who documented that women do have higher levels of tax compliance while men do show lower level of tax compliance. Similarly, Lewis, Carrera, Culls and Jones (2009) supports their position and opined that women are often judged more suitable than men. Findings

from this study supports the view that women have more ethical values than men and their presence on the board increases tax conservative strategies. consequently, our result validates those of Boussaidi and Hamed (2015), Kastlunger et al. (2010), Vacca et al. (2020) whose findings supports the role of women directors in a tax conservative corporate environment. However, our finding does not support those of Oyeleke, Erin and Emeni (2016) who documented a positive insignificant relationship between tax aggressiveness and board gender diversity in Nigeria.

More than these, it was observed that the relationship between institutional ownership and tax aggressiveness is insignificant for non-financial firms during the period under review. This may be attributed to low levels of institutional investors involved in the scheme of corporate activities in Nigeria. However, the finding is seen to negate those of Khan et al. (2017); Khurana and Moser (2013); Mappadang, Widyastuti and Wijaya (2018) who documented that firms having high levels of institutional ownership are less tax aggressive since institutional investors are more concerned about long-term consequences of tax-aggressive strategies. This study aligned findings with that of Lanis and Richardson (2011) and Richardson et al. (2013) whose study indicate an insignificant relationship between institutional ownership and tax aggressiveness.

On the relationship between foreign ownership and tax aggressiveness the statistical insignificant relationship is inconsistent with those of Annuar, Salihu and Obid (2014); Martinez and Ramalho (2014); Rawiwan (2013); Christensen & Murphy, (2004);

Hines & Rice, (1994); Kinney & Lawrence, (2000) who concluded that inclusion of more foreign ownership shareholding will increase tax aggressiveness. According to Peter (2019), foreign ownership will increase the level of capital income taxation that may materialize where there is no international tax policy coordination. Furthermore, it is established that foreign ownership is affected if countries increase their welfare through coordination of tax policies and that the tax coordination policy will either increase or decrease the capital income tax levels. However, our result is seen to be consistent with those of Otieno (2014) who documented an insignificant relationship between tax effectiveness and foreign ownership.

Particularly, the crux of this study is to examine the moderating effect of agency cost which exist on the relationship between corporate governance and tax aggressiveness in Nigeria. However, this is a novel study as new grounds are achieved via evidence obtained from the analysis. In this study, it was discovered that agency cost moderated the relationship between corporate governance compliance and tax aggressiveness. Beyond this, a striking information obtained is that the relationship between governance disclosure and tax aggressiveness is positively and significantly moderated by agency cost (free cash flow) during the period under review. Clearly, the result supports the fact that tax aggressive firms (non-financial) do not adequately comply to corporate governance rules and regulation nor do they disclose its required corporate governance information in their annual reports. This is a typical representation of a developing

country such as Nigeria where supervisory, monitoring and regulatory agencies are weak and, in most cases, non-existent (Salaudeen, 2017; Noor, Mastuki, & Bardai 2008). Notably, compliance to and disclosure of good governance practices have been considered to be very poor in Nigeria. This is partly due to managerial inefficiency associated with shady and sharp practices carried out by stewards which is in contention with shareholder's expectation. Conversely, our result suggests that on average, non-financial listed firms running on high free cash flow are tax conservatist who tend to comply as well as disclose required corporate governance information in their financial statement. The implication here is that tax conservatist firms show stronger corporate governance rules and regulations compliance and the attendant reporting of same during the period under investigation. The result goes beyond the traditional evidences prominent in most similar studies. Thus, tax conservative non-financial listed firms will be required to run high free cash flow activities and simultaneously show ardent compliance toward corporate governance rules, regulations and codes of best practice in order to remain conservative. This is indeed a brighter insight into the subject of corporate governance as it relates to tax aggressiveness among listed non-financial firms in Nigeria.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter provides the summary of the findings from the analyses carried out in the previous chapter. The conclusion was drawn from the findings, recommendations and contribution to knowledge and recommendations for further studies was made.

5.2 Summary of Findings

Particularly, it was observed that the outcome from the LSDV estimator revealed that:

1. The relationship between board independence and tax aggressiveness is not significant for non-financial listed companies in Nigeria during the period under investigation.
2. The relationship between board size and tax aggressiveness is not significant for non-financial listed companies in Nigeria during the period under investigation
3. The relationship between managerial ownership and tax aggressiveness is not significant for non-financial listed companies in Nigeria during the period under investigation
4. The relationship between board gender diversity (5%) and tax aggressiveness is not significant for non-financial listed companies in Nigeria during the period under investigation

5. The relationship between foreign ownership and tax aggressiveness is not significant for non-financial listed companies in Nigeria during the period under investigation
6. The relationship between institutional ownership and tax aggressiveness is not significant for non-financial listed companies in Nigeria during the period under review
7. Agency cost has a positive significant (5%) moderating effect on the relationship between corporate governance compliance and tax aggressiveness of non-financial listed companies in Nigeria.
8. Agency cost has a positive significant (5%) moderating effect on the relationship between corporate governance disclosure and tax aggressiveness of non-financial listed companies in Nigeria

5.3 Conclusion

In this study, the aim was to evaluate the moderating effect of agency cost on the relationship between corporate governance and tax aggressiveness of listed non-financial firms in Nigeria. The scope of this study covers a 10year period ranging from 2010 - 2019. The independent variables of interest that was employed in other to ascertain the possible moderating effect of agency cost on the relationship between corporate governance (Governance Compliance & Governance Disclosure) and tax aggressiveness include; board size, board independence, managerial ownership, board gender diversity,

foreign ownership and institutional ownership. The study employed free cash flow as a measure of agency cost as the moderator and the variable of cash effective tax rate as a measure for tax aggressiveness which is in line with related extant literature. Specifically, pre regression analysis which includes descriptive statistics, correlation matrix, and normality of residua analysis were conducted.

Basically, the Panel Ordinary Least Square Regression analysis was first conducted and diagnostic tests were carried out to check if it violates the basic Gauss Markov Theorem and assumptions as recommended by Woodridge, (2002). Post regression diagnostic test conducted in this study includes test for; multicollinearity, fixed effects and random effects. A critical examination of the diagnostic test revealed that the model should be controlled for fixed effects but no random effects. However, in order to control for the presence of fixed effect in the models, least square dummy variable regression analyses technique was employed, which is best suitable as it is known to cushion the fixed effects problems and allow for the independent variables in the model to exhibit their unique qualities/attributes following a minimised standard error computation technique. Hence, the study adopted Least Square Dummy Variable (LSDV) regression estimation technique which provided credible estimates reliable enough for interpretation as well as for policy recommendation.

5.4 Recommendations

In this study, it was observed with empirical evidence suitable environment where tax conservative firms can thrive. This study incorporates a peculiar measure of agency cost (free cash flow) as a moderating factor in a bid to examine its effect on the nexus between corporate governance and tax aggressiveness. Further, information on governance compliance and associated disclosure were obtained to enable the researcher gain further insight. According to agency perspective of tax, the problem that needs to be solved by investors is simply managerial shirking. Avoidance also considers another form of the agency problem: managerial opportunism or resource diversion. Desai and Dharmapala (2006) argued that complex tax aggressive behaviors and practices can provide management with tools, masks, and justifications for opportunistic managerial behaviours, such as earnings manipulations, related party transactions, and other resource-diverting activities. In other words, tax aggressiveness and managerial diversion have been seen to be complementary. In line with our empirical evidence, a more gender diversified board was argued to function effectively in reducing tax aggressive policies in Nigeria. This will greatly run in favor of the government and tax authorities whose desires include higher tax revenue which are meant for economic development.

5.5 Contribution to Knowledge

The study contributes to knowledge in the following ways:

The study explores the impact of corporate governance on tax aggressiveness and also with emphasis on the moderating role of agency cost. In doing this, the study closes gap on the paucity of literature on the subject matter.

The study introduced a moderating role of agency cost to examine its role on corporate governance compliance-tax aggressiveness nexus and corporate governance information disclosure-tax aggressiveness nexus which is unique to this particular study.

5.6 Suggestions for Further Studies

The study made the following suggestions for further research:

- i. The study covers only corporate governance mechanism based on its defined scope. Future studies can consider variables related to the firm-specific attributes as there are indications that firm's attributes can influence tax strategies.
- ii. The study was limited to non-financial companies, which means that the findings may likely not hold in companies of the other sectors. Future studies can expand the scope to cover the financial companies in order to enhance the generalisation potentials of the findings.
- iii. Other studies could use other variables to moderate corporate governance and tax aggressiveness in place of agency cost.
- iv. The sample and time period could be extended to cover a wider spectrum. As this study utilised the most recent time period.

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