KWARA STATE UNIVERSITY, MALETE, NIGERIA

SCHOOL OF POST GRADUATE STUDIES (SPGS)

DETERMINANTS OF AGGRESSIVE CORPORATE TAX PLANNING PRACTICES OF LISTED MANUFACTURING COMPANIES IN NIGERIA.

Saheed LAWAL

17/27/MAC018

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BY

Saheed LAWAL

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DEPARTMENT OF ACCOUNTING AND FINANCE,

FACULTY OF MANAGEMENT AND SOCIAL SCIENCES,

KWARA STATE UNIVERSITY, MALETE,

NIGERIA.

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DECLARATION PAGE

I hereby declare that this thesis titled "Determinants of Aggressive Corporate Tax Planning Practices of Listed Manufacturing Companies in Nigeria" is a record of my research. It has been neither been presented nor accepted in any previous application for higher degree.

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Saheed LAWAL Signature/Date

APPROVAL PAGE

This is to certify that this thesis by Saheed LAWAL has been read and approved as meeting the requirements of Department of Accounting and Finance for the award of the degree of Master of Science (M.Sc) in Accounting.

Mubaraq Sanni (Ph.D, FCA, ACIT, MBA, FCPDM)	---------------------
(Main Supervisor)	Signature & Date
Adeoye Afolabi (Ph.D, ACA)	---------------------
(Co-Project Supervisor)	Signature & Date
Mubaraq Sanni (Ph.D, FCA, ACTI, MBA, FCDPM)	---------------------
(Head of Department)	Signature & Date
Dr. Ahmed Adekunle	----------------------
(Internal Examiner)	Signature & Date
Dr. A. Olagunju	--------------------
(External Examiner)	Signature & Date
Prof. Hamza Abdulraheem	---------------------
(Dean, School of Post Graduate Studies, SPGS)	Signature & Date

DEDICATION

This research work is dedicated to Almighty Allah, the most beneficent, the most glorified.

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Abstract

Tax revenue generation in any country across the globe is often not maximized because there are attempts by taxpayers to avoid paying taxes aggressively or minimizing tax payments in ways they deem legal. According to Revenue Statistics in Africa 2019, Nigeria has experienced a serious depletion in tax revenue to GDP ratio since 2010 resulting from tax aggressive efforts by tax payers. In view of this, the study investigated the factors motivating companies to behave aggressively to corporate tax planning. The main objective of this study is to examine the determinants of aggressive corporate planning of listed manufacturing companies in Nigeria. To achieve this, the specific objectives were to; (i) examine the extent to which earnings management practices influences aggressive corporate tax planning practices; (ii) Examine whether or not tax practitioner affects aggressive corporate tax planning; (iii) Investigate the extent to which firm's capital intensity influence aggressive corporate tax planning and; (iv) Ascertain the influence firm's leverage affects aggressive corporate tax planning among listed manufacturing companies in Nigeria . The study employed Ex-post facto research design with the population consisting of seventy- four (74) listed manufacturing companies, fifty five (55) out of the 74 listed manufacturing companies were chosen as the sample size using Krejcie and Morgan (1970) sample size determination table, spanning across seven (7) sectors which include construction/real estate, consumer goods, healthcare, industrial goods, natural resources, oil and gas and conglomerates sectors. Descriptive statistics and Robust Least Square (RLS) Estimation Techniques were used in the analysis of the data collected from the annual reports and accounts of the sampled listed manufacturing companies for a period of five (5) years (2015-2019). The Robust Least Square (RLS) Estimation Technique which was used for testing all the hypotheses in this study, revealed that earnings management practices positively and significantly affects aggressive corporate tax planning evidenced by $\beta_{1a} = 0.1496$; $SE = 0.0284$, $p < 0.05$ indicating that managers minimize taxes aggressively through financial reporting mechanisms. The study also showed that the use of tax experts positively and significantly affects aggressive corporate tax planning evidenced by $\beta_{2a} = 0.1074$; $SE = 0.0258$, $p < 0.05$. However, the study found that firm's leverage $\beta_{3a} = -0.008$; $SE = 0.0037$, $p > 0.05$) and firm's capital intensity ($\beta_{4a} = 0.1074$; $SE = 0.0258$, $p < 0.05$) have a negative and significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria. The study therefore concluded that earning management practices and use of tax experts are major and influential determinants of aggressive corporate tax planning of listed Nigeria manufacturing companies while other determinants such as firm's capital intensity and leverage have a negative significant effect. Therefore, the study recommends that the Financial Reporting Council of Nigeria should closely monitor the accounting system for fair presentation of companies' financial statement in order to pay appropriate taxes to Federal Inland Revenue Service.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Despite the importance of tax revenue in the development of any economy as it provides revenue to fund governmental activities, ensures resources redistribution, reduces inflation and generates employment (Annuar, Salihu, & Obid, 2014), tax revenue generation in any country across the globe is often not maximized because there are attempts by taxpayers to avoid paying taxes or minimizing tax payments in ways they deem legal. Corporate tax is not only important source of revenue for governments around the world but it is also used to attain fiscal objectives of an economy; on the other hand, corporate tax is a significant expense to companies thereby impacting on major corporate decisions (Osebe & Naibei, 2019). According to the company goal to optimize its profit, the company, both domestic and multinational try to minimize the tax burden by using existing tax-probation's blind spot and urge management to do aggressive tax measures (Masri, Ani, & Fredy, 2017). However, management actions designed solely to reduce taxes by setting up tax-aggressive planning are becoming more common in all companies world-wide.

Corporate tax aggressiveness has been an issue since the inception of tax legislations and are prevalent in every society where taxes are levied across the globe (Osebe *et al.*, 2019)**.** In most of developed and developing countries, tax aggressiveness efforts exercised by corporate entities has resulted to loss of tax revenue due to weak tax administration strategies, weak corporate governance and presence of informal sector or shadow economy (Prasetyo & Zaman 2020). As a result of this tax aggressive behaviour, tax revenue contributions to the total revenue of the many developing countries has continue to reduce and shrinking.

Furthermore, the aggressive tax avoidance of some multinational enterprises (MNEs) has received much attention. The debate has been stimulated by very low reported effective tax rates. In 2010, for example, large profitable U.S. corporations disclosed on average an ETR of 16.9 %, although with 35 % they face one of the highest official statutory tax rates in the world (Prasetyo & Zaman, 2020).Additionally, the United Nations Conference on Trade and Development (UNTAD) in 2015 reported that multinational companies have a biggest share in undermining tax revenues in developing countries as they lose more than $ 300 million in the financial sector annually due to aggressive tax planning practices (Ezugwu & Akubo, 2014). Multinational companies (MNEs) on average contribute 10% to the revenue of developing countries, especially for developing countries on the African continent; the tax contribution of MNEs reaches 14% of state revenues (World Investment Report, 2015). Also, S&P Global Market Intelligence revealed that many of the 500 largest American companies engage in aggressive tax planning activities to avoid federal income taxes, e.g. Facebook, Boeing, Google, Apple, and Coca-Cola. Between 2007 and 2015, S&P 500 companies paid an average of 26.9% in income taxes when the official rate was 35% (Bosun-Fakunle, Josiah, & Olowoyo, 2017).

The board of directors is widely known to ensure the credibility of the financial reporting process and quality information for the computation of tax liability which is highly significant to public revenue and national development. Even with this, income taxes are seen as major source of cash outflow and significant amount of time, energy, and money may be employed in reducing its impact on financial results. Thus, the decisions of managers and tax accountants may possibly favour incorporating actions that decrease taxes (Oyeleke, Erin & Emeni, 2016). Therefore, tax aggressiveness refers to the aggressive side of tax planning practices. Given the oversight role of the board on executive decisions, they may impact on tax reducing activities and should be considered as a key factor in the success of aggressive tax behaviour (Uniamikogbo, Oghogho, & Atu, 2018).

The greatest interest of shareholders is wealth maximization, and one definite way of achieving this, is through cost reduction. Taxation is one of the costs of doing business and therefore represent serious barrier to wealth maximization thus, in order to reduce taxes, tax planning becomes imperative for management. It also important to note that tax planning has its associated cost such as administrative cost for professionals such as lawyers, accountants, and consultants in planning the tax strategies and the risk of legal challenges and penalty (Bosun-Fakunle, *et al.,* 2017).

In Nigeria, corporations are subjected to corporate income tax in Nigeria under the Company Income Tax Act (CITA) cap C21 LFN 2020 as amended at the rate of 30% on and 2% education tax on the taxable profit and assessable profit respectively. These taxes are significant costs to businesses as they reduce the distributable profit to be declared by managers of the incorporated entities (Ezugwu *et al.,* 2014). However, there are several anti-avoidance tax laws in Nigeria and almost every nation of the world to discourage tax aggressiveness practices, yet, firms do engage in tax aggressiveness through the help of tax experts and accountants, in assisting them in arranging their activities in such a way that they can take advantage of the loopholes in the tax laws; thereby paying less taxes. (Innocent, Chidiebele, Gloria, & Tochukwu, 2018).

Currently, corporate tax aggressiveness is considered as one of the issue threatening Nigeria. This menace may manifest in the form of reducing tax liabilities, engaging in tax avoidance which remains prevalent among corporate firms given the magnitude of the multiplicity of taxes which take away a more significant proportion of firm's pre-tax earnings and subsequently reduces their distributable profit to the shareholders (Innocent *et al.,* 2018).

Several studies on the determinants of the aggressive corporate tax planning practices have been conducted in various countries (for instance, Desai and Dharmapala, 2006; Dyreng *et al.,* 2008; Hanlon and Heizman, 2010; Minnick and Noga, 2010; Armstrong *et al.*, 2012; Kraft, 2014; Richardson and Lanis, 2013; Richardson, Taylor, and Lanis, 2016;Kovermann and Velte, 2019 and, more recently, Lee& Yoon, 2020). In particular, these studies analyze whether and to what extent does firm's specific variables like company's size, firm's capital intensity, the rate of profitability, the firms' capital structure and assets mix, liquidity, impacts on aggressive corporate tax planning, but these studies have failed to provide a comprehensive picture of what exactly determines the tax-aggressive behaviour among manufacturing corporations. Moreover, a large body of research focused on corporate governance mechanisms such as board of director features, form of ownership, and ownership structure as a determinants of aggressive corporate tax planning practices (Oyenike, Olayinka & Francis, 2016).

However, the need for this study becomes vital as its empirically determine the germane factors such as (earning management practices, tax expert, firm's capital intensity, and firm's leverage) that have the tendency to significantly influencing aggressive tax planning practices of listed Manufacturing companies in Nigeria.

1.2 Statement of the Problem

Aggressive tax planning practices by corporate entities represents a serious loss of revenue to the governments of most advanced and developing economies by creating a sluggish growth in funding government infrastructures (Amidu, Coffie & Acquah, 2019).On one hand, firms that are inefficient in tax matters, causes them to have a higher tax liability than their competitors. Given the magnitude of Nigeria's tax burden in terms of multiplicity, this inefficiency has strong negative effect on these firms' competitiveness, and thus on their returns in relation to their rivals. On the other hand, companies that are too aggressive in their tax planning efforts, exposes them to legal risks as a result of sliding into tax evasion act which could consequently unfolds a growing political tensions and distortion of corporate image (Zahra, Wulandari, & Syafrizal, 2019).

Nigeria has experienced a serious depletion in tax revenue to GDP ratio since 2010 resulting from tax aggressive efforts by tax payer (Pricewaterhouse cooper, 2019). Also, despite the series of tax reforms, tax audit, various sanctions, and anti-tax avoidance measures in Nigeria, particularly the newly approved national tax policy in February 2017, which currently recommends a reduction in corporate income tax rates for small businesses, progressive personal income tax rates, and an increase in the value-added tax (VAT) rate for luxury items, amongst others, it is saddened that the country has continue to record a decline in tax revenue to GDP ratio of 5.3% in 2017 from 5.7% in 2016 and 4.2% in 2018, which is lower than that of the average of the 26 African countries and also one of the lowest in the world (Revenue Statistics in Africa 2019; Pricewaterhouse cooper, 2019).

Giving the above evidences, the stagnant growth of corporate tax revenue, giving the high level of the operational activities of the manufacturing corporations in Nigerian economy, represents the high level of aggressive behaviour towards tax planning efforts. As a result of this, Nigeria government has been deprived of funds for the provision of essential infrastructural facilities for its citizens (Salawu, 2018).

Without doubt, changes in accounting procedures, income maximization and income smoothing are the major instruments that managers use in managing earnings in a way that create differences in the taxable profit and the accounting income so as to report manipulated profit in order to pay less tax. . Specifically, companies are exposed to legal risk i.e risky tax position, as resulting from sliding into tax evasion act while engaging in the management of earnings, which may, consequently lead to political cost, depletion of the corporate image, social and economic damage (Amidu *et al.,* 2019). Also the use of these tax avoidance mechanisms results in loss of tax revenue which hinders the ability of the government to undertake its social and economic responsibilities.

Arguably, use of tax expert for aggressive tax planning practices exposes them to face a dual agency problem, having a duty to act in their client's interests on one hand while upholding the provisions of the tax laws on the other. The morality of advising clients to exercise aggressive tax efforts is more complex than a simple decision to evade taxes on one's own behalf, involving professional codes of ethics which generally prohibit or discourage such aggressive advice (Killian & Doyle, 2015). It is reasonable to expect that practitioners create this dual agency tension in different ways depending on their personal characteristics as well as the external influences presented by an ambiguous tax issue (Killian *et al.,* 2015).

In efforts to maximize the shareholders' wealth, firm performance and aggressive tax planning objectives Corporate entities employs unnecessarily increase in the level of leverage at the expense of shareholders for aggressiveness in tax planning practices which leads to increase in interest allowable deduction for tax purposes, and consequently, increases the interest of shareholders to the danger of bankruptcy for having high debt profile in their capital structure for tax aggressiveness purpose (Uniamikogbo *et al.*, 2018). These excessive use of debt will disrupt the company operations because the company will fall into the category of extreme leverage (the extreme debt) that is, the company stuck in a very high debt level and difficult to release the debt burden. Therefore, this could result to excess cash, high liquidity, and decline in profitability and minimisation of shareholder value (Chytis, *et al.,* 2018; Chytis, Tasios, & Gerantonis, 2018).

Apart from the foregoing, large number of corporate manufacturing firms purchase excessive and unnecessary property, plant and equipment for aggressiveness for aggressive tax planning practices to claim capital allowances such as initial allowance, annual allowance, investment allowance, rural investment allowance, balancing allowances and other tax incentives even when they are not necessary or relevant for operational activities (Ilaboya, *et al.,* 2016). As a result of this, excessive non-current asset would create excessive asset capacity, deterioration and leads to low in asset turnover ratio.

Majority of the previous studies,(Annuar, Salihu and Obid 2014; Khaoula, & Mohamed Ali, 2012; Wang and Chen 2012; Tang, and Firth 2011; Desai and Dharmapala 2006, Richardson, Taylor and Lanis (2013) on determinants of corporate tax planning were carried out mostly in United States of America(U.S), China, Tunisia, Malaysia, and other jurisdiction in Nigeria. The similar studies in Nigeria such as Ilaboya, *et al.*, 2016;Uniamikogbo, Oghogho, & Atu, 2018; Oyeyemi & Babatunde 2016; Oyeleke, Erin & Emeni,2016) focus on the banks and manufacturing firms; industrial sector and consumer sector. Also, most of these studies were carried out utilizing either single or limited proxies studies of determinants (independent) of corporate tax planning (dependent) and not a wide range or a combination of them, that can address the salient issues of aggressive corporate tax planning.

Therefore, to resolve some of these salient issues, this study examine the earnings management practices, firm's capital intensity, firm's leverage and tax practitioner's expertise, as a determinants of aggressive corporate tax planning practices on specific proxies of aggressive corporate tax planning practices (GAAP Effective Tax Rate and cash Effective Tax Rate) of listed manufacturing companies on Nigeria Stock Exchange.

1.3 Research Questions

From the above established statement of problem, the study provides an answer to the following research questions:

i. To what extent does earning management practices influences aggressive corporate tax planning practices among listed manufacturing companies in Nigeria?
ii. What is the relationship between tax practitioner expertise and aggressive corporate tax planning practices among listed manufacturing companies in Nigeria?
iii. To what extent does firm's capital intensity influence aggressive corporate tax planning practices among listed manufacturing companies in Nigeria?
iv. To what level does firm's leverage affects aggressive corporate tax planning practices among listed manufacturing companies in Nigeria?

1.4 Research Objectives

The general objective of this study is to investigate the determinants of aggressive corporate tax planning practices among listed manufacturing companies in Nigeria. However, the following specific objectives are to:

i. Determine the extent to which earnings management practices influence aggressive corporate tax planning practices among listed manufacturing companies in Nigeria;
ii. Examine whether or not tax practitioner's expertise affects aggressive corporate tax planning practices among listed manufacturing companies in Nigeria;
iii. Investigate the extent to which firm's capital intensity influences aggressive corporate tax planning practices among listed manufacturing companies in Nigeria;
iv. Ascertain the influence firm's leverage affects aggressive corporate tax planning practices among listed manufacturing companies in Nigeria.

1.5 Research Hypotheses

In order to answer the questions raised above and to achieve the research objectives, the following null hypotheses were tested:

H_{O1}: There is no significant relationship between earnings management practices corporate tax planning among listed manufacturing companies in Nigeria.

H_{O2}: Tax practitioner's expertise has no significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria.

H_{O3}: Firm's capital intensity has no significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria.

H_{O4}: Firm's leverage has no significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria.

1.6 Justification for the Study

The study contributes to the growing literature on corporate tax planning from the tax aggressiveness point of view. Conceptually, the study investigates the determinants of corporate tax planning focusing on four factors which are earning management practices, tax practitioner's expertise, firm's leverage, and firm's capital intensity. Contribution to conceptual knowledge provides the inclusion of tax practitioner's expertise as determinants of aggressive corporate tax planning practices, given that the use of tax practitioner's expertise in aggressive tax planning activities greatly contributes to tax reduction as they are considered as important intermediaries of transactions between taxpayers and tax officials (Annuar, *et al.,* 2014). Thus, to the best of the literature found, no study had employed tax practitioner's expertise as a factors influencing aggressive corporate tax planning practices.

However, the results of this research will add insight and knowledge for the development of science in the field of financial accounting and taxation especially related to aggressive tax behaviour. More so, the significance of this study is also based on fact that it will provide opportunity to empirically test and validate prior finding in developing economy like Nigeria (Ilaboya *et al.,* 2016).

Practically, the study would increase the awareness of both the users of the financial statement and tax administration bodies on the degree of aggressive corporate tax planning exercised by corporate entities and large amount of taxes which may be lost due to this aggressive tax behaviour. It will also create unending benefits to tax administrators as their attention will directed to strategies to enhance the corporate tax improvement in Nigeria. More so, it will provide an insight and dissemination of knowledge to tax practitioners and accountants on the quality of service delivery to their clients and employer respectively.

Additionally, the study will be useful to Nigeria government agencies such as the tax authorities at the federal level to identify the germane determinant that requires attention in tax policy formulation since aggressive tax planning could possibly leads to tax evasion that is detrimental to a country's revenue base and its public spending. In addition, this study could help legislators to take into account the determinant factors of tax planning when designing a specific fiscal framework for Nigeria manufacturing companies, due to their significant contribution to the development and growth of Nigerian economy.

1.7 Scope of the Study

The study investigates the determinants of aggressive corporate tax planning. Strands of literature has considered many determinants especially corporate governance determinants, but this study tends to use; earning management practices, tax experts, firm's capital intensity; and firm's leverage as a germane determinants of aggressive corporate tax planning practices. This study covers all the seventy-four (74) manufacturing companies in Nigeria (Nigeria Stock

Exchange, 2019). Manufacturing sector were used in this research work because they are real sector which are crucial to economic sustainability and their complexity of production to meet aggregate demand in an economy. Also these companies are not faced with specific government regulations like other financial firms in Nigeria. Another reason for the choice of these companies for this research work is based on their high investment in property, plant, and equipment(PPE) of most these manufacturing firms than other firms as capital allowances are granted which constitutes a significant incentives for tax deductibility (Irianto, Sudibyo & S.Ak, 2017; Yinka & Uchenna, 2018). The study covers a period of five (5) years ranging from 2015 to 2019. The year 2015 was selected for the study, in view of global fall in oil prices in 2015, which adversely affected the oil-tax revenue of the county and consequently led to shift in government attention to non-oil tax revenue generation. Moreso, year 2019 was chosen due to unavailability of annual report and accounts for year 2020 on numerous websites of listed manufacturing companies.

CHAPTER TWO
LITERATURE REVIEW

This chapter provides summary of the previous literature on corporate tax planning and its determinants. This covers the conceptual issues, theoretical review, theoretical framework, empirical review as well as the summary and gap identified in the reviewed literatures.

2.1 Conceptual Review

The conceptual review serves to provide an in-depth understanding of the concepts under study which are; corporate tax planning; earning management practices; tax practitioner's expert; firm's capital intensity; and firm's leverage.

2.1.1 Corporate Tax Planning

Many studies have allowed the researcher to detect the different definitions of corporate tax planning. Firstly, taxes are confined to compulsory, unrequested payments to government while planning is the process of determining in advance the factors necessary to achieve a set of goals; designing an effective means of achieving some future goals (ends)- Kohler's Dictionary for Accountants (Ilaboya *et al.,* 2016). Corporate tax planning refers to the consensus efforts of corporate entities to minimise tax liabilities through aggressiveness tax planning activities which includes taking advantage of the exemptions, deductions, rebates, reliefs and other tax concessions allowed by tax statutes, leading to the reduction of the tax liability of the taxpayers (Innocent *et al.,* 2018).

As cited in work of Dyreng, Hanlon, & Maydew (2008), Hanlon and Heitzman (2006) argued that tax planning is said to be a continuum of activities that enable corporations to reduce taxes. At one extreme of this continuum are perfectly legal activities such as the purchase of tax-exempt bonds, while at the other end, are egregiously abusive tax-saving transactions such as the use of prohibited tax-shelter products, transfer mispricing etc., which will surely result in fines and penalties against the firm if detected by the Inland Revenue Service. Aburajab, Maali, Jaradat, and Alsharairi (2019) also opined that activities that are refer to as tax sheltering/avoidance/aggressiveness are between these extremes. These activities are generally based on a weaker set of facts and are often undertaken after a rigorous reading of the tax laws.

Tax planning is a part of comprehensive taxation management and the first step to analyze various alternatives of taxation applied systematically in order to achieve minimum tax liability (Sonia & Suparmun, 2019). Innocent *et al.,* (2018) states that tax planning is the corporate manipulation that entities engage themselves in order to reduce taxable income due to effective tax planning which can be considered as tax management. According to Uniamikogbo, *et al.,* (2018), corporate tax planning has the same meaning as tax aggressiveness, tax avoidance and tax sheltering as they meet the legal and ethical requirements established by the tax authorities. Corporate tax planning refers to the legal arrangement of tax payer's affairs aimed in reducing tax liability. It is seen as pejorative overtone as it is used to describe avoidance achieved by artificial arrangement of personal or business affairs to take advantage of loopholes, ambiguities, anomalies or other deficiencies of tax legislations (Uniamikogbo, *et al.,* 2018).

Traditionally, tax planning and tax Minimisation was not recognised to be two different concepts. This is because, in a World of costly contracting, implementation of tax minimising strategies may introduce significant costs along non-tax dimensions. Thus, the tax minimisation strategy may be undesirable. After all, a particularly easy way to avoid paying taxes is to prevent investing in profitable ventures. Thus, effective tax planning does not means minimising taxes, but maximising after-tax rates of return on assets. Uniamikogbo *et al.,* (2018) also posited that tax planning is important to achieve the objective of eliminating, reducing, or deferring the income tax to a later year of assessment within the ambit of the law. Generally, majority of the companies were compulsorily and legally mandated to pay company income taxes to the government, specifically to the Federal Inland Revenue Board of Nigeria (FIRBN). However, most corporate firms engages in strategic tax planning by hiring tax experts to fully utilize all the tax incentives given by the government in order to reduce their tax burden (Ogbeide & Iyafekhe, 2018).

Giving the above evidences, since tax planning refers to continuum of activities in tax planning practices in order to reduce taxes. The study tends look into one extreme of this continuum which egregiously abusive tax-saving transactions such as the use of prohibited tax-shelter products, earning management practices, use of tax experts, transfer mispricing etc., otherwise known as tax aggressiveness , which may result in fines and penalties against the firm if detected by the Inland Revenue Service.

2.1.2 Tax Aggressiveness

Tax aggressiveness is an action that aims to reduce taxable income through tax planning and using method that are classified or not classified as tax evasion. Even though not all tax aggressiveness is against the rules, more method are used to make the company more assertive in its tax planning. Tax aggressiveness can be done in form of actions that do not violate the law (tax avoidance) as well as acts that violate the law.Tax aggressiveness refers to the aggressive side of tax planning practices (Uniamikogbo *et al.,* 2018). Ogbeide & Iyafekhe, (2018) opined that tax aggressiveness refers to strategy deployed by managers, a set of processes, practices, resources and choices whose objective is to maximize income after all company's liabilities owed to the state and other stakeholders. Tax aggressive activities refer to legal activities which are usually provided by the auditor or tax agent and can be classified as gray area activities as well as illegal activities.

It is an attempt to utilize the pitfalls in tax laws to avoid paying taxes on the grounds that no conditions that involve taxes are available. It is described as a set of procedures and policies in which the tax payer follows to minimize the amount of due tax or to be exempted from tax (Bosun-Fakunle, Josiah & Olowoyo, 2017). According to (Prasetyo & Zaman 2020) tax aggressiveness is classified as part of tax avoidance despite their legal, illegal, or gray-scaled behavior

Tax aggressiveness has been interchangeably used as tax avoidance, tax sheltering, tax cheating, tax planning, and tax minimisation. In a nutshell, tax aggressiveness aimed at reducing tax payable to mining, manufacturing, construction, strive for maximum tax benefit through some illegal means, acts or procedures, is seen as a deceit or fraud and criminal. This means of reducing tax liability through illegal acts is known as tax evasion. (Bosun-Fakunle *et al.,* 2017). Hanlon and Heitzman (2010) point out that tax aggressiveness should be viewed as an investment decision and that value-maximizing firms should invest in tax aggressiveness when its marginal benefits exceed its marginal costs (Francis, Sun, & Wu 2018).

In addition, Frank, Lynch and Rego (2009) as cited in Indah, Salis and Hotman(2017) argued that tax aggressive as a procedure to decrease taxable income through tax planning. Also Graham and Tucker (2006) as cited in Indah *et al.,(*2017) defined tax aggressiveness according to US congress as effort to avoid tax with economic risk but without loss. Based on this definition, tax aggressiveness can be defined as tax avoidance. Lim (2011) as cited in Indah *et* *al.,*(2017) defined tax avoidance as tax saving which legally utilize tax rule weakness to minimize tax liabilities. Tax avoidance is part of tax planning which is done to possibilities within tax rules so that company can pay tax less than it should be.

Thus, it can be understood that tax aggressiveness has very broad concept and includes tax planning or tax avoidance as well as tax evasion principles. This concept is used in this study so that companies that behaves aggressively in tax do not mean they committed fraud or tax evasion and irregularities in accounting reporting practices.

2.1.3 Determinants of Aggressive Corporate tax Planning

More importantly, previous studies had used several factors as determinants of aggressive corporate tax planning. For instance, (Richardson, Taylor, and Lanis, 2013; Lanis, Richardson and Taylor 2015; Richardson, Taylor, and Lanis, 2016) used corporate governance mechanism (Women on the board of directors and board composition, gender diversity, corporate social responsibility, board of director oversight, risk management and internal controls). Similarly, Irianto *et al.,* (2017) used firm characteristics which includes size, leverage, profitability, and capital intensity, and liquidity. Also, Stevanus and Irenius (2018) also considered board characteristics and capital structure as a determinants that affects aggressive corporate tax planning.

For the purpose of this study, four germane factors are identified as the determinants of aggressive corporate tax planning practices. These include earnings management, tax experts, firm's capital intensity, and firm's leverage.

2.1.3.1 Earning Management

Earning management can be described as an active manipulation of financial information to establish an altered impression of company's financial results in terms of financial performance and financial position as measured by its earnings (Amidu, Coffie & Acquah 2019). Amidu *et al.,* (2019) also opined that earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.

Purnamasari (2019) defined earnings management as a deliberate management intervention in the profit determination process to obtain some personal gains. The purpose of this intervention is the effort made by managers to influence information in financial statements with the aim of tricking stakeholders who want to know the performance and conditions of the company. Often times, process includes fashioning accounting reports, especially the lowest number, namely profit (Purnamasari, 2019). Sepe, Nelson, Tan and Spiceland (2012) viewed earnings management as the ability of reported earnings (income) to predict a company's future earnings. Earning management can be done by profit minimization to achieve aggressive tax planning, profit maximization and income smoothing.

In the same vein, Kurniasih, Sulardi, and Suranta (2017) states that tax payment is one of most common reasons why corporate firms engages in earning management in order to minimize the level of income reported by company. However, lower tax payment may depend on the company's efforts in engaging in earning management by producing financial statement for the determination of taxes (Chen, Dhaliwal, & Trombley 2007). The flexibility of accounting standards allows for manipulative practices which provides considerable discretion in adopting accounting policies, and in making required estimates ((Marques, Rodrigues, & Craig 2011).

The conflict that arises between agents and principal can sometimes affect the quality of earnings However, Kurniasih Sulardi , and Suranta (2017) reveals that taxation motivation is one of the encouragements for corporate managers to engage in earnings management. Tarmidi, & Murwaningsari (2019) also opined that managers whose interests are aligned with its shareholders will act more aggressively with respect to tax planning. The use of accounting income as the basis for taxation encourages managers engage in earnings management (Marques, Rodrigues, & Craig 2011)

2.1.3.2 Tax Practitioner's Expertise

The concept of a single "tax practitioner" is difficult to comprehend. In practice, the term "tax practitioner" covers a diverse group of individuals, business structures and professional groups who provide a range of tax services for their clients (Blaufus & Zinowsky, 2013). Self-employed and in-house accountants, tax advisers and registered tax agents, tax consultants, tax agent franchises and legal practitioners in the tax area are all embraced by the term "tax practitioner". According to Blaufus *et al.,* (2013), "tax practitioner's expertise" includes tax professionals, tax expert, tax preparers, tax agents, tax accountants and tax lawyers and the terms are used interchangeably.

Tax practitioners play multiple roles in both tax and financial planning. They are gatekeepers to the tax system for those who want someone else to take care of their tax affairs. Tax practitioners function as enforcers, trying to dissuade clients from actions that will likely create problems with tax authorities, either through protracted conflict or penalties. Tax practitioners also adopt the role of enablers (or exploiters), identifying financial planning arrangements that minimize tax or avoid it altogether. An established tax expert will have had exposure to all of these roles, either as observer or participant (Wurth & Braithwaite, 2016).

However, Tax experts have always been considered important as intermediaries of transactions between taxpayers and tax officials. Tax expert enters into a professional relationship with taxpayers, tax administrators and policy makers, and professional associations to gain more diverse knowledge in the tax system. Tax expert are highly networked actors in the tax system, holders of knowledge and resources, and importantly of contacts through whom tax planning contagion is triggered (Wurth *et al.*, 2016). For this reason, tax experts are at the centre of any discussion about aggressive tax planning, tax minimisation and tax avoidance and the eliciting of taxpayer cooperation.

2.1.3.3 Firm Capital Intensity

Capital intensity is the investment activity done by the company which is related to the investment in form of fixed assets. The non- current assets will be compared with total assets owned by the company (Sonia *et al.*, 2019). According to Zulaikha and Ardyansah (2014) in work of Sonia *et al.*, (2019), that large proportion of non-current assets to total asset can decrease the company's tax by their depreciation. The depreciation of non-current assets can reduce the company's profit directly while preparing tax liability. This depreciation is deductible expense in accordance with the tax regulation. Therefore, the high capital intensity can be an indication of tax aggressiveness (Sonia *et al.*,2019).

Firms with huge investment on non - current assets tend to use higher value of depreciation expense to reduce their assessable income and hence pay lesser income tax expense. Investment allowance and capital allowance also combine to reduce the tax burden on capital-intensive firms. Hence, there exists a negative relationship between capital intensity and aggressive corporate tax planning (Ilaboya *et al.,* 2016). Capital intensity is often associated with how big non-current assets owned by company. Zemzem and Ftouhi (2013) also asserted that the company's non-current assets allows the company to withhold taxes due to the depreciation of its non-current assets annually, so that the depreciation expense is a deductible cost of fixed asset depreciation annually.

2.1.3.4 Firm's Leverage

According to Rahmawati and dan,(2018) leverage in a business definition refers to the use of the asset and fund resource by a firm where the use of asset of fund is intended to increase the potential benefit for stakeholders of the firm. In addition, leverage means the extent to which companies uses fixed interest- bearing capital to finance its operations. According to Sartono (2000) in (Kurniasih *et al.,* 2017; Irianto *et al.,,* (2017), leverage refers to the utilization of debt to finance investments.

In the same vein, Uniamikogbo *et al.,* (2018) posited that leverage is the extent to which a firm has been financed by outside or external funds which are purely debt obligations. Leverage could either be an operating or a financial leverage. Operating leverage is the use of assets which forced the company to bear the fixed costs such as depreciation. Similarly, Irianto *et al.,* (2017) states that operating leverage is defined as a firm's ability in utilizing fixed operating costs to enlarge the influence of sale volume changes on earnings before interest and taxes. Financial leverage is the use of funds that forced the company to bear the burden of fixed rate of interest. Debt financing and equity financing are the two financing options most commonly pursued by companies. Debt financing refers to borrowing funds which must be repaid with interest, while equity financing refers to raising funds by selling shareholding interests in the company (Uniamikogbo *et al.,* (2018). The primary motive why companies use financial leverage is to increase shareholders' funds under favourable economic conditions. Leverage is measured as the ratio of debt capital to equity capital in financing the firm's assets.

Sonia and Suparmun, (2019) states that company which has high leverage can be indicated as doing tax avoidance. The interest expense can be used as the deduction of taxable income i.e. the interest expense occurs from owing to third party or creditor which does not have special relation to the company (Sonia *et al.,* 2019). Therefore, the higher of leverage comes from the third party, the higher interest expense it will be. This high interest expense can be used to reduce the tax because it decreases the taxable income. The company will pay lower tax by having lower profit. Therefore, the high leverage will indicate that the company does tax avoidance (Sonia *et al.*, 2019)

According to Eugene F.Brigham and Joel F. Houston (2014) in Fadhillah, (2017) revealed that the use of debt to finance the company's assets is financial leverage and one of the main reasons for the use of debt is that interest due to loans is a tax deductible expense for tax purposes, so the tendency of companies to borrow it will result in tax aggressiveness as companies would avoid or reduce tax. Furthermore, Fadhillah, (2017) states that leverage is used to finance / buy company assets, which means the addition of the amount of debt will result in the emergence of interest expense to be paid by the company which provides tax saving on interest charges on debts.

2.2 Theoretical Review

The theoretical perspective provides a mirror to understand better, issues under investigation in this research. The review of various related theories provides a guide in the identification and analysis of various relevant theories, so as to give better clarification of perspective of the study which includes Hoffman Tax Planning theory, Agency theory, and Stakeholder theory and Tax Deterrence theory. The research thus examines the philosophy and the relevance of these theories to the study.

2.2.1 Hoffman's Tax planning theory

This theory was propounded by William H. Hoffman in 1961. It is based on the assumption that efficient corporate entities should legally divert cash from tax authorities to the corporate entity's purse (Kawor & Kportorgbi, 2014). Hoffman(1961), in explaining the tax planning theory, he established principles and concepts of tax planning activities that are most applicable to tax practitioners. However, these principles and concepts are considered because the tax payers are likely to engage in tax planning activities based on the advice of the tax practitioners. The theory also highlighted four solid points of tax planning. Firstly, in case of properly handled, tax planning is not a simple process. Secondly, much gain will be obtained if the process of tax planning is conducted as a formalize procedure. Thirdly, many tax planner do not practice to the greatest possible advantage and finally, tax planning could benefit many tax payer but few are aware of it advantage (Fagbemi *et al.*, 2016).

The theory also states that tax planning objectives are only achievable when there is the tendency to reduce the taxable income to the barest minimum without having a negative effect on accounting income which is based on the fact that firms' tax liability is charged on taxable income. Therefore, corporate entities should exercise their efforts in the tax planning activities that shrink the income that is subjected to taxation, rather than an accounting income (Fagbemi, Olaniyi, & Ogundipe, 2019).

From the foregoing, the study predicts that there is a positive association between the tax practitioner and tax planning which is based on the fact that the engagement of tax experts for firm's tax matters would create a benefits would flow into the entity through substantial tax savings from efficient tax planning activities ((Fagbemi *et al.,* 2019).

Additionally, this study also perceives that, in Hoffman's tax planning theory, there is a direct relationship between firm's leverage, firm's capital intensity and corporate tax planning. As firms would plan to make financing mix decision and investment decision which will incorporate debt(leverage) in its capital structure in order to claim allowable tax deductible expense(interest) for tax purpose resulting to minimisation of taxable income upon which the statutory rate of 30 percent is charged. Similarly, considering the plan to make investment decision for the acquisition of non-current asset (capital intensity), this will also give room for aggressive tax planning. This is because; tax allowable depreciation/ capital allowance will be granted as a relief from the tax authority resulting to reduction in the firm taxable income. From the principles underpinning the Hoffman tax planning theories, it is also established that the scope of the Hoffman's tax planning theory does not address the dynamics of tax planning and earning management.

2.2.2 Agency Theory

The agency theory was initiated by Ross (1973) from the economic perspective. Ross economic theory of agency concerning the problem faced by the principal was one of choosing a compensation system that will induce an agent to exhibit behaviour consistent with the principal's preference in a contractual relationship between an agent and his principal (Amidu *et al.,* 2019). This theory was later extended by Jensen & Meckling (1976).

However, this theory was propounded by Jensen and Mecking (1976) and they defined agency as a relationship which involves contract, whereby one or more persons (the employer or principal) hire another agent (management) to perform a number of services and delegate authority to make decisions on behalf of the principal. Principal provides resources for the operations of the company, while the agent is responsible to manage the company with the aim of improving the prosperity of the company (Amidu *et al.*, 2019).

The agency theory is the basic theory that underlies that there is a social contract between principal (shareholders) and agent (management). The main principle of this theory states the existence of a working relationship between the parties that gives authority (principal) i.e investors with the party who receives the authority (agency) that is manager. However, Agency theory assumes that all individuals act on their own behalf. This "economic interest" difference causes the emergence of asymmetric information between shareholders (majority & minority shareholders) on both parties). Their interest difference is in the owner's utility maximization with benefit obstacle and incentive which will be received by management. That different interest causes a conflict of interest among those two (Jensen & Meckling, 1976). In its relationship with corporate tax planning, there is an interest difference between government and company. However, the government tries to increase tax revenue so that able to achieve the set target but on the other hand, the company tries to minimize its tax liability. (Rahmawati & Dan, 2018).

The theory also postulates that when both parties are utility maximizers then the agent will refuse to take actions in line with the principal's interest. This brings about the conflict of interest between insider manager and the outside stockholders of public corporations. Hence, the theory postulates that instituting a compensation contract will help to align the interest of managers with that of their shareholders. This compensation contact is based on accounting earnings. Therefore, the theory posits that accounting numbers play a central role in mitigating the conflict of interest between managers and stockholders (Jensen & Meckling, 1976).
Corporate managers have the responsibility to run the affairs of the corporation and therefore have thorough information about the corporation. If such information is not made available to the stakeholders would result in information asymmetry. Information asymmetry occurs when managers have information that stakeholders do not have any knowledge of (Ross, 1973). Such privilege information held by managers increases their ability to exploit benefits from other stakeholders leading to the agency problem (Amidu *et al.* 2019; ,Jensen & Meckling, 1976). According to Eisenhardt (1989) as cited in Amidu *et al.* (2019) the agency theory focuses on resolving two main agency problems that are likely to occur in the agency relationship. The

first problem befalls when the goal of the agent differs substantially from that of the principal. The second problem also arises when the principal finds it difficult or expensive to confirm the actual performance of the agent.

In this study, the researcher identify that the shareholder and the tax authority to suffer from lack of adequate information about the earnings management practices of the firm. To prevent such problems from occurring, the shareholder and the tax authority have to incur some cost to limit the conflicting interest which exist between them and the managers of the firm (Amidu *et al.*, 2019). Also, the existence of information asymmetry between managers and shareholders for tax planning can help managers to manage earnings in their own interest resulting in a positive association between earning management and aggressive tax planning. Management actions designed solely to reduce taxes by setting up tax planning activities are becoming more common in all companies world-wide (Salawu and Adedeji, 2017) .

Oyeyemi and Babatunde, (2016) posited that on agency theory of tax avoidance emphasized on the inability of the tax savings through tax planning strategies to transform into enhancement of after tax return due to agency problem of managerial opportunism or resource diversion. According to Desai and Dharmapala (2006) as cited Oyeyemi *et al.,* (2016) complex tax avoidance transactions can provide management with the tools, masks, and justifications for opportunistic managerial behaviours, such as earnings manipulations, related party transactions, and other resource-diverting activities thus, tax savings may not actually result to increase on firms' after tax rate of return.

Based on agency theory which explains relationship between agent and principal who have different interests, wherein capital intensity as independent variable of tax avoidance. The agent is manager and principal is government. The government wants to get more income from tax but manager want to minimize tax payment from capital intensity. High level of fixed assets will attract government's attention to apply tax payment to taxpayers. Great fixed assets will be bigger in an amount of tax paid, so it will encourage companies to take action on tax avoidance. (Irianto, & Sudibyo & S.Ak, (2017).). Also, this theory underpins a dual agency conflicts relationship between tax experts and two other parties (government and their clients) , by having an obligation to act in the best interests of their clients and on one hand while upholding tax regulations on the other.

2.2.3 Stakeholder Theory

This theory was propounded by Freeman in 1984. The main focus of stakeholder theory is how a firm monitors and responds its stakeholder needs (Rahmawati *et al.,* 2018). A stakeholder is parties having direct or indirect interest towards the existence of firm activity. According to Freeman *et al.,* (2011), a stakeholder is any group or individual that can influence or be influenced by the achievement of organizational goals. The stakeholder theory is an extension of the agency theory which concentrates on the incongruence of the interests of equity owners and managers and how to resolve the conflicts.

The stakeholder theory looks beyond the relationship between shareholders and managers and include other categories of stakeholders (Nwaobia *et al.,* 2016). A company's success depends on its ability to balance the diverse interests of its stakeholders or stakeholders. Nwaobia *et al.,* (2016) opined that this theory considers the firm as a nexus of contracts between management and shareholders on one hand, and also employees, shareholders, creditors, government and other stakeholders on the other hand. Thus, from the point of view of the stakeholder theory, concern should go beyond the traditional management – shareholder relationship to include all other stakeholders, for instance, government, creditors etc. With many interest groups keeping an eye on managers' activities, pursuing exclusively their own personal goals is reduced. Managers can survive only when they are successful; and they are successful when they manage the company better than someone else (Rahmawati *et al.,* 2018). Therefore, it can be said that the wealth of shareholders in the long-run can be maximised when government, customers, employees and other stakeholders of the firm are satisfied.

However, stakeholder's theory also explains that company do not only prioritize the interests of shareholders but the company began to prioritize the interest of the government. The government becomes satisfied when appropriate taxes are remitted while the shareholders are satisfied if these taxes do not negatively affect the liquidity overall financial performance of their firm (Salawu, Ogundipe & Yeye, 2017).

2.2.4 Tax Deterrence Thoery

The tax deterrence theory concentrates on the cost of implication of tax aggressiveness of which is tax evasion. The theory was developed by Allingham and Sandmo (1972) and it serves as the underpinning for carryout researches on aggressive tax planning. Desai *et al.,* (2006) hold the view that the deterrence model of Allingham and Sandmo (1972) is very germane to explaining agency theory in the context of corporate governance studies. Agency theory conjectures that tax evasion that could arise from tax aggressiveness is a firm's strategic choice defined by an employment contract (actual or implied) between shareholders and tax managers. This employment contract (actual or implied) occasioned by the agency theory is not farther from the fact that managers may presumed that ex ante their effort to reduce tax liability is not compensated for adequately (Desai *et al.,* 2006: Dyreng *et al.,* 2008: Ogbeide *et al.,* 2018).

Additionally, managers may hold the perception that their effort to reduce a company's tax liability in a clandestine manner may lead to the tendency to be vulnerable to tax evasion which affects them adversely and the very of the firm's internal control system. The aforementioned reasons tend to influence them to engage in rent seeking or extraction. In other words, they take advantage of the system to optimize their personal gains to the detriment of the resources owners (shareholders). The essence of the deterrence theory is it that places emphasizes on penalty for tax evasion due to tax aggressive behaviour by managers. This penalty then serves a as deterrent to managers to act in the interest of existing tax laws in attempt to engage in tax aggressive behaviour in corporate organizations (Ogbeide *et al.,* 2018)

More so, penalties for tax evasion can be imposed on either tax managers or a company but the higher deterrence of tax evasion can be achieved through penalizing tax managers instead of the corporation. Ogbeide *et al.,* (2018) noted that the penalty on the firm reduces the wealth of its shareholders while the penalties on tax managers who attempted to reduce tax liabilities via illegal tax method should be reimbursed and hence increased uncertainty in determining the optimal level of employment contracts. Similarly, the deterrence theory of tax evasion propounded by Allingham and Sandmo (1972) demonstrates that individual tax payers endeavour to minimize the consequences of tax evasion by taking into consideration three basic aspects which include the chance of being caught, the size of penalty and of course the intensity of their risk aversion.
The deterrence model presumes that individual tax payers neither have moral judgment nor civic duties for tax payments. What they do is to choose the best level of tax evasion to maximize their expected satisfaction. In the deterrence theory, tax evasion has a trade – off. The trade off is that a high payoff is offset by penalties imposable by the tax authorities. It is the stiff penalties that do serve as deterrent to individual / corporate tax payers to avoid tax evasion under aggressive tax behaviour. According to Ogbeide *et al.,* (2018), the deterrence theory may not be applicable to individual tax payers in particular, it is however peculiar to

large publicly traded companies which are owned by shareholders but operated by managers.

2.3 Empirical Review

The section aimed to review various studies that are conducted on determinants of corporate tax planning in developed countries, developing countries and Nigeria in order to establish the existing coverage and bring out the contribution of this study.

2.3.1 Empirical Studies on Developed Countries

In china, Wang and Chen (2012) conducted a research on the motivation for tax avoidance in earnings management by examining data from Chinese A share non- financial listed companies from annual reports during 2004-2006. Dependent variable used in this study takes the difference between accounting profit and taxable profit as proxy variables (Diff) for tax-avoidance behaviour while Independent variable used was "DA" is discretionary accruals, calculated by the Modified Jones Model. Finding revealed that there is a significant positive correlation between earnings management and tax avoidance and the long-term business performance weakens this positive correlation.

Also, Rego and Wilson (2008) investigated the association between tax reporting aggressiveness and the level of chief executive officer and Chief financial officer compensation, after controlling for standard economic determinants of such compensation using sample which consists of 18,827 CEO-year observations from 1992 through 2006 in United Kingdom. Employing multiple regression, findings shows that there is no evidence that firms with aggressive tax reporting and weak corporate governance pay their CEOs and CFOs more than other firms. Moreover, finding also revealed that there is no evidence that the positive relation between executive compensation and tax reporting aggressiveness leads to poor future firm performance.

In addition, Dyreng, Hanlon, and Maydew (2008) develop and described a new measure of long-run corporate tax avoidance that is based on the ability to pay a low amount of cash taxes per dollar of pre-tax earnings over long time periods. The study used the long-run cash effective tax rate to examine the extent to which some firms are able to avoid taxes over periods as long as ten years, and how predictive one-year tax rates are for long-run tax avoidance. Thus, using a sample of 24,390 firm-years, corresponding to 2,439 unique firms in U.S during the years

1995–2004 that have an unbroken string of cash taxes paid, income tax expense, and pre-tax income. The study found out that there is considerable cross-sectional variation in tax avoidance. Also the study found out that annual cash effective tax rates are not very good predictors of long-run cash effective tax rates and, thus, are not accurate proxies for long-run tax avoidance.

Likewise, Tang, and Firth (2011) investigated the relationship between book–tax differences (BTDs) and earnings management, tax management, and their interactions in Chinese-listed companies using unique tax effect BTDs obtained from Chinese B-share-listed firms. The study adopted the ex-post facto research design and employed OLS estimation technique for data analysis. The study found out that firms with strong incentives for earnings and tax management exhibit high levels of abnormal BTDs and recommended that BTDs can be used to capture both accounting and tax manipulations induced by managerial motivations. Findings also provides that earnings management explains 7.4% of abnormal BTDs, tax management accounts for 27.8% of abnormal BTDs, and their interaction explains 3.2% of abnormal BTDs.

In the light of the above, Frank, Lynch and Rego (2009) investigated the association between aggressive tax and financial reporting using a sample consisting of 49,886 firm-years (8,100 firms) in U.S. The study was build on the effective tax rate and discretionary accrual literatures and estimate discretionary permanent differences as measure of tax reporting aggressiveness and financial reporting aggressiveness respectively. Employing the regression analysis, the study found out that a strong, and positive relationship between Tax Reporting Aggressiveness and Aggressive Financial Reporting.

In contrast with above findings, Badertscher, Katz and Rego (2010) examined whether private equity (PE) firms influence the extent and types of tax planning of their portfolio firms as an additional source of economic value in United States using a sample consisting of private firms that have publicly-traded debt selected based on all firm-year observations on COMPUSTAT in any of the 28 years from 1978 through 2005. Employing three measures that reflect book-tax non-conforming tax planning, which reduces a firm's income tax liability but not its financial income, including total book-tax differences, discretionary permanent book-tax differences, and cash effective tax rate, the study documented that private equity -backed portfolio firms engage is significantly more non-conforming tax planning and have lower marginal tax rates than other private firms, and also documented that PE-backed portfolio firms pay 14.2 percent less income tax per dollar of pre-tax income than non-PE backed firms, after controlling for net operating loss carry forwards and debt tax shields.

More so, Harrington and Smith (2012) investigated whether U.S. public corporations with a strategy of general tax avoidance use more debt compared to non-tax avoiders. The sample for investigating the effect of ante general tax avoidance on leverage in the general cross section contains 25,122 firm years, and the sample restricted to refinancing activities has 14,576 firm years. However, using ordinary least square regression, empirical findings shows that the influence of ex ante general tax avoidance on leverage are highly robust (and generally stronger) using alternative methods to identify tax avoiders. This study does not find strong support for the notion that ex ante likely to issue debt at a refinancing event compared to other firm. Cross-sectional regression results indicated the ex ante general tax avoidance is a robust positive influence on leverage. Overall results suggests that firms with an ex ante focus on general tax avoidance use relatively more debt in their capital structures

Similarly, Desai and Dharmapala (2006) examined alternative theories of corporate tax avoidance using unexplained differences between income reported to capital markets and to tax authorities. Data were obtained from three sources; Financial accounting data are drawn from Standard and Poor’s Compustat database, executive compensation data (and certain other control variables) from Standard and Poor’s Execucomp database, and data on institutional ownership of firms from the CDA/ Spectrum database, Leading to a data set with 4,492 observations at the firm-year level on 862 firms over the period 1993–2001. Ordinary least square regression estimates indicated that the effect of tax avoidance on firm value is a function of firm governance, as predicted by an agency perspective on corporate tax avoidance. The results suggest that the simple view of corporate tax avoidance as a transfer of resources from the state to shareholders is incomplete given the agency problems characterizing shareholder-manager relations.

In addition, Dyreng, Hanlon, and Maydew (2010) investigated whether individual top executives have incremental effects on their firms’ tax avoidance that cannot be explained by characteristics of the firms in United States using sample which includes 12,958 firm-years of data, corresponding to 1,138 distinct firms, and 908 distinct executives for the years 1992 to 2006. Employing Ordinary least square regression, finding indicated that individual executives play a significant role in determining the level of tax avoidance that firms undertake, incremental to characteristics of the firm.

However, Armstrong, Blouin and Larcker (2012) examined the relationship between the incentives of the tax director and GAAP and cash effective tax rates, the book-tax gap, as measures of tax aggressiveness. Proprietary data set with detailed executive compensation information were obtained from a large human resources consulting firm which consists of 423 unique firms in United States and 1,162 firm-year observations that are nearly uniformly distributed across the sample period for the fiscal years from 2002 to 2006. Employing multiple regression, findings reveals that the incentive compensation of the tax director exhibits a strong negative relationship with the GAAP effective tax rate, but little relationship with the other tax attributes.

In contrast with the findings of Armstrong, *et al*.,2012; & Harrington *et al*.,2012, Lennox, Lisowsky, and Pittman(2013) contributes to resolving the issue competing arguments on whether U.S firms that are aggressive in their financial reporting exhibit more or less tax aggressiveness by examining the association between aggressive tax reporting and the incidence of alleged accounting fraud. Sample were complied by identifying frauds by collecting from the SEC Web site and Lexis-Nexis the AAERs, which outline the results of the SEC's investigations into alleged accounting violations, issued between January 1, 1981 and October 31, 2006. Employing multivariate and relying on several proxies for tax aggressiveness to triangulate the evidence, the study finds that tax aggressive U.S. public firms are less likely to commit accounting fraud.

Contrary to the findings of Lennox *et al.,*(2013) and Armstrong *et al.,*(2012) , Blaylock, Shevlin, and. Wilson (2012) investigated why temporary book-tax differences appear to serve as a useful signal of earnings persistence. The study used a sample of all U.S firms on the Compustat and CRSP tapes with non-missing asset and stock return data for the years 1993–2005. However, employing the regression analysis, the study found out that firms with large positive book-tax differences likely arising from upward earnings management (tax avoidance) exhibit lower (higher) earnings and accruals persistence than do other firms with large positive book-tax differences.

Also, Cheng, Huang, Li and Stanfeild (2012) examined the impact of hedge fund activism on corporate tax avoidance in china. The study collects Sample by obtaining all Schedule 13D and 13D/A filings between January 1, 1994 and December 31, 2008 from the EDGAR database of the SEC and using the panel data regression, findings suggests that the increase in tax avoidance is greater when activists have a successful track record of implementing tax changes and possess tax interest or knowledge as indicated by their SEC 13D filings.

However, Khaoula, A., & Mohamed Ali, (2012) posited the effect of demographic gender diversity on corporate tax planning in America. Data were extracted from various sources including financial accounting data is from Compustat database and governance from IRRC or proxy statements. Using a sample of 300 large American firms (S&P 500) for the 1996-2009 periods, finding indicated that gender diversity on the board is not significant and doesn't have an effect on tax planning. Board independence enhances tax practice. ROA is significant and associated with tax planning. Board size and firm size do not exhibit significant relations.

Contrarily to the work of Khaoula, & Mohamed Ali, (2012) , Devos (2012) also conducted an empirical study on whether or not there is a relationship that exists between the advices provided by tax professionals and the compliance behaviour of Australian individual taxpayers (both evaders and non evaders) taken from the taxpayers' perspective. Using survey instrument which comprised of six sections including 30 questions that are specifically related to tax professionals were investigated on a five point likert scale. Findings revealed that there was a statistically significant relationship between the need for engaging tax professionals and compliance behaviour generally. There was also evidence of a statistically significant relationship between tax professionals' aggressive advice and the compliance behaviour of non-evaders.

However, Huseynov and Klamm (2012) ascertained the effect of three measures of corporate social responsibility (CSR) including corporate governance, community and diversity on tax avoidance in firms that use auditor provided tax services in United States. Sample for this study consists of S&P 500 firms which are considered large firms that are more effective in tax management. Using the dynamic panel data multiple regression, finding shows that the interaction of community concerns coupled with tax management fees positively affects both GAAP and Cash effective tax rates, while the interaction of corporate governance strengths and diversity concerns with tax management fees negatively affects Cash effective tax rate.

More so, Badertscher, Katz and Rego (2013) determined whether variation in the separation of ownership and control influences the tax practices of private firms with different ownership structures using sample which consists of 2628 private firm-year observations and 549 private firms in United States that have publicly-traded debt covering 31 years from 1980 through 2010. Using ordinary least square regression, findings revealed that firms with greater concentrations of ownership and control, and thus more risk averse managers, avoid less income tax than firms with less concentrated ownership and control.

Likewise, Higgins, Omer and Phillips (2013) investigated a research on the influence of a firm's business strategy on its tax aggressiveness using a test sample of 29,324 firm-years in United States covering from1993 to 2010. Using ordinary least square regression (OLS), findings provide evidence that a firm's business strategy not only influences its level of tax avoidance but its degree of tax aggressiveness. Also, Ole-Kristian, Mark(Shuai), and Thomas (2013) examined the relationship between corporate tax avoidance and disclosure of geographic earnings for U.S. multinational companies in the post-SFAS 131 period which consists of 4,545 observations, of which 3,755 represent firms that do not disclose geographic earnings. In the post-M-3 period, 4,547 of 5,165 observations come from firms that do not disclose geographic earnings in the post-SFAS 131 periods. The dependent variable proxy by firms' current effective tax as measure of tax avoidance. Using the regression estimation technique, findings reveals that after the adoption of Statement of Financial Accounting Standards No. 131 in 1998, firms opting to discontinue disclosure of geographic earnings in their financial reports have lower worldwide effective tax rates.

Moreso, Chyz (2013) conducted a study on whether executives who evidence a propensity for personal tax evasion (suspect executives) are associated with tax sheltering at the firm level with a sample construction by collecting all stock acquired by insiders through stock-option exercises between January 1, 1996 and August 29, 2002. Using multiple regressions, findings indicated that the presence of suspect executives is positively associated with proxies for corporate tax sheltering. In addition, firm-years with suspect executive presence have significantly higher cash tax savings relative to firm-years without suspect executive presence.

In addition, Richardson *et al.*, (2013) conducted a research on the impact of board of director oversight characteristics on corporate tax aggressiveness using a 812 firm-year data set of 203 publicly-listed Australian firms covering a period of 2006–2009. Dependent variable was represented by corporate tax aggressiveness and proxied by a dummy variable, coded 1 in the first year of the 2006–2009 sample period that the firm is subject to a tax dispute with the tax authority concerning tax aggressiveness under the Australian tax legislation, otherwise 0; while board of director oversight are denoted by the existence of an effective risk management system and internal controls, external auditor type, external auditor independence and internal audit committee independence. Based the regression, results provides that if a firm has established an effective risk management system and internal controls, engages a big-4 auditor, its external auditor's services involve proportionally fewer non-audit services than audit services and the more independent is its internal audit committee, it is less likely to be tax aggressive. Results also indicated that the interaction effect between board of director composition (i.e a higher ratio of independent directors on the board) and the establishment of an effective risk management system and internal controls jointly reduce tax aggressiveness.

More so, Salihu, Obid and Annuar (2013) conducted an investigation on the conceptual framework for the study of the determinants of corporate tax aggressiveness in a concentrated ownership setting with an emerging capital market. Using a theoretical approach, the study identifies potential benefits and costs of corporate tax aggressiveness to develop a framework of the likely forms of ownership that could be related more to tax aggressive planning. Findings revealed that family, government and foreign ownerships as the three forms of corporate ownership which represents the determinants of corporate tax aggressiveness given the costs/benefits consideration of the aggressive activities.

Similarly, Salihu, Annuar and Obid (2013) researched on an empirical analysis on measures of corporate tax avoidance evidenced from an emerging economy. In this study, three established measures which includes Effective tax rate (ETR), Book-tax gap (BTG) Differential TAX were compared with the proposed measure by Hanlon and Heitzman (2010) for conforming tax avoidance using data from the annual reports of the Malaysian top 100 companies based on FTSE tradable index. Based on ANOVA results and post hoc test, findings shows that the proposed measure to be statistically and significantly different at 5%.

In contrast to the work of Salihu, Obid and Annuar (2013), Richardson *et al.*, (2013) examined the association between corporate social responsibility (CSR) and corporate tax aggressiveness using sample of 408 publicly listed Australian corporations for the 2008/2009 financial year.

The study employed corporate social responsibility disclosure as an indicator for corporate social responsibility performance and as proxy for CSR while corporate tax aggressiveness was measured by effective tax rate. Based on multiple regression analysis, findings shows that there is a negative and statistically significant association between CSR disclosure and tax aggressiveness which holds across a number of different regression model specifications, thus more socially responsible corporations are likely to be less tax aggressive in nature.

Similar to work of Ogbeide, (2017), Jalan, Kale, and Meneghetti (2013) assessed the effect of leverage on corporate tax aggressiveness and derived the optimal level of aggressiveness for a firm with a given level of debt in a two-date, single-period model in which a firm's manager with an equity stake in the firm maximizes her payoff. Using main sample consists of 66,198 firm-years (9,648 unique firms) over the period 1986-2012. The study define BTDs and the ratio of adjusted spread to pre-tax book income to capture a firm's tax aggressiveness as and also the define leverage as the book value of debt divided by the book value of assets minus the book value of common equity plus the market value of equity and measured measure the firm's value with Tobin's q, computed as book value of debt plus market value of common equity divided by book value of assets. Based on the regression results, findings show that the negative effect of debt on tax sheltering is stronger for riskier firms; and weaker for larger, better governed, more profitable firms, and for firms that are in the "public eye". We provide some evidence that while leverage reduces sheltering, it increases the proportion of income that is sheltered. Findings also indicated that tax sheltering reduces firm value.

Donohoe (2014) examined the economic effects of financial derivatives on corporate tax avoidance by obtaining Compustat observations for fiscal-years 2000–2008. This study estimates the corporate tax savings from financial derivatives. Findings provide economic insight into the prevalence of derivatives-based tax avoidance.

Similarly, Lin, Tong, and Tucker (2014) researched on corporate tax aggression and debt by providing a trade off model of the capital structure that allows leverage to be a function of a firm's choice of tax aggressiveness. The sample used in this study consists of 1500 U.S. firms: the Standard and Poor's 500, the Standard and Poor's 400, and the 600 largest publicly-traded companies not included in these two Indices. The tax reserve data (UTB's) are hand collected from these firms' 10 K filings with the Securities and Exchange Commission (SEC) for fiscal tax years 2006–2011. Based on the results of the regression model, various measures of corporate tax aggressiveness are found to be a reliable determinant of leverage for the sampled firms. Finding also shows that the association between corporate tax aggressiveness and corporate debt policy is more pronounced in the non-credit-crisis period than in the credit crisis period.

Also, Annuar, Salihu and Obid (2014) conducted an empirical investigations into the relationship between corporate ownership structure and corporate tax avoidance among Malaysian listed companies. corporate tax avoidance measured as the proportion of cash tax paid to operating cash flow represents the dependent variable while family, foreign and government ownerships were used as proxy for corporate ownership structure Data was obtained from annual report of Malaysian companies listed on the main market of Bursa Malaysia over the time-frame of five years from 2009 to 2013. Using the Generalized Method Moment (GMM) estimator, and based on cost/benefits consideration of tax avoidance, findings shows that family; foreign and government ownerships could be associated with corporate tax avoidance among Malaysian listed companies

Similarly, in terms of methodology and finding with work of Annuar, *et al*., (2014) , Salihu ,Obid, and Annuar (2014) examined the influence of substantial government ownership on corporate tax aggressiveness; empirical evidence from Malaysia. Data were sourced from the top 100 Malaysian companies based on FTSE tradable index covering three-year financial period. Using the system GMM estimation of the dynamic panel data models for four similar measures of tax avoidance shows an inconclusive finding, that is, findings from this analysis shows an inconclusive conclusion on whether government linked companies are less tax avoidant or not.

Additionally, Hong, Kim, and Matsunaga (2014) researched on how the business group ownership structure and country-level characteristics combine to influence the degree of a firm's tax avoidance in U.S. using sample period that covers 14-year period (2000–2013). The study utilize measure of tax avoidance for Atwood et al. (2012) as the reduction in explicit taxes paid relative to the country's statutory rate. Adopting baseline regression model coupled the (OLS) estimation technique, the study found out that business group firms exhibit more tax avoidance than standalone firms in in developed market countries and recommended that ultimate owners are able to use their financial flexibility and control to allocate resources to reduce their tax liability and overcome the associated non-tax costs. In contrast, the study found that business group firms exhibit lower tax avoidance in emerging market countries, where the non-tax costs are higher.

Besides this, Martinez and Ramalho (2014) investigated whether family firms are more tax aggressive in terms of tax planning than non-family firms in Brazil using a sample of firms listed on the BMF & Bovepa covering from 2001 to 2012. Finding reveals that there is a significant relationship between classification as a family firm and tax aggressiveness, based on two metrics. The first, effective tax rate, captures the actual taxes paid in relation to pre-tax earnings, while the second, book-tax differences, reflects the differences between accounting income and taxable income. The family firms in the sample were more tax aggressive than the non-family firms. For the variable book tax differences, family firms presented a positive sign, indicating a tendency for higher book tax difference. Conversely, effective tax rate had a negative sign, providing a tendency for family firms to pay lower taxes.

Moreso, Armstrong, Blouin, Jagolinzer and Larcker (2015) examined the link between corporate governance, managerial incentives, and corporate tax avoidance in United States by employing sample selection of all firms listed on Compustat for the period of three year from 2007 to 2011 fiscal years for which data to compute at least one of the tax attributes were available. However, adopting quantile regression, findings provides that there is a positive relationship between board independence and financial sophistication for low levels of tax avoidance, but a negative relation for high levels of tax avoidance. These results indicated that these governance attributes have a stronger relation with more extreme levels of tax avoidance, which are more likely to be symptomatic of over- and under-investment by managers.

In contrast with findings of Armstrong, *et al.*, (2015) above, Lanis, Richardson and Taylor (2015) examined the impact of board of director gender diversity on corporate tax aggressiveness using a sample of 418 U.S S&P 500 firms which covers a period between 2006-2009. Gender diversity which was the independent variable was measured as the proportion of directors serving on the board who are female directors and specifically employed effective tax rates (ETRs) and the book-tax gap (BTG) as measures of tax aggressiveness in this study. Based ordinary least squares regression, results reveals a negative and statistically significant association between female representation on the board and tax aggressiveness after controlling for endogeneity which are consistent across
several measures of tax aggressiveness and additional robustness checks

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Similarly, Hu, Cao, and Zheng (2015) investigated the relationship listed companies' income tax planning and earnings management: Based on China's Capital Market. The study adopts research approach that combines theoretical analysis and empirical analysis by deepening into theoretical analysis on the listed companies' choice between pre-tax earnings management activities and earnings management activities, and then exemplify theory. Using hand-collected data from the misstatement firms' financial statements, the study gathered its findings by analyzing results of descriptive statistics and correlation test and logistic regression of model. Based on the results, Different motivations do influence the choice of earnings management strategies, specifically, when the firm has motivations to turn losses into gains and has the motivation to avoid penalty cost associating with fraud being found, the firm prefers to employ more conforming earnings management strategies.

In the light of the above work, Lanis and Richardson (2015) also researched on whether corporate social responsibility performance is associated with corporate tax avoidance by employing a sample of 434 firm-year observations (i.e., 217 tax-avoidant and 217 non-tax avoidant firm-year observations) from the Kinder, Lydenberg, and Domini database covering the period 2003–2009. Based the logit regression results, finding provides that the higher the level of CSR performance of a firm, the lower the likelihood of tax avoidance, indicating that more socially responsible firms are likely to be aggressive in tax planning.

In the light of above, Salihu, Annuar and Obid (2015) conducted a research on Foreign investors' interests and corporate tax avoidance: Evidence from an emerging economy using sample data which were extracted from annual reports of the FTSE Bursa Malaysia Top 100 firms for the financial periods from 2009 to 2011. Using four similar measures of tax avoidance and three

related measures of foreign investors' interest , the study analyse dynamic panel data with a system GMM estimator which shows significant positive relationships between foreign investors' interests and the measures of corporate tax avoidance among large Malaysian companies.

Similar to the finding of Salihu *et al.*, (2015), Ahmad, Bachek and Saleh (2007) conducted an empirical analysis of tax holiday and its association with earnings management that is, the tax non-compliance activity among Malaysian companies which are under tax holiday incentives known as pioneer status companies, in which secondary data were obtained from the Companies Commission of Malaysia. Purposive sampling method was employed, in which sample total of 216 companies were identified for test from the population of all manufacturing companies that have enjoyed pioneer status and exemption expired in 2002 until 2006. Discretionary current accruals were used as a proxy to earning management. Using multiple regression analysis, finding indicated that pioneer status companies manage their earnings to minimize their tax burden.

Contrary to the above work, Dyreng, Hoopes, and Wilde (2015) examined the relationship between public pressure and corporate tax behaviour using sample consisting of all United States firms listed on the FTSE 100 in 2010. Using Compustat Global, data for these 100 firms between 1997 and 2012, which results in a maximum sample size of 1,500 firm-years. Dependent variable is effective tax rate, which is the book effective tax rate less the statutory tax rate.. Using ordinary least regression, finding reveals that firms that were newly required to disclose a full subsidiary list decreased their tax avoidance and use of tax havens relative to firms that already disclosed a full subsidiary list.

Also, Hsieh and Willis (2015) examined links between corporate tax avoidance, specifically for firms having subsidiaries in tax haven countries, and executive incentive compensation using a sample of 100 largest publicly traded federal contractors in fiscal year 2001 identified in the United States (U.S.) General Accounting Office (GAO) 2004 report. Employing multiple regression, findings show that incentive compensation is related to firms' tax sheltering decisions and executive equity-based compensation positively affects the likelihood of having tax-haven subsidiaries and provide empirical evidence that incentive compensation helps to align owners and managers' incentives, which in turn, causes managers to be more aggressive about tax avoidance.

In addition, Dallyn (2016) conducted a research on an examination of the political salience of corporate tax avoidance in United Kingdom: a case study of the tax justice network. The approach to this study was principally a qualitative case study based one, because political salience is employed as a heuristic to describe how the Tax justice network has worked to raise the political salience of corporate tax avoidance. The study deduced that political salience serves as a useful heuristic tool for accounting analysis because it helps to shed light on when, and how, complex accounting issues can acquire a high political profile, and the role of civil society actors in this. While existing political economy accounting analyses have broadened the analytical focus to address the wider social and political context.

In line the study of Kiesewetter, *et al*., (2017), Richardson, Taylor, and Lanis (2016) conducted a research on an empirical analysis on women on the board of directors and corporate tax aggressiveness in Australia. In this study, corporate tax aggressiveness was measured by dummy variable coded 1 only in the first year of 2006-2010 sample period that firm is party to tax with the tax authority regarding tax aggressiveness, otherwise 0 while women presence on board of board was proxy by 3 variables including none female presence on the board, one female presence on the board, more than one female presence on the board. Data were obtained from the sample of all publicly-listed Australian firms which was tested for self-selection bias in the regression model by using the two-stage Heckman procedure. However, Using the multivariate regression analysis, findings provides that, greater than one female presence on the board of directors reduces the likelihood of tax aggressiveness.

Furthermore, Li, Luo, Wang and Foo (2016) examined the relationship between managerial tax aggressiveness and risk of stock price crashing risk using a sample of 9,702 observations between 2008 and 2013 which consist of listed corporate firms in Shanghai Stock Exchange and Shenzhen Stock Exchange, financial and capital market data are sourced from the China Capital Market and Accounting Research and Reset financial database. Employing multiple comprehensive measures of tax aggression and stock price crash risk. Findings revealed that tax aggression and stock price crash risk is positively related, that is, tax aggression is usually accompanied by the management's personal profit expropriation and hiding bad news. With higher tax aggression levels, the risk of stock price crash is higher.

Similarly, an examination on the effect of corporate governance on tax avoidance: evidence from governance reform in United States was carried out by Kerr, Price and Román (2016). Governance data are collected for each company from the "Code of Best Practices" questionnaire filed by México's regulators each year. Due to the availability of data for the Code, analysis ends in 2013. In this study, effective tax rate was measured by the spread between the firm-level effective tax rate (ETR) and the corporate statutory tax rate. Employing ordinary least regression estimation technique, findings show strong and robust evidence that firms with better corporate governance exhibit less tax avoidance both in effective tax rates and current effective tax rates.

Similar to the work of Kerr *et al.*,(2016) above, Streefland (2016) researched on gender board diversity and corporate tax avoidance by adopting a sample of U.S. publicly traded firms derived from the ISS database, containing individual director data and ISS governance database covering from 2009 to 2014. Two different measures was employed to proxy board diversity including number of female directors on the board and Blau-index which represents diversity index , as used in Bear (2010). Using Ordinary Least Squares regression (OLS), finding indicated that the number of female directors is significantly associated with lower GAAP effective tax rates and uncertain tax benefit positions (UTB).

Similar to the work of Harrington and Smith (2012), Kubick, and Lockhart (2016) conducted a study on the association between tax aggressiveness and corporate debt maturity U.S firms by deriving sample containing 10,967 firm-year observations with debt in the capital structure from the intersection of the Compustat and Execucomp databases from 1993 through 2012. Short debt maturity measured as the proportion of corporate debt maturing within the next three years and measure of tax sheltering likelihood as measure of tax aggressiveness which is ETR. Findings indicated that there is a strong evidence that shorter debt maturity is more prevalent for tax aggressive.

In the light of the work of Li, Luo, Wang and Foo (2016), Koester, Shevlin and Wangerin (2016) investigated whether executives with superior ability to efficiently manage corporate resources engage in greater tax avoidance using sample of 44,616 firm-year observations in United states that are approximately evenly distributed across 17-year time period. Using the multiple regression, we examine how higher-ability managers reduce income tax payments and find that they engage in greater state tax planning activities, shift more income to foreign tax havens, make more research and development credit claims, and make greater investments in assets that generate accelerated depreciation deductions.

In addition, Schwarz (2016) conducted a research to analyze the opportunities of American multinationals to reallocate their profits into tax haven. Data sourced for the dependent variables comes from the 'Bureau of Economic Analysis' (BEA), for roughly 50 countries during the period 1999-2001 are available. Employing multiple regression, findings shows that the pre-tax profitability of American multinationals is higher in tax havens. This relationship is consistent with the opportunities of multinationals to shift income outside high-tax jurisdictions and also the paper shows that profit shifting largely takes place into tax havens, whereas other countries do not benefit from profit-shifting activities.

Wurth and Braithwaite (2016) conducted a study on Tax practitioner's experts and tax avoidance: gaming through authorities, cultures and markets'. Using a survey of over 1,000 practitioners preparing and lodging returns for clients with the Australian Taxation Office, this study establishes that the tax practitioner – taxpayer relationship is a micro social process to deliver tax compliance. Three models of the tax practitioner and taxpayer experience are reviewed and research on the role of the tax practitioner is discussed within these frameworks. Drawing on lessons learnt from these three models, an integrated model is provided to broaden the landscape against which we view and study developments in the tax avoidance industry.

Wang, Xu, Zhang and Zheng (2016) conducted a study on Parent-Subsidiary Common Managers and Corporate Tax Planning: Evidence from China using a unique hand-collected data of common managers for Chinese listed firms resulting to a sample of 8,612 firm-years during 2009-2013. Corporate tax planning proxy by GAAP Effective tax rate as measured by current year's income tax expenses divided by pre-tax income while Independent variable measured as managerial ability was proxy with two-stage process that begins with an estimation of total firm efficiency using data envelopment analysis Employing two-stage least squares estimation (2SLS) for the Tax-reducing Effect, finding indicated that a significant portion, 36.4%, of these firm-years have their top managers (Chairman, CEO or CFO) appointed as the board director or the manager of these firm's subsidiaries. Both univariate and multivariate analysis also show a negative association between the indicator for firms with common managers and the effective income tax rates..

Moreno-Rojas, González-Rodríguez and Martín-Samper (2017) conducted a study on determinants of the effective tax rate in the tourism sector employing a dynamic panel data model in Spain based on a panel data set over the 2008-2013 period. Using Arellano-Bond system GMM estimator, findings obtained suggest that the ETR borne is determined by size, financing structure and type of entity and also reveal that there is existence of non-linear relationships between ETR and size and financing structure.

Kiesewetter, Manthey and Johannes (2017) analysed the causal relationship between corporate governance and tax avoidance evidenced from Germany using a regression discontinuity design (RDD) in a two-stage instrumental variable and take advantage of the exogenous variation in the index membership around the DAX and MDAX threshold, in which DAX includes the 30 most valuable companies listed on the Frankfurt stock exchange and MDAX contains the subsequent 50 largest firms. Finding provides that there is a significant discontinuity in the level of the corporate governance characteristics at the cut off. The largest MDAX firms show stronger corporate governance characteristics compared to the smallest DAX firms. Also, findings show that strong corporate governance characteristics drive down the effective tax rate for the DAX firms.

Similar to study of Kiesewetter, *et al*., (2017) above, Ying, Wright and Huang (2017) investigated the influence of state shareholding and control versus institutional investors on tax aggressiveness of Chinese firms which were listed on the Shenzhen and Shanghai Stock Exchanges Markets during 2006-2012. The dependent variable in this study represent the tax aggressiveness which is measured by the book tax differences while state shareholding and control versus institutional investors was measured by the percentage of state shares (including state-owned legal person shares) and ownership concentration. Finding shows that state ownership and control are positively associated with corporate tax aggressiveness. Also there is positive link between the collective shareholding by the top ten shareholders and firm tax aggressiveness. On a contrary, institutional share ownership is negatively associated with corporate tax aggressiveness.

Similar to work of Rego and Wilson (2008), Quillin (2017) examined the association between executive compensation, corporate tax aggressiveness and financial reporting aggressiveness: evidence from SFAS 123R employing a sample which includes 907 firms United States with 3,628 firm-year observations for fiscal years 2004 to 2007. Using ordinary least squares regression, this study shows that, when executive compensation is more sensitive to stock price volatility, firms implement riskier investment and financial policies and take more aggressive positions in financial and tax reporting.

In the same vein with the study of Quillin (2017), Francis, Maharjan, Teng and Wu (2018) determined the effect of executives' pay duration on corporate tax aggressiveness using data from Equilar for the time period from 2006 to 2012, which covers executive compensation including stock grants and option grants for each of top executives with 7,204 firm-year observations. Using Quantile Regression analysis, finding revealed that both dimensions of pay duration, grant size and vesting time, positively affect tax aggressiveness. More so, find that tax aggressiveness of firms with long pay duration increases firm value, suggesting that long pay duration is an effective governance mechanism to prevent managers from investment myopia and therefore encourages aggressive tax avoidance.

Also, Zeng (2018) examined the relationship between corporate social responsibility (CSR) and tax avoidance as well as how CSR and country-level governance interplay in affecting tax avoidance in an international setting using listed companies from 35 countries with a final sample which includes 8,993 firm-year observations for each year from 2011 to 2015 and relying on several proxies for corporate tax avoidance activities including the difference between the statutory tax rate and the annual effective tax rate, the book-tax difference and the residual book-tax differences. Using multivariate, findings shows strong evidence that CSR is positively related to tax avoidance and also finds that in countries with weak country-level governance, firms with higher CSR scores engage in less tax avoidance, implying that CSR and country-level governance are substitutes.

Razali, Ghazali, Lunyai and Hwang (2018) conducted a study to determine the impact of tax planning on firm value of firms listed in Bursa Malaysia. Tax planning proxies in this study are the Effective Tax Rate (ETR) and Book Tax Differences (BTDs). The 387 samples data were collected from the DataStream from period of 2014 to 2016. Using the firm size, leverage, asset tangibility, firm age and dividend as control variables, the regression results show that ETR has a significant and positive relationship with firm value while BTDs has insignificant negative relationship with firm value. Firm with less tax planning activities may signal investors that the firm is more transparent in publishing their financial information. Control variables such as leverage, asset tangibility, firm age and dividend have negative relationship with firm value. This study recommended that ETR proxy is suitable to determine firm value rather than BTDs.

Su, Li and Ma (2018) investigated the effects of corporate dispersion on tax avoidance from geographical and institutional dispersion perspectives by using evidence from China. Using a panel data of Chinese listed firms during 2003-2015, this study estimated with correlation analysis and multiple regression analysis. Finding revealed that geographical and institutional dispersion are negatively associated with the degree of corporate tax avoidance. However, corporate governance mechanisms and female chief executive officers can mitigate the negative relation between corporate dispersion and tax avoidance. The results also indicate that ineffective internal control is one of the channels through which corporate dispersion reduces tax avoidance.

In the same view, Gul, Khedmati, and Shams (2018) investigated whether managers of firms with managerial acquisitiveness also engage in corporate tax avoidance using a sample of comprises 11,327 firm-year observations of US listed firms during the 24-year period from January 1991 to December 2015. The dependent variable (tax avoidance) measures of tax avoidance (cash ETRs). Using the Cross-Sectional Regression Analysis, the research work found that there is a statistically significant association between firm acquisition decisions and corporate tax avoidance.

However, Coulmont, Berthelot and Gagné (2018) examined the comparison between the compensation of CEOs of firms listed on the S&P/TSX Composite Index and the amount of corporate income tax these firms pay. Using ordinary least square regression, the study findings show that more than 40 of the 203 sampled firms between 2013 and 2015 paid less in income tax than in CEO compensation. Nearly 70% of these firms paid no taxes or received a refund, while only a minority of them reported a net loss. This study findings reveal that one-quarter of the sample firms do not seem to pay their fair share of taxes each year. This study also show that in paying little income tax, each year, more than 19.7% of the S&P/TSX Composite Index sample firms spent less on contributing to the growth of the economy that supports them than they spent on compensating their CEO.

Similarly, Augusto and Araujo (2019) also seeks to verify whether incentives through the CEO Compensation as a result of the use of tax planning in Brazilian companies with corporate governance using a sample of 100 largest non-financial companies who have adopted tax planning in Brazilian publicly quoted companies on index IBRx 100 as at 25 February 2019 during the crisis period by years of 2010 to 2016. The dependent variable tested was a proxy the total remuneration average and the explanatory variable used was a proxy for tax planning. Findings revealed that payment of additional remuneration to executives reduces the tax burden of companies and also provides that corporate governance has a crucial role in restricting the use of tax planning.

Also, Feng, Habib and Tian (2019) investigated the association between aggressive tax planning and stock price synchronicity. Employing the special institutional background of China, this study constructs tax aggressiveness and stock price synchronicity measures for a large sample of Chinese stocks spanning the period 2003–2015. Using ordinary least square regression finding shows that there is significant and positive association between aggressive tax planning and stock price synchronicity.

Similar to studies of (Kerr,*et al*., 2016 & Richardson, *et al*.,2016), Kovermann and Velte (2019) conducted a review recently published literature (79 articles) on the impact of corporate governance on corporate tax avoidance in Germany. Employing a stakeholder-oriented view, finding revealed that various aspects of corporate governance, such as incentive alignment between management and shareholders, board composition, ownership structure, capital market monitoring, audit, enforcement and government relations, and other stakeholders' pressure have a strong influence on corporate tax avoidance. Findings also indicates that effective corporate governance mechanisms steer tax aggressiveness at its firm-specific optimal level.

As related to study of Moreno-Rojas, *et al*., (2017), Hazir (2019) also conducted a study on the determinants of effective tax rates by Turkish public listed companies (excluding banking and insurance sectors) between 2007-2016 comprising a total of 2640 firm-year observations and data were extracted from the financial statements of firms in respect of the variables. The study establishes the relationship between ETRs and firm specific characteristics of size, leverage, asset mix and profitability. Using the panel data estimation procedures, finding provides that the tax burden is determined by the characteristics of firm size, leverage and capital intensity of each company.

2.3.2 Empirical Studies from Developing Countries

Ahmad, Bachek and Saleh (2007) investigated on empirical analysis of tax holiday and its association with earnings management that is, the tax non-compliance activity among Malaysian companies which are under tax holiday incentives known as pioneer status companies, in which secondary data were obtained from the Companies Commission of Malaysia. Purposive sampling method was employed, in which sample total of 216 companies were identified for test from the population of all manufacturing companies that have enjoyed pioneer status and exemption expired in 2002 until 2006. Discretionary current accruals were used as a proxy to earning management. Using multiple regression analysis, finding indicated that pioneer status companies manage their earnings to minimize their tax burden.

Also, Graham and Tucker (2006) researched on Tax shelters and corporate debt policy using a unique sample of 44 tax shelter cases from 1975 to 2000 to investigate the magnitude of tax shelter activity and whether participating in a shelter is related to corporate debt policy. Employing regression analysis, findings shows that firms in the sample use less debt when they engage in tax sheltering compared to companies with similar pre-shelter debt ratios, the debt ratios of firms engaged in tax shelters fall by about 8%. The tax shelter firms also appear underlevered if shelters are ignored but do not appear underlevered once shelters are considered.

Similar to the work of Ahmad, Bachek and Saleh (2007) above , Chen, Dhaliwal, and Trombley (2007) examined the effect of tax planning and earnings management on the relative informativeness of book income and taxable income informativeness of book income and taxable income using the sample which consists of firms with required financial statement information in the 2006 Compustat annual data files that also have stock returns available in the CRSP (Center for Research in Security Prices) data files. These criteria result in 60,636 firm-year observations over the period from 1993-2005. The study conducted two sets of tests including the incremental effect of tax planning and earnings management on the relative informativeness of book and taxable income and the relation between voluntary conformity and the relative informativeness of book and taxable income. Based the results of regression analysis, the study concluded that high tax planning firms have relatively less informative taxable income than low tax planning firms, controlling for earnings management, and that high-earnings-management firms have less informative book income than low-earnings-management firms, controlling for tax planning.

Similarly, Marques, Rodrigues, and Craig (2011) conducted a research on earnings management induced by tax planning: The case of Portuguese private firms by using data for tax years 2001 and 2002 from the sample size of 6652 firms: 3255 firms in 2001 and 3397 firms in 2002. Using regression analysis, finding revealed that earnings manipulation appears to have been motivated by desire to minimize special payment on account tax policy which was introduced by the Portuguese government legislators. It was also found out that Firms whose estimate of SPA liability fell within the range of minimum and maximum limits of the SPA had higher levels of discretionary accruals than firms whose estimate was (equal to or) above the ceiling imposed by the new legislation to introduce a system of “special payment on account” (SPA). However, firms with higher rates of income tax were found to reduce earnings to near zero. Firms with higher average income tax rates were more likely to manipulate their earnings than other firms.

In addition, Lim (2011) examined the impact of tax avoidance on the cost of debt and its interaction effect with shareholder activism by using Sample firms which are selected from companies listed on the Korean Stock Exchange between 1994 and 2003. The study employed discretionary accrual was used as the proxy for earnings management and measured shareholder activism with institutional ownership. Findings shows that there is a negative relationship between tax avoidance and the cost of debt, supporting the trade-off theory. Findings also indicated that tax avoidance reduces the cost of debt through trade-offs and creates a managerial rent diversion, which is mitigated in firms with larger institutional holdings.

More so, Blaufus & Zinowsky (2013) researched on the determinants of experts’ tax aggressiveness: Experience and personality traits. This study analyzes how the Big Five personality traits and professional experience affect the aggressiveness of tax preparers’ recommendations. Moreover, the study provided an evidence that the danger of potential reputation losses reduces subjects’ tax aggressiveness regardless of whether the subject is highly experienced aim. The study conducted a survey among tax professionals of a Big Four accounting firm and tax students. Using treatment-effects regressions, the study revealed that personality traits have direct and indirect effects on tax aggressiveness

In addition to the above study of Blaufus & Zinowsky (2013), Killian *et al.,* (2015) conducted a research on tax aggression among tax professionals: the case of south africa and investigates the factors that lead to tax aggression among tax preparers in South Africa. Using a pilot survey designed to detect various levels of tax aggression of tax professionals in South Africa with assistance from the South African Institute of Chartered Accountants, The results extend the current literature on tax aggressive behaviour by tax practitioners, and shed light on the tax compliance dynamic in a time of change.

In the light of the studies of Augusto et *al*., (2019), Aliani (2014) investigated the relationship between CEO characteristics and corporate tax planning evidence from US companies using a sample of 300 US firms of S&P 500 over a period of 15 years going from 1996 until 2010 from the US Securities and Exchange commission filings. Employing the ordinary least square regression, the results of this study revealed that the educational level and specialty of the CEO influence significantly the tax strategy used by the firm. However, the study found insignificant relationship between tax planning and the other variables of our study (experience, seniority, age).

Similar to work of Blaufus & Zinowsky (2013), and Killian *et al.,* (2015), Takril and Sanusi (2014) investigated on an exploratory study of Malaysian tax practitioners' perception on the practice of aggressive tax avoidance. The objective of this study is to explore the perception of Malaysian tax practitioners in giving tax advice to tax clients whether to promote aggressive tax avoidance or to promote tax compliance. A survey approach is used to obtain information from tax practitioners practicing in public accounting firms in urban towns. Tax practitioners who perceived leniently on the practice of aggressive tax avoidance signify a likelihood of aggressive tax avoidance participation. The finding of this study shows that Malaysian tax practitioners perceived aggressive tax avoidance as unethical behavior. The aggressive tax avoidance practice is contributed by the tax clients' incomplete documentation and competitive tax environment. However, the results also indicated that tax practitioners are at the state of dilemma whether to satisfy their tax clients request to minimize tax or to the society demand for a fair tax share. The study also revealed that there is a need for collaborative and collective effort from various parties such as taxpayers, tax practitioners and tax authority to shape and sustain a good environment of tax practices.

Furthermore, Allen, Francis, Wu, & Zhao (2016) examined the association between analyst coverage and corporate tax aggressiveness evidence from U.S firms. Using difference-in-differences methodology, this study identified a negative causal effect of analyst coverage on tax aggressiveness, suggesting that higher analyst coverage constrains corporate tax aggressiveness. Further cross-sectional variation tests found that this constraining effect on tax aggressiveness is more pronounced in firms with lower investor recognition and firms with more opaque information environments.

In contrast to the above study, Yorke, Amidu and Boateng (2016) analysed the implications of earnings management and corporate tax avoidance on the value of firm. Using all (34) non financial firms listed on the Ghana Stock Exchange over a period of ten years (2003– 2012), the study focuses on two pertinent issues: first, it analyses the relationship between earnings management (EM) and corporate tax avoidance. Second, it empirically tests the effect of the interactions between the two variables on the value of the firm (CTA). The study employed discretionary accrual was used as the proxy for earnings management, the effective tax rate (ETR) as the measure of corporate tax avoidance and Tobin's Q was adopted as proxy for firm's value . Based on the multiple regression analysis, findings shows that managers employ avoidance techniques to manage earnings. And despite the positive influence of corporate tax avoidance on firm value, the effect is not significant to offset the negative impact of earnings management on firm value, thereby resulting in an overall negative effect on the value of the firm.

Also, Tandean and Winnie (2016) conducted a research on empirical analysis on the effect of good corporate governance on tax avoidance which becomes a proxy of current ETR (Effective Tax Rate) using samples of 120 manufacturing companies listed in Indonesian Stock Exchange in 2010 – 2013. Employing multiple regression analysis, findings revealed t that audit committee has a positive effect on tax avoidance in partial but the executive compensation, executive character, company size, institutional ownership, boards of commisioners' proportion, audit committee and audit quality have simultaneous effect to define tax avoidance.

In addition, Martinez, Bossonello, Souza and Monte-Mor (2016) researched on the evidence regarding the relationship between book-tax differences (BTD), persistence of earnings and accruals and tax planning in the Brazilian scenario using a sample of all non-financial firms listed on the BM&F Bovespa that disclosed consolidated financial statements between 2003 and 2012 when the use of International Financial Reporting Standards (IFRS) became mandatory in Brazil and was obtained from the Economática database. Based on ordinary least square estimation technique, results provide statistical evidence that temporary large positive book-tax differences provide useful incremental information about the magnitude of accruals and that by examining accruals it is possible to predict the persistence of earnings and their components.

However, Miiller and Martinez (2016) assessed whether the credit rating of bond issues in the Brazilian market is influenced by the differences between book income and taxable income (BTD), as well earning management practices, based on a sample of all nonfinancial firms that issued bonds in the period from 2004 to 2014 with published financial information, resulting in a final sample of 96 observations. Using the ordinary least square estimation technique, results indicated book-tax differences does not determine the credit rating in the Brazilian market and also, results indicated as earnings management increases, ratings tend to decline, while firms that engage in aggressive tax management are not penalized.

Similar to the work of Yorke, Amidu and Boateng (2016), Amidu, Yorke and Harvey (2016) analysed the implications of adoption of International Financial Reporting Standards (IFRS) for accounting information quality and tax avoidance by employing a sample of 119 firms non-financial firms listed on the Ghana Stock Exchange (GSE) as well as non-listed firms from Ghana Revenue Authority (GRA) database after the implementation of IFRS. Using the multiple regression, findings revealed that IFRS reduces the incidence of tax avoidance as the level of earnings quality increases when firms use internal funding to increase their profitability levels. Based on this finding, the study suggests that the relatively high quality earnings and low incidence of tax avoidance among firms in Ghana is attributed to the adoption of IFRS and the interaction of firm size to equity capital and the strategy of firms in Ghana to finance their operations with debt.

Also, Jeong and Chae (2017) conducted a study on the effect and determinants Of small - and medium-sized entities conducting tax avoidance using a sample which consists of 18,954 audited firms including those external audited from 2011 to 2013. This study proxy BTD as a measure for tax avoidance, as the difference between accounting profit and taxable income and estimated corporate tax avoidance (TS), which is the part that cannot be explained by total accruals in BTD to proxy for tax avoidance. Findings shows that firm size (SIZE), profitability (ROA), leverage (LEV), operating cash flow(CFO), capital intensity (PPE), R&D intensity (RNDS), and growth rate (GS) all influence the corporate tax avoidance of SME and suggested that there is variation in the determinants among the SME with high corporate tax avoidance.

Contrary to the findings of Jeong *et al.*, (2017); Amidu *et al.*, (2019), Irianto, *et al.,* (2017) also found negative result by examining the Influence of profitability, leverage, firm size and capital intensity towards corporate tax avoidance using the sample size of 36 manufacturing companies listed in Indonesia Stock Exchange in the period 2013-2015 by employing purposive sampling method. Based on the (OLS) regression results, findings showed that the firm's size have positive influence on the effective tax rate while leverage, profitability and capital intensity ratio does not significantly influence the tax avoidance.

In the same vein, Masri, Musta, Ani, and Fredy (2017) investigated the effect of tax aggressive behaviour toward the cost of equity, using moderating by family ownership for the sample size of 224 manufacturing firms in Indonesia Stock Exchange for period 2010-2013. Dependent variable is cost of equity measured using CAPM approach while independent variable is tax aggressiveness measured using discretionary on book tax differences. The analytical method used was fixed panel analysis. The study revealed that tax avoidance has negative influence on cost of equity. Discretionary on BTD is regarded as earnings management in taxes or a tax planning so it is seen as a positive by the shareholders.

In the same view with the study of Yorke, Amidu and Boateng (2016), Kurniasih, Sulardi, and Suranta (2017) examined the relationship between earnings management, corporate governance and tax avoidance: the case in Indonesia by employing purposive sampling method, resulting in 290 firms with 871 firm's observation which include non-financial companies that are listed on the Indonesian Stock Exchange (IDX) between 2014 and 2016. Dependent variable in this study is Corporate tax avoidance which was proxy using the effective tax rate (ETR), which is the ratio of pre-tax income to income tax expenses while the independent variable are Corporate governance mechanisms as institutional ownership, the size of the board of commissioners, the percentage of independent commissioners, auditing committees, and audit quality were used as proxies. Meanwhile, earnings management uses the modified Jones model. Based on the result of the multiple regression, the study revealed that earnings management has a significant impact on effective tax rate that is, the higher the level of corporate earnings management , the higher the level of tax avoidance activities by management, which is marked by a high effective tax rate value of the company.

Similar to the positive findings of Kurniasih *et al.,* (2017) above, Geraldina and Jasmine (2018) also examined the effect of earnings management on the participation of company owners in tax amnesty program in Indonesia using a matching sample approach that consist of publicly listed companies on the Indonesia Stock Exchange from period 2011-2015 that participated in tax amnesty program and companies that did not participate in tax amnesty program during 1st July-30th September 2016, which thus, gives a final sample was obtained 339 firm years. Finding indicated that accrual earnings management has a positive effect on the possibility of the owner of the company to participate in the tax amnesty program and recommended that the users of financial reports to pay attention on the level of aggressiveness of companies' earnings management whom the owners participate in tax amnesty program.

Bayar, Huseynov and Sardarli (2018) investigated on corporate governance, tax avoidance, and financial constraints: corporate governance, tax avoidance, and financial constraints in India. Data used in this study primarily came from four publicly available data sources from the financial statement leading to 35,000 firm-year observations from 1990 to 2015 from Institutional Shareholder Services. Employing panel data regression estimation techniques, the study found that tax avoidance does not have a negative impact on financial constraints. Also, the study suggest that tax avoidance is a less useful source of financing for constrained firms when they are plagued with potential agency problems and opaque information environments. The study therefore, suggest that stronger governance mechanisms can help firms mitigate the negative consequences of tax avoidance

In light of the above study, Sonia, and Suparmun (2018) examined the influence of independent commissioner, institutional ownership, managerial ownership, return on assets, firm size, leverage, sales growth, capital intensity ratio and inventory intensity ratio on tax avoidance. Based on purposive sampling method, 61 out of 134 manufacturing companies listed in the Indonesia Stock Exchange for 2014-2016 resulting 183 data available for testing. Employing multiple regression analysis, findings indicates that institutional ownership and return on asset have significant influence on tax avoidance, however, independent commissioner, managerial ownership, firm size, leverage, sales growth, capital intensity ratio and inventory intensity ratio do not have significant influence on tax avoidance.

Similarly, Rahmawati, and dan (2018) also examined the influence of political connections, firm characteristics and audit quality on tax avoidance using a sample of 39 banking companies selected based on purposive sampling which are listed on Indonesia Exchange Stock over the 2014-2016 periods with total 101 observations. Independent variables consist of Political Connection, Firm characteristics (which are proxied by Leverage and Capital Intensity), and Audit Quality. While dependent variable is tax avoidance measured by ETRs. Using the multiple regression analysis, findings showed that only Political Connections have a significant influence on Tax Avoidance. Leverage, Firm Characteristics and also Audit Quality did not have a significant influence on Tax Avoidance.

Furthermore, Pangestu, and Irenius (2018) assessed the effects of top management characteristics and capital structure on tax avoidance, measured with Effective Tax Rate (ETR). Using the publicly listed Indonesian manufacturing corporations over the period of 2010-2015 which produces 452 firm-year observations. Based on statistical analysis using random effects regression model on the E-Views software, the study shows that tax avoidance is negatively influenced by independent directors, also tax avoidance is positively affected by foreign directors; tax avoidance is also influenced by capital structure, measured with firm leverage, and similarly , tax avoidance is positively affected by current profitability, measured with Return on Equity whereas the effects of female directors are found to be non-existent.

In addition, Zahra, Wulandari, and Syafrizal (2019) examined the influence of managerial ownership, earnings management, intellectual capital, and tax aggressiveness to firm value by using sample of 10 manufacturing companies of industrial sector of consumer goods listed in the Indonesia Stock Exchange as determined by purposive sampling method from 2011-2015 period. The independent variable used is managerial ownership, profit management, intellectual capital and aggressive tax action. Based on the multiple regression results, findings provides that managerial ownership, management and aggressive tax earnings measurements have no significant effect on firm value, while intellectual capital has a positive and significant influence on firm value.

Also, Stevanus and Irenius (2018) also conducted a study on the determinants and economic consequences of tax avoidance In Indonesia: the effects of top management characteristics and capital structure. This study aims to assess the effects of top management characteristics and capital structure on tax avoidance, measured with Effective Tax Rate (ETR). Using longitudinal data set of publicly listed Indonesian manufacturing corporations over the period of 2010-2015 produces 452 firm-year observations. Based on random effects regression model on the E-Views software, the study find that tax avoidance is negatively influenced by independent directors; positively affected by foreign directors; influenced by capital structure, measured with firm leverage, and positively affects current profitability, measured with Return on Equity. Whereas the effects of female directors are found to be non-existent.

Beside this, Amidu, Coffie, and Acquah (2019) conducted a research on transfer pricing, earnings management and tax avoidance of firms in Ghana. Using audited annual reports of sampled 40 firms from both non-financial and financial multinational firms listed on Ghana Stock Exchange as well as the non-listed multinational firms from 2008 to 2015, the study exploits the panel data techniques to provide insight on the effects of transfer pricing aggressiveness and earnings management practices on tax avoidance among the Ghanaian multinational firms. Tax avoidance was the Dependent variable in this study which was proxy as the difference between statutory tax rate (STR) and effective tax rate (ETR) while discretionary accrual as a measure of earnings management and constructed five item index as a proxy to measure transfer pricing aggressiveness were the independent variables in this study. Findings, however, revealed that earnings management (EM) is positively related to tax avoidance (CTA) for both financial and non-financial firms that is, positive relationship depicts that the firms avoid taxes through the manipulation of earnings. Also, the study found transfer pricing to relate positively and significantly with tax avoidance for both firm groups with the introduction of the interactive term.

Similarly, Tarmidi, & Murwaningsari (2019) researched on the influence of Earnings Management and Tax Planning on Firm Value with Audit Quality as a moderating variable by using purposive sampling method to obtained data from 481 manufacturing firms from the Indonesia Stock Exchange 2013-2017 period. However, using multiple regression and moderation analysis, the study found that the earnings management have a positive influence on Firm Value and Tax Planning as well as the effect on Firm Value. As a moderating variable, Audit Quality weaken the influence of Earnings Management on Firm Value significantly but not significantly weaken the influence of Tax Planning on Firm Value.

Similar to finding of Amidu *et al.*, (2019), Purnamasari (2019) determined how much influence tax planning and tax burden in conducting earnings management in manufacturing companies listed on the Indonesia Stock Exchange for the period 2014-2017. The study used descriptive method. Using purposive sampling, data were collected from manufacturing companies of the Food and Beverages Sector listed on the Indonesia Stock Exchange for the 2014-2017 period totaling 43 companies. Based on multiple linear regression statistical test method with the aid of SPSS software. The study found that tax planning has a positive and not significant effect on earnings management, and the burden of deferred tax has a positive and not significant effect on the probability of companies making earnings management. The study also found that earnings management did occur with the aim of avoiding reporting losses on companies.

In addition, Pattiasina, Tammubua, Numberi, Patiran, and Temalagi (2019) examined the relationship of capital intensity as a moderating variable to the relationship of tax avoidance in Indonesia among listed banks on the Indonesia Stock Exchange within the periods of 2013-2016. Here, the study examined social responsibility, audit committee, the board of commissioner, proportion of commissioner board, and institutional ownership, as the parts of capital intensity in tax avoidance phenomena. The study used purposive sampling to gain a total sample of 32 banking data listed on the Indonesia Stock Exchange. Tax avoidance as the dependent variable was measured as ETRs Based on the regression results, Finding shows that the audit committee and institutional ownership have influenced tax avoidance, while capital Intensity as the moderation variable has not got any significant effect on corporate social responsibility.

Also, Zhu, Mbroh and Bonsu (2019) researched on impact of Corporate Tax Avoidance on Firm's Profitability by taking data from the annual reports and financial statements of firms listed on the Ghana Stock Exchange (GSE). The independent variable, the measure of Corporate Tax avoidance is a proxy measure of the firm's Effective Tax Rate (ETR) measured as the tax expense divided by the profit before tax. Employing a standard Ordinary Least Square regression with the aid of SPSS statistical Tools, findings confirmed that there is a negative relationship between the tax avoidance measure by (effective tax rate) and the measure of profitability (return on asset).

In the light of the study of Huseynov and Sardarli (2018), Osebe, Naibei and Kirui (2019) conducted a study on moderating effect of leverage on the relationship between corporate governance and effective tax rates among listed firms in Kenya in the period 2011 to 2017. Corporate governance was proxy by board size, board independence, board gender diversity and ownership structure and ETRs was proxy Cash tax paid divided by Profit Before Tax. The study employed longitudinal research design. A sample of 40 firms was purposively selected from the 67 listed firms in Kenya as at 31st December, 2017. With the aid of STATA, Finding indicated that leverage has a significant moderating effect on the relationship between board size, board independence, board gender diversity and effective tax rate. However, leverage was found to have no moderating effect on the relationship between ownership structure and effective tax rate. The study recommends that leverage be considered when formulating tax policies and strategies.

The above result is similar to findings of Khanh, and Khuong (2019), who examined the association between corporate tax avoidance and firm leverage. With the aid of STATA, the study used GMM on a sample of 125 Vietnam listed firms' on Ho Chi Minh City Stock Exchange and Hanoi Stock Exchange data over the period 2010-2016, resulting to 875 observations that were used for the analysis. Dependent variable measured as firm leverage, which is calculated as short-term and long-term debt for the year divided by total asset at year-end while independent variables were measured three measures of corporate tax avoidance including the current effective tax rate, cash effective and book tax differences. However, using the (OLS) regression, the study revealed that there is a significant positive relationship between corporate tax avoidance on firm leverage in Vietnam.

Aksoy Hazir (2019) investigated on the Determinants of Effective Tax Rates in Turkey Using Turkish public listed companies (excluding banking and insurance sectors) between 2007-2016 and data were extracted from the financial statements of firms in respect of the variables. The study establishes the relationship between ETRs and firm specific characteristics of size, leverage, asset mix and profitability. Using the panel data estimation techniques, the regression results shows that firms size has a significant positive effect on ETR, leverage again significant but negative effect and capital intensity significant positive effect on ETR. The study also found evidence that highly leveraged companies face lower ETRs and highly capital-intensive companies face with higher ETRs.

Contrary to the findings of Aksoy Hazir (2019), Aburajab, Maali, Jaradat, and Alsharairi (2019) examined the relationship between board of directors' characteristics and tax aggressiveness: evidence from Jordanian listed firms. Based on a sample of 140 Jordanian firms during the period 2013-2017, this study used regression analysis to examine the effect of board composition, board independence, CEO duality, return on assets (ROA) and firm size on the tax aggressiveness. The study found that there is a negative relationship between board composition and board independence from one side, and the tax aggressiveness from the other side. Furthermore, the study found that there is a positive relationship between board duality and tax aggressiveness.

2.3.3 Empirical Studies from Nigeria

Ilaboya, Obasi, Izevbekhai and Ohiokha (2016) investigated which firm-specific characteristics impact on effective tax rates by selecting a sample of 87 companies quoted on the Nigerian Stock Exchange between 2008 and 2014. Using panel data regression approach with a preference for the fixed effect model based on the result of the Hausman test. Findings provided that negative relationship exists between the explanatory variables of leverage, capital intensity, and effective tax rate implying that preponderance of debt over equity financing and huge investment on non-current assets tends to minimise corporate tax liabilities. Findings also indicated that there is a positive relationship between profitability, firm size, the moderating variable of ownership concentration and effective tax rate. However the study recommended debt financing, more investment in non-current assets so that companies can take advantage of the incentives, allowances to cut down on their tax liabilities.

Contrary to the above findings, Oyenike *et al.,* (2016) assessed the relationship between the board of directors' gender diversity and tax aggressiveness of listed banks by considering a sample of 11 listed banks over the period of 2012 -2014. Gender diversity being the independent variable was measured by the proportion of female directors to total board size while tax aggressiveness was measured using effective tax rate. Employing a panel regression analysis, findings reveals female directors on bank boards are noted to be positively correlated to effective tax rate which means the higher percentage of female directors does not significantly reduce the possibility of tax aggressiveness. Thus, higher ratio of women as directors should lead to lower tax aggressiveness as ETR increases.

Similarly, Nwaobia and Jayeoba, (2016) empirically examined the effect of tax planning strategies on firms' liquidity. Tax planning strategies such as Capital Intensity (CAPINT), Thin Capitalization (TINCAP), Lease Option (LOPT) and Industry sector incentives (IND) were selected as the independent variable while the criterion variable used was firms' liquidity measured in this study by the Current Ratio (CR) while firm size (SIZE) was adopted as the control variable. Data obtained from 154 firm- year observations were described and regression analysis was used to test the hypothesis developed. Findings revealed that tax planning strategies of Capital Intensity (CAPINT), Thin Capitalization (TINCAP), and Lease Option (LOPT) exert negative effects on firms' liquidity while tax planning strategies of Industry (IND) and firm size (SIZE) have positive effects on firms' liquidity.

More so, Oyeyemi and Babatunde (2016) researched on the influence of corporate tax planning on the financial performance of manufacturing firms quoted on Nigerian Stock Exchange using annual reports and accounts of 10 selected firms out of 28 firms listed under consumer goods sector. The study employed Generalized Least Square (GLS) method of regression based on the outcome of Hausman's model estimation test. Finding reveal that aggressive tax planning such as thin capitalization, tax law incentives and other benefits of loopholes in Nigerian tax laws have not been fully utilized by the Nigerian firms and however, recommended that that manufacturing firms in Nigeria should make tax planning as part of the firm's strategic financial planning, employ the service of expertise in tax practices due the complexity and dynamitic of Nigeria tax laws.

Additionally, Mohammed, Bello and Dahir (2017) conducted a qualitative research on synthesized review of three key issues with regards corporate tax avoidance in the literature including the nature of tax avoidance as a concept, the determinants of firms'/ corporations' tax avoidance strategy and the consequences of tax avoidance. Firm characteristics, Ownership structure and executives were considered as the determinants of corporate tax avoidance in Nigeria. Desk-top study was employed as methodology for deductions made from the literature. Finding revealed that measuring tax avoidance is largely an indirect affair through the use of book-tax differences and variants of effective tax rates. This is because, by its very nature, tax avoidance is not meant to be visible and no individual or corporation would voluntarily own up to engaging in the practise.

Ogbeide (2017) researched on firm characteristics and tax aggressiveness of listed firms in Nigeria using pool and panel data for the period 2012 to 2016. Firm attributes represents independent variable in this study and it was proxy using leverage, firm size, Audit Quality, and Interest charges while tax aggressiveness was measured by effective tax rate. Data for the study was obtained from the annual report of selected firms was analysed using the panel and dynamic panel methods. However, Finding revealed that external auditor's quality, interest charges and firm size has exerts positive and significant effects with tax aggressiveness while leverage is significant and exerts negative relationship with tax aggressiveness. The finding of this study is in line with studies of Ilaboya, *et al*., (2016) Similar to the above study, Uniamikogbo, *et al.,* (2018) conducted a study on effect of firm attributes and tax aggressiveness among deposit money bank in Nigeria for a period of five years (2013- 2017). Data were collected from annual reports and accounts of 10 sampled quoted deposit money banks on the Nigeria stock exchange as at 31st December, 2017 using the judgmental technique based on Banks with international authorization. In this study, firm attributes being the independent variable was proxy by firm size, profitability, liquidity and leverage while tax aggressiveness was proxy by effective tax rate. Using Ordinary Least Square (OLS) regression, findings revealed that firm size, leverage, and liquidity have a significant impact on tax aggressiveness while profitability has an insignificant impact on tax aggressiveness among deposit money banks in Nigeria.

In support of the above, Salawu and Adedeji (2017) also investigated the impact of corporate governance on tax planning of non-financial listed companies in Nigeria between 2004- 2014. Corporate governance was proxied using Board size, Board Diversity, Quality of External Auditor, Ownership or Equity Concentration, Foreign Ownership while tax planning was proxy using Effective tax rate. The study obtained a sample of fifty (50) companies spanning across 10 sectors which was purposively selected on stratified randomly sampling basis. The study employed generalized method of moments to analysis the data obtained from the audited financial statement, and it found that there is positive and significant relationship between the effective tax rate and firm value (Tobin Q). This implies that, tax planning activities has not be benefiting the increase in firm value.

Similar to the studies of Ogbeide (2017) & Uniamikogbo, *et al.,* (2018), Yinka and Uchenna (2018) also conducted a study on firm specific determinants of corporate effective tax rate of non-financial firms listed in Nigerian Stock Exchange. This study established the relationships between ETRs and firm specific characteristics of size, leverage, profitability, capital intensity, inventory intensity, labour intensity and auditor type. Data were extracted from the financial statements of sampled firms. Employing Ordinary Least Square (OLS), random effect and fixed effect models, the results show that ETRs were lower than the Statutory Tax Rate during the period of the study and that there are differences in ETR from one sector of the economy to the other. The study further reveals that larger and more profitable firms are faced with high tax burden while firms with high leverage, capital intensity, and tax expert (auditor type) are faced with lower ETR. Also, there is no significant relationship between ETR and labour intensity.

Additionally, Osegbue, Nweze, Ifurueze, & Nwoye (2018) examined the effect of corporate aggressive strategies on firm growth in Nigeria. The study employed an ex-post facto research design in which data were collected from the annual reports and accounts of Nigeria food production. Firm growth which was the dependent variable in this study was proxy by Profit after tax (PAT), while Corporate tax aggressiveness as independent variable was proxy using effective tax rate aggressiveness and leverage tax aggresivessness. Using the pooled multiple regression analysis to test the hypothesis, the study found the leverage to impact positively on Firm Growth Also, the study reveals that Effective tax rate (ETR) to impact positive on Firm Growth, but this impact was statistically significant. Since the influence of effective tax rate is not statistically significant and so, should be ignored as a determinant of firm growth in Nigeria.

Moreso, Salawu (2018) conducted a study on corporate tax avoidance of listed firms in Nigeria with a view to examine the ability of listed firms to pay low amount of cash taxes in naira of pre-tax earnings over a long run period of twelve years. A sample of 19 listed firms were selected based on purposive sampling technique from the list of NSE 30 listed firms on the Nigeria stock exchange. The study indicated that that there is variation across the firms in tax avoidance at long run with some firms achieving a lower amount of cash taxes in naira of pre-tax earnings compared to others. The study recommended than financial service sector firms should contribute more to education tax in Nigeria

Similar to work of Oyeleke, Erin & Emeni (2016), Innocent *et al.,* (2018) also examined the effect of corporate governance mechanisms on tax aggressiveness among selected manufacturing firms focusing on consumer and industrial sector in Nigeria by employing ex-facto research design in which data was obtained from the financial statement of 44 listed manufacturing firms listed on the Nigerian Stock Exchange (NSE) fact book as at the end of the year, 2016 and however, it was selected based on complete information of the variables of the study, from 2005-2016 been period covered by the study. Board size, board diversity, independent directors and proportion of non-executive directors to executive directors were the variables used as proxy for corporate governance(independent variable) while tax aggressiveness was measured by the effective tax rate Using the Ordinary Least Square technique with its Best Linear Unbiased Estimate (BLUE) Property, the study revealed that board size has no significant effect on tax aggressiveness while board diversity, independent director and proportion of non-executive directors to executive directors is having a significant impact on tax aggressiveness among quoted manufacturing firms in Nigeria.

However, Osegbue, Francis, Austin, Meshack, and Mary (2018) studied on how tax sheltering and its interactions with cash effective tax rate, long-term effective tax rate, tax savings, book tax gap, temporary difference of tax shelter and permanent difference of tax shelter impacted the modified Jones earnings model (earnings quality management) from 2009 to 2016 using a sample of all 116 listed companies on the Nigerian stock exchange ranging from all sectors excluding financial services sector. The study employed panel generalised method of moment's regression and finding shows that tax sheltering had a significant and positive effect on the modified Jones earnings model (earnings management).

To support the positive findings of above research work, Yinka and Rafiu (2018) researched on non-linearity in determinants of corporate effective tax rate in Nigeria using an average of listed 177 firms on the Nigerian Stock Exchange (NSE) which excludes the 55 firms in the Financial Services Sector from the sample because of their reporting requirement that is different from those of other firms. Employing quantile regression analysis, finding reveals that Firm size, firm leverage and inventory intensity are most influential variables while capital intensity and profitability are fairly influential across the ETR of firms. However, tax expert, firm size and inventory intensity are the most influential for firms with lower ETR. The study also confirms that large firms enjoy political clout but smaller firms are also able to reduce their fiscal pressure.

In addition, Ogbeide and Iyafekhe (2018) empirically examined the level of tax aggressiveness of listed firms in Nigeria stock exchange by obtaining the population which consists of all the quoted non- financial firms as at 31st December, 2016. In this study, the data used were obtained from a sample of eighty five (85) quoted firms for the period 2012 to 2016. Using the descriptive method, the results obtained revealed that twenty six (26) out of the eighty five (85) of the companies in the non- financial sector were highly tax aggressive. Thirteen (13) of the listed firms were moderately tax aggressive. Sixteen (16) very of them were tax aggressive at equilibrium while thirty (30) of the firms were not tax aggressive. The study recommends that firm should create a tax department and it should be manned by tax experts/ auditors who are deemed to be imbued with wide experience on tax strategies to minimize tax expense payment.

Finally, Fagbemi, Olaniyi and Ogundipe (2019) examined the corporate tax planning and financial performance of systemically important banks in Nigeria by obtaining the sample size consisting of eight SIBs in Nigeria. The study employs Ex-post facto research design in this study. However, obtaining data derived from the annual reports of the SIBs and with the aid of Pooled OLS, findings from the analysis revealed that the effective tax rate has a negative and significant impact on financial performance. Thin capitalization has a positive significant impact on the financial performance of SIBs in Nigeria, whereas capital intensity and the lease option have demonstrated an insignificant impact on the financial performance of SIBs in the country.

2.4 Summary and Gap Identified in Literature

Several remarks need to be emphasized regarding the selection of literature reviewed. Different terms have been used to conceptualize tax planning such as tax aggressiveness, tax sheltering, tax avoidance, tax minimisation and tax compliance level. However, the concept of aggressive corporate tax planning from various authors' perception provides that reduction in taxes through legal means. Various authors also viewed companies that behave aggressively in tax do not mean they have committed fraud or tax evasion or irregularities in accounting reporting practices. Many of the studies measured aggressive tax planning as effective tax rate, while some used book tax differences as measure of corporate tax planning. Some authors explored both effective tax rate and book tax difference as measure of aggressive corporate tax planning. In addition, most studies both developed and developing economies focus on firm-level characteristics and/or corporate governance mechanisms as determinants of aggressive tax planning.

Conceptually, most of the studies conducted in Nigeria, developed and developing countries focused corporate governance mechanisms such as board size, board meetings, board independence, board expertise, chief Executive Officer duality etc, as determinants of corporate tax planning while few studies focused on firm characteristics such as firm size, firm liquidity, firm leverage, firm capital intensity, and firm age) as determinants of aggressive corporate tax planning ignoring other salient factors that would influence the companies to engage in corporate tax planning. To best of researcher's knowledge, liltle or no study had employed tax practitioner's expertise as an aggressive behaviour to corporate tax planning in developing countries and Nigeria.

From the methodology point of view, more of the previous studies on corporate tax planning in Nigeria focused more on deposit money banks and other financial firms while few looked into manufacturing companies focusing on two sectors; industrial sector and consumer sector ignoring the fact that other sectors in the manufacturing industry also engages in tax planning as their taxes constitute a significant proportion in the Nigeria tax revenue base and they are real sector which are crucial to economic sustainability and due to their complexity of production to meet aggregate demand in an economy. Evidently, little or no research work had used all the manufacturing sectors in Nigeria. Thus, this study tends to fill the literature by studying the determinants of aggressive corporate tax planning and capturing all the sectors in the manufacturing industry in Nigeria.

In addition, it has been observed that substantial number of studies on determinants of corporate tax aggressiveness in developed, developing countries and Nigeria had only focused on panel data multiple regression as estimation technique. However, as against the backdrop of the backdrop of the results on the classical regression assumption, this necessitated the utilization of an alternative and more robust inferential statistic -the Robust Least Squares regression was the next line of action. The robust least squares were used to test hypotheses raised because it is not sensitive to serial correlation, non-normal distribution, and constant residual errors. Evidently, little or no studies had used this methodological approach. Hence this study aims to bridge the gap.

More so, few studies on aggressive tax planning in developed and developed economies were found to cover 2019 as research study period. To the extent of literature found, little or no study were found to cover 2015 -2019 as a study period in Nigeria. Thus, the study tends to bridge the timing gap in the existing literature by covering the period 2015-2019 which will be adding to the recent scanty studies in aggressive corporate tax planning literature.

Furthermore, many among the recent studies conducted on aggressive corporate tax planning in Nigeria had captioned their research work title using various nomenclature such as effect of corporate tax aggressiveness on firm growth in Nigeria: An Empirical Analysis (Ifurueze *et al* .,2018), female directors and tax aggressiveness of listed banks in Nigeria (Salawu *et al.,* 2017), firm characteristics and tax aggressiveness of listed firms in Nigeria(Sunday, 2017), corporate tax planning and financial performance of systemically important banks in Nigeria

(Fagbemi *et al.*, 2019), firm-specific characteristics impact on effective tax rates (Ilaboya *et al.*, 2016), effect of corporate governance mechanisms on tax aggressiveness among selected manufacturing firms in Nigeria (Innocent *et al.*, 2018). However, liltle or no studies had titled research work on the determinants of aggressive corporate tax planning in Nigeria.

2.5 Theoretical framework

This study is underpinned on 2 theories which provide justification for the factor influencing companies to engage more in tax planning consisting of Hoffman tax planning theory, and stakeholders theory.

Hoffman tax planning theory as propounded by William H. Hoffman (1961) which is based on the assumption that corporate entities should legally transfer cash resources from tax authorities to the corporate entity's purse by optimally taking advantage of loopholes in tax laws (Kawor & Kportorgbi, 2014). Hoffman (1961), in explaining the tax planning theory, he established principles and concepts of tax planning activities that are most applicable to tax practitioners. Hoffman's theory also underpins that firms could only derive appreciable tax savings from their tax planning activities through a deeper understanding of the ambiguity of and loopholes in tax legislations. Therefore, the theory provides a view of creation of firm value as this would motivate companies to engage more in the purchase of capital items which is capable of generating capital allowance from the government, engagement tax experts, and management of earnings.

Also, stakeholders theory credited to freeman 1984 assumes that firm should not only prioritize the interest of the shareholders but also cater for other stakeholders by monitoring and responding to its stakeholder needs. However, government is one of the major stakeholders that must monitored so as to avoid political cost as results of failure to respect tax laws. More importantly, the government becomes satisfied when appropriate taxes are remitted as at when due. The government through the Federal Inland Revenue Service has tried its best to increase state revenue through tax with various policies launched and various regulation improvements undertaken while companies also always make an effort with various ways to engage in aggressive tax avoidance practice to minimise tax liabilities.

Independent Variables **Dependent Variable**

Determinants of aggressive Corporate Tax Planning

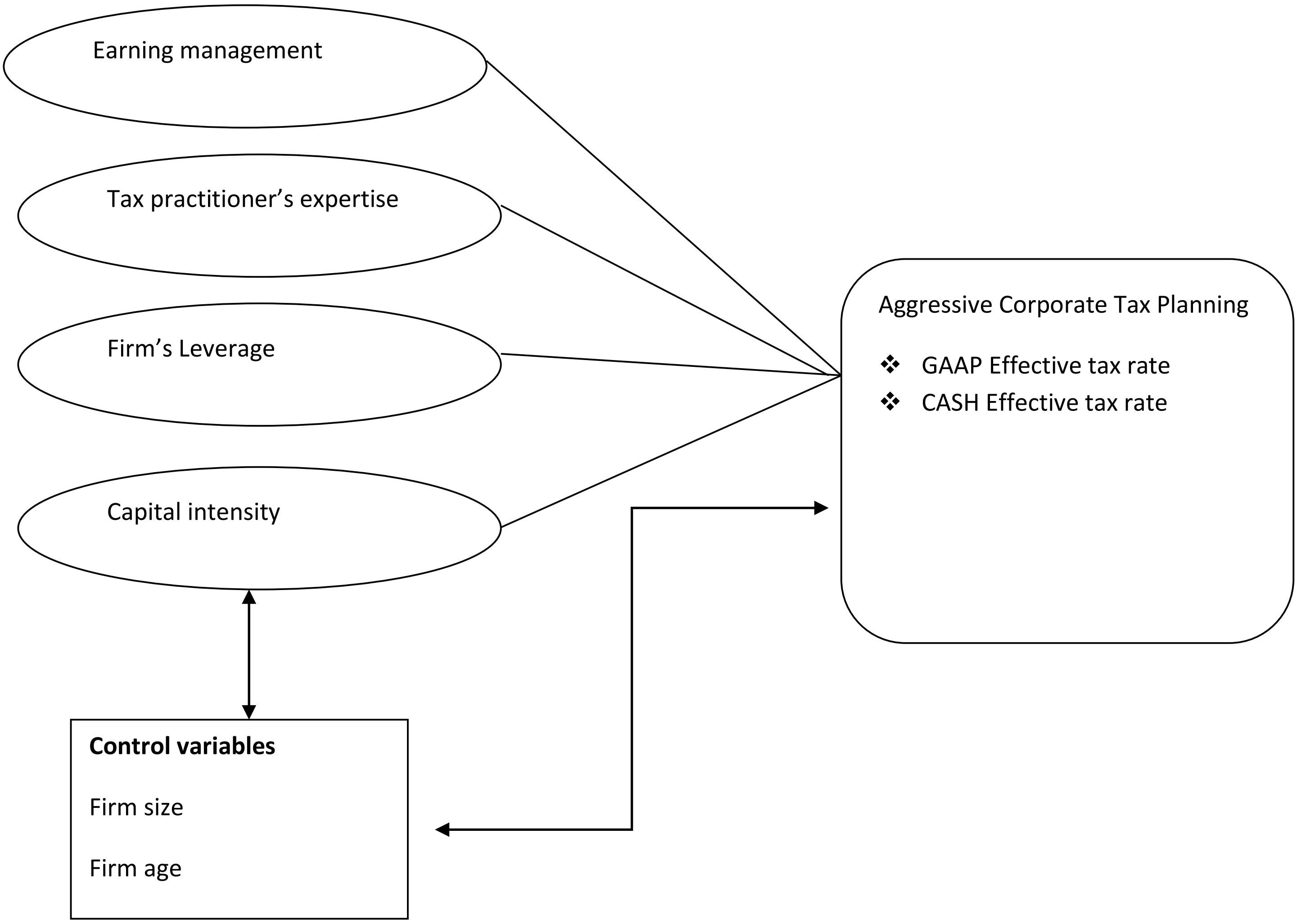

Figure 2.1 Conceptual framework

Source; Author’s Framework (2020)

Figure 2.1 above provides a relationship between the dependent variable and independent variables. The dependent variable (aggressive corporate tax planning) was proxy as Effective tax rate (GAAP ETR and CASH ETR) which computed as total tax expenses divided pre-tax income and cash tax paid dividend by pre-tax income. However, the effective tax rate and the indicates the company’s level of aggressive tax planning. The higher the effective tax rate, the lower the company’s engagement toward aggressive tax planning, vice versa.

The independent variable was proxy using factors such as earning management, tax practitioner's expertise, capital intensity, firm's leverage while the control variables was proxy employing firm's size and firm age as shown in the figure 2.1 above.

CHAPTER THREE
METHODOLOGY

This chapter highlights the research process beginning with the research design, population and sample size, sources and method of data collection, model specification and the definition and measurement of variables. Also, this chapter will facilitate the next step of data collection and analysis.

3.1 Research Design

The study employed ex-post facto research design to examine the determinants of aggressive corporate tax planning so as to achieve the objectives of the study. Ex-post facto research design is quasi experimental design that deals with the data that are already in existence which can neither be manipulated nor controller by the research (Innocent *et al.,* 2018). The data used for analysis are already made available in the published financial statement of all listed manufacturing companies in Nigeria.

3.2 Population of the Study

The population of this study consists of all listed manufacturing companies on the floor of the Nigeria Stock Exchange as at 31st December, 2019. There are seventy four (74) listed manufacturing companies spanning across seven (7) which include construction/real estate, consumer goods, healthcare, industrial goods, natural resources, oil and gas and conglomerates sectors. Manufacturing companies was employed because they are considered to have large scope of operation and high investment in non-current asset/ property, plant and equipment which gives room for claiming various tax incentives, tax holidays and other tax amnesty (Irianto, *et al.,* 2017). In addition, they are real sector which are crucial to economic sustainability and their complexity of production to meet aggregate demand in an economy. Listed below are the seven (7) sectors and their respective numbers of quoted manufacturing companies.

S/N	SECTOR	POPULATION
1	Construction/Real Estate	**9**
2	Consumer Goods	**20**
3	Healthcare	**10**
4	Industrial Goods	**13**
5	Natural Resources	**4**
6	Oil And Gas	**12**
7	Conglomerates	**6**
	TOTAL	**74**

Source; Nigeria Stock Exchange (2019)

3.3 Sample Size and Sampling Techniques

The sample size representative of the study is sixty three (63), it was selected based on Krejcie and Morgan (1970) sample size determination table. This is employed to eliminate the element of unbaisness and ensures satisfactory degree of representativeness. Due to the unavailability of data, the study excluded eight manufacturing firms from the sample size which eventually made the total of 55 companies that was used as the sample size. In selecting the sample of the study, stratified sampling method was employed coupled with the random sampling method. This involves dividing the population of each stratum by the total population multiply by the sample size (see below); thereafter companies from sectors were selected randomly.

Table 3.3 Sample Size and Sampling Technique

S/N	Sector (Stratum)	Population		Sample Size
1	Construction/Real Estate	**9**	**(9/74)63 = 8**	**8**
2	Consumer Goods	**20**	**(20/74)63 = 17**	**17**
3	Healthcare	**10**	**(10/74)63 = 9**	**9**
4	Industrial Goods	**13**	**(13/74)63 = 11**	**11**
5	Natural Resources	**4**	**(4/74)63 = 3**	**3**
6	Oil And Gas	**12**	**(12/74)63 = 10**	**10**
7	Conglomerates	**6**	**(6/74)63 = 5**	**5**
	TOTAL	**74**	**63**	**63**

Source; Researcher’s Computation (2020)

3.4 Sources and Method of Data Collection

The study makes use of secondary data. This is the annual reports and accounts of the sampled companies as its major source of its data. Data were extracted from the annual reports and accounts for the period covering 2015 to 2019 accounting year; this is based on fact that annual reports are readily available and accessible by the various users.

However, the choice of 2015 to 2019 for the research work is to bridge the timing gap in literature. The year 2015 was selected for the study, in view of global fall in oil prices in 2015, which adversely affected the revenue of the county and leads to economic recession in Nigeria. Consequently, led to shift in government attention to tax revenue generation. Moreso, year 2019 was chosen due to unavailability of annual report and accounts for year 2020 on websites of listed manufacturing companies.

3.5 Data Analysis and Estimation Techniques

Since the main objective of this research work is to study the determinants of aggressive corporate tax planning in Nigeria by examining fifty-five (55) annual reports and accounts of listed manufacturing companies on Nigeria stock exchange and in order to accept or reject the hypothesis raised in chapter one, both descriptive and inferential statistical techniques was employed as a form of quantitative analysis on the data collected. The descriptive statistics; which includes mean, standard deviation, minimum and maximum values are used to summarize the 2015-2019 annual reports and accounts of the sampled companies. The descriptive statistics also gives a snapshot of the data collected for the study. The mean was used to shows the average of the values in a data set. Standard deviation was used to measure the variability while the minimum and maximum values showed the lowest and highest number of observations.

The inferential statistics technique deployed to analysis four objectives and to confirm or reject the hypothesis stated in chapter one was Robust Square regression. The Robust Square regression being a inferential statistics permits backdrop of the results on the classical regression assumptions as it is not sensitive to serial correlation, non-normal distribution, and constant residual errors (Renaud & Victoria-Fester, 2010; Saliban-Barrera &Yohai, 2006). Prior to the inferential statistics, normality test was conducted to test the reliability of the data collected with the use skewness and kurtosis as well jaque-bera. More so, preliminary diagnostics test were also carried out which includes multicolinearity, using variance inflation factor(VIF) heteroskadacity using Breusch-Pagan Godfrey, serial correlation using Breusch-Pagan Godfrey and model misspecification using Ramsey.

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3.6 Definition and Measurement of Variables

The study employed three (3) variables which are dependent, independent and control variables. The dependent variable for the study is the Effective tax rate(GAAP ETR and CASH ETR) developed by Hanlon and Heitzman, (2010), independent variables are the determinants (earning management practices, tax practitioner's expertise, firm's capital intensity, firm's leverage) of aggressive corporate tax planning while the control variables are firm's age and firm's size.

3.6.1 The Dependent Variable (Aggressive Corporate Tax Planning)

Prior studies on tax literature develop varying measures for aggressive tax planning. These proxies include total difference between book and taxable incomes (BTDs), cash ETR, generally accepted accounting principles ETR, long run cash ETR, discretionary total and permanent BTDs, temporary BTDs, tax shelter and unrecognized tax benefits (Chytis *et al.,* 2018).

As used in previous studies conducted (Salihu *et al*, 2018; Ying *et al*, 2017; Innocent *et al.,* 2018; Hanlon *et al.*, 2010; Uniamikogbo *et al.*,2018; Ilaboya *et al.,* 2016; Ifurueze *et al.*,2018; Salawu *et al.*, 2017; Oyeleke *et al.*, 2017; and Bosun-Fakunle *et al.*, 2017), this study employs CASH ETR and GAAP ETR, measured by cash tax expense divided by pre-tax income and income tax expense divided by pre-tax income respectively as a aggressive tax planning measurements.

Following the Employment of both GAAP ETR and CASH ETR as proxy for aggressive tax planning, it reflects permanent book tax differences (BTDs), it excludes the effect of temporary book tax differences and it captures the effect of foreign operations for tax planning purposes (Halioui *et al.*,2016):. In addition, cash effective tax rate reveals the taxes paid rate per dollar of income earned and by extension per naira of income earned in the context of Nigeria. Also, it is not easily affected by accrual adjustments except with only the tax deferred strategies compared to GAAP effective tax (Ogbeide *et al.*, 2018; Yinka, & Rafiu 2018).

A higher ETR reflects lesser the companies' aggressiveness towards tax planning and vice versa (Chytis *et al.*, 2018). ETR is calculated as the quotient of total tax to pre-tax income. However, aggressive corporate tax planning for each sampled companies is computed as the effective tax rate as developed by Hanlon and Heitzman, (2010) as it is used in the work of Chytis *et al.,* (2018).

3.6.2 The Independent Variables (Determinants of Aggressive Corporate Tax Planning)

The independent variables (determinants of aggressive corporate tax planning) used in this study are earning management practices, tax practitioner's expertise, capital intensity, and leverage. To estimate the extent to which a company was able to manage its earnings, the modified Jones-model was used. In detecting earnings management practices (EMPr), the modified Jones model is used because the model can detect earnings management more effectively when compared to other models (Dechow et al. (1995); Healy model (1985); DeAngelo model (1986); Jones mode (1991), and the Industrial model developed by Dechow and Sloan (1991)).These variables are measured as shown in the table below; The formular for modified Jones model is:

$$DA_{i,t} = \beta_1(1/A_{it-1}) + \beta_2(\Delta REV_{it} - \Delta REC_{it}) + \beta_3(PPE_{it}) + \varepsilon_{it} \ldots\ldots\ldots..3.3$$

Where:

DA_{it} = Discretionary accruals in year t

A_{it-1}= Assets in year t-1

ΔREV_{it}= change in revenue from year t-1 to year t

ΔREC_{it} = change in receivables from year t-1 to year t

PPE_{it} = property, plant and equipment (in year t)

The variables ΔREVit, ΔRECit and PPEit are scaled by total assets in year t-1

Table 3.6 Definition and Measurement of Variables

Variable	**Measurement**	**Previous researchers**	**A-Prior expectatio n**
Depedent			
Aggressive Corporate tax planning	Measured using (i) Cash Effective Tax rate	Chytis, Tasios, and Gerantonis (2018);	

	calculated as (ii) Generally Accepted Accounting Principles(GAAP)Effective tax rate		
Cash Effective Tax rate	Measured using Cash Income Tax Expense divided Pre-Tax Income	Ogbeide *et al.*, (2018); Bosun-Fakunle *et al.*, (2017);	
Generally Accepted Accounting Principles(GAAP)Effective Tax Rate	Measured using GAAP Income Tax Expense divided Pre Tax Income	Ogbeide (2017); Innocent *et al.*, (2018); Oyeleke *et al.*, (2017)	+
Independent			
Earning management practices	Measured by using discretionary accruals from the modified Jones model	Zahra *et al.*, (2019)	+
Tax Practitioner's Expertise	Takes the value of 1 if company uses any firm being audited by the major four audit firms, 0 if otherwise	Armstrong, Blouin, Jagolinzer & Larcker (2015)	+
Firm's Capital Intensity	Measured as the ratio of net tangible fixed assets to total assets	Rodríguez *et al.*, (2015)	+
Firm's Leverage	Measured by debt to equity ratio	Pratama, (2016); Chytis *et al.*, (2018);Uniamikogbo *et al.*, (2018); Ilaboya *et al.*, (2016)	+
Control			

Firm's Age	Natural logarithm of Number of years of existence	Pratama (2017); Ogbeide (2017); Boussaidi *et al.*, (2015)	+
Firm's Size	Natural logarithm of total company's assets	Pratama (2017); Irianto, *et al.*, (2017); valentine *et al.*, (2016); Ogbeide (2017)	+

Source; Field Survey (2020)

3.7 Model Specification

To achieve the objectives of the study, the model of Chytis, Tasios, and Gerantonis (2018) model was adapted and modified. The model was presented as:

$ETR_{it}= \boldsymbol{\beta 0}+\boldsymbol{\beta 1}Fsize_{it}+\boldsymbol{\beta 2}Profm_{it}+\boldsymbol{\beta}3ROA_{it}+\boldsymbol{\beta 4}ROA_{it}+\boldsymbol{\beta}5Liq_{it}+\boldsymbol{\beta}6Lev_{it}+ \boldsymbol{\beta}7Afirm_{it} + \boldsymbol{\beta}8bindep+ \boldsymbol{\beta}9CEOdual_{it} +\boldsymbol{\beta}10Owncon_{it} +\boldsymbol{\varepsilon i}_{it}$……………………………………(3.1)

Where:

ETR: the effective tax rate of each firm;
Fsize: firm size measured by the log of total assets per company;
Profm: the percentage of gross profit margin;

ROA: return on assets measured by net income to total assets ratio;

ROE: return on equity measured by net income to total equity ratio;
Liq: liquidity measured by current assets to current liabilities ratio;
Lev: leverage measured by debt to equity ratio;
Afirm: auditing firm size, a dummy variable that takes the value 1 if the company is audited by one of the big 4 auditing firms and 0 otherwise;
Bindep: board independence, measured by the percentage of independent members of the board;
Ceodual: chief executive officer duality a dummy variable that takes the value 1 if the positions of the CEO and the president are held by the same person and 0 otherwise

Owncon: ownership concentration, measured by the cumulative percentage of shareholders with more than 5% of issued share capital;
εi: disturbance term

The above model was modified and improved on for the purpose of this study, where eight of their variables were replaced (with earning management practices, and tax practitioner's expertise, firm's capital intensity, and firm age) because they were not relevant in achieving the objectives of the study. Therefore, since the aim of this study is to examine the determinants of aggressive corporate tax planning raised in chapter one, the models for this study is specified thus;

MODEL 1:

$GAAPETR_{it}= \boldsymbol{\beta 0}+\boldsymbol{\beta 1}EMPr_{it}+\boldsymbol{\beta 2}TaxPr_{it}+ \boldsymbol{\beta}3Lev_{it}+\boldsymbol{\beta 4}CapInt_{i} +\boldsymbol{\beta}5FirmAge_{it} +\boldsymbol{\beta}6FirmSize_{it} + \boldsymbol{\varepsilon i}_{it}$...(3.1)

MODEL 2:

$CASHETR_{it}=\boldsymbol{\beta 0}+\boldsymbol{\beta 1}EMPr_{it}+\boldsymbol{\beta 2}TaxPr_{it}+_{t}+\boldsymbol{\beta}3Lev_{it}+\boldsymbol{\beta 4}CapInt_{i} +\boldsymbol{\beta}5FirmAge_{it} +\boldsymbol{\beta}6FirmSize_{it} + \boldsymbol{\varepsilon i}_{it}$...(3.2)

Where:

GAAPETR= Generally Accepted Accounting Principles Effective Tax Rate of firm i in year t

CASHETR: Cash Effective Tax Rate of firm i in year t

$\boldsymbol{\beta 0}$ = Intercept

$EmPr_{it}$: Earnings Management Practices of firm i in year t

$TaxPr_{it}$: Tax Practitioner's Expertise of firm i in year t

$CapInt_{it}$: Capital Intensity of firm i in year t

$FirmLev_{it}$: Leverage of firm i in year t
$FirmAge_{it}$: Firm Age of firm i in year t
$FirmSize_{it}$: Firm size of firm i in year t
$\boldsymbol{\varepsilon i}$; Random Error Term

The apriori signs are $\boldsymbol{\beta}1>0$, $\boldsymbol{\beta}2>0$, $\boldsymbol{\beta}3>0$, $\boldsymbol{\beta}4>0$, $\boldsymbol{\beta}5>0$, $\boldsymbol{\beta}6>0$

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

In this chapter, the data collected were presented, analyzed and interpreted in tables. Descriptive Statistics such as mean, minimum, maximum and standard deviationwas used to summarize the data of the study. Diagnostics test such as (Serial Correlation, Normality, Linearity, Heteroskedasticity and Multicollinearity) were carried out to fulfil the basic assumption of regression. The hypotheses formulated in chapter one is also tested in this chapter.

4.1 Descriptive Statistics

Table 4.1
Descriptive Statistics

	GAAPETR	CASHETR	ACCRUAL	TAXPR	LEVERAGE	CAPINT	FIRMAGE	FIRMSIZE
Mean	0.2170	0.2054	0.4334	0.5490	0.7304	0.5923	46.545	10.302
Maximum	11.793	7.6248	4.8800	1.0000	32.317	0.9975	96.000	12.240
Minimum	-3.6008	-2.4918	-1.6000	0.0000	-11.445	0.0000	7.0000	8.1184
Std. Dev.	0.9324	0.7255	0.4246	0.4984	3.2279	0.2548	19.336	0.9258

Source: Author's computation, 2020

Table 4.1 above shows a descriptive statistic of variables used in the study. The dependent variable of the study GAAPETR and CASHETR mean stood at 0.217 and 0.2054. The minimum and maximum value of both measure of tax aggressiveness used in the study was -3.6008 and 11.793 for GAAPETR; -2.4918 and 7.6248 for CASHETR respectively. The standard deviation for both measure of tax aggressiveness did not exhibit considerable clustering around the mean. The mean of earnings management practices stood at 0.4334, having a minimum and maximum value of -1.6 and 4.88 respectively. However, the standard deviation was less than the mean indicating a considerable clustering around the mean. The average of tax practitioner's expertise stood at 0.549 with a standard deviation of 0.4984. Leverage had a mean of 0.7304, with the lowest and highest value of -11.445 and 32.317, respectively. The standard deviation of leverage did not exhibit a considerable clustering around the mean. Firm's capital intensity had a mean of 0.5923 and a standard deviation 0.2548. The control variables – firm age and firm size had means of 46.545 (an average of about 47 years old) and #10,302,000 respectively. The lowest and highest firm age stood at 7 years and 96 years, respectively. While the lowest and highest value of firm size stood at #8,118,400 and #12,240,000 respectively.

4.2. Preliminary Diagnonistic Test

The preliminary test were conducted prior to the testing of hypotheses in order to test the normality of the data collected. Amongst the preliminary tests carried out include the normality test using skewness, kurtosis, and jaque bera, test for correlation matrix, test of multicolinearity using the variance inflation factor (VIF), test for serial heteroskedacity using breusch-pagan – Godfrey on the models and test for constant residual error using Breusch-Pagan-Godfrey.

4.2.1 Correlation Analysis

The bivariate relationship between variables in the models was examined before carrying out the regression. This relationship was observed through the Pearson product moment correlation analysis and was used in determining the direction and strength of the relationship either positive or negative. In addition, it also helped to detect the presence of multicolinearity among the variables in the models.

Table 4.2.1

Correlation Matrix

	GAAPETR	CASHETR	ACCRUAL	TAXPR	LEVERAGE	CAPINT	FIRMAGE	FIRMSIZE
GAAPETR	1.0000							
CASHETR	0.4007	1.000000						
ACCRUAL	-0.0175	0.043904	1.000000					
TAXPR	0.1131	0.143834	-0.104588	1.000000				
LEVERAGE	-0.0271	-0.025819	0.010301	0.076618	1.000000			
CAPINT	-0.1042	-0.093178	-0.016429	-0.023096	0.008878	1.000000		
FIRMAGE	-0.0248	-0.022252	-0.117057	0.190313	0.044139	-0.035015	1.000000	
FIRMSIZE	0.0411	0.053149	-0.025225	0.308777	0.036648	0.153509	0.005552	1.00

Source: Author's computation, 2020

The linearity of variables (correlation matrix) as presented in Table 4.2.1 show that the variables exhibited both positive and negative relationship. For example, GAAPETR and TAXPR (0.1131) and GAAPETR and ACCRUAL (-0.0175). Also, as seen in the matrix, the strength of the relationship between variables measured by the Pearson product-moment correlation showed that the association between the variables is relatively small and were below the threshold of 0.80, suggesting the absence of the problem of multicollinearity in the predictor variables (Studenmund, 2014). However, to further validate the veracity of this result, we employed the Variance Inflation Factor test.

4.2.2 Classical Regression Assumption Summary

We carried out various diagnostics test in order to fulfill the basic assumptions of regression. Some of the diagnostics test we did was autocorrelation test, serial correlations test, constant residual error (Heteroskedasticity), normality and model misspecification test **(See appendix one for details)**. The summary of some classical assumptions carried out to fulfill the basic assumption of regression are shown in the table below

Table 4.2.2

Classical Regression Assumption Summary

Classical Assumptions	Model	TEST	PROBABILITY	REMARK
Normality	Model 1	Jarque-Bera	Kurtosis = 89.7, Skewness = 7.2, Significant at 5%**	Not Fulfilled
	Model 2		Kurtosis = 63.0, Skewness = 6.4, Significant at 5%**	
Multicollinearity		Variance Inflation Factor	Centered VIF less than 10	**Fulfilled**
Serial correlation	Model 1	Breusch-Godfrey (LM)	F(2,266) = 0.0165, p = 0.9837	**Fulfilled**
	Model 2		F(2,266) = 6.2949, p = 0.0021**	Not Fulfilled
Constant residual error	Model 1	Breusch-Pagan-Godfrey	F(2,268) = 1.0498, p = 0.3934	**Fulfilled**
	Model 2		F(2,268) = 0.8920, p = 0.5011	
Model Misspecification	Model 1	Ramsey RESET	F(1,267) = 6.7913, p = 0.0097**	Not Fulfilled
	Model 2		F(2,268) = 1.0816, p = 0.2804	**Fulfilled**

Source: Authors Computation, 2020 using E-views 11

One of the assumptions of regression is normality of series distribution. The skewness and kurtosis shows whether there is any departure from normality in the series. The skewness statistics indicates that our data series was positively skewed (7.2 and 6.4), and the kurtosis which shows the peakedness of the distribution was leptokurtic (89.7, and 67) in nature. These results is in dissonance with threshold of (-3 to 3) range of Peck, Olsen and Devore (2008) in determining normality of a distribution. To further strengthen this, the Jarque-Bera statistics, test of normality was statistically significant for all variables at 5%, implying a significant departure away from normality (Studenmund, 2014).

To further strengthen the results from correlation matrix on multicollinearity, the variance inflation factor test was done. From the results as presented in table above, it was observed that none of the variables tested indicates the presence of multicollinearity as the centered VIF of the variables were all less than 10 as suggested by (Studenmund, 2014).

In the GAAPETR model estimated, the series correlation assumption was fulfilled, correlation using the Breusch-Godfrey serial correlation (LM) test, $F(2,266) = 0.0165$, $p > .05$ and the null hypothesis of no serial correlation was accepted. However, in the CASHETR model estimated, the series correlation assumption was not fulfilled, $F(2,268) = 6.2949$, $p < 0.05$, thus we failed to accept the null hypothesis of no serial correlation (Studenmund, 2014).

The Breusch-Pagan-Godfrey test of heteroskecdacity was conducted to test the constant residual error in the models estimated. In both models the hypothesis of heteroskedacity in the series was fulfilled, thus the absence of heteroskedasticity, $F(2,268) = 1.0498$, $p > .05$; $F(2,268) = 0.8920$, $p > .05$. This implies that the residual error is constant in the series (Studenmund, 2014).

Lastly, the Ramsey RESET Test was conducted to test for model miss-specification. In GAAPETR model estimated, result of the analysis revealed the presence of model misspecification, $F(1, 267) = 6.7913$, $p <0.05$. However, in the CASHETR model estimated, the result revealed the absence of model misspecification, $F(1, 267) = 1.0816$, $p >0.05$

4.3 Multivariate Analysis and Test of Hypotheses

Against the backdrop of the backdrop of the results on the classical regression assumption, we failed to estimate our model using the panel least squares. This revelation necessitated the utilization of an alternative and more robust inferential statistic -the Robust Least Squares regression. The robust least squares were used to test hypotheses raised because it is not sensitive to serial correlation, non-normal distribution, and constant residual errors (Renaud & Victoria-Fester, 2010; Saliban-Barrera &Yohai, 2006). These statistical problems could occur due to outliers in observations that do not reflect the underlying statistical relationship in coefficient estimates (Aifuwa, Musa & Gold, 2020; Croux, Dhaene, & Hoorelbeke, 2003; Maronna, Martin, &Yohai, 2006; Renaud & Victoria-Fester, 2010; Saliban-Barrera &Yohai, 2006).

4.3 Inferential statistics - Robust Least Square Regression Summary

Regressors	<u>*Model 1*</u>	<u>*Model 2*</u>
	Coefficient	Coefficient
	Std. Error	*Std. Error*
	(Z-Statistic)	**(Z-Statistic)**
	(Prob)	(Prob)
Intercept	-0.348516	-0.088448
	0.141636	*0.087321*
	-2.460638	**-1.012914**
	(0.0139)	(0.3111)
CASHETR(-1)		0.717850
		0.011119
		-64.56094
		(0.0000)
ACCURAL	0.149597	-0.006162

	0.028364	*0.016601*
	5.274152	**-0.371196**
	(0.0000)**	(0.7105)
TAXPR	0.107404	0.002264
	0.02583	*0.016249*
	4.156748	**0.139342**
	(0.0000)**	(0.8892)
LEVERAGE	-0.000862	-0.000457
	0.003705	*0.002458*
	-0.232712	**-0.185695**
	(0.0360)**	(0.8527)
CAPINT	-0.223099	-0.048840
	0.047469	*0.029373*
	-4.699914	**-1.662738**
	(0.0000)**	(0.0964)
FIRMAGE	0.001449	0.000300
	0.000632	*0.000390*
	2.291076	**0.770385**
	(0.0220)	(0.4411)
FIRMSIZE	0.048980	0.012923
	0.013748	*0.008492*
	3.562715	**1.521760**
	(0.0004)**	(0.1281)
R-squared	0.1736	0.3266
Adjusted R-squared	0.1552	0.3044
S.E. of regression	0.9378	0.7695
Rn-Square Statistics	93.9385	4350.519
Prob. (Rn-Squared Statistics)	0.0001	0.0001

**significant at 5 per cent level;

Source: Authors' Computation, 2020

Note; *CASHETR(-1) is cash effective tax rate; TAXPR is tax practitioner's experts ; CAPINT is capital intensity; FIRMAGE is firm age; and FIRMSIZE is firm size*

Table 4.3 above revealed the results of the robust least squares regression for both models of the study. In model one – the GAAPETR model, the variables employed significantly explains the determinants of aggressive corporate tax planning among listed manufacturing companies in Nigeria for the periods 2015-2019, Rn-Square statistic = 93.94, $p < 0.05$. The R square test for the cumulative effect of selected determinants variables of aggressive corporate tax planning practices. Table 4.3 above reveals that a R^2 of 17%, which therefore indicates that the total variation of aggressive corporate tax planning of listed manufacturing companies caused by the independent variables used in the study. Furthermore, the adjusted R-Squared stood at 0.1552; that is about 16% of the systematic variation in the dependent variable is caused by the explanatory variable used in the study. While about 84% of the variations are caused by other variables not included in the model but were adequately captured by the standard error of the regression, SE = 0.9378. It is worthy to note that the acceptance level of R^2 depends on the research context (Hair, Black, Babin, & Anderson, 2010). Falk and Miller (1992) propose and R^2 of 10% as minimum acceptable level. Therefore, R^2 of 17% can be considered satisfactory percentage considering the rules of (Falk & Miller, 1992).

The CASHETR model, the R^2 stood at 0.3266 (33%) which explains the total variation of aggressive corporate tax planning of listed manufacturing companies caused by the independent variables used in the study while the adjusted R-Squared stood at 0.3044; that is about 30% of the systematic variation in the dependent variable is caused by the explanatory variable used in the study. About 70% of the variations are caused by other variables not included in the model but were adequately captured by the standard error of the regression, SE = 0.7695.The model was significantly fit to explain the determinants of corporate tax planning among listed manufacturing companies in Nigeria, Rn-Square statistic = 4350.519, $p < 0.05$. As discussed above, it is also worthy to note that the acceptance level of R^2 depends on the research context (Hair, Black, Babin, & Anderson, 2010). Falk and Miller (1992) propose and R^2 of 10% as minimum acceptable level. Therefore, R^2 of 33% can be considered satisfactory percentage considering the rules of (Falk & Miller, 1992).

The control variables introduced- firm age and firm size in both revealed mixed findings on corporate tax planning in Nigeria using GAAPETR and CASHETR.

4.3.1 Restatement and Test of Hypothesis One

We tested our hypotheses at 5% level of significance (that is, if p-value < 0.05 reject Ho, else do otherwise).

H_{O1}: There is no significant relationship between earnings management practices and aggressive corporate tax planning among listed manufacturing companies in Nigeria.

From the result in table 4.3 above, the study found mixed finding on the relationship between earnings management practices and corporate tax planning among listed manufacturing companies in Nigeria for the periods 2015- 2019. First, the study found that earnings management practices positively and significantly affects aggressive corporate tax planning (via GAAPETR proxy), β_{1a} = 0.1496; SE = 0.0284, $p < 0.05$. However, using the CASHETR model, we found no relationship between earnings management practices and aggressive corporate tax planning, β_{1b} = -0.0062; SE = 0.0166, $p > 0.05$ thereby providing basis to reject the null hypothesis which states that earnings management practices has no significant influence on aggressive corporate tax planning of listed manufacturing companies in Nigeria. This result implies that the earnings management practices is an influential determinants of aggressive corporate tax planning of listed manufacturing companies in Nigeria. This indicates that managers minimize taxes through aggressive financial reporting mechanisms.

4.3.2 Restatement and Test of Hypothesis Two

H_{O2}: Tax practitioner's expertise has no significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria. Result from the robust regression revealed mixed finding on the relationship between tax practitioner's expertise and corporate tax planning among listed manufacturing companies in Nigeria. First, the study found that the use of tax experts positively and significantly affects aggressive corporate tax planning (via GAAPETR proxy), β_{2a} = 0.1074; SE = 0.0258, $p < 0.05$. However, using the CASHETR model, the study found no relationship between tax expertise and aggressive corporate tax planning, β_{2b} = -0.0023; SE = 0.0163, $p > 0.05$. This result leads to rejection of null hypothesis which states tax practitioner's expertise has no significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria. This implies that, technical skills and expertise of tax practitioners is an influential factor that allows drives tax aggressiveness in corporate manufacturing companies in Nigeria.

4.3.3 Restatement and Test of Hypothesis Three

H_{O3}: firm's leverage has no significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria.

From the result in table 4.3 above, the robust regression revealed that in both GAAPETR and CASHETR models, firms leverage do not have significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria, β_{3a} = -0.008; SE = 0.0037, $p > 0.05$, and β_{3a} = -0.0005; SE = 0.0023, p >0.05.Therefore, the study accept the null hypothesis that firm's leverage has no significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria. This implies that debt financing does not have significant influence on aggressive corporate tax planning of listed manufacturing companies in Nigeria.

4.3.4 Restatement and Test of Hypothesis Four

H_{O4}: firm's capital intensity has no significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria.

The result from the robust regression revealed mixed finding on the relationship between firm's capital intensity and corporate tax planning among listed manufacturing companies in Nigeria. Evidence from the GAAPETR model revealed that firm's capital intensity negatively and significantly affects corporate tax planning, β_{4a} = 0.1074; SE = 0.0258, $p < 0.05$. That is, an increase in firm's capital intensity would lead to decrease in aggressive corporate tax planning. However, in the CASHETR model, we found no relationship between firm's capital intensity and corporate tax planning, β_{4b} = -0.0488; SE = 0.0294, $p > 0.05$. This result leads to rejection of acceptance of null hypothesis which states that firm's capital intensity has no significant influence on aggressive corporate tax planning among listed manufacturing companies in Nigeria. This implies capital intensity does not significantly influence the aggressive tax planning among listed manufacturing companies in Nigeria.

4.3.5 Summary of Hypotheses Tested

Table 4.4: Summary of Hypotheses Tested

Hypotheses	Model 1	Model 2	Remark
H_{O1}	Positive and Significant	No relationship	Positive and Significant
H_{O2}	Positive and Significant	No relationship	Positive and Significant
H_{O3}	Negative and Significant	Negative and Significant	Negative and Significant
H_{O4}	Negative and Significant	No relationship	Negative and Significant

Source: Authors' Compilation, 2020

4.4 Discussion of Findings

From the empirical analysis and hypothesis tested, the empirical results showed that the independent variable proxy with earnings management practices and tax practitioner's expertise are significant positive (via GAAPETR proxy) and no relationship (via CASHETR proxy) determinants of aggressive corporate tax planning among listed manufacturing companies leading to mixed results, Moreso, firm's leverage is significant negative (via GAAPETR proxy and CASHETR) determinant of aggressive corporate tax planning of listed manufacturing companies in Nigeria. Lastly, firm's capital intensity is significant negative (via GAAPETR proxy) and no relationship (via CASHETR proxy) determinant of aggressive corporate tax planning of listed manufacturing companies in Nigeria.

4.4.1 Earnings management practices as a Determinant of Aggressive Corporate Tax planning among listed manufacturing companies in Nigeria.

Specifically, the study revealed that earnings management practices positively and significantly affects aggressive corporate tax planning (via GAAPETR proxy), evidenced by

β_{1a} = 0.1496; SE = 0.0284, $p < 0.05$. This is in line the prediction of the agency theory that the the existence of information asymmetry as one of the agency problem between managers and tax authority can help managers to manage earnings in their own interest resulting to drastic reduction in the tax payable to government agencies. This implies that aggressive and complex tax planning transactions that can provide management with the tools, masks, and justifications for opportunistic managerial behaviours, such as earnings manipulations, related party transactions and other resource-diverting activities would create a tax savings which will increase the after tax return of the firm. This result supports *a-priori* expectation as the researcher expect earnings management practices would leads to increase in aggressive corporate tax planning by manufacturing firms. This empirical findings is in tandem with that the work of Wang and Chen (2007); , Chen *et al.,* (2007); Marques *et al.,* (2011); Ahmad *et al.,* (2015); Yorke *et al.,* (2016); Amidu *et al.,* (2019); Kurniasih *et al.,* (2017) where they found significant positive between earnings management practices and aggressive corporate tax planning.

Conversely, empirical results from the same hypothesis tested found no relationship between earnings management practices and aggressive corporate tax planning (via CASH ETR proxy), evidenced by , β_{1b} = -0.0062; SE = 0.0166, $p > 0.05$.

4.4.2 Influence of Tax practitioner's expertise on aggressive corporate tax planning among listed manufacturing companies in Nigeria.

The empirical result shows that the use of tax practitioner's expertise positively and significantly affects aggressive corporate tax planning (via GAAPETR proxy), as indicated by β_{2a} = 0.1074; SE = 0.0258, $p < 0.05$. This confirmed the Hoffman's tax planning theory that the engagement of tax expert with for firm's tax matters would create a benefit that would flow into the entity through substantial tax savings from efficient tax planning activities, Implying that the use of tax practitioner with experience, technical expertise and skills for their corporate tax matters would provide tax savings which will consequently increases the level of tax aggressiveness which decrease tax expense payment. This findings is in line with the *a priori* expectation of the study as the researcher expect that the use of tax practitioner would positively influence corporate tax aggressiveness. The results support the work of Wurth & Braithwaite, (2016); Killian *et al.,* (2015).

Conversely, empirical results from the same hypothesis tested found no relationship between tax practitioner's expertise and corporate tax planning evidenced by $\beta 2b = -0.0023$; $SE = 0.0163$, $p > 0.05$. This support the prediction of the tax deterrence theory which states penalties for tax evasion can be imposed on tax expert rather than the company. This implies that the use of tax expert for corporate tax matters do not necessitate aggressive tax planning. The result further implies that that corporate tax payers through help of the tax expert who tries to minimize the consequences of tax evasion by taking into consideration three basic aspects which include the chance of being caught, the size of penalty and of course the intensity of their risk aversion.This unexpected result corroborates with the finding of Ogbeide and Iyafekhe (2018).

4.4.3 Influence of Firm's Leverage on aggressive corporate tax planning among listed manufacturing companies in Nigeria.

Similarly, the study revealed that firms leverage is significant and exert negative effect on aggressive corporate tax planning among listed manufacturing companies in Nigeria, $\beta_{3a} = -0.008$; $SE = 0.0037$, $p > 0.05$ (via GAAPETR proxy), and $\beta_{3a} = -0.0005$; $SE = 0.0023$,$p >0.05$ (via CASH ETR proxy). This finding confirms agency theory that assumes that managers of firm with huge amount of leverage are sometimes subjected to the discipline of financing agreement imposed by creditors via inclusion of limiting clauses as this tends to mitigate agents costs (Ogbeide, 2017). The interest element in leverage financing has a tax shield which tends to reduce the income tax liability (Rahmawati *et al.,* 2018). Since interest expense is tax deductible, it tends to increase the level of tax aggressiveness thereby reducing the income tax liability. This findings agrees with the *a priori* expectation of the study as the researcher expect that the use of leverage capital positively influence corporate tax aggressiveness tax thereby decreasing income tax liability. The finding disagreed with the result of prior researches of Lanis and Richardson (2012); Kraft (2014); and Boussaidi and Hamed (2015). This findings is also in tadem with the work of Chytis, Tasios, and Gerantonis (2018); Ilaboya *et al.,* (2016); and Oyeleke *et al.,* (2017).

4.4.4 Firm's Capital Intensity as a Determinants of Aggressive Corporate Tax Planning Among Listed Manufacturing Companies in Nigeria.

The result of this work also revealed that firm's capital intensity negatively and significantly affects aggressive corporate tax planning, $\beta_{4a} = 0.1074$; SE = 0.0258, $p < 0.05$ (Evidence from the GAAPETR model). That is, an increase in firm's capital intensity would lead to decrease in aggressive corporate tax planning. This finding confirms the stakeholder theory, which predicts that companies under study are exposed to effective scrutiny by the various government agencies with little opportunity of tax minimization. This indicates that presence of huge investment in physical assets send a signal to tax authority for more effective verification of the companies' asset so as not to claim higher value of tax depreciation expense that could reduce their assessable income and therefore pay high income tax expense(Ogbeide, 2017). This findings disagrees with the *a priori* expectation of the study as the researcher expect that capital intensity influence corporate tax aggressiveness tax thereby decreasing income tax liability. The findings is in tandem with earlier studies of Ilaboya *et al.,* (2016); Innocent *et al.,* (2018); Ilaboya, *et al.,* (2016); and Pattiasina (2019). It did not agree with the work of Sonia *et al.,* (2019), Irianto *et al.,* (2017); and Nwaobia *et al.,* (2016).

4.5 Policy Implication of Findings

The implication of the finding gotten from this study;

i. The study found that earnings management practices positive significantly influence the aggressive corporate tax planning of listed manufacturing companies in Nigeria. This depicts that the firms avoid taxes aggressively through the manipulation of earnings. The implication of this is that if the accounting regulators do not address the issue of management of earnings s purposely to avoid taxes aggressively, this would continue to worsen tax revenue of the country.

ii. The study also shows that the use of tax practitioner's expert positively and significantly affects aggressive corporate tax planning of listed manufacturing companies in Nigeria. This depicts that use of tax experts with vast knowledge of tax laws is not only for tax aggressiveness purpose but providing their clients with tax risk advice and representing their clients in tax disputes with the tax administration or other business entities functions. The implication of this is that if tax authorities do not examine the tax history of individual companies on regular basis, tax revenue of the country will continue to drop back. To companies, tax position status may be threatened.

iii. Furthermore, the study also reveals that leverage has a negative significant effect on aggressive corporate tax planning among listed manufacturing companies in Nigeria. This represent that presence of excessive of debt in the capital structure does not decrease company's tax liability. This implies that if companies' management do not discontinue debt financing purposely for tax aggressive it would lead to high cost of bankruptcy which will be at expense of the shareholders.

iv. In addition, the study revealed that capital intensity has a negative significant effect on aggressive corporate tax planning of listed manufacturing companies in Nigeria. This depicts that excess non-current asset does not reduce companies' taxes .This implies if the company management do not discontinue to purchase non-current asset for tax advantage purpose, it would result to asset redundancy, illiquidity and low asset turnover.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter discusses the summary, conclusion, and recommendations of the study. The chapter is divided into sub-sections. It begins with the introduction followed by the summary and also the conclusion as well as the recommendation for the further studies and the limitation and challenges faced in the research work.

5.1 Summary

Aggressive tax planning is a common practice employed by companies to reduce the tax burden. Companies uses several methods to conduct aggressive tax planning, but the most common method is accounting methods (Pratama, 2017). Companies also employ estimation to increase their expenses and allowances to reduce their income. Previous research has shown that some companies have a greater tendency to engage in tax avoidance than others (Martinez & Ramalho, 2017). In most developed and developing countries, tax aggressiveness efforts exercised by corporate entities has contributed to loss of tax revenue as a result of weak tax administration strategies and presence of informal sector or shadow economy (Martinez, 2017; Prasetyo & Zaman, 2020)

Consequently, tax aggressive behaviour has negatively affected tax revenue contributions to the total revenue of the most countries. Similarly, Nigeria has experienced a serious depletion in tax revenue to GDP ratio since 2010 caused by tax aggressive efforts by tax payer. Despite the series of tax reforms, tax audit, various sanctions, and anti-tax avoidance measures in Nigeria, particularly the newly approved national tax policy in February, 2017, it is unfortunate that Nigeria has had a dwindling tax revenue in recent years resulting from tax aggressive behaviour of corporate tax payer given the magnitude of multiplicity of taxes which takes away significant proportion of company's pre- tax earnings s (Innocent *et al.*, 2018). Therefore, given role of real sector in an economy, manufacturing sector is the pivot in any national development as they are crucial for economic sustainability in terms of production complexities to meet aggregate demand in an economy. It is against this background that this study investigated the various mechanisms influencing aggressive corporate tax planning of listed manufacturing firms in Nigeria. It is however achieved through four specific objectives; to examine the extent to which earnings management practices influences aggressive corporate tax planning practices among listed manufacturing companies in Nigeria; to examine whether or not tax practitioner's expertise affects aggressive corporate tax planning among listed manufacturing companies in Nigeria; to ascertain the level at which firm's capital intensity influences aggressive corporate tax planning among listed manufacturing companies in Nigeria; and to determine the magnitude to which leverage affects aggressive corporate tax planning among listed manufacturing companies in Nigeria.

The study reviewed several literatures on aggressive corporate tax planning practices. The literature review was divided into three sub-chapters; the conceptual review, theoretical framework and empirical review. The study critically examines the concepts of corporate tax planning; concept of tax aggressiveness; and tax aggressiveness determinants. The study does not only give a comprehensive definition on the concepts used in the study but was also guided by the Hoffman's tax planning, agency, and stakeholder and tax deterrence theories. The findings of previous researchers on studies relating to this in recent years were also explored and divided into developed, developing and Nigeria for easy understanding and to show the lacuna on the previous studies on the determinants of aggressive corporate tax planning in Nigeria. The chapter also discussed quite a number of gaps identified in extant literatures amongst which are; timing gap, institutional gap, methodological gap, and variable gap.

The theories on which the research work was anchored are both the Hoffman's tax planning and stakeholder theory already reviewed. The study adopted the ex-post facto research design. The population of the study comprised all the listed manufacturing companies on the floor of the Nigeria Stock Exchange as at 31st December, 2019 spanning across seven (7) sectors which include; construction/real estate, consumer goods, healthcare, industrial goods, natural resources, oil and gas and conglomerates. As at that date, a total of 74 manufacturing companies were listed on the floor of Nigeria Stock Exchange (NSE). The research work employed stratified sampling method was employed coupled with the random sampling method which eventually captured 55 listed manufacturing companies. The data were sourced from the financial reports of the sampled listed manufacturing companies for five years (2015- 2019) and was analyzed through the descriptive and inferential statistics. The four hypotheses formulated were tested using the Robust Least Square Regression (RLS) which tested the impact of various independent variables on the aggressive corporate tax planning of listed manufacturing companies in Nigeria. The model of Chytis, Tasios, and Gerantonis (2018) model was adapted and modified in other to include some variables not captured by their study. Aggressive corporate tax planning (dependent) was measured using GAAP Effective tax rate and Cash Effective tax rate while the independent variable were proxy using earnings management, tax experts, firm's capital intensity and firm's leverage.

The study found amongst others that the determinants through earnings management and tax practitioner's expertise are significant positive determinants of aggressive corporate tax planning. This indicates that management of earnings, and engagement of tax experts increases the aggressiveness level of corporate tax planning among listed manufacturing companies in Nigeria. This means that complex tax planning transactions can provide management with huge tax savings with the aid earnings management techniques and tax expert which consequently leads to tax aggressiveness. The study also reveals that capital intensity is negatively significant determinant of aggressive corporate tax planning among listed manufacturing companies in Nigeria. This means corporate manufacturing firms acquires non-current asset for production purposes and not claim capital allowances to could reduce tax liability. More so, it indicates that presence of huge investment in non-current assets sends a signal to regulatory agencies for more effective verification of the companies' asset so as not to claim higher value of tax depreciation expense that could reduce their assessable income and therefore pay high income tax expense. Finally, the study also reveals that leverage is negatively significant factor of aggressive corporate tax planning of listed manufacturing companies in Nigeria which indicates that manufacturing companies could be avoiding taxes aggressively but not through debt financing.

5.2 Conclusion

Based on the empirical results of the hypotheses tested in chapter four;

i. The study therefore concludes that earnings management practices is positive significant determinant of aggressive corporate tax planning of listed manufacturing companies in Nigeria. This assures relevant tax authority; Federal Inland Revenue Service that all listed manufacturing companies in Nigeria for years under review has been paying less taxes through earnings manipulations which may in turn, slide the companies' status into tax evasion position.
ii. The study also concludes that engagement of tax practitioner's expertise constitutes a positive significant determinant of aggressive corporate tax planning of listed manufacturing companies in Nigeria, suggesting that listed manufacturing companies make use of tax practitioner for their tax affairs suggesting that taxes

assessed and computed has been reduced drastically through tax expertise and technical skills of tax practitioners and providing their clients tax risk advice.

iii. Also, the study concludes that leverage financing does not constitute determinant of aggressive corporate tax planning that is, companies under review does not use of debt financing to claim tax deductible expenses in order pay less taxes.

iv. Hence, the study concludes that capital intensity is negative significant determinants of aggressive corporate tax planning of listed manufacturing companies in Nigeria.

5.3 Recommendations

Based on the empirical findings of this study, the following recommendations were made for listed manufacturing companies in Nigeria in order to moderate aggressive corporate tax planning as well as to improve the national tax revenue.

i. Based on the findings which reveal that earnings management practices positively and significantly affects aggressive corporate tax planning of listed manufacturing companies in Nigeria. This study therefore recommends that the Financial Reporting Council of Nigeria should closely monitor the accounting system for fair presentation of companies' financial statement in order to pay appropriate taxes to Federal Inland Revenue Service. Also, companies should reduce earning management aggressive tools such as creative accounting etc that could pose company's status into legal risk and reputation risk as result of sliding tax evasion act while being too aggressive to taxes.

ii. Furthermore, the finding revealed that the use of tax practitioner's expertise have a positive significant effect on aggressive corporate tax planning among listed manufacturing companies in Nigeria. Based on this, the study recommends that all listed manufacturing companies should continue to engage tax experts so as avoid taxes and prevent them from behaving aggressively in their tax obligations.

iii. Similarly, further finding reveals that leverage is negative significant effect on aggressive corporate tax planning among listed manufacturing companies in Nigeria. Hence, it is recommended that all manufacturing companies should minimize it debt financing in order to reduce the cost of debt or financial distress, which is also called cost of bankruptcy.

iv. More so, findings shows that capital intensity does not constitute determinant of aggressive corporate tax planning of listed manufacturing companies, based on this findings, the study recommends that all manufacturing companies should use other financing method of acquiring non-current asset such as hire purchase and leases; operating and financing but rather than acquisition out rightly for tax aggressiveness purposes.

5.4 Contribution to Knowledge

The study examined the determinants of aggressive corporate tax planning of listed manufacturing companies in Nigeria. Based on the extant literature such as Dyreng *et al.,* (2008); Desai *et al.,* (2006); Martinez *et al.,* (2014); Lanis *et al.,* (2015); Salihu *et al.,* (2015); Streefland, (2016); Koester *et al.,* (2016); Uniamikogbo *et al.,* (2018); Salawu *et al.,* (2017) Innocent *et al.,* (2018), Salaudeen *et al.,* (2018) Fagbemi *et al*., (2019) etc., it is discovered that none of the studies has examined tax expert as a determinants of aggressive corporate tax planning in Nigeria. However, it was discovered many studies examined the effect of corporate governance (board expertise, board qualification, audit committee expertise, CEO duality etc.) on corporate tax aggressiveness in Nigeria in which the study focuses non-corporate governance variables with few empirical evidences. It was also discovered that none of these studies use two proxy variables for (dependent) aggressive corporate tax planning in which this study utilizes for more robust findings.

The study also observed that many studies in developed, developing and Nigeria (for instance, Oyeyemi *et al*., 2016; Ogbeide, 2017; Aliani, 2014; Kurniasih, *et al.,* 2017) focused on deposit money banks, other financial sectors, and manufacturing companies; industrial sector and consumer sector. This study therefore, contributes to the frontiers of knowledge by employing all the 7 sectors in the manufacturing industries in Nigeria in view of their high investment in non-current assets as to claim tax deductions (capital allowances) for tax aggressiveness purposes.

More so, the only study conducted on earning management, and tax experts as well as leverage and aggressive corporate tax planning practices in Nigeria examined a cross sectional annual reports of listed manufacturing companies four years (2014 - 2017) only, but this study extended the timing by assessing the annual reports of manufacturing companies for 5 years ranging from (2015-2019). Therefore this study is a unique as it examined the influence of earning management practices, tax practitioner's expertise, leverage and capital intensity as a determinants of aggressive corporate tax planning of listed manufacturing companies in Nigeria.

5.5 Limitation and Delimitation of the Study

The findings of this research work are limited to four germane determinants variables of the listed manufacturing companies in Nigeria as they are few empirical evidences in extant literature. For instance, others variables to proxy determinants are not captured in the study because sufficient empirical evidences relating to them abound in previous literature. Another limitation is that, the study failed to conduct survey of opinions from the stakeholders in tax regulators and tax administrators as well as listed manufacturing companies as the annual reports examined were the best means to elicit accurate information on corporate tax aggressiveness.

Furthermore, data collected was for five years (2015-2019), thus this research could not account for time-lag effect of 2020, because of data of these sampled manufacturing companies was not available for public access.

Despite these limitations, it has no effect on the empirical findings on this study as a results of the adequate supportive and statistical evidence deployed to make the results reliable and fit for policy formulation.

5.6 Suggestion for Further Studies

In order to improve on the study on the limitation and delimitation identified above, the finding suggest the following for future researchers interested in this study area;

i. The study focused on mainly listed manufacturing companies; further studies should capture other sectors of the economy listed on the floor of Nigeria stock exchange for effective generalization.
ii. The study used secondary data for five years (2015-2019); further research should look into a wider timing to include 2020 data for which access could not be gotten as at the time of carrying out this research work.
iii. This sample size could be increased to capture all listed companies which could include financial companies not captured by this study.
iv. Further researcher could expand the scope of the study to capture the determinants of aggressive corporate tax planning practice in other African countries.

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APPENDIX I

Multicolinearity Test

Variance Inflation Factors
Date: 10/20/20 Time: 09:02
Sample: 1 275
Included observations: 275

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.445907	141.8385	NA
ACCRUAL	0.017883	2.090774	1.022191
TAXPR	0.014840	2.591917	1.168719
LEVERAGE	0.000305	1.059414	1.007626
CAPINT	0.050085	6.621133	1.031056
FIRMAGE	8.89E-06	7.177277	1.053090
FIRMSIZE	0.004201	142.9720	1.141258

Source: Author's Computation, 2020 using E-views 11

Serial Correlation LM Test for Model One

Breusch-Godfrey Serial Correlation LM Test:
Null hypothesis: No serial correlation at up to 2 lags

F-statistic	0.016481	Prob. F(2,266)	0.9837
Obs*R-squared	0.034073	Prob. Chi-Square(2)	0.9831

Source: Author's Computation, 2020 using E-views 11

Constant Residual error test for Model One

Heteroskedasticity Test: Breusch-Pagan-Godfrey
Null hypothesis: Homoskedasticity

F-statistic	1.049840	Prob. F(6,268)	0.3934
Obs*R-squared	6.315138	Prob. Chi-Square(6)	0.3888
Scaled explained SS	266.0093	Prob. Chi-Square(6)	0.0000

Source: Author's Computation, 2020 using E-views 11

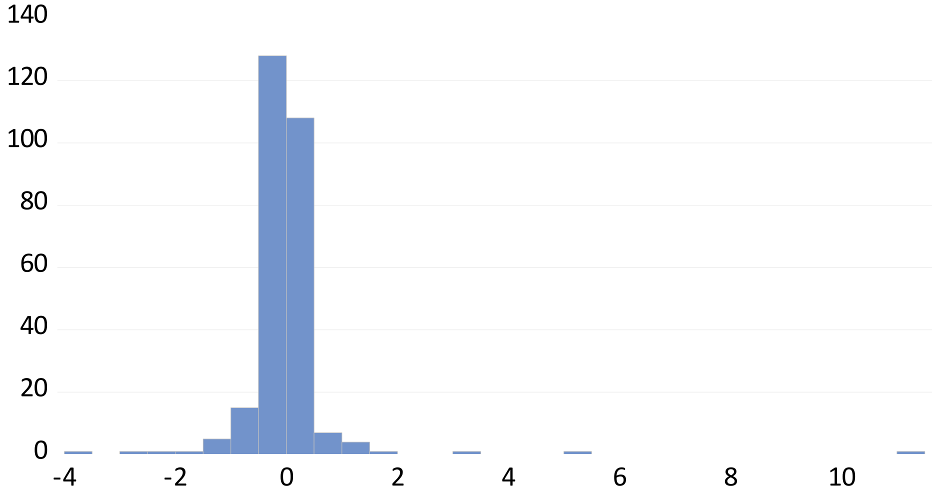
Model Misspecification Test for Model One

Ramsey RESET Test
Equation: UNTITLED
Omitted Variables: Squares of fitted values
Specification: GAAPETR C ACCRUAL TAXPR LEVERAGE CAPINT FIRMAGE FIRMSIZE

	Value	Df	Probability
t-statistic	2.606005	267	0.0097
F-statistic	6.791264	(1, 267)	0.0097
Likelihood ratio	6.907271	1	0.0086

Source: Author's Computation, 2020 using E-views 11

Normality Test for Model One



Series: Residuals
Sample 1 275
Observations 275

Mean	1.13e-16
Median	-0.022435
Maximum	11.29001
Minimum	-3.816459
Std. Dev.	0.919567
Skewness	7.239072
Kurtosis	89.70331
Jarque-Bera	88539.46
Probability	0.000000

Constant Residual Error Test for Model Two

Heteroskedasticity Test: Breusch-Pagan-Godfrey
Null hypothesis: Homoskedasticity

F-statistic	0.892029	Prob. F(6,268)	0.5011
Obs*R-squared	5.384437	Prob. Chi-Square(6)	0.4955
Scaled explained SS	158.5287	Prob. Chi-Square(6)	0.0000

Source: Author’s Computation, 2020 using E-views 11

Serial Correlation LM Test for Model Two

Breusch-Godfrey Serial Correlation LM Test:
Null hypothesis: No serial correlation at up to 2 lags

F-statistic	6.294906	Prob. F(2,266)	0.0021
Obs*R-squared	12.42758	Prob. Chi-Square(2)	0.0020

Source: Author’s Computation, 2020 using E-views 11

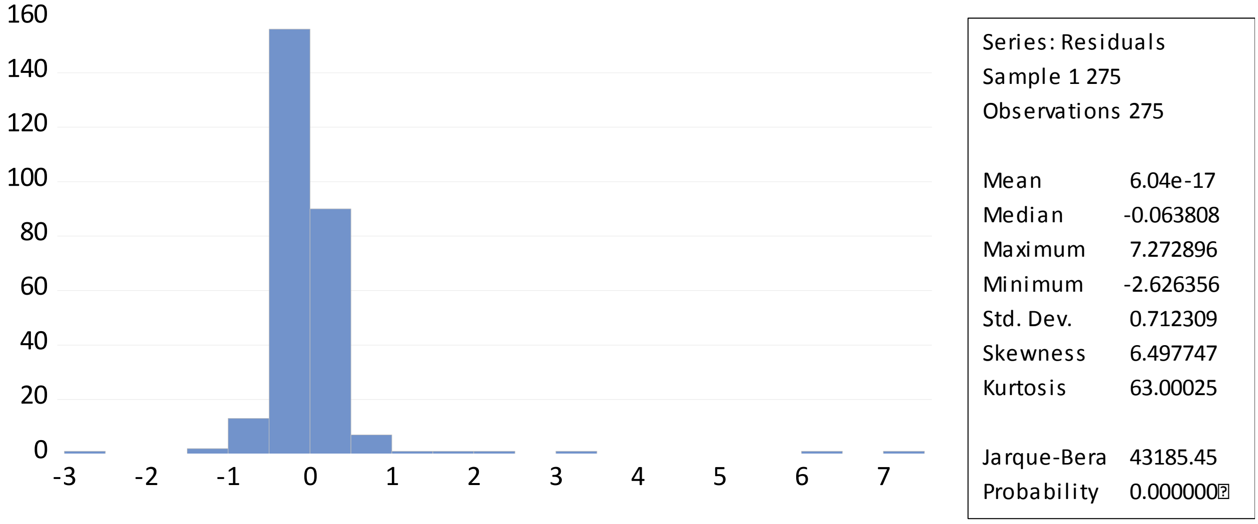
Model Misspecification Test for Model Two

Ramsey RESET Test
Equation: UNTITLED
Omitted Variables: Squares of fitted values
Specification: CASHETR C ACCRUAL TAXPR LEVERAGE CAPINT FIRMAGE FIRMSIZE

	Value	Df	Probability
t-statistic	1.081568	267	0.2804
F-statistic	1.169790	(1, 267)	0.2804
Likelihood ratio	1.202208	1	0.2729

Source: Author’s Computation, 2020 using E-views 11

Normality Test for Model Two



Dependent Variable: GAAPETR
Method: Robust Least Squares
Date: 10/20/20 Time: 00:13
Sample: 2015 2019
Included observations: 275
Method: S-estimation
S settings: tuning=1.547645, breakdown=0.5, trials=200, subsmpl=7,
refine=2, compare=5
Random number generator: rng=kn, seed=625031792
Huber Type I Standard Errors & Covariance

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.348516	0.141636	-2.460638	0.0139
ACCRUAL	0.149597	0.028364	5.274152	0.0000
TAXPR	0.107404	0.025838	4.156748	0.0000
LEVERAGE	-0.000862	0.003705	-0.232712	0.8160
CAPINT	-0.223099	0.047469	-4.699914	0.0000
FIRMAGE	0.001449	0.000632	2.291076	0.0220
FIRMSIZE	0.048980	0.013748	3.562715	0.0004

Robust Statistics

R-squared	0.173666	Adjusted R-squared	0.155166
Scale	0.187289	Deviance	0.035077
Rn-squared statistic	93.93847	Prob(Rn-squared stat.)	0.000000

Non-robust Statistics

Mean dependent var	0.217092	S.D. dependent var	0.932445
S.E. of regression	0.937794	Sum squared resid	235.6946

Source: Author's Computation, 2020 using E-views 11

Dependent Variable: D(CASHETR)
Method: Robust Least Squares
Date: 10/20/20 Time: 13:48
Sample (adjusted): 2016 2019
Included observations: 220 after adjustments
Method: S-estimation

S settings: tuning=1.547645, breakdown=0.5, trials=200, subsmpl=8, refine=2, compare=5
Random number generator: rng=kn, seed=1729440843
Huber Type I Standard Errors & Covariance

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.088448	0.087321	-1.012914	0.3111
CASHETR(-1)	-0.717850	0.011119	-64.56094	0.0000
ACCRUAL	-0.006162	0.016601	-0.371196	0.7105
TAXPR	0.002264	0.016249	0.139342	0.8892
LEVERAGE	-0.000457	0.002458	-0.185695	0.8527
CAPINT	-0.048840	0.029373	-1.662738	0.0964
FIRMAGE	0.000300	0.000390	0.770385	0.4411
FIRMSIZE	0.012923	0.008492	1.521760	0.1281

Robust Statistics

R-squared	0.326646	Adjusted R-squared	0.304412
Scale	0.143400	Deviance	0.020564
Rn-squared statistic	4350.519	Prob(Rn-squared stat.)	0.000000

Non-robust Statistics

Mean dependent var	-0.004362	S.D. dependent var	0.874676
S.E. of regression	0.769545	Sum squared resid	125.5462

Source: Author's Computation, 2020 using E-views 11

APPENDIX 11		
S/N	**COMPANY**	**SECTOR**
1	Chellarams	Conglomerate
2	A.G. Leventis	Conglomerate
3	SCOA Nig PLC	Conglomerate
4	John Holt PLC	Conglomerate
5	Skye Shelter	Construction
6	Arbico	Construction
7	Julius Berger	Construction
8	Unilever Nig	Consumer
9	Cadbury Nig	Consumer
10	Dangote Sugar	Consumer
11	Flour Mills Of Nigeria	Consumer
12	Guinness Nig	Consumer
13	Nascon Allied	Consumer
14	Nestle Nig	Consumer
15	Nigeria Breweries	Consumer
16	Pz Cussons	Consumer
17	Vitafoam Nig	Consumer
18	Mcnchols plc	Consumer
19	Golden Guinea Brew	Consumer
20	International Brewries	Consumer
21	Honeywell Flour	Consumer
22	Union Diacon Salt	Consumer
23	Dangote Flour	Consumer
24	Evans Medical	Healthcare
25	Glaxosmithkline Nig	Healthcare
26	May & Baker Nig	Healthcare
27	Morison Industries	Healthcare
28	Neimeth Int Pharm	Healthcare
29	Pharma-Deko	Healthcare
30	Fidscon	Healthcare
31	Union Diagnostical	Healthcare

32	Avon Crowncaps & Containers	Industrial
33	Berger Paints Nig	Industrial
34	Beta Glass Company	Industrial
35	Cement Co Of Northern Nig	Industrial
36	Cutix	Industrial
37	Dn Meyer	Industrial
38	Greif Nig	Industrial
39	Lafarge Cement Wapco Nig	Industrial
40	Premier Paints	Industrial
41	First Alumminium Nig	Industrial
42	Dangote Cement	Industrial
43	Chemical & Allied Product	Industrial
44	Eterna PLC	Oil and Gas
45	MRS Oil	Oil and Gas
46	FORTE OIL	Oil and Gas
47	JAPAUL OIL	Oil and Gas
48	OANDO	Oil and Gas
49	SEPLAT	Oil and Gas
50	CONOIL	Oil and Gas
51	TOTAL	Oil and Gas
52	Aluminium Extrusion Indus	Resources
53	B.O.C Gases Nig	Resources
54	Multiverse	Resources
55	Thomas Wyatt	Resources

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