UNIVERSITY OF CAPE COAST

ANTECEDENTS OF TAX AGGRESSIVENESS AND PERFORMANCE OF

LISTED FIRMS IN GHANA

VINCENT ADELA

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Vincent Adela

University of Cape Coast

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LISTED FIRMS IN GHANA

BY

VINCENT ADELA

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Administration

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: .... Date: ....

Name: Vincent Adela

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: .... Date: ....

Name: Prof. Samuel Kwaku Agyei

Co-Supervisor's Signature: .... Date: ....

Name: Prof. James Atta Peprah

ABSTRACT

This thesis draws inspiration from agency theory, Hoffman's tax planning theory, resource dependency theory, pecking order theory, and legitimacy theory to investigate the antecedents of tax aggressiveness, the effect of tax aggressiveness on financial performance, earnings management and corporate transparency, and the moderating role of tax risk and corporate governance on the relationship between tax aggressiveness and financial performance of listed non-financial firms in Ghana. The study used a two-step system generalised method of moment (SGMM) approach to analyse the data covering from 2010 to 2019. The study found board size, board gender diversity, non-executive directors, institutional ownership, and ownership structure to have a significant positive effect on tax aggressiveness. Political connection and financial constraints had a significant positive impact on tax aggressiveness while CSR had mixed effects on tax aggressiveness. Tax aggressiveness positively affects firm performance, regardless of the proxy. While the marginal effects of tax aggressiveness and corporate governance on the relationships between tax aggressiveness and ROE and ROA were positive, they were negative for Tobin's Q. The study concluded that firms that engage in tax aggressiveness have low earnings quality and lack transparency in their dealings. Again, it was concluded that sound corporate governance structures could smoothen out part of the agency costs that might arise from opportunistic managerial behaviours, thereby, improving firm performance - returns on assets and equity. The study recommends that firms should utilise the services of tax experts and consultants for effective tax planning.

KEYWORDS

Corporate governance

Financial constraints

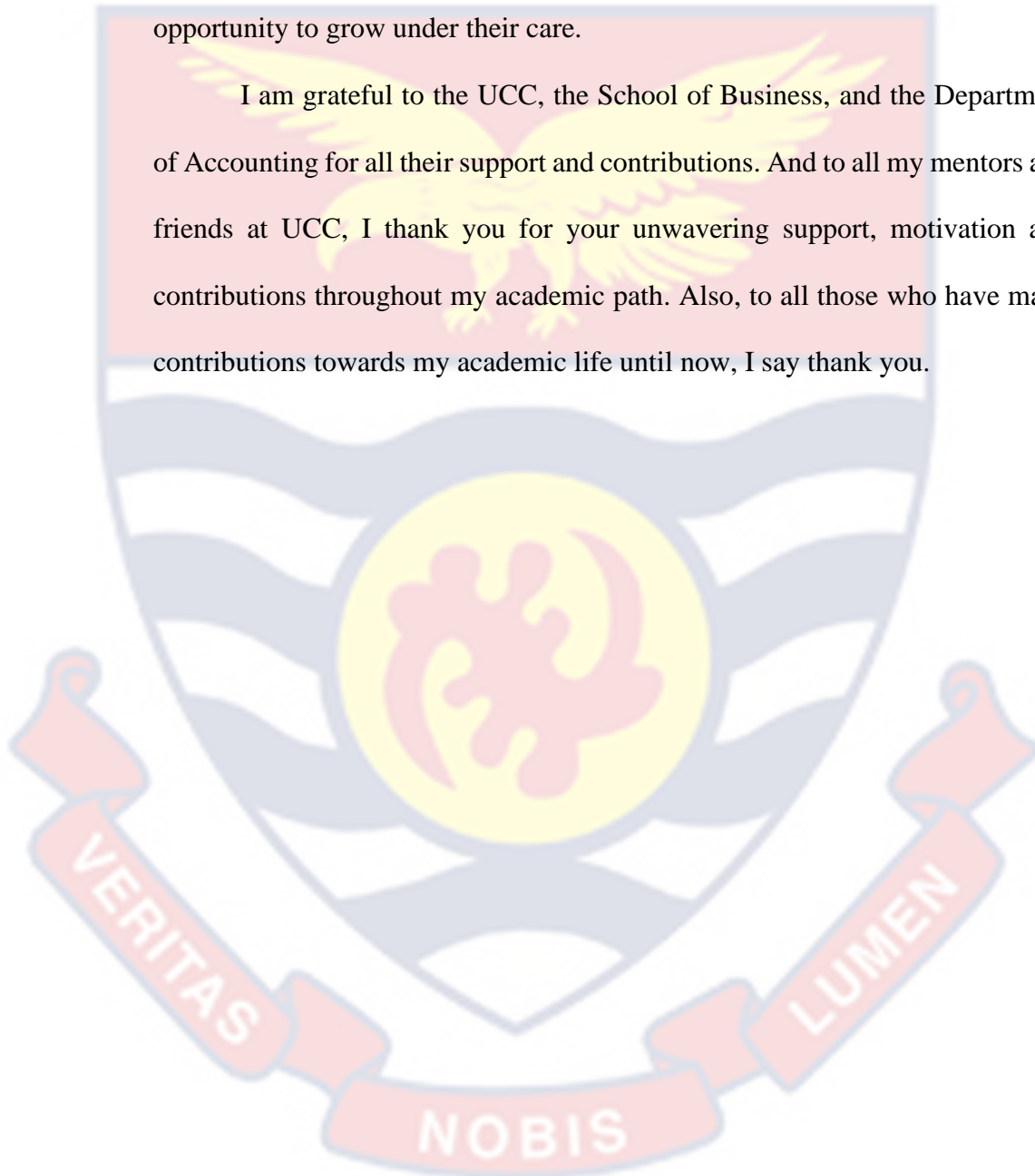Firm performance

Political connection

Tax aggressiveness

Tax risk

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DEDICATION
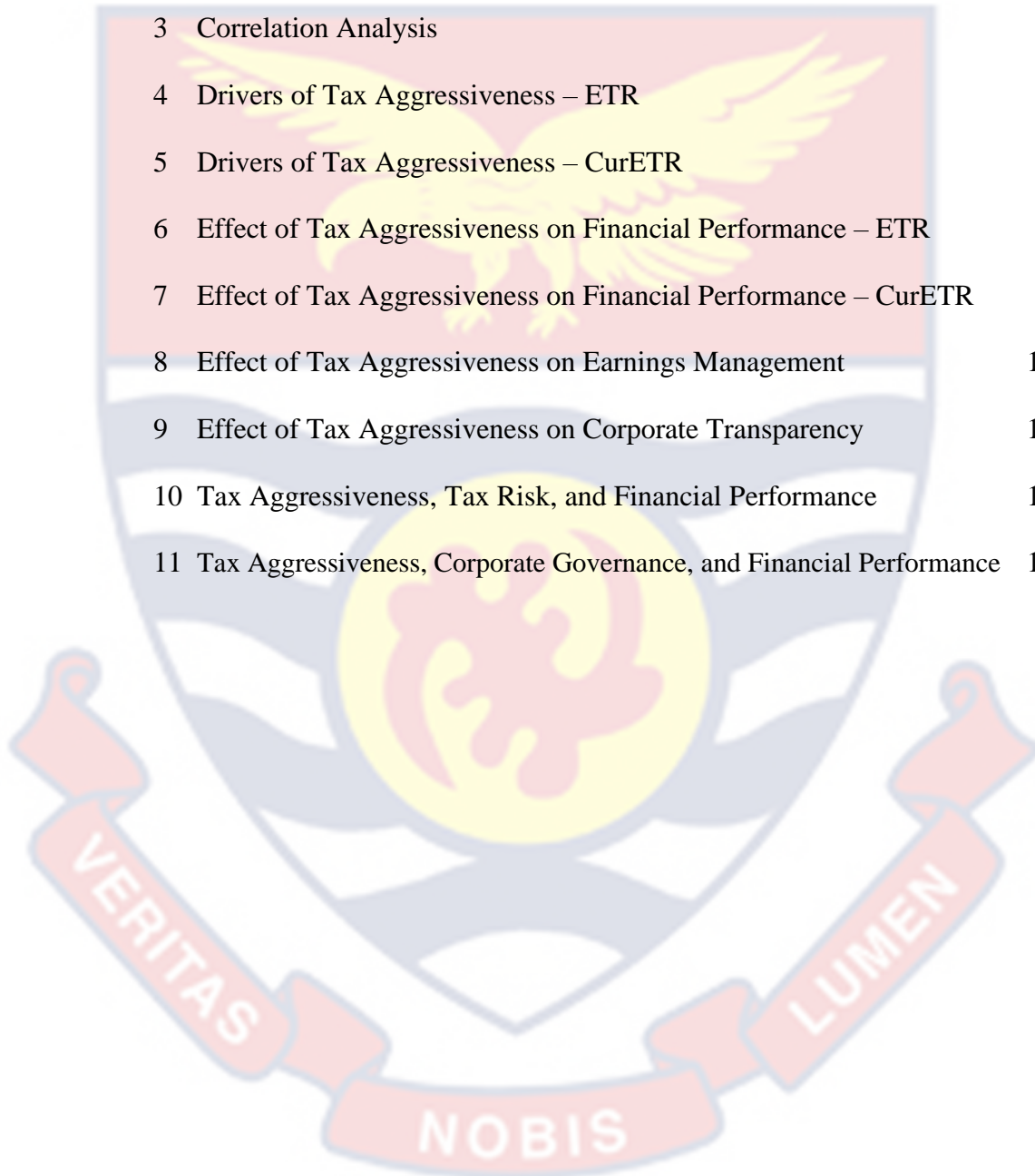
To my family and friends

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LIST OF ACRONYMS

ROA   Returns on Assets

ROE   Returns on Equity

SGMM   System Generalised Method of moments

CHAPTER ONE

INTRODUCTION

Financial statement (FS) quality is vital to stakeholders when making investment and credit choices, and it increases market efficiency. It depends on the value of the information shown in the FSs, as well as how the company's management prepares FSs in line with relevant regulations and standards. In practice, the intended use of FSs may incentivise management to falsify financial statements to reflect the company's best performance and fulfil shareholders' and stakeholders' expectations, as per the shareholder, stakeholder, agency, and goal-setting theories.

Earnings management and tax management are two examples of financial manipulation in the workplace. Stakeholders use the net profit to assess management's performance and estimate the company's future profitability. As a result, corporations attempt to control their net earnings, which is commonly referred to as financial reporting aggressiveness, to boost shareholder trust. Although such a practice might assist the firm, proactive financial reporting could detrimentally influence companies' tax payments. This is known as tax aggressiveness (TA) in the literature. Empirics refer to TA as tax planning that reduces the amount of taxable income, whether through tax avoidance or not. Tax planning in itself may take several forms, including identifying gaps (loopholes) in the tax structure, which is sometimes referred to as tax management, tax avoidance, tax dodging, and tax shelters. TA is most likely an 'everyday thing' for corporations. The determining elements of tax aggressiveness were explored in this study.

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Background to the Study

For decades, tax system and taxation academics have struggled to understand the factors that influence taxpayer noncompliance. Because tax revenues are viewed as an important source of cash in paying government expenditures, several experimental and survey results concluded by tax scholars have revealed characteristics of non-compliant taxpayers. Globalisation has created a great demand for a variety of public services, prompting governments to raise taxes to fund these development-oriented programmes (Issah & Rodrigues, 2021). The burden of taxes is shifted to taxpayers as a result of the government's and taxpayers' need for public service. Owing to taxpayers' noncompliance, the gap between tax receipts and government expenditures is widening, resulting in imbalanced government budgets. Understanding the causes of tax aggressive behaviours and their relative impact on individual firms necessitates an investigation into the motivations of aggressive tax behaviours or actions.

Tax aggressiveness is described to include all types of company tax planning, whether legitimate, criminal, or somewhere in the midway (Lanis, & Richardson, 2012; Laguir, Stagliano, & Elbaz, 2015; Issah & Rodrigues, 2021). Tax avoidance, aggressive tax behaviour, tax planning, tax management and tax aggressiveness are all terms used interchangeably in the literature (Hoi, Wu, & Zhang, 2013; Issah & Rodrigues, 2021; Lanis & Richardson, 2012; Lanis & Richardson, 2011). In this study, tax planning and tax avoidance are interchangeably used with tax aggressiveness. Issah and Rodrigues (2021) define tax aggressiveness as executive efforts aimed at reducing or minimising corporation tax payments through tax planning activities, employing all legal

and criminal measures at hand. In brief, organisations undertake what is termed as 'earnings management' to minimise and, in some cases, determine what amount they are willing to pay as tax. Activities such as these are all directed towards profit maximisation, for either internal officers or owners (shareholders).

Prior research highlights firm-level variables as predictors of tax aggressiveness, including financial limitations (Law & Mills, 2015), chief executive remuneration (Higgins, Omer, & Phillips, 2015), internal debt incentives (Chi, Huang, & Sanchez, 2014), analyst coverage (Allen, Francis, Wu, & Zhao, 2016) corporate governance (Armstrong, Blouin, Jagolinzer, & Larcker, 2015), tax preparers (Klassen, Lisowsky, & Mescall, 2016), political influences (Wahab, Ariff, Marzuki, & Sanusi, 2017; Kim & Zhang, 2016; Ying, Wright, & Huang, 2017), ownership structures (Badertscher, Katz, & Rego, 2013), institutional ownership (Lawal, Suleiman, Adisa, & Mohammed, 2021), customer-supplier connections (Cen, Maydew, Zhang, & Zuo, 2017), and activism of hedge funds (Cheng, Huang, Li, & Stanfield, 2012).

A careful examination of the aforementioned studies unveils intuitions that reiterate the essence of firm-specific factors as predictors of corporate aggressive tax behaviour. Therefore, critical corporation-specific factors such as corporate governance and associated issues like agency, shareholder and stakeholder management, etc. need to be given critical attention when examining corporate tax aggressiveness. Scholars, such as Wahab et al. (2017), Kim and Zhang (2016), and Ying et al. (2017), submit that political ties form an essential predictor of corporate tax aggression. The argument is that politically linked corporations would be highly aggressive in their tax planning than non-

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affiliated businesses (Sugeng et al., 2020). The study postulates that if firms have access to resources, they may or may not engage in tax aggressiveness based on the resource dependency theory (Pfeffer & Salancick, 1978; Pfeffer, 1973; Kyereboah-Coleman, 2007). Political Connection is unique resource, and it can form an essential predictor of tax aggressiveness (Wahab et al., 2017; Kim & Zhang, 2016; Ying et al., 2017). The aforementioned factors could be collectively referred to as managerial decision-making on tax aggressiveness (Wang, Xu, Sun & Cullinan, 2020).

The factors that could influence the level of a corporation's tax aggression are manifold, but the literature keeps growing in novelties. It is reasonable to believe that financial constraints increase the tendency that firms may eagerly engage in tax planning and/or tax aggressiveness. Example, the pecking order theory posit that firms that are financially constrained would most likely implement measures to boost internally generated funds through cash tax planning (Seidu et al. 2021).

Furthermore, as per the principles of the legitimacy theory, a corporation may have the right of existence when its values corroborate with societal expectations, particularly within the boundaries in which the corporation operates (Magness, 2006; Cho, Guidry, Hageman, & Patten, 2012). Intuitively, the legitimacy theory establishes a social contract between the company and the society (Shehata, 2014).

Dunbar, Higgins, Phillips and Plesko (2010) document that capital intensity is related to the policies devised by the firm vis-à-vis tax planning options. Owing to the augmented depreciation charges based on a non-current asset, capital intensity is directly related to tax aggression (Richardson, Taylor,

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& Lanis, 2016). Similarly, inventory intensity (i.e., a firm's investment in inventory) is related to its tax planning policies. Capital tied up in inventory is not yet taxable and, hence, a company may not take measures to mitigate tax expenses. Consequently, both capital-intensive and inventory-intensive corporations should be negatively correlated with tax aggressiveness, implying that the higher a company's investment in non-current assets and inventory levels, the lower its aim to avoid paying taxes (Sugeng, Prasetyo, & Zaman, 2020).

Summarily, there are unnumbered characteristics that might increase a corporation's tax aggressiveness intention. Notable among these characteristics are company risk, capital intensity, business size, inventory intensity, and political ties. Surprisingly, controversies surrounding some of these characteristics are yet to be settled by the empirical literature since several studies have yielded distinct conclusions (Sugeng et al., 2020). A jurisdiction-based examination of these factors might be essential to additionally unravel plausible similarities as well as diversities that may exist in the context of the theme in question (i.e., antecedents of tax aggressiveness).

Tax aggressiveness encompasses a broader range of agency struggles between management and shareholders. Managerial opportunism – which is also referred to as resource diversion – is also a form of agency problem that is discussed under tax avoidance (Uniamikogbo, Bennee, & Adeusi, 2019). Complicated tax avoidance activities, such as earnings management, related party transactions, and other resource-diverting events, according to Desai and Dharmapala (2006), Uniamikogbo et al. (2019), and Yu, Liao, Qu, Fang, Luo and Xiong (2021), might offer management with the instruments, excuses, and

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justifications for exploitative managerial behaviour. The forerunning argument suggests that stringent corporate governance mechanisms could either lessen or heighten the degree of tax aggression for corporations.

Aside from profit maximisation, Scott and O'Brien (2003) claim that one of the earnings management motivations is to reduce net profit, which influences the firm's tax burden. Management of profits, similar to Mulyadi and Anwar's (2015) conclusion, is widely used to reduce tax liabilities. This argument rekindles the goal-setting theory (Prastiwi, 2017), which, intuitively, suggests that an entity does something with the motive of achieving a goal or target while the attainment of this goal or target is induced by motivation, suggesting further that corporations have motivations for embarking on aggressive tax behaviours (Hasyim & Jiwayana, 2021).

Amid financial reforms, it is natural for firms to engage in aggressive tax behaviours or earnings management practices (Dyreng, Hanlon, & Maydew, 2019; Herusetya & Stefani, 2020; Rego & Wilson, 2009, 2012). Thus, financial constraints triggers firms to engage in aggressive tax behaviours. Therefore, analysing the relationship between tax aggressiveness and firm performance is as important as analysing the drivers of tax aggressiveness. To achieve good financial performance, businesses regard tax planning or aggressiveness as an essential component of a firm's overall financial planning strategies (Ogundajo & Onakoya, 2016). But as to whether tax aggressiveness results in financial performance for businesses or not is a contentious issue that has not yet been fully settled by empirical research (Tackie, Agyei, Bawuah, Adela, & Bossman, 2022).

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Existing literature has explored the relationship between tax aggression and firm performance, but empirical debates have been equivocal (see, for example, Tang 2019; Wahab & Holland, 2012; Vu & Le, 2021; Wahab, Ariff, Marzuki, & Sanusi, 2017; Wardhani, 2015). For example, some studies claim that tax aggressiveness has a significant impact on firm performance and that, because tax is part of the cost of doing business, any "tax cost-cutting strategy" leads to higher firm performance (Desai & Hines, 2002; Nanik & Ratna, 2015). This proposition contends that the benefits of tax avoidance outweigh the costs and risks involved. Mbroh, Monney, and Bonsu (2019) reports that it had an impact on the performance of listed enterprises. Also, Kawor and Kportorgbi (2014) found that tax aggressive practices have no significant influence on firm performance.

The relationship between tax aggressiveness and firm performance has been argued to be incomplete until other factors, such as tax risk (Mangoting, Yuliana, Effendy, Hariono, & Lians, 2021; Neuman, Omer, & Schmidt, 2020; Conte, 2019) and corporate governance (Deslandes, Fortin, & Landry, 2019; Kovermann & Velte 2019; Sikka, 2018), are incorporated. Vu and Le (2021) and Tang (2019) contend that the effect of tax aggression on firm performance and value is dependent on each firm's heterogeneous agency costs. This means that tax avoidance may result in agency issues. According to agency theory, managers' interests must be aligned with those of the firm (Jensen & Meckling, 1976). According to Kportorgbi (2013), corporate governance plays a role in the relationship between tax planning and firm performance. As claimed by Hoffman (1961), tax planning or aggressiveness attempts to transfer money that would otherwise go to the tax authorities to the firm's coffers. The theory is

based on a fundamental presumption that tax benefits from the tax planning surpass tax cost.

The significance of corporate governance in influencing both the performance and behaviour of corporations is supported by a wide range of empirical studies (Deslandes, Fortin, & Landry, 2019; Kovermann & Velte 2019; Sikka, 2018; Minnick & Noga, 2010; Tang, 2019; Vu & Le, 2021). Theoretically, there seems to be apparent agreement that, in reality, the board of directors is a body primarily responsible for protecting shareholders' interests, even though the literature is divided on whether corporate governance systems are most effective in raising business performance (Fama & Jensen, 1983). The board is also in charge of making sure that the organisation runs within a risk profile that is acceptable to shareholders. In order to do this, the board must discuss, debate, and have an impact on the overall tax risk position (Deslandes, Fortin, & Landry, 2019). Therefore, the board's responsibility in the management of tax risk cannot be disregarded. In view of Wahab, Ariff, Marzuki, and Sanusi (2017), a firm's tax policies may be impacted by various external corporate governance systems. Hence, based on the above lines of arguments, this study analysed whether or not corporate governance amplifies or reduces the strength of the association between tax aggressiveness and firm performance.

Consistent with the theoretical viewpoint of Markowitz (1952), risk factors have been defined as the dispersion from projected outcomes. Accordingly, some studies (see, e.g., Drake, Lusch, & Stekelberg, 2019; Saavedra, 2017) use the dispersion across tax expense, which is termed "tax risk", to measure tax aggressiveness among firms. According to the study, when

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organizations confront risks and options for making decisions, they may have the option of engaging in aggressive tax planning actions to minimize their taxable income in order to boost profitability or otherwise. It has been argued that tax aggressiveness results in agency costs and there exists a possibility of tax risk due to fines and penalties (Wahab, Ariff, Marzuki, & Sanusi, 2017). Thus, the magnitude of such tax risk can affect the extent to which benefits in the form of tax savings can be made. Risk generally refers to the probability of deviating from the intended course of action or target. As a result, tax aggressiveness and tax risk are linked. If a business engages in tax avoidance, there is a tax risk (Irawan, & Turwanto, 2020).

Even though businesses may restrict the amount of money they pay to the tax authority, there are expenses associated with aggressive tax methods. First, the disallowance of corporations' tax positions renders them liable to pay back or settle penalties, unpaid taxes, and interests that may outweigh the amount of taxes saved (Chi, Huang, & Sanchez, 2014; Ji, 2018). Second, if a company is found to be a tax evader, such a corporation may suffer reputational damage, as Chi et al. (2014) submit. Firms also have to pay for the expenses of performing tax transactions (e.g., direct labour and information systems), as well as agency costs like rent extraction (Chen et al., 2010; Balakrishnan et al., 2019). As a result, in order to fully assess the relationship between tax aggression and corporate performance, the role of tax risk must be included. Meanwhile, empirical evidence on how tax risk influences the link between tax aggression and corporate performance is lacking. The aim of this study was to see if tax risk impacted the link between tax aggression and corporate performance.

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Thus, the question is, given these prospective losses associated with tax aggressiveness, what drives businesses to become aggressive with tax? Are these factors justifiable enough to warrant businesses to be tax aggressive? Answers to these questions, inter alia, require empirical investigations into the forerunning discourse. In the spirit of the above premise, this study examined the antecedents of corporate tax aggressiveness in the case of an emerging economy, Ghana, by integrating firm-level characteristics and corporations' governance-related issues, effect of tax aggressiveness on financial performance, earnings management and corporate transparency, and also assessed the moderating role of tax risk and corporate governance on the relationship between tax aggressiveness and financial performance.

Statement of the Problem

Over the recent decade, the level of tax income recorded by the Ghanaian economy has plummeted. Tax collection as a percentage of GDP was 13.9% in 2007. In 2012, tax revenue reached a high of 15.4% proportional to GDP. Tax income as a percentage of GDP was only 11.1% in 2016. The pattern suggests that tax income has decreased on average, indicating a limit on the amount of money that can be utilised to support infrastructural development. As contended by Idun (2018), tax revenue reductions are a big stumbling block to Africa's public sector's ability to fund infrastructure. Tax cuts in a developing economy, such as Ghana, have the potential to stifle economic growth and development, as well as the accomplishment of sustainable development goals (SDGs).

A major contributory factor to the shrinking tax revenue is corporate tax aggressiveness (Lawal et al., 2021). An insight into the drivers of the tax-

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aggressive behaviour of firms could offer essential policy dimensions to governments and policymakers in developing effective revenue accumulation policies. Further, in the quest to attain sustainability, addressing tax aggressiveness as a means of improving revenue mobilisation is consistent with the first target of SDG17 ("enhance implementation mechanisms and revitalize the global cooperation for sustainable development"), which seeks to "Encourage the strengthening of domestic resource mobilization, including through international assistance to developing nations, in order to boost domestic capacity for tax and other revenue collection." This is pivotal in an era within the Ghanaian economy where the main revenue mobilisation agency, i.e., the Ghana Revenue Authority, is urgently searching for strategies to enhance tax mobilisation.

Firms are not making much profits and some are complaining that governments all over the world are taking the small money they make. Firms try to increase after-tax earnings because taxes reduce their cashflow. Their aim is to maximise shareholders' wealth, through all means including tax planning if the law permit. Meanwhile, as corporations, certain measures such as tying remunerations to shares, among others, means that firms may do more than the law is expected of them. To meet these requirements and stay in business, they may, in turn, adopt tax aggressive measures along some corporate actions, thereby being tax aggressive.

Again, the influence of the 2007/08 global financial crisis (GFC) on business tax avoidance was explored by Ji (2018) on the premise that due to the hardships in financial markets, corporations adopt more aggressive tax practices to preserve cash internally during crises. Ji's findings demonstrate that

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companies were more tax aggressive during the crisis than during the non-crisis era, which is consistent with the apriori assumption made. It was further discovered that crisis had a greater impact on corporate tax avoidance for enterprises with weaker cash balances (i.e., businesses more inclined to market shocks).

Similar to global financial turbulences, the last decade in the history of the Ghanaian economy has been filled with several policy measures – such as banking and financial sector clean-ups and reforms – that have consequences on firms' earnings (Bossman et al., 2022). This means that corporations are likely to adopt more tax-aggressive measures to curtail the losses brought about by these policy initiatives. Drawing from this premise, it is intuitive to suggest that these financial crises (global and local) make several firms – especially those from emerging economies like Ghana – more susceptible to adopting tax aggressive measures. According to Bossman et al. (2022), financial sector clean-ups (notable ones in Ghana are those between 2015 and 2017), and for that matter financial crises, are detrimental to listed non-financial firms in Ghana. Arguably, this detrimental effect could motivate the deployment of aggressive tax practices. Corollary to this, the need for this study at this time cannot be narrowed.

Furthermore, even though it could be noted from the extant literature that a consensus in terms of the conclusions on the drivers of corporate tax aggressiveness is yet to be reached. This could be attributed to, inter alia, jurisdictional diversities, distinct study periods and sample size, varied estimation models or techniques, and non-uniform assumptions. It is worth noting that firm-specific regulations and corporate norms, ownership and

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shareholder structure (institutional ownership) – which ignites the operability of corporate governance – could influence the conclusions drawn by the existing literature. Wang et al. (2020) suggest that future studies into tax avoidance should involve pertinent and contemporary firm-level factors that stand the chance to influence corporations' intention towards tax avoidance.

Kovermann and Velte (2019) and Wang et al. (2020) advance that aside from effective tax rate (ETR) and book-tax difference (BTD), novel and widely applicable measures of tax aggressiveness ought to be employed in empirical studies. In addition, investigations into tax aggression behaviour of firms need to explore the significance of factors like managerial decision-making, etc. and as well integrate diverse corporate governance measures, which the extant literature fails to address (Kovermann & Velte, 2019; Wang et al., 2020). Additionally, empirical studies need to employ estimation techniques that could accommodate these wide-ranging factors into a single model without biasing the accompanying results (Agyei, Marfo-Yiadom, Ansong, & Idun, 2020; Agyei et al., 2021). To assess the operability of fundamental corporate dynamics, pertinent relationships need to be revisited upon novel occurrences – such as economic reforms, major crises, substantial regulations and/or deregulations, etc. – in an economy.

Furthermore, assessments of tax aggressive behaviour and firm performance need to recognise firm performance as a dynamic variable, as per Bossman et al. (2022). The premise is that based on the performance of a firm in time 't', investors are more likely to react to a favourable corporate performance by increasing their investment in the firm or allocating existing funds to the shares of such a company. The results from this decision would be

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realised in the ensuing year, which is in time '*t+1*'. Similarly, the opposite holds such that if firms realise unfavourable net performance in the form of losses, investors would most likely divest from such a corporation if they hold investments or would be discouraged from investing in such a corporation. This would have a detrimental effect on the value of the firm in succeeding periods, all things being equal. Hence, the level of performance today (*t*) could be a significant determining factor of performance tomorrow (*t+1*) and, as a result, renders performance a dynamic variable, which empirical studies – on tax aggressiveness – must consider as such. This is lacking in the literature traced to emerging economies of which Ghana is no exception.

As Issah and Rodrigues (2021) rightly observe, studies in sub-Saharan African economies, like Ghana, which incorporate novel factors like political connections and also integrate new paradigms and theories are almost non-existent. Recent tax aggressiveness-related studies in Ghana include the works of Amidu, Coffie and Acquah (2019), Agyei et al. (2020), and Seidu, Queku and Carsamer (2021). While the works of Agyei et al. (2020) and Seidu et al. (2021) shift the focus to the banking sector, the contribution of Amidu et al. (2019) focuses on transfer pricing.

Most importantly, the aforementioned studies are either built outside the context of contemporary themes on tax aggressiveness (Amidu et al., 2019), or they are constrained by a relatively small study period (Agyei et al., 2020; Seidu et al., 2021). None of these studies integrates the contemporary drivers of tax aggressiveness – political connection, institutional ownership, etc. – and, hence, there is a need for a study that closes this gap. This unveils the impetus of the present study, as it examined the antecedents of tax aggressiveness of corporate

entities in an emerging economy in sub-Saharan Africa, specifically Ghana, which has witnessed several reforms in the banking and financial sector in the past few years.

Corporations engage in tax aggressiveness to circumvent tax payments to the state. Moreover, it is still unclear in the extant literature whether tax aggressiveness enhances firm performance and firm value. In the Ghanaian context, several studies have brought to light that Ghanaian firms engage in some level of tax aggressiveness or tax avoidance (see, Agyei, Marfo-Yiadom, Ansong, & Idun, 2020; Kawor & Kportorgbi, 2014; Mbroh, Monney, & Bonsu, 2019; Yorke, Amidu, and Agyemin-Boateng, 2016; Amidu, Kwakye, Harvey, & Yorke, 2016). However, these studies do not examine the specific corporate governance variables, external connections and internal constraints that explain the decision of firms in Ghana to undertake aggressive tax practices.

Moreover, studies that seek to examine the relationships among corporate social responsibility, earnings management and tax aggressiveness, were undertaken within sample windows prior to the enactment of the Income Tax Act 2015, Act 896 (see, see, Amidu, Kwakye, Harvey, &Yorke, 2016). This is because the passage of the Act resulted in the implementation of specific tax avoidance provisions which deter firms and individuals from engaging in certain tax-aggressive practices. This is important because the limits and benefits of tax aggressiveness are dictated by the prevailing legislation and law. Also, the use of listed and non-listed firms could confound such relationships between the reporting requirements, transparency disclosures, and monitoring of listed firms may differ from that of non-listed ones. Further, their incentives for engaging in tax aggressiveness could also differ based on the signalling and

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pecking order theories. Finally, these studies also fail to deal with the potential issues of endogeneity (see, Amidu, Coffie & Acquah, 2019).

Regarding the implications of tax aggressiveness, studies in Ghana have not examined its influence on corporate transparency. However, those that seek to assess its effects on corporate performance are inconclusive. For instance, Kawor and Kportorgbi (2014) find that tax aggressive tax practices have no significant influence on firm performance. However, Mbroh, Monney and Bonsu (2019) report that its effect on the performance of listed firms was negative. Further, Yorke, Amidu, and Agyemin-Boateng (2016) contend that tax aggressiveness has a positive influence on the value of listed firms in Ghana. These mixed findings mean that the effect of tax aggressiveness on firm performance is conditioned on other factors, which are unexplored in the literature.

It has been argued that tax aggressiveness results in agency costs and there exists a possibility of tax risk due to fines and penalties (Wahab, Ariff, Marzuki, & Sanusi, 2017). Thus, the magnitude of such tax risk can affect the extent to which benefits in the form of tax savings can be made. Further, the presence of sound corporate governance structures can smoothen out part of the agency costs that arise from opportunistic managerial behaviours in tax aggressiveness, improving the extent to which tax aggressiveness affects corporate performance. As a result, the moderating roles of tax risk and corporate governance structures in the relationship between tax aggressiveness and financial performance were also investigated in this study.

Although some studies have examined the influence of corporate governance structures on tax aggressiveness and their linkages with firm

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performance, the results remain largely inconclusive. Moreover, such results cannot be extended to the Ghanaian context. This is because individual country institutional factors can affect corporate tax decisions (Kanagaretnam, Lee, Lim, & Lobo, 2016). Indeed, the quality of laws, as well as institutions that regulate the implementation of tax policies, differ among countries, making discussions on tax aggressiveness country-specific too. This, coupled with inconclusive evidence from studies conducted outside the Ghanaian jurisdiction, requires an in-depth and robust analysis of the factors that shape corporate tax aggressiveness decisions and the implications on financial performance.

Purpose of the Study

The study investigated the antecedents of tax aggressiveness and financial performance of listed non-financial firms in Ghana.

Research Objectives

The study specifically sought to:

1. investigate the antecedents of tax aggressiveness of listed non-financial firms in Ghana.

2. analyse the effects of tax aggressiveness on financial performance, earnings management and corporate transparency of listed non-financial firms in Ghana.

3. examine the moderating role of tax risk on the relationship between tax aggressiveness and the financial performance of listed non-financial firms in Ghana.

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4. assess the moderating role of corporate governance on the relationship between tax aggressiveness and the financial performance of listed non-financial firms in Ghana.

Research Questions

To generate empirical evidence for the various objectives, the following research questions were tested by the study.

1. What are the antecedents of tax aggressiveness of listed non-financial firms in Ghana?

2. What are the effects of tax aggressiveness on the financial performance, earnings management and corporate transparency of listed non-financial firms in Ghana?

3. Does tax risk moderates the relationship between tax aggressiveness and the financial performance of listed non-financial firms in Ghana?

4. Is the relationship between tax aggressiveness and the financial performance of listed non-financial firms in Ghana moderated by corporate governance?

Significance of the Study

This study complements the extant literature on tax aggressiveness in many ways. First, findings from the study are particularly needed to ascertain how, from a frontier economy perspective, what mainly drives tax aggressiveness among corporations. Second, the findings of the present research contribute to the debate on tax aggressiveness among companies by including other interesting perspectives such as political connections, earnings management, and corporate transparency. These are emerging themes that are

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noted to be influential in developed economies; yet, empirical assessments of their role in a developing market context are yet to be carried out.

Third, from the perspective of developing economies, this study establishes the groundwork for future research on contemporary issues related to tax avoidance. Fourth, the empirical findings of this study are very important in policy regulation. Thus, the study's findings are practical in that they can easily ease the identification of academic and tax officials' training and development needs for successful and efficient revenue collection.

Delimitations

The study first concentrated on the antecedents of tax aggressiveness as well as the impact of tax aggressiveness on financial performance, earnings management, and corporate transparency of Ghana's listed non-financial enterprises. Again, the study looked at the effect of tax risk and corporate governance in moderating the relationship between tax aggression and financial performance of listed non-financial enterprises in Ghana, rather than any other country. CSR, political ties, tax risk, company governance, financial performance, business transparency, and earnings management were among the variables examined in the study.

The sample covered 19 listed non-financial firms listed on the Ghana Stock Exchange over the period from 2010 to 2019. The study used the SGMM approach in processing the secondary data gathered on these firms. This means that the study did not cover any other period and did not use any other approach in analysing the data. The time frame for this investigation was largely determined by data availability. The study did not include financial firms

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because of their uniqueness and peculiar characteristics, such as strict and separate financial regulations, capital requirements, etc.

Limitations

The limitation of the study is that it could not combine non-financial firms with financial firms because of special regulations governing the financial sector. So, the reported results are mainly for non-financial listed firms. This mainly narrowed the scope of the study to 19 non-financial listed firms. However, this is not much of a worry since the firms included are those necessary to carry out these kinds of studies. Besides, the study relied on statistical significance to make conclusions, suggesting that the underlying meanings, explanations, and conclusions were not compromised.

Organisation of the Study

The study was systematised into five broad chapters. The first chapter introduced the study by presenting background issues on the tax aggressiveness and corporate performance. The managerial issues on the study theme and the gaps in the literature were discussed in the statement of the problem also in the first chapter. These were followed by the study's objectives, the research questions, and the significance of the study. The chapter also outlined the delimitations and concluded with how the study was organised. The second chapter presented a review of the literature, covering the theoretical underpinnings, relevant concepts, and empirical studies. Based on the various reviews, the chapter presented a conceptual framework that embodied the various relationships that were analysed in the study.

In what concerns the research methods, the third chapter presented the philosophy that backed the research, the approach to the study, the employed

design, and the issues relating to data processing and analysis. Furthermore, the chapter explained how the variables employed in the study were conceptualised. The estimation technique and models were also specified in the third chapter. The fourth chapter elaborated on the empirical findings based on the various objectives. The diagnostics of the various models and a discussion of each objective were presented in the fourth chapter. The last (fifth) chapter summarised the overall study, presented the main findings based on the objectives, and deduced conclusions. The study's main contributions were also highlighted in the fifth chapter. The final chapter ended with notable suggestions that are pivotal for further research in the areas of tax aggressiveness, tax risk, earnings management, financial constraints, and other issues related to firm performance.
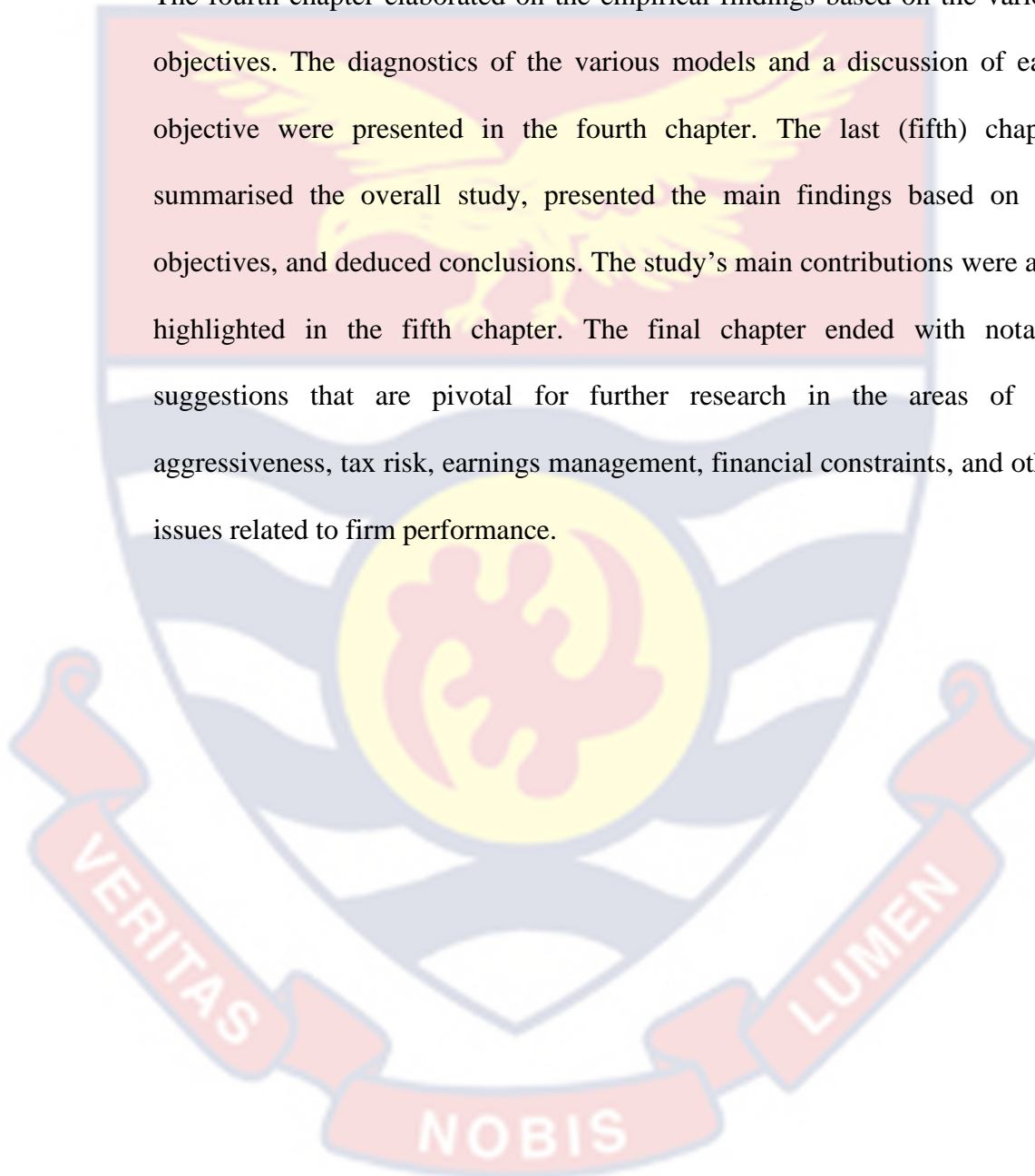
CHAPTER TWO

LITERATURE REVIEW

Introduction

A literature review was carried out, theories were discussed, and empirical results that are related to the topic were presented. This chapter of the thesis was organised under the following sections, namely, theoretical review, review of related concepts, empirical review, lessons learnt, and conceptual framework.

Theoretical Review

This section examined the theoretical foundation of the study, discussing the theories that underpin the study and attempting to contextualize it. Several hypotheses are related with tax avoidance; nonetheless, the choice of a theory is determined by its explanatory power. To give the needed explanation for the issues under research, the agency theory, pecking order theory, resource dependence theory, Hoffman's tax planning theory, prospect theory, and legitimacy theory were examined.

Agency theory

Understanding the agency theory is required for tax avoidance, corporate governance, earnings management, and financial performance. The core assumption of agency theory was developed by Jensen and Meckling (1976). According to Jensen and Meckling (1976), an agency connection exists between a company's management and its owners/shareholders, as stated by Kamalluarifin (2016). In theory, a company's management is acknowledged as agents obligated to preserve the interests of the principals (owners). To eliminate agency conflicts, the agency theory aims to connect the interests of

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agents (managers) and principals (owners) (Ibitamuno, Onuchuku, & Nteegah, 2018).

According to Cohen, Cornett, Marcus, and Tehranian (2014), there is an information imbalance between owners and corporate managers as a result of the separation of ownership and control in modern firms. As a result, managers are more likely to abuse the wealth of knowledge at their disposal by behaving in ways that harm the interests of the owners. Additionally, because agents and principals are utility maximisers, agents may fail to be consistent in acting in the utmost interest of their principal (Yiadom, 2016). Thus, instead of achieving shareholders' expectations, managers will meet their own.

Investors in the company do not trust agents because of information asymmetry, as per the ICAEW (2005). Consequently, procedures and mechanisms will be established to align the interests of agents and principals, as well as to lessen information asymmetry and the potential for opportunistic managerial behaviour (Ndung'u, 2017). These actions require that owners align the interests of managers in tandem with theirs. One mechanism of achieving this is by instituting sound corporate governance mechanisms such as board structures to oversee the interest of the owners.

Desai and Dharmapala (2006), as cited in Wahab, Ariff, Marzuki and Sanusi (2017), argue that tax aggressiveness may be desired by shareholders as it can enhance shareholder value. Nonetheless, extant empirical evidence suggests tax aggressiveness may not necessarily increase the wealth of shareholders (Wahab, Ariff, Marzuki, & Sanusi, 2017). This is because short-term profitability garnered through tax aggressiveness may not be sustainable in the long-term and can result in reputational and commercial risks with

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governments and regulators (Li, Liu, & Wang, 2021). Thus, uncertainties exist as to whether tax aggressiveness is favourable to corporate shareholders. Such uncertainties regarding the corporate value and tax aggressiveness raise questions regarding the role of corporate governance structures.

Furthermore, information asymmetry, regarding tax information between corporate managers and owners, such as information with respect to the extent of legally permissible tax avoidance strategies, also serves as a loophole for opportunistic managerial behaviours (Chung, Goh, Lee, & Shevlin, 2019; Wahab, Ariff, Marzuki, & Sanusi, 2017; Desai & Dharmapala, 2006). Thus, there is a need for corporate governance structures to curb such incentives. Moreover, recent evidence reveals that different corporate governance structures exhibit diverse influence on tax aggressiveness (see, Arismajayanti, & Jati, 2017; Innocent, & Gloria, 2018; Ying, Wright, & Huang, 2017), suggesting that tax aggressiveness gives rise to agency costs. Consequently, different corporate governance structures (internal and external) may have a diverse influence on tax aggressiveness.

Tax planning and tax aggressiveness is a board issue because it requires a well-informed strategy that is within the realm of tax laws to lessen tax expense and improve the bottom-line (Ogbeide & Obaretin, 2018). The board is, thus, responsible for instituting a framework for the management of tax risk and tax governance. This is because the overall management of risks is in the hands of corporate boards who are responsible for providing shareholders with the assurance that the risk within the organisation, including tax risk, is managed within the risk appetite of the shareholders.

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Further, tax expenses can form a significant part of the operating costs of firms. Directors are noted for the direct role they play in tax management. An important aspect of the board dynamics is its composition. On one hand, a large board size is associated with effective and enhanced monitoring, as the oversight load is shared accordingly (Wahab, Ariff, Marzuki, & Sanusi, 2017). In sharp contrast, the ability of the board to undertake effective monitoring weakens as the size grows. This is because the performance of a larger board size is less easy to access and, consequently, a smaller board size may be more effective in addressing issues regarding managerial opportunism in tax aggressiveness (Bosun-Fakunle, & Josiah, 2019).

Gender diversity of the corporate board can also have an influence on tax aggressiveness. Recent evidence divulges that the presence of female directors on the board of corporations is often characterised by increased risk aversion and conservatism in terms of financial reporting style (see, Damak, 2018; Orazalin, 2019). This implies that increasing female participation on the board structure of corporations can exhibit a negative influence on tax aggressiveness. Furthermore, outside directors play a key role in safeguarding shareholders' interests and refuse to agree to any direction in expropriating corporate shareholders. In executing their duty as overseers of corporations' strategic decisions, Manning, Braam, and Reimsbach (2019) aver that outside directors support enhanced corporate responsiveness to social needs. In consequence, increasing the number of outside directors may minimise incentives to engage in aggressive tax planning.

Concerning the structure of the board, the presence of audit committees can also influence the extent to which tax aggressiveness can be perused by

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firms. Audit committee members are usually experienced in issues regarding financial reporting and are more thorough in examining tax aggressive accounting decisions (Pomeroy, 2010). According to Wilbanks, Hermanson, and Sharma (2017), audit committee members with accounting competence take more actions to investigate issues related to fraudulent financial reporting and managerial integrity. As a result, in the presence of numerous audit committee members, management may tend to minimize opportunistic tax aggressiveness acts.

It is worth noting that the level of external monitoring also serves as an additional layer to corporate governance structures. A fledgling body of literature reveals that ownership structure affects tax aggressive decisions of firms (see, Bauweraerts, Vandernoot, & Buchet, 2020; Salaudeen, & Ejeh, 2018; Lee, & Bose, 2021; Wahab, Ariff, Marzuki, & Sanusi, 2017). Two competing perspectives are, however, pioneered in the literature regarding the role of institutional ownership on the tax aggressiveness of firms. On the one hand, institutional investors are placed in a fiduciary role to monitor the investments of their clients due to their size, expertise, and funding capacity to mount a credible governance role in firms (Shleifer & Vishny, 1986; Jennings, 2005). In consequence, institutional ownership can minimise the agency problem and, hence, the extent to which management may tend to be tax aggressive with the firm (Wahab et al., 2017).

Government-controlled institutional investors, on the other hand, change the firm into one with political links, which can provide assistance for tax avoidance. Concerning foreign ownership, there is a growing conviction that multinational firms are constructed to aid tax avoidance in every jurisdiction in

which they operate (Christensen & Murphy, 2004). However, international investors' desire to seek favour with government agencies and authorities in their home countries which may reduce their aggressive taxing behavior (Salihu, Annuar, & Obid, 2015).

Finally, audit quality also influences the extent to which firms can engage in tax-aggressive behaviours. It is perceived that the size of the audit firm is directly proportional to its reputation and quality. This presupposes that the big 4 firms have incentives to protect their reputation. Moreover, firms that undertake aggressive tax planning are susceptible to the risk of material misstatements because managers can exploit various classes of accounts (Kanagaretnam, Lee, Lim, & Lobo, 2016). Furthermore, if tax aggressiveness is challenged by tax authorities, substantial tax claims and interest penalties can result in a restatement of the financial statement, which is related to reputational risk and litigation risk (Hennes, Leone, & Miller, 2014). Thus, firms audited by the big 4 may tend to be less tax aggressive.

The agency theory connects the interests of management and shareholders in the context of tax planning and aggressive tax measures as follows. Effective corporate governance arrangements, according to agency theory, may assist managers align their interests with those of shareholders, lessen the agency issues involved with tax planning, and encourage more responsible company activities. Furthermore, according to the agency theory, the relationship between tax planning and company transparency is complicated and influenced by the conflict of interest between shareholders and managers. However, by implementing effective corporate governance mechanisms and engaging in transparent tax planning practices, companies can mitigate the risks

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of agency costs and enhance their reputation and relationships with stakeholders.

Resource dependency theory

Pfeffer and Salancick (1978) advanced the resource dependency theory, which explains that a firm's performance is dependent on the uniqueness of the resources it possesses. The theory demonstrates that for the most part, firms would want to decrease the vulnerability of outside impacts. It is achieved by assuring there is the accessibility of resources to guarantee the durability and improvement of the firm (Kyereboah-Coleman, 2007). Using Pfeffer (1973) and Pfeffer and Salancick's (1978) resource dependence theory, it is emphasised that outside executives increase a firm's capacity to protect itself against the outside situation (environment), decrease vulnerability, or co-opt resources that extend the company's capacity to raise funds or augment its status and recognition.

The principle calls for the inclusion of directors from other organisations on the board of directors of a company. This creation would aid in the formation and maintenance of relationships that would enable the organisation to gain access to resources in the form of data that could be used to its advantage. As a result, this principle seems to imply that a firm's quality or power is proportional to the amount of resource in the form of relevant information available to it. Using the resource dependence hypothesis, some studies argue that if a company has access to capital, it is less likely to indulge in tax avoidance and co-opt resources that increase the company's ability to raise funds or enhance its status and acknowledgement (Pfeffer & Salancick, 1978; Pfeffer, 1973;

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Kyereboah-Coleman, 2007; Pfeffer & Salancick, 1978; Pfeffer, 1973). This implies that financial constraints can spur a firm's tax aggressiveness practices.

Tax planning or tax avoidance, according to Hoffman (1961), aims to divert money that would otherwise go to the tax agency to the firm's coffers. Tax planning solutions are desirable in the sense that they minimize the assessable benefit while conserving accounting income. The theory is based on the reality that assessable income, rather than accounting revenue, determines a company's tax burden. The aim is to increase the number of exercises that reduce assessable earnings without impacting accounting revenue. As a result, the hypothesis suggests that there is a positive relationship between corporate tax planning and firm performance. Hoffman (1961) highlighted the importance of tax expenditure in tax planning as well. According to this theory, the direct impact of tax planning on company performance is based on the fundamental concept that tax profits from tax planning exceed tax costs.

Firms' desire to decrease the vulnerability of outside impacts may make political connections a powerful tool for survival and profitability. Intuitively, political connections can grant a company access to vital future information to proposed changes in tax laws ex-ante. This allows enterprises to take advantage of time-series changes in tax legislation (Wahab, Ariff, Marzuki, & Sanusi, 2017). Furthermore, because of their relationships, politically connected enterprises may have lower discovery risks. This means that the appropriate government agencies may overlook their tax avoidance tactics. As a result, the level of political link may function as an external resource that provides impetus for corporations to engage in aggressive tax avoidance.

Legitimacy theory

According to the legitimacy theory, a company's ideals must meet the demands of the society in which it works in order for it to have a right to exist (Cho et al., 2012; Magness, 2006; Shehata, 2014). As a result, businesses and the society share a social contract. This theory considers a business to be a part of society that both affects and is influenced by the same social structure. It outlines the types of details companies reveal, why they disclose them, and how they disclose them (Magness, 2006). Most businesses report on their environmental practices to legitimise their operations (Cho, 2009; Kamal & Deegan, 2013). Since there is a correlation between a company's reputation and the public's perception of it, it is important for management to reveal details that will positively affect the public's perception of it (Cormier & Gordon, 2001). The inclusion of environmental-related activities in a company's annual report serves to legitimise the company (Lightstone & Driscoll, 2008).

Aside from reporting on an organisation's environmental practices, a burgeoning body of literature reveals that the legitimacy theory applies to corporate tax practices. The amount of taxes corporations pay is usually subjected to public scrutiny (Holland, Lindop, & Zainudin, 2016). The public tends to compare identical companies in relation to the amount of taxes they pay against the profits they make. According to Preuss (2010), as cited in Suranta, Midiastuty, and Hasibuan (2020), payment of corporate taxes is regarded as a corporate responsibility towards the state where the activities of the corporation are conducted and towards the citizens. Thus, tax payments are seen as a means of fulfilling one's civic responsibility and, hence, companies' desire to be accepted and be branded good corporate citizens minimises their incentives to

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engage in tax aggressiveness. This is because tax avoidance, in most cases, is considered to be socially irresponsible (Shi et al., 2020).

The perception that tax avoidance is a socially irresponsible act means that companies must align their value system with that of society. Tax aggressiveness is socially irresponsible as it creates tax loss to the state and, therefore, is incompatible with the expectations of the community (Goldstein, & Goldstein, 2020). Through the legitimacy channel, foreign ownership can exhibit a negative influence on tax aggression even though there is a perception that multinationals establish foreign subsidiaries to minimise corporate tax obligations (Salihu, Annuar, & Obid, 2015). Moreover, to attract favourable public attention, companies must not just conform to societal values but must also report them. This justifies the rationale for the constant reportage of corporations' corporate social activities and vice versa, i.e., they can hide behind CSR to engage in tax aggressiveness.

Prospect theory

The prospect theory (PT) was proposed by Kahneman and Tversky (1979). Three aspects of PT, according to the authors, can impact the outcome of a choice. As previously indicated, individuals assess results in relation to a neutral reference point. The second notion is similar to Bernoulli's concept of falling marginal utility, except that Kahneman and Tversky think marginal utility decreases as one moves away from the neutral reference point. The third trait is that people are risk averse, which means they will choose the alternative that is least hazardous in any given situation. To prevent risk, a risk-averse individual can even pay a premium. This procedure resembles that of the insurance industry. Even if the chances of a catastrophic accident occurring are

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slim, people are willing to pay a premium that is higher than the expected value of the insurance policy.

Some aspects of this research are based on prospect theory and tax planning theory, which notes that when companies are faced with risks and decisions to make, they may use aggressive tax planning practices to minimise their taxable profits while increasing their earnings. Individuals are classified as risk averse based on prospect theory, as per Dhami and Al-Nowaihi (2007). Small probabilities are overweighted, while high probabilities are underweighted. Despite the fact that audit risks and penalty rates are poor in practice, the authors show that the magnitude of tax aggressiveness, predicted by the prospect theory, is compatible with the evidence.

Individuals are also expected to adapt to a higher tax rate by rising the amount of money they evade. This is consistent with the majority of the proof but contradicts the predicted utility theory's opposite prediction. In the presence of tax aggressiveness, the optimal tax rates expected by the prospect theory are compatible with real tax rates. The prospect theory was created to understand real decision-making in risky circumstances. The pronouncers argue that the prospect theory solved the tax aggressiveness puzzles by utilizing human choice factors provided by independent experimental data. Its estimates of the magnitudes of ideal income taxes in the presence of tax avoidance match the actual magnitudes. They come to the conclusion that tax payer behaviour lends good support to the prospect theory.

Pecking order theory

Donaldson (1961) initiated the pecking order theory, which was later modified by Myers and Majluf (1984) and Myers (1984). The theory posits that

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firms will resort to external funding as their last resort. Thus, firms will not have an optimum debt-equity as a result of information asymmetry (Wamiori, Namusonge, & Sakwa, 2016). The pecking order theory posits that firms have a preferred hierarchy for financing their activities and the highest preference is given to internal sources (in the form of retained earnings) before resorting to external funding. Internal sources of funding are preferred because no floatation costs are incurred and there is no need to comply with stringent regulations and disclosure requirements which could result in a loss of competitive advantage (Muneer, Ahmad, & Ali, 2017). Consequent to this, firms will use external funding in the order of debt, convertible securities, preference shares, and common stock (Myers, 1984).

The above discussion underscores how owners of firms want to avoid losing corporate control and the cost arising from equity. Due to this, firms will want to make enough profits to sustain their financing, operating, and investing activities rather than seek external funding. Impliedly, firms with higher levels of profitability may employ lower leverage. In this regard, Mac, Bhaird and Lucey (2010) and Dwaikat, Queiri and Aziz (2014) document a negative relationship between profitability and debt.

Firms' regard for internal sources may also elicit support for aggressive tax avoidance practices even from existing shareholders who may prefer that investments are financed out of retained earnings than external sources. The intuition is that an internal source of funds is cheaper and, besides, shareholders may not want to dilute their ownership holdings. Moreover, debt makes the firm riskier and can reduce the distributions available to shareholders due to the constant strain on the resources of the firm to meet interest payments to debt

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holders. Consequently, managers and shareholders may want to use tax aggressiveness as a means of generating tax savings and increasing the amount of cheap-internal resources available for the company.

Hoffman's tax planning theory

Hoffman's (1961) tax planning theory tried to clarify the goal of tax planning and distinguish between tax avoidance and tax evasion. Hoffman described tax planning as the structuring of a taxpayer's financial affairs in order to incur the fewest tax expenses. He contends that not all tax-planning measures are guaranteed to produce outcomes. This indicates that tax planning attempts that are not adequately targeted to an individual's unique situation can have negative implications in terms of tax maximization.

Hoffman's tax planning theory avers that tax savings are a consequence of tax planning. This means that effective tax planning can result in tax savings with positive repercussions on profitability (Wahab, Ariff, Marzuki, & Sanusi, 2017). The line between tax avoidance, which is legal, and the illegal activity of tax evasion is also drawn by the principles of the tax planning theory. This means that tax practitioners and corporate bodies must undertake due diligence in their practices not to offend tax laws; the outcome may be counterproductive. This is because short-term profitability garnered through tax aggressiveness may not be sustainable in the long-term and can result in reputational and commercial risks with governments and regulators (Li, Liu, & Wang, 2021).

The Income Tax Act, 2015 (Act 896) and the Revenue Administrations Act, 2016 (Act 915) in Ghana authorize the Commissioner General to disregard arrangements whose principal goal is to exploit tax system loopholes. Thus, statutory loopholes keep fleeting (Hoffman, 1961) and can be stopped by the

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government revenue agency or parliament. This means that activities considered tax aggressive can be challenged by tax authorities, which could result in substantial tax claims against the company plus interests and penalties which can have negative implications on the performance of the firm (Hennes, Leone, & Miller, 2014).

Connectedness of Theories and Research Objectives

The goal was to look into the causes of tax avoidance among Ghana's publicly traded non-financial enterprises, first. This purpose is congruent with the theories of agency, pecking order, legitimacy, and resource reliance. Effective corporate governance systems, agency theory can help to align managers' interests with those of shareholders, reduce agency problems associated with tax planning, and encourage more responsible business activities (Hennes, Leone, & Miller, 2014; Kanagaretnam, Lee, Lim, & Lobo, 2016). According to the pecking order hypothesis, financial constraints may compel firms to engage in tax planning in order to generate internal money and minimize the need for external funding (Donaldson, 1961; Myers & Majluf 1984; Myers 1984).

Furthermore, according to the legitimacy theory (Cho et al., 2012; Magness, 2006; Shehata, 2014), corporations must maintain a favourable image and reputation in order to be perceived as legitimate and retain their social license to function. This necessitates that businesses participate in appropriate tax planning efforts that are consistent with their larger CSR initiatives and stakeholder expectations, while avoiding any activity that could be perceived as unlawful or unethical (Cho, 2009; Kamal & Deegan, 2013). Based on the resource dependency theory (Pfeffer & Salancick, 1978), businesses may

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engage in tax planning actions in order to maintain political connections and gain access to government resources. Also, they may engage in tax planning because of their reliable access to government information on current and future policies that may relate to taxation (Wahab, Ariff, Marzuki, & Sanusi, 2017). Thus, this access to vital government information enables firms to exploit and benefit from time-series differences in tax laws.

The second objective examined the effects of tax aggression on financial performance, earnings management, and corporate transparency of listed non-financial enterprises in Ghana. This objective was supported by Hoffman's tax planning theory (from the standpoint of financial performance and earnings management) and the agency theory. According to Hoffman's tax planning hypothesis (Hoffman, 1961), tax planning can add value to a firm by minimizing its tax liability and improving its financial performance, as long as it is done properly and legally. Companies must, however, assess the potential risks and restrictions of tax planning, as well as ensure that their tax planning activities are consistent with their overall financial strategy and objectives.

Tax planning and earnings management both need the manipulation of financial data to achieve certain goals. Companies, in particular, may engage in tax-advantaged strategies that result in earnings management. Meanwhile, the link between tax planning and corporate transparency is difficult and impacted by the conflict of interest between shareholders and management, according to the agency theory. Companies can reduce the risks of agency charges while also improving their reputation and stakeholder relationships by building effective corporate governance frameworks and engaging in transparent tax planning initiatives.

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The third objective of the study investigated the effect of tax risk in moderating the link between tax aggression and financial performance of Ghana's listed non-financial enterprises. The prospect theory and Hoffman's tax planning theory were useful in this case. According to prospect theory, individuals assess expected advantages and losses in relation to a reference point, with losses being more sensitive than gains of the same magnitude (Kahneman & Tversky, 1979; Dhami & Al-Nowaihi, 2007). This notion can also apply to businesses, as they may be more worried with potential losses from tax risks than with potential advantages through tax preparation. As a result, when tax risk is high, corporations may become more risk-averse and less willing to participate in aggressive tax planning tactics that may result in unfavourable consequences.

Therefore, the relationship between tax planning and financial performance may be moderated, as enterprises may be more focused on avoiding potential losses and maintaining their reputation and legal compliance. Conversely, firms may be more risk-seeking and more willing to participate in tax planning measures that could boost their profitability when tax risk is low. In this instance, the moderating influence of tax risk may be less important since corporations may be more concerned with prospective gains rather than potential losses.

Finally, the fourth study goal examined the function of corporate governance in moderating the link between tax aggression and financial performance of Ghana's listed non-financial enterprises. The agency theory and Hoffman's tax planning theory supported this goal. Good company governance may mitigate the negative consequences of tax planning while amplifying the

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positive ones. Tax planning, on the other hand, may boost financial performance by minimizing a company's tax obligations, which increases profitability. However, aggressive tax planning tactics might have unintended repercussions like as reputational harm and legal and regulatory problems. Through the agency theory, effective corporate governance, on the other hand, can assist organisations in managing these risks by ensuring that tax planning methods are linked with the firm's overall strategic goals and values. Good corporate governance standards can assist organisations in engaging in appropriate tax planning, complying with applicable rules and regulations, and maintaining their reputation.

Conceptual Review

This section reviews the concepts underpinning the study. The review cantered on how other researchers have explained the concepts.

Tax aggressiveness

The fundamental problem confronting talks on firm tax aggression is the lack of agreement on the phenomenon's conceptualization and quantification. Chen et al. (2010, p. 1) describe tax aggressiveness as the "downward management of taxable income through tax planning activities." Frischmann, Shevlin, and Wilson (2008, p. 265) suggest a tighter definition of tax aggressiveness as "engaging in significant tax positions with relatively weak supporting facts." According to Lisowsky, Robinson, and Schmidt (2010), tax aggressiveness is at the extreme end of a spectrum of activities that aim to avoid paying taxes, ranging from legitimate tax planning to investments in abusive tax shelters.

In common, the various definitions divulge that the ultimate aim of tax aggressiveness is to minimise the tax liability of the firm. This requires taking advantage of the lacunae in the tax laws. Whereas such activities, if do not constitute tax evasion are legal, they are deemed not to conform to the spirit of tax laws. As a consequence of this, several economies have given the power to the revenue collection agency of the country to disregard such arrangements. For instance, the Income Tax Act of Ghana, 2015 (Act 896) and its associated legislation give the Commissioner General the authority to disregard any arrangement undertaken purposely to avoid tax payments or activities conducted whose primary benefit is the reduction of tax payments whether in the form of increased reliefs, rebates, or total tax avoidance. Thus, care must be taken in firms' tax-aggressive behaviours so as not to infringe on tax laws.

On the empirical front, several measurements of tax aggressiveness have dominated the extant empirical literature. In this discussion, two variants of tax aggressiveness are discussed. The ETR, calculated as the ratio of tax burden to income, has probably dominated empirical discussions and is continually employed as a proxy for active tax planning (Fuadah & Kalsum, 2021). The book effective tax rate (BETR), which is determined as the ratio of total book tax expense to pre-tax revenue, is another proxy that follows from the ETR-based method. The current effective rate (CETR), as opposed to the BETR, employs the current tax expense in the books as the numerator rather than the total book tax expense. Current ETR is a metric used to analyze a company's tax aggressiveness, however it only takes into account the current tax burden. Current ETR is a calculation that takes into account companies' current tax payments (Hanlon & Heitzman, 2010). The consequence of tax aggressiveness

and the factors that affect firms to use aggressive tax practices are still burgeoning in the literature. This thesis seeks to examine these thoroughly by explaining firm-specific and other external characteristics that affect tax aggressiveness and the impact of tax aggressiveness on corporate performance.

Tax risk

Despite the fact that there is no agreement in the research on the idea of tax risk, this study focused on a perspective comparable to that of the classical finance literature. In this sense, tax risk is defined as the dispersion of expectations. As a result, quantitative dispersion from projected outcomes is regarded as a risk factor in the study. This is consistent with Markowitz's (1952) stance. While Markowitz does not provide a clear definition of tax risk, he says that "the investor considers expected return to be a desirable thing and variance of return to be a bad one" (Markowitz 1952, p. 77). Several studies have utilized variance as a risk metric, which supports this assumption (see, for example, Dew-Becker, Giglio, Le, & Rodriguez, 2017; Xing, & Yan, 2019; Mital, Goetschalckx, & Huang, 2015).

Weiss-Lehman, Hufbauer, and Melbourne (2017) use variance or standard deviation to assess the spread of potential outcomes. They further proffered that these measures are natural indices of risk. This is also in conformity with the perspective of recent literature on tax risk (see also, Mangoting, Yuliana, Effendy, Hariono, & Lians, 2021; Neuman, Omer, & Schmidt, 2020; Conte, 2019; Sari, & Etemadi, 2019). The extant literature divulges that tax avoidance may not be sustainable (see, Drake, Lusch, & Stekelberg, 2019; Saavedra, 2017). Thus, tax risk has been a regular topic in empirical discussions on tax avoidance. Accordingly, the variance/standard

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deviation of annual effective tax has been used as tax risk in the recent literature (Drake, Lusch, & Stekelberg, 2019; Guenther, Matsunaga, & Williams, 2017; Hutchens & Rego, 2015).

Tax aggressiveness and corporate governance

The customary practice is that management makes every effort to minimise expenses and increase profitability. This is in line with the concept of shareholder wealth maximisation and doing so means that management is able to meet targets. In doing so too, management may use a gamut of tax strategies, including those that follow the letter of the law but contravenes the spirit of the law and, therefore, are regarded as aggressive (Deslandes, Fortin, & Landry, 2019). In recent times, the behaviour of firms as good corporate citizens has aroused interest from several stakeholders, and this includes corporate firms' responsibility for paying a fair share of their tax obligations to the state (Sikka, 2018). Accordingly, the implementation of tax strategies that simply follow the letter of the law does not correspond to today's representation of good corporate citizenship.

The danger of not conforming to societal expectations regarding tax avoidance and corporate citizenship is that it results in reputational damage, with the far-reaching consequence that outweighs the tax savings obtainable from aggressive tax practices (Deslandes, Fortin, & Landry, 2019). In addition, there is the risk of litigation once the tax rate is considered too low compared to competitors in the industry. The impact of the aforementioned can also result in affecting the value of the firm (Zaitul & Ilona, 2019).

As a result, tax avoidance is a corporate governance issue, because the purpose of corporate governance is to protect the interests of owners.

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Furthermore, there are certain issues regarding the impact of tax aggressiveness on business value, which raises concerns about the function of corporate governance. According to Minnick and Noga (2010), the types of corporate governance arrangements implemented in a corporation influence how it manages its corporate taxes. Furthermore, there is some type of information asymmetry in terms of information on legally acceptable tax avoidance strategies, which leads to opportunistic managerial behavior (Wahab, Ariff, Marzuki, & Sanusi, 2017). Kovermann and Velte (2019) document that corporate governance institutions could potentially make tax avoidance less risky and more profitable for firms.

Specifically, the board of directors comprises a body primarily responsible for safeguarding shareholders' interests (Fama & Jensen, 1983). Moreover, the board of directors is responsible for ensuring that the organisation operates within an acceptable risk profile to shareholders. This requires that the board discusses, debates, and influences the overall tax risk position (Deslandes, Fortin & Landry, 2019). Beasley, Goldman, Lewellen, and McAllister (2021) argue that tax avoidance is a board room issue. In line with its broad responsibilities, the board of directors may delegate responsibility to sub-committees such as the risk management committee or audit committee. This also requires that the board is of sufficient size to exercise control and oversight and to permit the formation of effective sub-groups.

Intuitively, a board that is not large enough will be overburdened with tasks. The size of the board is usually synonymous with its expertise. Nevertheless, long and thorough arguments over policies are often occasioned by excessively large boards, minimising their effectiveness (Yermack, 1996).

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In line with these diverse perspectives, mixed evidence has been documented regarding the role of board size on corporate performance (Pintea, & Fulop, 2015) and its effects on the tax aggressiveness of corporations (Jamei, 2017; Pratama, 2017; Wahab, Ariff, Marzuki & Sanusi, 2017).

The role of gender diversity in corporate board effectiveness has also been discussed in the literature. Female participants are more likely than male directors to demonstrate innovation and autonomous thought, maximizing their performance (Carter, D'Souza, Simkins & Simpson, 2010). Females contribute varied perspectives to board meetings, which facilitates educated judgments and raises their level of transparency, according to Daily, Certo and Dalton (2000). Corollary to this, Martinez-Jimenez, Hernández-Ortiz, and Fernández (2020) aver that gender diversity improves board effectiveness. However, some studies document that the role of women in improving board effectiveness is statistically insignificant (Kakabadse et al., 2015).

Notwithstanding the abovementioned conflicting views concerning the role of female directors towards board effectiveness, women are perceived to be risk averse (Loukil & Yousfi, 2016) and their participation on corporate boards is expected to result in less aggressive behaviours. In terms of taxation, it has been argued that women are likely to be more compliant and have been attributed to be the source of attitudinal change of corporate boards regarding tax ethics (see, Ruegger & King, 1992). Indeed, the role of female directors has been associated with that of outside directors (Deslandes, Fortin & Landry, 2019).

Recent literature has found that women on the board can reduce tax avoidance (Hoseini & Safari Gerayli, 2018; Herawati, Rahmawati, Indudewi,

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Wardani, & Susanto, 2021; Suleiman & Abubakar, 2021). However, other studies also document that their role is insignificant in corporate tax avoidance (Budi, 2019; Cortellese, 2020). Chang, Huang, Ting, and Chang (2019) document that Chinese CEOs that are females are as tax aggressive as their male counterparts.

Aside from the internal corporate governance mechanisms, this thesis also explored the role of external corporate governance structures on tax aggressiveness. For instance, it has been argued that the size of an external audit firm corroborates with its experience and the quality of audit reports (Wahab, Ariff, Marzuki, & Sanusi, 2017). In Ghana, large audit firms also provide tax advisory services due to the in-depth understanding of the corporate structure and financial structure possessed by the auditors of their clients. Lisowsky, Robinson, and Schmidt (2013) argue that auditors provide better services and prevent their important clients from under-reserving their activities regarding tax shelters. Thus, it is surmised that firms that are audited by the big 4 are given an additional layer of their corporate governance structure, including their tax activities. Further, large audit firms are very particular about their reputation and, therefore, the reputational damage that follows after a firm is commanded to restate their financial statements as well as the litigation that follows suit may prevent such audit firms from condoning tax-aggressive behaviours. In consequence, firms audited by the big 4 will tend to be less aggressive.

In terms of corporate governance and tax avoidance, institutional investors are particularly important. Since they are in control of their clients' investments, they have a fiduciary duty in practice (Hawley & Williams, 1997). They have the scale, experience, and resources to assume greater responsibility

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for corporate governance in the companies in which they invest. The involvement of institutional investors in Ghana is expected to result in strong corporate governance, as they have been proved to increase firm performance (Abor & Biekpe, 2007; Bokpin, & Arko, 2009).

From another perspective, institutional investors may be government controlled or may possess the relevant political connections, providing support for tax aggressiveness. The perspectives regarding foreign ownership and tax aggressiveness are dichotomous. The activities of multinational corporations are firstly associated with tax avoidance schemes. Thus, it is not startling for foreign-owned firms to become tax aggressive. However, based on the legitimacy theory, foreign-owned corporations may want to establish some form of goodwill. Due to the fact that tax-aggressive behaviours are frowned upon by the citizenry, the desire to conform to societal expectations may make foreign-owned firms less tax aggressive.

Tax aggressiveness and financial constraints

Chen and Lai (2012) demonstrate that financially limited enterprises have more incentives to engage in tax-aggressive behavior. According to the pecking order theory, because acquiring external capital is more expensive, financially limited enterprises will have more incentives to undertake aggressive tax avoidance tactics in order to create more cash flows from operating operations than unconstrained firms. Prior research indicates that cash holdings are extremely valuable to enterprises, and as a result, they tend to accumulate surplus cash in the face of challenges in acquiring external funding (see, Richardson, Lanis, & Taylor, 2015; Firmansyah, & Bayuaji, 2019; Chen & Lai, 2012).

The importance of tax aggressiveness in helping financially constrained firms is arguable. However, it is believed that by engaging in more aggressive cash-saving activities, firms that are financially constrained can save cash internally to mitigate their problems with financial constraints (Chen & Lai, 2012). Further, tax savings provide a cost-effective source of internal funding to support underinvestment in financially constrained firms.

Tax aggressiveness and corporate social responsibility

According to Gray et al. (1995), corporations would endeavor to create and maintain ties with their social and political surroundings in order to gain the legitimacy required for existence. Indeed, there has been increasing societal interest in CSR and tax avoidance techniques as a result of the agreement that corporations have a duty to other stakeholders in addition to shareholders.

Avi-Yonah (2008) offers three perspectives regarding CSR and firm tax avoidance behaviours. First, the artificial entity view posits that firms owe their countries. Therefore, engaging in CSR is part of its mission and core mandate. The real entity perspective sees firms as entities possessing rights and having obligations as individuals. In terms of tax payment, firms must obey the obligation and duty to pay taxes and must not be involved in aggressive tax avoidance practices. Finally, the nexus of a contract is a shareholder-centric perspective where the firm's core mandate is to maximise shareholders' wealth. This includes minimising tax payments to enhance profits for shareholders.

Drawing on the real activity view, Avi-Yonah (2008) posits that it implies that CSR can be seen as a legitimate business activity and not just cost in the course of maximising the value of shareholders. However, a legitimacy gap is created in the presence of a mismatch between the expectations of society

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and organisational activities, which threatens the survival and status of the firm within the larger social system. Thus, if firms implement strategies with the sole purpose of avoiding taxes, society perceives the firm to be escaping its duty of paying a fairer portion of its wealth to the state for financing public goods (Freedman, 2003). This action causes hostility against the firm to rise, leads to reputational damage, and can eventually result in the firm ceasing its operations (Richardson & Lanis, 2011). Further, tax aggressiveness is regarded as an opportunistic behaviour directed at exploiting the contract the firm has with the state and with society at the expense of the latter groups (Laguir et al., 2015).

Regular payment of taxes is recognised as the cornerstone of corporate engagement with society as it symbolises the firm's willingness to share its wealth (Mohanadas, Salim, & Pheng, 2019). Thus, corporate tax aggressiveness can be analysed from the perspective of CSR. Avi-Yonah (2008) proffers that the decision of a firm to pursue an aggressive tax strategy is affected by its perspective regarding CSR. Corollary to this, some studies relate CSR and tax avoidance to be incompatible (Hoi, Wu, & Zhang, 2013; Lanis & Richardson, 2015). Likewise, Lanis and Richardson (2015) argue that firms that practice CSR activities tend to be overly concerned about their reputation and, thereby, will likely not engage in aggressive tax practices. The above-related discussions also presuppose that CSR should be inconsistent with corporate tax aggressiveness, from a theoretical perspective.

The purpose of measuring the influence of CSR on tax aggressiveness in Ghana is closely connected to the research of Amidu, Kwakye, Harvey, and Yorke (2016), who looked into the relationships between tax avoidance, CSR, and profits management of non-financial firms in Ghana. The study used 119

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businesses as a sample and collected data from 2010 to 2013. The system-generalized technique of moments results indicated that the sampled businesses engaged in some kind of earnings management and that CSR was used as a smoke screen by the firms to engage in opportunistic behaviors such as earnings management.

However, the present study takes several different perspectives. First, although the GMM is efficient with shorter periods, the four-year period does not allow the study to adequately exploit the time variable in corporate tax avoidance, tax planning and tax aggressive strategies. Moreover, the enactment of Act 896, with subsequent amendments, has placed much emphasis on curtailing corporate tax avoidance incentives. As a consequence of this, opportunities that may have existed before 2015 to engage in corporate tax aggressiveness may no longer exist, requiring further study into the phenomena. The present study utilised data on 19 firms spanning from 2010 to 2019 to capture a uniquely rich panel dataset on tax planning decisions following the enactment of Act 2015.

Furthermore, the use of non-listed firms with listed firms can confound the relationships between earnings management, CSR and tax avoidance. This is because the intention and ability of management to manage earnings for listed firms may differ from that of non-listed firms. Based on the signalling theory, firms' desire to obtain external funding, which is limited for non-listed firms, can influence their earnings management decisions. Moreover, listed firms are faced with much scrutiny and the need to comply with other corporate disclosures. The present study offered a different lens by employing only corporations listed on the Ghana Stock Exchange.

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Tax aggressiveness and political connection

Politically connected businesses are thought to be more tax aggressive than businesses with no political ties. Due to the protection they receive from politicians, businesses with political ties are less likely to be discovered (Wahab, 2017). Such businesses can also get knowledge on future changes in tax rules and administration, allowing them to apply techniques that take advantage of time-series disparities. Politically connected enterprises, according to Kim and Zhang (2015), have less market pressure to demonstrate more transparency.

However, to the extent that firms exploit political connections for purposes other than minimising scrutiny regarding taxation, political ties might not be related to tax aggressiveness or could enhance tax payments (Lin, Mills, hang, & Li, 2018). Moreover, reputational concerns deter board members from hindering tax enforcement. For instance, political connections are seen as a personal asset that hinges on reputation. In consequence, board members may want to maintain such a reputation with the government and such that it does not go to ruin due to tax avoidance strategies (Lin, Mills, hang, & Li, 2018).

In line with these arguments, some studies have sought to test them empirically. Kim and Zhang (2015) employ data coverage from 1999 – 2009 for US firms and documented that firms that were politically connected perused more aggressive tax practices. Wahab et al. (2017) also confirm this finding for a sample of 2,538 firms in Malaysia after controlling for industry fixed effects and time fixed effects with a panel least square regression estimator. Sugeng et al. (2020) also document similar findings using listed manufacturing firms from 2015 to 2017 in Indonesia. Also, using a sample of 121 listed companies on the Tehran Stock Exchange find evidence to support a positive impact of political

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connections on tax aggressiveness from 2012-2017. Notwithstanding, Iswari et al. (2019) document that state-owned enterprises in Indonesia do not engage in tax-aggressive behaviours.

Financial performance and tax aggressiveness

Vu and Le (2021) state that tax aggressiveness has both benefits and costs. The resultant tax savings as a result of aggressive tax behaviours can generate higher after-tax profits. Tax savings are also associated with increased cash flows after tax, increased income, and enhanced net asset position, all of which have positive repercussions on firm value (Rego & Wilson, 2009). This has been the traditional perspective. From this perspective, tax savings provide a cheaper source of funding for re-investments which creates further income. However, it has been argued that when agency costs are taken into account, the net impact can be onerous to the firm (Wahab et al, 2017).

Agency problems may arise because the interests of shareholders and managers may not be aligned concerning tax risk. It is believed that shareholders will accept management decisions, e.g., tax minimisation, that improve the firm's profits (Tang, 2019). However, tax aggressive decisions may reflect the self-interests of management than the interests of shareholders. Moreover, the potential fines and costs, coupled with the reputational damage associated with tax-aggressive behaviours often endanger shareholders' wealth (Wahab et al, 2017).

Chen, Hu, Wang, and Tang (2014) are of the view that firms that are appropriately governed pay less taxes. Further, the influence of tax aggressiveness on firm value is moderated by agency costs (Vu & Le, 2021). As a consequence of this, shareholders must assess the implications of tax

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aggressiveness. Vu and Le (2021) document a negative relationship between tax aggressiveness and firm value, as measured by Tobin's Q. Earlier, Wahab and Holland (2012) found that tax aggressiveness reduces the value of firms. Tang (2019) investigates the implications of tax aggressiveness (measured by ETR) on firm value (proxied with Tobin's Q) for a sample of 42,107 firms operating in 46 countries. Their results revealed a significant positive role played by ETR in maximising the value of the respective firms. Further, the study found that such a relationship is conditioned on the heterogeneous agency costs of each firm. Similarly, Lestari and Wardhani (2015) find a positive effect of tax aggressiveness on the value firms, but the effect is moderated by board gender diversity.

In Ghana, Kawor and Kportorgbi (2014) examine the impact of tax planning on the financial performance of 22 non-financial enterprises listed on the Ghana Stock Exchange (GSE) from 2000 to 2011. The results show that the effect is negligible. Using a similar OLS technique, Mbroh, Monney, and Bonsu (2019) discover that tax avoidance has a detrimental influence on the performance of listed enterprises. According to Yorke, Amidu, and Agyemin-Boateng (2016), while tax avoidance has a beneficial impact on the value of listed enterprises in Ghana, the negative impact of earnings management on company value renders the net impact inconsequential.

Earnings management and tax aggressiveness

Tax avoidance creates tremendous uncertainty and expenses for businesses and management (Dyreng, Hanlon & Maydew, 2019; Rego & Wilson, 2009). In order to engage in tax-aggressive behavior, managers must have certain incentives (Rego & Wilson, 2012). According to Frank, Lynch, and

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Rego (2009), there is no trade-off between active financial and aggressive tax reporting. As a result, the two are not mutually exclusive. Corporate tax aggression includes manipulative tactics such as profit manipulations, linked party arrangements, and other activities carried out by management to further their self-interests (Desai & Dharmapala, 2006). Earnings management efforts are examples of financial reporting aggressiveness (Frank, Lynch & Rego 2009). This can be accomplished by accrual or real earnings management (Sohn, 2016).

Existing research has found evidence to support a link between profits management and tax aggression. Herusetya and Stefani (2020), for example, test this association on manufacturing enterprises in Indonesia and present supportive evidence. Previously, Frank et al (2009) discovered a link between tax aggressiveness and discretionary, a proxy for earnings management. It has been reported that managers tend to use discretionary accruals such as tax contingency reserves, tax accruals (expenses), and valuation allowances to smooth earnings and meet tax reporting goals (Dhaliwal, Gleason & Mills, 2004; Hanlon & Heitzman, 2010).

In practice, there is no trade-off in decisions regarding tax and financial reporting. This is evident from the differences between earnings reported for tax purposes and those in the financial statements. The differences in financial reporting and tax reporting rules allow managers to exploit such differences, thereby reporting lower incomes for tax purposes but higher profits in the financial statements for the same reporting period. Moreover, since managers may want to manage earnings upwards to meet their bonus and other performance targets but are interested in tax aggressiveness to circumvent the

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payment of hefty taxes, the difference between reporting requirements for tax and that of the financial statements enables managers to pursue tax aggressiveness and earnings management in tandem. Thus, it has been reported that companies that engage in tax aggressive practices usually have low earnings quality (Zang et al., 2013).

Amidu, Coffie and Acquah (2019) demonstrate that transfer pricing and profits management are positively related to aggressive tax avoidance using a sample of listed and non-listed multinational firms in Ghana. In contrast, the use of random effects fails to account for the possibility of endogeneity in the link between tax avoidance and tax aggression. Additionally, employing both listed and non-listed businesses may cause confusion in the links. This is because the transparency and reporting norms of listed businesses may differ from those of non-listed enterprises.

Corporate transparency and tax aggressiveness

Scholes and Wolfson's seminal work in 1992 exposed the tensions that exist for managers between tax avoidance and financial reporting. Managers want to declare bigger earnings, but they also want to pay less money in taxes to the government (Balakrishnan, Blouin & Guay, 2019). In Ghana, tax reporting rules differ from financial reporting requirements, resulting in disparities regarding the amount reported to investors and those reported to tax authorities. However, as economic transactions are recorded similar for financial reporting and books, there is often a trade-off between reported earnings and tax savings.

Indeed, repowering lower profits is just one out of the many potential costs associated with tax aggressiveness. Balakrishnan, Blouin, and Guay

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(2019) argue that it also comes with other direct and indirect costs of tax aggressiveness. These include potential penalties and fines (labour cost of hiring a tax professional, costs of investing in tax information systems, and other tax-related agency costs) that the firm may incur if it is found out. Existing studies also reveal the reputational costs associated with tax aggressiveness (Wahab, Ariff, Marzuki & Sanusi, 2017). Another cost that is gaining recent empirical attention is the influence of tax aggressiveness on corporate transparency (see, Balakrishnan, Blouin & Guay, 2019)

Existing evidence has related corporate opacity to factors including international diversification (Duru & Reeb, 2002), informational complexity induced by technology (Gu & Wang, 2005) and complexities relating to financial statements (Hodder, Hopkins & Wood, 2008). In line with the study of Balakrishnan, Blouin and Guay (2019), this thesis extended this line into corporate transparency induced by tax aggressiveness. Balakrishnan et al. (2019) aver that tax aggressive practices result in complexities as they require investments in different jurisdictions and the segregation of a number of income streams. Specifically, the firm's income will have to be categorised into those that qualify for treaties, withholding taxes, exemptions, etc. Further, tax aggressiveness changes the cash flow patterns within the firm.

It has been argued that the resultant segregation of business activities can confound outsiders understanding of the sources and persistence of earnings and cash flows, causing opacity in its financial and operating environment. Firms may also adopt a complex organisational structure to accommodate foreign subsidiaries, enhancing their complexities and opaqueness. As a

consequence of this, Balakrishnan et al. (2019) document a trade-off between benefits from tax savings and corporate transparency.

Tax risk as a moderator between tax aggressiveness and financial performance

Vu and Le (2021) stated that tax aggressiveness has both benefits and costs. The tax savings that result from aggressive tax behaviours can generate higher after-tax profits. Tax savings are also associated with increased cash flows after tax, increased income, and enhanced net asset position, all of which have positive repercussions on firm value (Rego & Wilson, 2009). From this perspective, tax savings provide a cheaper source of funding for re-investments which creates further income.

However, empirical discussions surrounding the effect of tax aggressiveness on performance have not been conclusive. Wahab and Holland (2012) and Vu and Le (2021) document that firms that practise tax aggressiveness were associated with lower levels of performance, translating into low firm value. Countervailing this evidence, Tang (2019) and Wardhani (2015) document a positive role of tax aggressiveness in enhancing firm value and performance. While there are methodological differences as well as differences in the unit of analysis and periods in the discussions of the aforementioned studies, the disparity in the results also suggests that some unexplored factors condition the relationship between tax aggressiveness and firm performance.

Wahab, Ariff, Marzuki, and Sanusi (2017) argue that the effect of tax aggressiveness on firm performance depends on the costs. Agency problems may arise because the interests of shareholders and managers may not be

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aligned with regard to tax risk. It is believed that shareholders will accept management decisions that improve the firm's profits such as tax minimisation (Tang, 2019). However, tax aggressive decisions may reflect the self-interests of management than the interests of shareholders. This thesis argued that the effect of tax aggressiveness on firm performance is conditioned on the risk associated with taxes (i.e., tax risk).

Indeed, since tax aggressive practices are believed not to follow the spirit of the law, excessiveness in its use is likely to result in back clashes with relevant tax authorities that there is a risk that certain transactions may be disregarded, resulting in hefty fines, penalties and other costs which may cumulatively outweigh the potential savings. Moreover, on the continuum of tax aggressiveness is tax evasion. The reputational damage associated with being branded as a firm that does not pay taxes can also result in a loss of revenue to loss of customers (Wahab, Ariff, Marzuki, & Sanusi, 2017). This presupposes that tax risk affects the extent to which companies will undertake tax-aggressive decisions and also determines the net benefits from tax aggressiveness.

Corporate governance as a moderator between tax aggressiveness and financial performance

Although the literature is divided on which corporate governance systems are most effective in increasing firm performance, there appears to be an apparent agreement that, in practice, the board of directors is primarily responsible for safeguarding shareholders' interests (Fama & Jensen, 1983). Moreover, it is the responsibility of the board for ensuring that the organisation operates within a risk profile acceptable to shareholders. This requires that the

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board discusses, debates, and influences the overall tax risk position (Deslandes, Fortin, & Landry, 2019). Thus, the role of the board in the management of tax risk cannot be ignored. Wahab, Ariff, Marzuki, and Sanusi (2017) are of the view that other external corporate governance structures can affect a firm's tax policies.

Tang (2019) and Vu and Le (2021) contend that the effect of tax aggression on company performance and value is dependent on each firm's diverse agency costs. This means that tax avoidance may result in agency issues. According to Wahab et al., (2017), there is a sort of information asymmetry since information on legally permitted tax avoidance strategies also leads to opportunistic managerial behavior. This also means that the implementation of corporate governance systems influences how a firm handles its taxes (Minnick & Noga, 2010). This is because managers' incentives to engage in opportunistic behavior are reduced in the face of robust corporate governance systems. Thus, it is imperative to suggest that the presence of sound corporate governance structures can smoothen out the part of the agency costs that arise from opportunistic managerial behaviours in tax aggressiveness, thereby, improving the extent to which tax aggressiveness affects corporate performance.

Control variables

Firm size

The size of a company affects its tax position. Intuitively, larger firms have a complex structure and tend to be exposed to several tax positions. It has also been argued that large firms may gain political connections, which affects their level of tax aggressiveness. Kim and Im (2017) also aver that the larger the size of the profits and costs of a firm, the higher the possibility of engaging in

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tax aggressiveness. Moreover, several studies document a positive influence of firm size on tax aggressiveness (Dunbar, Higgins, Phillips, & Plesko, 2010; Allen, Francis, Wu, & Zhao, 2016; Sari, & Tjen, 2017). Notwithstanding, Agyei, Marfo-Yiadom, Ansong, and Idun (2020) adduced evidence to support the argument that larger firms are easily recognisable and easily affected by poor reputation and, therefore, tend to be less tax aggressive.

Liquidity

In terms of the pecking order theory, financial constraints can affect firms' decisions regarding tax aggressiveness. This implies that firms with a low level of liquidity can be tax aggressive. Moreover, firms with a low level of liquidity may want to turn to internal sources of funding (Agyei, Marfo-Yiadom, Ansong, & Idun, 2020). This may include cost-minimisation strategies. Further, firms in their bid to maintain their level of liquidity may tend to engage in tax-aggressive behaviours. As a consequence, several studies have revealed that financial constraints move firms to engage in aggressive tax planning activities (Edwards, Schwab, & Shevlin, 2016; Campbell, Goldman, & Li, 2021).

Growth prospects

Firms enjoying sales growth may be tax aggressive. Such firms may be pursuing aggressive expansionary strategies, which require that firms maintain enough internal funding for such strategies. Thus, firms enjoying high growths in revenues may tend to maintain such growth spurts using promotional incentives. To maintain profitability in that regard, the firm may engage in aggressive tax practices to maintain savings.

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Capital structure

The present evidence indicates that tax avoidance influences funding decisions. This is because tax avoidance generates dangerous incremental cash flows (Lee et al. 2019). Several research have been conducted to investigate the effect of tax avoidance on capital (Shevlin et al., 2020; Cook et al., 2017; Goh et al., 2016; Hasan et al., 2014). These studies, however, do not investigate whether tax aggressiveness influences debt costs more than equity costs. It has been argued that shareholders may respond to tax aggressiveness more negatively than creditors. Since shareholders are the residual owners of the business, they tend to benefit more from tax aggressiveness than creditors, whose interests are fixed and obligatory (Lee, Shevlin, & Venkat, 2019).

Furthermore, Goh et al. (2016) contend that when the cash flows generated by tax-aggressive behavior are adequate to compensate shareholders for the associated risks, the impact on the cost of equity is negative. Lee, Shevlin and Venkat (2019) present evidence in support of the above theory and forecast that tax avoidance raises the relative price of debt versus equity. This presupposes that companies that are highly geared may tend to be less aggressive. However, it has also been argued that firms use debt capital to avoid payment of taxes. This explains why certain countries have implemented thin capitalisation principles in corporate tax laws. This is because interest on debts is tax deductible and firms may want to employ a degree of gearing to reduce tax payments. This also presupposes that firms with high levels of gearing may be tax aggressive.

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Firm age

There is inconsistent data in the literature on the point in a firm's life cycle when it may require internal finance, which can impact tax aggressiveness. While Agyei, Marfo-Yiadom, Ansong and Idun (2020) present evidence that financial firms in the later stages of their life cycle do not engage in aggressive tax avoidance, Hasan, Al-Hadi, Taylor and Richardson (2017) explain that firms in the introductory and decline stages do, with firms in the growth and maturity stages being less likely.

Inventory intensity

The level of inventory intensity is considered to be important in tax avoidance decisions (Pratama & Suryarini, 2020). According to Nurfauzi and Firmansyah (2018), inventory intensity measures the amount of investments in inventory. Pratama and Suryarini (2020) proffer that companies use inventory intensity to minimise the amount of profits generated. With a large inventory, firms incur the inventory-holding cost and other costs incidental to holding inventory. Corollary to this, Nurkholisoh and Hidayah (2019) predict inventory intensity to affect the tax aggressiveness decisions of firms.

Lessons from Review of Literature

The review of the literature underscores the need for sound corporate governance structures in corporate tax-aggressive decisions. This is because of the information asymmetries and risks associated with tax aggressiveness. However, the extant literature has been inconclusive regarding specific corporate governance attributes that are beneficial for the firm in its tax-aggressive decisions. Furthermore, the legitimacy argument demonstrates that efforts to stay in the good graces of populists might alter the level of tax

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aggression. As a result, there are various competing ideas about the drivers of corporate tax avoidance and the implications for business value and performance.

Empirically, although some studies have assessed the determinants of tax aggressiveness and its influence on firm value and corporate transparency and performance, little has been done in the Ghanaian context. Kanagaretnam et al. (2016) aver that individual country institutional factors can affect corporate tax decisions. Indeed, the quality of laws, as well as institutions that give effects to tax laws, differ among countries, making discussions on tax aggressiveness country-specific too. This, coupled with inconclusive evidence from studies conducted outside the Ghanaian jurisdiction, requires an in-depth and robust analysis of the factors that shape corporate tax aggressiveness decisions and the implications on firm performance.

Amidu et al. (2019) demonstrate that transfer pricing and profits management are positively related to aggressive tax avoidance in a sample of listed and non-listed multinational businesses in Ghana. The random effect, on the other hand, did not explain for any endogeneity in corporate tax avoidance and aggressiveness decisions (Agyei et al., 2020). From 2000 to 2011, Kawor and Kportorgbi (2014) give empirical data on the influence of tax planning on the performance of 22 non-financial firms listed on the GSE. According to the data, tax planning has little effect on corporate performance. Using a similar OLS, Mbroh et al. (2019) discover that tax avoidance has a detrimental effect on the performance of listed enterprises. According to Yorke et al. (2016), while tax avoidance has a favorable impact on the value of listed enterprises in Ghana, the negative impact of earnings management on firm value renders the net

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impact inconsequential. These studies, however, do not address endogeneity concerns and use sample windows that encompass periods previous to the passage of Act 896 in 2015.

Agyei et al. (2020) also address several firm-determinants of corporate tax avoidance in financial institutions in Ghana. However, regulatory and reporting characteristics of financial firms tend to differ compared to non-financial firms, making it difficult to extend the empirical findings to the latter. Moreover, the study does not exploit the corporate governance determinants of tax aggressiveness of the listed firms and its effects on performance.
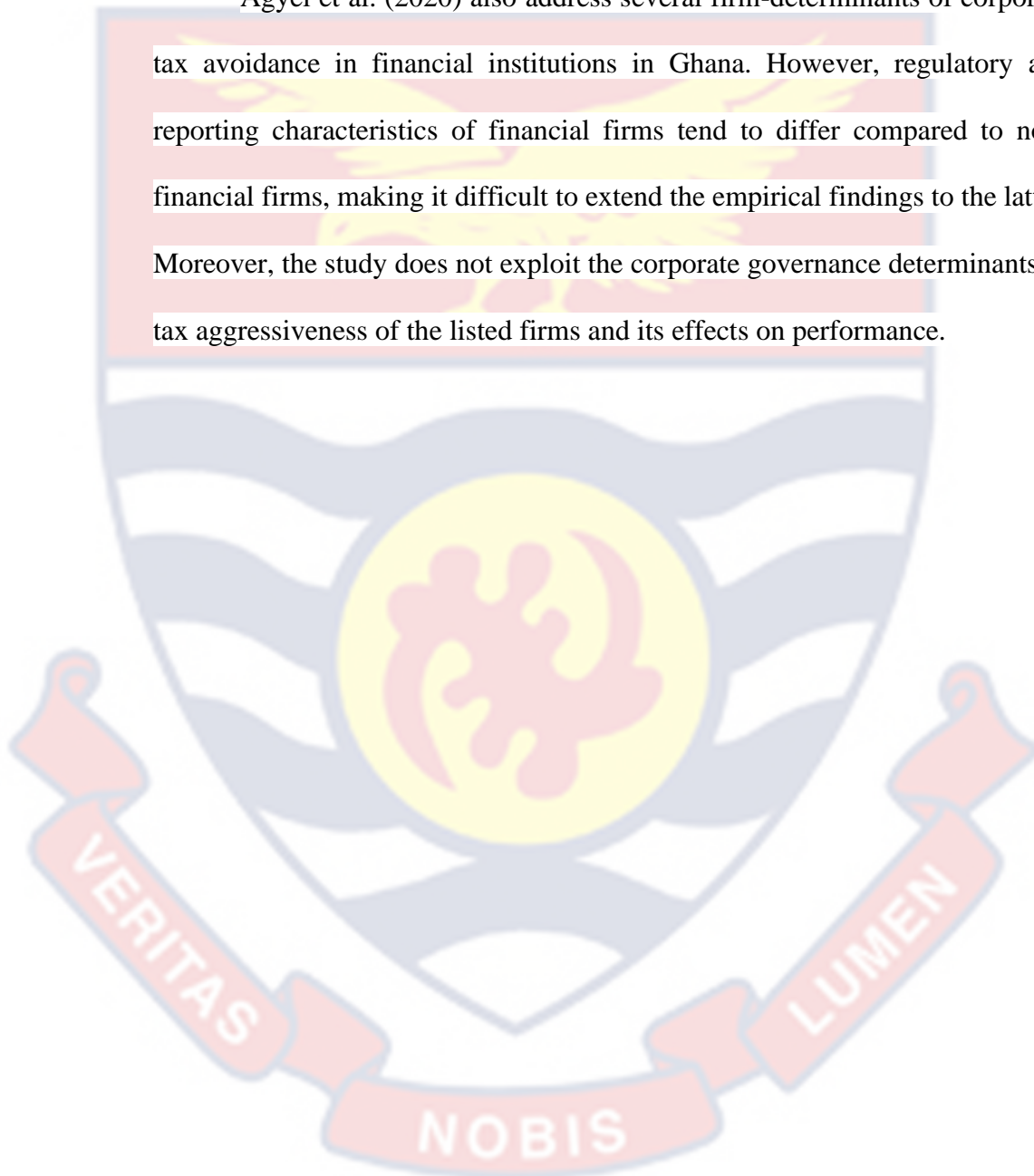
Conceptual Framework
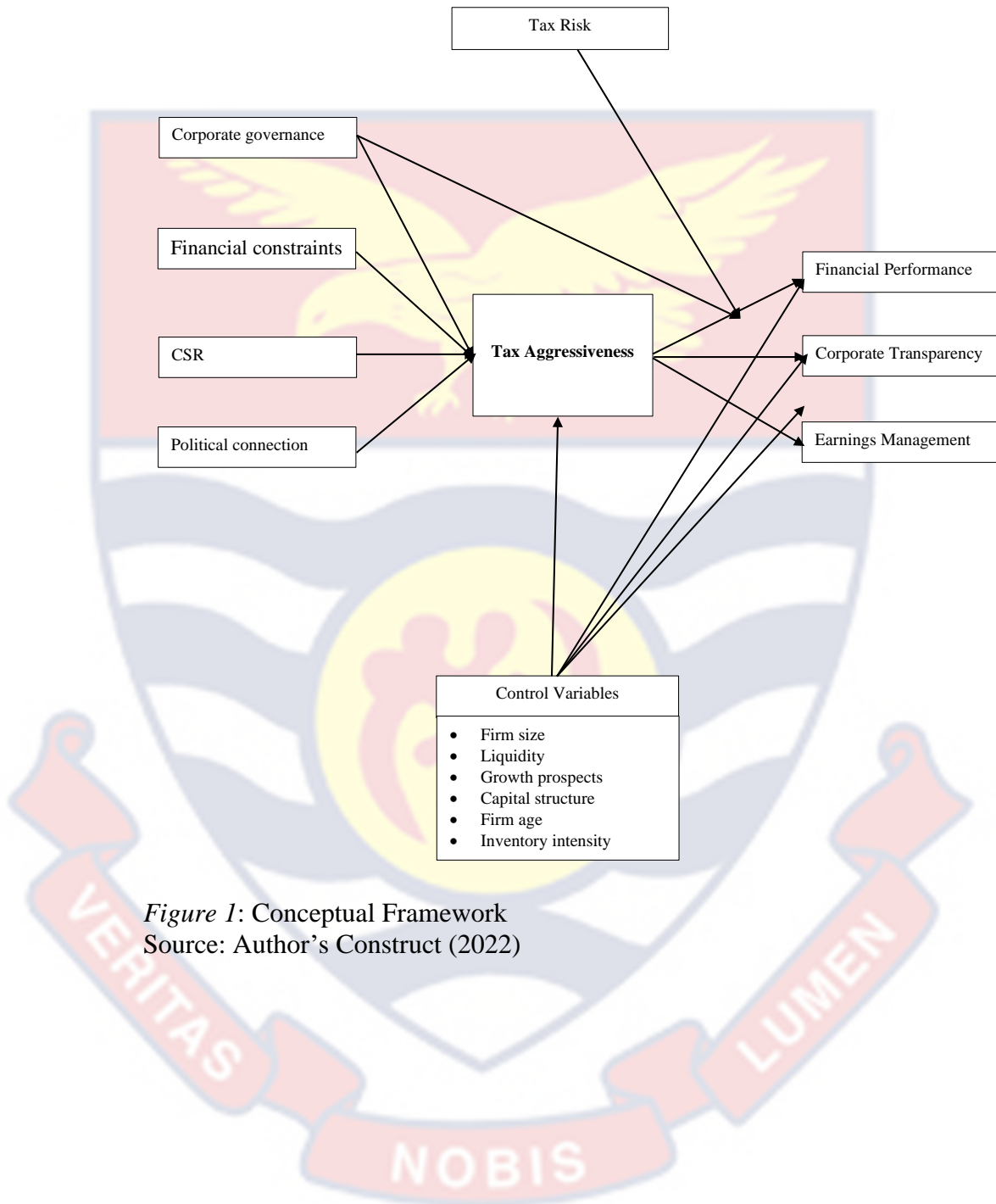
Figure 1: Conceptual Framework
Source: Author's Construct (2022)

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Looking at the conceptualised relationships in Figure 1, the independent variables of corporate governance, business strategy, financial constraints, CSR, and political connection influence tax aggressive behaviour. Again, tax aggressiveness also affects firm performance, corporate transparency, and earnings management. Figure 1 also depicts the moderating effects of tax risk and corporate governance on the nexus between tax aggressiveness and financial performance. There are also control variables that affect all the relationships mentioned.

Chapter Summary

Chapter Two conducted a review of the works of scholars to ascertain their strengths and weaknesses. This aided in demonstrating familiarity with what is known about the topic of study. The review entailed important theories, concepts, and empirical literature. Based on the various reviewed concepts, a framework was also developed to demonstrate the various analysed relationships. The methods for conducting this study were further discussed in Chapter Three.

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CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter describes the methodologies used in this study. The research technique is a research plan that demonstrates the ontological and epistemological concerns as well as how the study will be carried out (Sarantakos, 2005). It describes the steps involved in doing the research. As a result, this chapter includes the research philosophy, research approach, study design, population and sampling, variable operationalisation and measurements, data sources, and estimating strategy.

Research Philosophy

According to Saunders, Lewis, and Thornhill (2009), research philosophy includes ideologies that define what constitutes knowledge in a field of study and guide the researcher's beliefs and ideas about the world and reality. Philosophy also guides the choice of research approach, study design, and strategy for reaching study objectives. Saunders et al. (2009) assert that there are two broad philosophies used in studies and they are positivism and interpretivism. The philosophical grounds for this thesis lies with positivism since this philosophy deals with issues that are observable and measurable. Besides, insights into these issues could be gained through scientific research, and the knowledge is quantifiable and objective, but all observation can be fallible and reality cannot be known with certainty.

The choice of positivist philosophy is appropriate because the purpose of the research is to examine antecedents of tax aggressiveness and performance of listed non-financial firms in Ghana on the GSE through the testing of

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relationships and the researcher's role is considered to be independent and objective.

Research Approach

Inferencing from the positivist philosophy, the researcher adopted a quantitative approach. The research approach affects the choice of techniques for data collection and analysis and it flows from the researcher's philosophy based on the study objectives (Creswell, 2009). The study employed objective data collection procedures and statistical techniques in data analysis, and it drew generalised conclusions about hypothesised relationships where possible (Saunders et al., 2009).

Research Design

There are various research designs, but the study used the explanatory research design. The study explained, rather than described, the relationships among the variables. The study employed a quantitative design and the data were analysed using statistical techniques in answering mostly causal research questions to establish casual conclusions. Explanatory research design is a suitable and widespread strategy in business and economic studies, according to Saunders et al. (2009)**.** The design strategy has the advantage of being easy to explain and understand results. Again, the design was chosen based on the post-positivism understanding of scientific explanations.

Population and Sampling

The study's population comprised listed firms on the Ghana Stock Exchange. The total number of firms listed was 38 as of 31st December 2019. The data for the study was secondary data of mandatory and voluntary information from the Ghana Stock Exchange (GSE) Fact Book. The Fact Book

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is made up of annual reports from all listed companies on the exchange. The information that was used for the analysis was from the data section of the annual reports in the Fact Book. Exclusion was based on a lack of data. Based on the fact that financial and non-financial firms cannot be used together due to special regulatory requirements that apply to the financial sector, the study used non-financial firms. Hence, the study used 19 non-financial firms. In all, the study covered a period of 10 years spanning from 2010 to 2019. The data available for the empirical analysis were organised into an unbalanced panel dataset.

The sample period for this investigation was largely determined by data availability. The study did not include financial firms because of their uniqueness and peculiar characteristics, such as strict and separate financial regulations, capital requirements, etc.

Sources of Data

The study employed firm-level secondary that was sourced from the annual reports of listed non-financial firms on the Ghana Stock Exchange (GSE). It is worth noting that the secondary data employed are mandatory and voluntary information from the GSE Fact Book. The Factbook is made up of annual reports from all listed companies on the exchange.

Variables or Concepts Operationalisation and Measurement

The main variables of interest for the study were tax aggressiveness, corporate social responsibility, tax risk, corporate governance, firm performance and financial constraints. Based on the literature reviewed in this study, several variables, which were expected to influence tax aggressiveness

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and other dependent variables from other models, were also controlled for. A

summary of the variables and their operationalisation is presented in Table 1.

Table 1: Variables and their Operationalisation

Variables	Measurement/Operationalisation	Expected sign
Tax Aggressiveness		
• ETR	ETR_{it} = Total tax expenses$_{it}$ / Profit before tax$_{it}$	
• Current ETR	Current tax$_{it}$/Profit before Tax$_{it}$	
Tax Risk	SD of ETR_{it}	
Firm Financial Performance		
• Return on Asset (ROA)	ROA = Profit after tax$_{it}$ divided by total assets$_{it}$	
• Return on Equity (ROE)	ROE = Profit after tax$_{it}$ divided by total equity$_{it}$	
• TOBINS Q	TOBINS Q= Market value of assets$_{it}$ / Book value of assets$_{it}$	
Earnings Management	Discretionary accruals, which is computed as the excess of TAC_{it} over NDA_{it}	+
Corporate Governance		−
• Non-Executive Directors/ board independence	Proportion of non-executive directors$_{it}$	
• Board Gender Diversity	Proportion of women directors out of the total Board of Directors$_{it}$	
• Board size	Number of directors on the board$_{it}$	
• Institutional Ownership dummy	Dummy variable – 1 for years in which a firm had institutional investors and 0 if otherwise.	
• Foreign and Domestic Ownership dummy	Dummy variable – 1 for firms that are owned or managed by foreigners and 0 if otherwise.	
•		
Financial Constraint	Following Whited and Wu's (2006) index and the Cleary index of Hennessy and Whited (2007), financial constraint is estimated as follows. FC_{it}= -0.091*(Cash Flow/TA) − 0.062*(1 if dv > 0, 0 if dv = 0) + 0.021*(LTD/TA) − 0.044*lnTA – 0.035*SG	+

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	where TA denotes Total Assets, dv signify Dividend paid; LTD represents Total Long Term Debt; SG is growth in sales.	
Corporate Transparency	Standard and Poor's Transparency and Disclosure Rankings 1. Ownership structure and investor rights 2. Financial transparency and information disclosure 3. Board and management structure and process	–
CSR	A firm's spending on CSR as a ratio to its revenue	+/–
Political Connection	Following Johnson and Mitton (2003), a dummy variable for political connection is defined as 1 for politically connected firms and 0 otherwise	+
Control Variables		
• Inventory Intensity	As per Taylor and Richardson (2012), inventory intensity is the ratio of a firm's inventory to its total assets.	+
• Firm Size	Natural logarithm of total assets.	+
• Liquidity	The ratio of current assets to current liabilities	+
• Growth Prospects	The difference between the current year's and previous year's revenue divided by the previous year's revenue.	–
• Firm Age	Firm age is measured as the length of years sampled firm i had been in operations as at period t.	+
• Capital Structure	Debt-to-Equity ratio	+

Source: Field Data (2022)

Estimation Strategy

In a panel framework, this thesis utilised the systems dynamic general method of moments (GMM) technique to analyse the data. This estimation approach has several advantages, as it is fit for data with a large number of observations, which enlarges the degrees of freedom whilst reducing multicollinearity among the predictor variables. By so doing, the GMM technique enhances the efficiency of statistical estimates and facilitates the

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analysis of a variety of economic questions that may not be detected by means of a cross-sectional survey or time-series analysis (Hsiao, 2003).

In particular, Roodman's (2009a, 2009b) version of the GMM developed by Arellano and Bond (1961) is employed to cater for issues of endogeneity, which may impact the results when failed to be accounted for (Agyei et al., 2021; Agyei & Idan, 2022; Asiamah et al., 2022a, 2022b). By taking into consideration endogeneity, the GMM approach makes use of the instrumental variables method to account for dependence across cross-sections whilst limiting overidentification (Agyei et al., 2021).

Models Specification

Based on the systems GMM, the following tax aggressiveness, financial performance, corporate transparency, earnings management, and tax risk models were specified in this research.

Tax aggressiveness

The ETR models, based on which the Current ETR (CurETR) models were developed, were specified as:

$$
\begin{aligned}
ETR_{it} = \ & \beta_1 l.ETR_{it-1} + \beta_2 CG_{it} + \beta_3 InvIntsty_{it} + \beta_4 FmSze_{it} \\
& + \beta_5 Liquidity_{it} + \beta_6 GrthProspct_{it} + \beta_7 CapStr_{it} \qquad (1) \\
& + \beta_8 FmAge_{it} + \varepsilon_{it}
\end{aligned}
$$

Here, CG represents a vector of corporate governance variables (non-executive directors, board gender diversity, board size, institutional ownership and ownership structure); β denotes regression coefficients; ETR is effective tax rate; l.ETR denotes the lag of ETR, InvIntsty is inventory intensity; FmSze is firm size; GrthProspct

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denotes growth prospect; CapStr represents capital structure; and FmAge is firm age.

$$ETR_{it} = \gamma_1 l.ETR_{it-1} + \gamma_2 FinConst_{it} + \gamma_3 InvIntsty_{it}$$
$$+ \gamma_4 FmSze_{it} + \gamma_5 Liquidity_{it} + \gamma_6 GrthProspct_{it} \qquad (2)$$
$$+ \gamma_7 CapStr_{it} + \gamma_8 FmAge_{it} + \varepsilon_{it}$$

$$ETR_{it} = \delta_1 l.ETR_{it-1} + \delta_2 CSR_{it} + \delta_3 InvIntsty_{it} + \delta_4 FmSze_{it}$$
$$+ \delta_5 Liquidity_{it} + \delta_6 GrthProspct_{it} + \delta_7 CapStr_{it} \qquad (3)$$
$$+ \delta_8 FmAge_{it} + \varepsilon_{it}$$

$$ETR_{it} = \alpha_1 l.ETR_{it-1} + \alpha_2 PolConn_{it} + \alpha_3 InvIntsty_{it}$$
$$+ \alpha_4 FmSze_{it} + \alpha_5 Liquidity_{it} + \alpha_6 GrthProspct_{it} \qquad (4)$$
$$+ \alpha_7 CapStr_{it} + \alpha_8 FmAge_{it} + \varepsilon_{it}$$

From Equations 2-4, γ, δ, and α are regression coefficients; ETR is effective tax rate; l.ETR denotes the lag of ETR, CSR represents corporate social responsibility; InvIntsty is inventory intensity; FmSze is firm size; GrthProspct denotes growth prospect; CapStr represents capital structure; and FmAge is firm age.

Financial performance

The models for ROA, ROE and Tobin's Q for ETR based on which CurETR models were derived were formulated as follows:

$$ROA_{it} = \theta_1 l.ROA_{it} + \theta_2 lnETR_{it} + \theta_3 NED_{it} + \theta_4 FmSze_{it}$$
$$+ \theta_5 Liquidity_{it} + \theta_6 GrthProspct_{it} + \theta_7 CapStr_{it}$$
$$+ \theta_8 FmAge_{it} + \theta_9 InvIntsty_{it} + \theta_{10} TaxRisk_{it} \qquad (5)$$
$$+ \varepsilon_{it}$$

$$ROE_{it} = \Upsilon_1 l.ROE_{it} + \Upsilon_2 lnETR_{it} + \Upsilon_3 NED_{it} + \Upsilon_4 FmSze_{it}$$
$$+ \Upsilon_5 Liquidity_{it} + \Upsilon_6 GrthProspct_{it} + \Upsilon_7 CapStr_{it}$$
$$+ \Upsilon_8 FmAge_{it} + \Upsilon_9 InvIntsty_{it} + \Upsilon_{10} TaxRisk_{it}$$
$$+ \varepsilon_{it}$$

(6)

$$TobinsQ_{it} = \Phi_1 l.lnTobinsQ_{it} + \Phi_2 lnETR_{it} + \Phi_3 NED_{it}$$
$$+ \Phi_4 FmSze_{it} + \Phi_5 Liquidity_{it} + \Phi_6 GrthProspct_{it}$$
$$+ \Phi_7 CapStr_{it} + \Phi_8 FmAge_{it} + \Phi_9 InvIntsty_{it}$$
$$+ \Phi_{10} TaxRisk_{it} + \varepsilon_{it}$$

(7)

From Equations 5-7, θ, Υ, and Φ are regression coefficients; ROA is return on assets; l.ROA denotes the lag of ROA; ROE is return on equity; l.ROE is the lag of ROE; TobinsQ is Tobin's Q; l.TobinsQ is the lag of TobinsQ; ETR is effective tax rate; NED is non-executive directors; InvIntsty is inventory intensity; FmSze is firm size; GrthProspct denotes growth prospect; CapStr represents capital structure; and FmAge is firm age.

Corporate transparency

The corporate transparency model for ETR based on which the CurETR model was derived was specified as follows:

$$CorpTransp_{it} = \Psi_1 l.CorpTransp_{it} + \Psi_2 lnETR_{it}$$
$$+ \Psi_3 InvIntsty_{it} + \Psi_4 FmSze_{it} + \Psi_5 Liquidity_{it}$$
$$+ \Psi_6 GrthProspct_{it} + \Psi_7 CapStr_{it} + \Psi_8 FmAge_{it}$$
$$+ \Psi_9 NED_{it} + \Psi_{10} TaxRisk_{it} + \varepsilon_{it}$$

(8)

From Equation 8, Ψ represents regression coefficients; CorpTransp is corporate transparency; l.CorpTransp denotes the lag of CorpTransp; ETR is effective tax rate; NED is non-executive directors; InvIntsty is inventory intensity; FmSze is

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firm size; GrthProspct denotes growth prospect; CapStr represents capital structure; TaxRisk is tax risk; and FmAge is firm age.

Earnings management

The model for earnings management based on discretionary accruals (DA) for ETR based on which CurETR model was derived was specified as follows:

$$
\begin{aligned}
DA_{it} = \ & \varphi_1 l. DA_{it} + \varphi_2 lnETR_{it} + \varphi_3 InvIntsty_{it} + \varphi_4 FmSze_{it} \\
& + \varphi_5 Liquidity_{it} + \varphi_6 GrthProspct_{it} + \varphi_7 CapStr_{it} \quad (9) \\
& + \varphi_8 FmAge_{it} + \varphi_9 NED_{it} + \varphi_{10} TaxRisk_{it} + \varepsilon_{it}
\end{aligned}
$$

From Equation 9, φ represents regression coefficients; DA is discretionary accruals; ETR is effective tax rate; l.DA denotes the lag of NED is non-executive directors; InvIntsty is inventory intensity; FmSze is firm size; GrthProspct denotes growth prospect; CapStr represents capital structure; TaxRisk is tax risk; and FmAge is firm age.

Tax risk as a moderator in the relationship between tax aggressiveness and financial performance

The moderating role of tax risk on the relationship between tax aggressiveness and firm performance was modelled as:

$$
\begin{aligned}
ROA_{it} = \ & \psi_1 l. ROA_{it} + \psi_2 ETR_{it} + \psi_3 TaxRisk_{it} \\
& + \psi_4 (TaxRisk \times ETR)_{it} + \psi_5 CapStr_{it} \\
& + \psi_6 FmSze_{it} + \psi_7 Liquidity_{it} + \psi_8 GrthProspct_{it} \quad (10) \\
& + \psi_9 InvIntsty_{it} + \psi_{10} FmAge_{it} + \psi_{11} CG_{it} + \varepsilon_{it}
\end{aligned}
$$

From Equation 10, ψ represents regression coefficients; ROA is return on assets; l.ROA is the lag of ROA; ETR is effective tax rate; TaxRisk is tax risk; (TaxRisk×ETR) is the interaction between tax risk and effective tax rate;

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InvIntsty is inventory intensity; FmSze is firm size; GrthProspct denotes growth prospect; CapStr represents capital structure; CG is corporate governance; and FmAge is firm age.

Corporate governance as a moderator in the relationship between tax aggressiveness and financial performance

The moderating role of corporate governance between tax aggressiveness and firm performance was modelled as:

$$ROA_{it} = \omega_1 l.ROA_{it} + \omega_2 lnETR_{it} + \omega_3 CG_{it} + \omega_4 (CG \times ETR)_{it}$$
$$+ \omega_5 FmSze_{it} + \omega_6 Liquidity_{it}$$
$$+ \omega_7 GrthProspct_{it} + \omega_8 CapStr_{it} \qquad (11)$$
$$+ \omega_9 InvIntsty_{it} + \omega_{10} FmAge_{it} + \omega_{11} TaxRisk_{it}$$
$$+ \varepsilon_{it}$$

From Equation 11, ω represents regression coefficients; ROA is return on assets; l.ROA is the lag of ROA; ETR is effective tax rate; CG is corporate governance; (CG×ETR) is the interaction between corporate governance and effective tax rate; InvIntsty is inventory intensity; FmSze is firm size; GrthProspct denotes growth prospect; CapStr represents capital structure; TaxRisk is tax risk; and FmAge is firm age.

Note that, in this research, the general form of the system GMM estimation used in specifying the above equations is presented as follows:

$$TA_{it} = \gamma_0 + \gamma_1 TA_{it-\tau} + \sum_{h=1}^{n} \gamma_h W_{h,it-\tau} + \theta_i + \mu_i + \varepsilon_{it} \qquad (12)$$

$$TA_{it} - TA_{it-\tau} = \gamma_1(TA_{it-\tau} - TA_{it-2\tau}) + \sum_{h=1}^{n} \gamma_h \, (W_{h,it-\tau}$$

$$- W_{h,it-2\tau}) + (\mu_t - \mu_{t-\tau}) + \varepsilon_{it-\tau} \qquad (13)$$

where TA_{it} represented the Tax Aggressiveness of firm i in time t; γ_0 is a constant; W represented a vector of control variables (inventory intensity, firm size, liquidity, growth prospect, capital structure, and firm age); τ signified the coefficient of autoregression (which was equal to 1 for the specification); μ_t signified the time-specific constant; θ_i represented the firm-specific effect; n was the number of control variables in any specified model; and ε_{it} was the noise (error term).

As part of the GMM model diagnostics, the strict exogeneity of the time-invariant variables was supported by the results from Sargan overidentification and the Hansen J tests (Agyei et al., 2021).

Data Processing and Analysis

Data analysis is described as a procedure that involves drawing conclusions and clarifying results in words about a study (Creswell, 2008). The secondary data gathered were analysed to mirror each objective. Data gathered from the annual reports of GSE-listed companies were sorted and cleaned before final estimations were made. Microsoft Excel 2019 was the main tool for gathering the data and subsequent cleaning. After generating clean data, the data were transferred to Version 15 of Stata, a quantitative data processing tool, for the actual estimations. All estimations were done under the systems GMM (SGMM) framework.

The estimation technique (i.e., systems GMM) adopted in the analysis was robust because the systems GMM accounts for the problem of reverse causality and at the same time deals with the potential problem of endogeneity common with dynamic models (Agyei & Idan, 2022; Miletkov et al., 2017). As a result, its application is consistent with recent works on tax aggressiveness with different dimensions as well as other empirical analysis (Adela et al., 2023; Agyei et al., 2020; Agyei & Idan, 2022; Asiamah et al., 2022a, 2022b; Tackie et al., 2022). The main disadvantage of the SGMM relate to the possibility of instrument proliferation. This was dealt with in this study by resorting to the guidelines provided by Roodman (2009a, 2009b), who introduced the Xtabond2 commands in stata.

Chapter Summary

The research procedures employed by the study were detailed in this chapter. The chapter contained the steps for conducting the research. Specifically, this chapter outlined the research philosophy, the research approach, the study design, the population and sampling, variables operationalisation and measurements, sources of data, estimation strategy, model specification, and data processing and analysis.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

In this chapter, the empirical results are presented followed by objective-based discussions of the findings. The results are presented in tables. The chapter starts with the sample statistics followed by the analysis of the pairwise correlations between the predictor variables. The main results and discussion based on the various objectives were then detailed.

Descriptive Statistics

This section shows the summary statistics of all the variables used in the study. Precisely, the number of observations, the mean, the standard deviation, and the minimum and the maximum values for each variable are tabulated and discussed. The essence of the descriptive statistics was to present an overview, i.e., a statistical summary, of the study's variables of interest gathered on the 19 sampled non-financial listed firms on the GSE. The descriptive summary is detailed in Table 2.

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Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ETR	182	8.51	85.133	-21.985	1053.664
CurETR	182	.162	.631	-3.19	5.054
TaxRisk	190	19.127	76.897	.01	344.376
ROA	182	-.08	1.49	-19.98	.52
ROE	182	-.17	7.662	-55.621	68.553
TobinsQ	170	15.389	88.813	0	651.812
NED	172	.608	.24	0	.889
BGD	172	.157	.141	0	.5
BoardSize	172	8	2.203	3	12
InstOwn	190	-	-	0	1
ForLoc	189	-	-	0	1
CorpTrans	185	6.876	2.222	1	11
CSR	182	0	.001	0	.007
PolConn	189	-	-	0	1
InvIntsy	182	.134	.103	0	.575
FirmSize	182	12.057	2.647	6.81	17.578
Liquidity	182	1.191	1.091	.118	7.685
GrthPrspct	164	.766	7.459	-1	95.509
CapStr	182	18.671	126.25	-5.942	1360.633
FmAge	190	35.816	17.267	3	68
FinConst	184	-.442	1.019	-3.955	7.777
DA	190	.307	15.226	-86.38	162.384

Notes: variable names correspond to those specified in Table 1. ETR represents effective tax rate; CurETR represents current effective tax rate; TaxRisk represents tax risk; ROE represents return on equity; ROA represents return on asset; TobinsQ represents Tobins Q; NED represents non-executive directors in the firms; BGD measures board gender diversity; BoardSize represents board size; InstOwn is a dummy variable for institutional ownership; ForLoc is a dummy variable that indicates if foreign owners own a firm or not; CorpTrans represents corporate transparency; CSR is a measure for the corporate social responsibility of the firm; PolConn is a dummy that depicts the political connection level of the firm; InvIntsty represents inventory intensity; GrthPrspct is a measure for growth prospect; CapStr represents capital structure; FirmSize represents the size of the firm; Liquidity represents the liquidity of the firm; FmAge is a measure the age of the firm; FinConst is a measure of financial constraint; DA represents earnings management.
Source: Field Data (2022)

The descriptive statistics in Table 2 communicate essential features about the sampled firms over the studied period. A careful study of the ETR suggests that, over the studied period, some listed firms in Ghana paid taxes that overly outweighed their annual pre-tax income. This contributed to the high mean ETR of 8.51 over the studied period, while CurETR averaged 0.162, with

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relatively mild standard deviations. Averagely, about 60% of the board members of the studied firms were non-executive directors with less than 20% of the board membership being dominated by females. By count, the largest (smallest) board had 12 (3) members with an average size of 8 members.

Over 80% of the studied firms had institutional investors whereas about 36.5% had foreign ownership. Averagely, listed firms in Ghana are financially constrained, as revealed by the negative average measure of financial constraints of the studied firms over the sample period. It was not surprising that a low liquidity ratio (averaging a little above 1:1 with a high standard deviation) was recorded over the studied period. A little over 37% of the sampled firms had political connections, a feature that may typically trigger aggressive tax behaviour among firms given that their political connections may shield them. Hence, the observed characteristics of the sampled firms provide an avenue to ascertain the drivers of tax aggressiveness.

Furthermore, tax risk, measured as the standard deviation of tax expense, was as high as 344.376% although the mean was 19.127 with a standard deviation of 76.897%. Over the sampled period, more than 84% of the listed non-financial firms had institutional investors. Hardly did the firms engage in extensive CSR activities, when the amount spent by firms is expressed as a percentage of their total sales. Over the sampled period, the firm that spent the highest amount on CSR spent less than 1% of the total sales it recorded in a given year.

Generally, the mean values for ROA and ROE measures were negative for the sampled firms over the studied period, with high extremes, communicating the presence of some outliers. This indicated that while some of

the sampled listed non-financial firms made extreme positive returns on assets and equity, several others recorded highly negative returns. Thus, the nature of the sampled period, a period in which the Ghanaian economy underwent several clean-ups and reforms targeted at the banking and/or financial sector, could be a factor. This observation corroborates the conclusion of Bossman et al. (2022), who reported that financial sector clean-ups are detrimental to listed non-financial firms in Ghana.

The studied firms had high capitalisations in non-current assets coupled with moderate investments in inventory, averaging a little above 13% of their total assets. While some firms recorded positive growth in sales, others realised substantial declines in sales volumes. On average, firms aged around 36 years, with the least and highest-grown firms aged 3 and 68 years, respectively.

Correlation Analysis

The correlation matrix for the various measures employed in the research is shown in this section. Correlation can be used to measure the direction and strength of the association between the various variables. It does not indicate causality and is used to analyse issues of multicollinearity. The unconditional pairwise correlations between the study variables are summarised in Table 3.
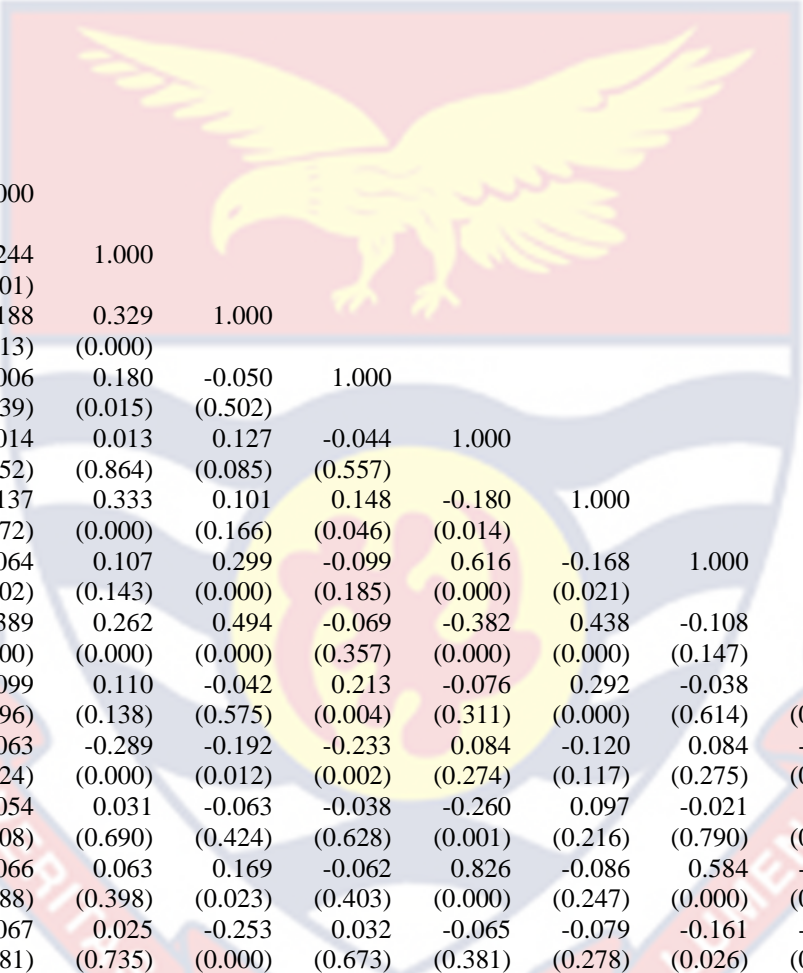
Table 3: Correlation Analysis

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) lnetr	1.000													
(2) L.lnetr	0.681	1.000												
	(0.000)													
(3) curetr	0.237	-0.081	1.000											
	(0.006)	(0.376)												
(4) L.curetr	-0.021	0.235	-0.068	1.000										
	(0.822)	(0.009)	(0.386)											
(5) roe	0.003	-0.017	0.012	0.027	1.000									
	(0.976)	(0.852)	(0.872)	(0.736)										
(6) L.roe	-0.007	0.003	0.020	0.011	0.049	1.000								
	(0.940)	(0.971)	(0.797)	(0.884)	(0.538)									
(7) roa	-0.025	-0.013	0.025	0.020	0.460	0.011	1.000							
	(0.772)	(0.890)	(0.741)	(0.803)	(0.000)	(0.887)								
(8) L.roa	-0.025	-0.025	0.047	0.024	0.028	0.460	-0.003	1.000						
	(0.787)	(0.785)	(0.552)	(0.759)	(0.718)	(0.000)	(0.968)							
(9) lntobinsq	0.375	0.284	-0.029	0.082	-0.017	-0.177	0.017	0.021	1.000					
	(0.000)	(0.002)	(0.710)	(0.315)	(0.831)	(0.028)	(0.830)	(0.796)						
(10) L.lntobinsq	0.398	0.368	0.006	-0.025	0.010	-0.011	-0.033	0.022	0.849	1.000				
	(0.000)	(0.000)	(0.941)	(0.762)	(0.907)	(0.895)	(0.693)	(0.784)	(0.000)					
(11) da	0.300	0.486	-0.102	-0.005	0.044	0.016	0.118	0.016	0.036	-0.058	1.000			
	(0.000)	(0.000)	(0.169)	(0.947)	(0.559)	(0.837)	(0.111)	(0.839)	(0.638)	(0.477)				
(12) L.da	-0.605	0.303	0.086	-0.103	-0.007	0.044	-0.005	0.119	-0.342	0.040	-0.121	1.000		
	(0.000)	(0.001)	(0.274)	(0.189)	(0.934)	(0.579)	(0.946)	(0.129)	(0.000)	(0.623)	(0.116)			
(13) corptrans	0.032	0.040	0.086	0.097	-0.031	-0.029	-0.070	-0.071	0.138	0.102	-0.073	-0.077	1.000	
	(0.712)	(0.665)	(0.249)	(0.217)	(0.680)	(0.711)	(0.350)	(0.369)	(0.074)	(0.212)	(0.324)	(0.324)		
(14) L.corptrans	-0.001	0.045	0.081	0.099	-0.049	-0.030	-0.075	-0.072	0.134	0.102	-0.077	-0.077	0.985	1.000
	(0.992)	(0.625)	(0.302)	(0.205)	(0.531)	(0.706)	(0.338)	(0.360)	(0.098)	(0.211)	(0.323)	(0.322)	(0.000)	
(15) ned	-0.156	-0.182	-0.107	-0.081	0.118	0.097	0.145	0.150	-0.033	-0.056	0.036	-0.098	-0.065	-0.023

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(0.079)	(0.053)	(0.161)	(0.316)	(0.122)	(0.228)	(0.057)	(0.063)	(0.678)	(0.499)	(0.642)	(0.222)	(0.400)	(0.776)
(16) BGD													
0.090	0.139	0.062	0.076	-0.067	-0.042	-0.069	-0.067	0.075	0.064	-0.022	-0.101	0.454	0.458
(0.315)	(0.141)	(0.421)	(0.348)	(0.385)	(0.601)	(0.370)	(0.410)	(0.343)	(0.445)	(0.777)	(0.209)	(0.000)	(0.000)
(17) boardsize													
0.068	0.092	-0.001	0.026	0.076	0.053	0.030	0.039	0.117	0.134	-0.016	-0.113	0.512	0.511
(0.443)	(0.328)	(0.992)	(0.745)	(0.319)	(0.515)	(0.700)	(0.634)	(0.137)	(0.106)	(0.840)	(0.160)	(0.000)	(0.000)
(18) instownp													
0.121	0.095	0.015	0.019	-0.015	-0.015	-0.033	-0.034	0.264	0.249	0.005	0.006	-0.009	-0.003
(0.163)	(0.298)	(0.844)	(0.807)	(0.842)	(0.847)	(0.663)	(0.663)	(0.001)	(0.002)	(0.941)	(0.938)	(0.899)	(0.964)
(19) f1orloc													
0.306	0.309	0.091	0.112	-0.122	-0.126	-0.099	-0.106	0.386	0.344	-0.027	-0.170	0.310	0.314
(0.000)	(0.001)	(0.224)	(0.154)	(0.101)	(0.108)	(0.182)	(0.175)	(0.000)	(0.000)	(0.713)	(0.027)	(0.000)	(0.000)
(20) csrsales													
-0.132	-0.188	0.004	0.041	0.001	0.015	0.013	0.042	0.077	0.072	-0.010	0.025	0.079	0.059
(0.129)	(0.040)	(0.960)	(0.604)	(0.986)	(0.848)	(0.864)	(0.591)	(0.318)	(0.381)	(0.897)	(0.746)	(0.288)	(0.454)
(21) finconst													
0.645	0.445	-0.077	-0.040	0.000	-0.328	-0.008	-0.013	0.551	0.529	-0.072	-0.440	-0.091	-0.093
(0.000)	(0.000)	(0.305)	(0.614)	(0.995)	(0.000)	(0.915)	(0.866)	(0.000)	(0.000)	(0.328)	(0.000)	(0.222)	(0.236)
(22) Polconn													
-0.088	-0.079	0.064	0.060	0.022	0.023	-0.094	-0.102	-0.113	-0.154	-0.033	0.017	0.051	0.060
(0.311)	(0.390)	(0.389)	(0.449)	(0.770)	(0.770)	(0.205)	(0.194)	(0.143)	(0.059)	(0.655)	(0.821)	(0.489)	(0.444)
(23) sdofetr													
0.650	0.655	-0.097	-0.098	-0.196	-0.197	-0.022	-0.021	0.592	0.644	0.004	0.004	-0.091	-0.090
(0.000)	(0.000)	(0.194)	(0.211)	(0.008)	(0.011)	(0.765)	(0.787)	(0.000)	(0.000)	(0.955)	(0.955)	(0.217)	(0.250)
(24) firmsize													
-0.066	0.028	0.029	0.015	-0.029	0.083	0.019	0.019	-0.033	-0.063	-0.040	0.100	0.303	0.320
(0.451)	(0.758)	(0.700)	(0.850)	(0.696)	(0.292)	(0.795)	(0.810)	(0.668)	(0.441)	(0.591)	(0.203)	(0.000)	(0.000)
(25) liquidity													
-0.296	-0.308	-0.026	0.074	-0.008	0.015	0.010	0.100	0.198	0.235	0.002	0.018	-0.058	-0.055
(0.001)	(0.001)	(0.726)	(0.349)	(0.917)	(0.849)	(0.894)	(0.205)	(0.010)	(0.004)	(0.974)	(0.815)	(0.436)	(0.484)
(26) lnInvtInt													
0.046	0.006	0.061	0.048	-0.121	-0.026	-0.090	-0.081	-0.021	0.035	-0.035	-0.052	0.006	-0.012
(0.601)	(0.953)	(0.426)	(0.554)	(0.114)	(0.749)	(0.244)	(0.322)	(0.788)	(0.683)	(0.650)	(0.522)	(0.937)	(0.881)
(27) grwthprspct													
-0.032	-0.002	-0.021	-0.022	0.015	0.004	0.008	0.006	-0.046	-0.038	-0.004	0.004	0.002	0.004
(0.726)	(0.983)	(0.789)	(0.776)	(0.851)	(0.963)	(0.919)	(0.940)	(0.574)	(0.639)	(0.961)	(0.958)	(0.983)	(0.964)
(28) CapStr													
0.608	0.594	-0.063	-0.038	0.103	-0.195	0.003	-0.007	0.492	0.551	-0.289	-0.630	-0.051	-0.054
(0.000)	(0.000)	(0.398)	(0.631)	(0.168)	(0.012)	(0.963)	(0.926)	(0.000)	(0.000)	(0.000)	(0.000)	(0.498)	(0.493)
(29) firmage													
-0.071	-0.072	0.183	0.183	-0.028	-0.034	-0.073	-0.084	-0.035	0.024	-0.019	-0.020	-0.015	-0.028
(0.412)	(0.431)	(0.013)	(0.018)	(0.707)	(0.666)	(0.326)	(0.282)	(0.652)	(0.774)	(0.795)	(0.794)	(0.840)	(0.717)
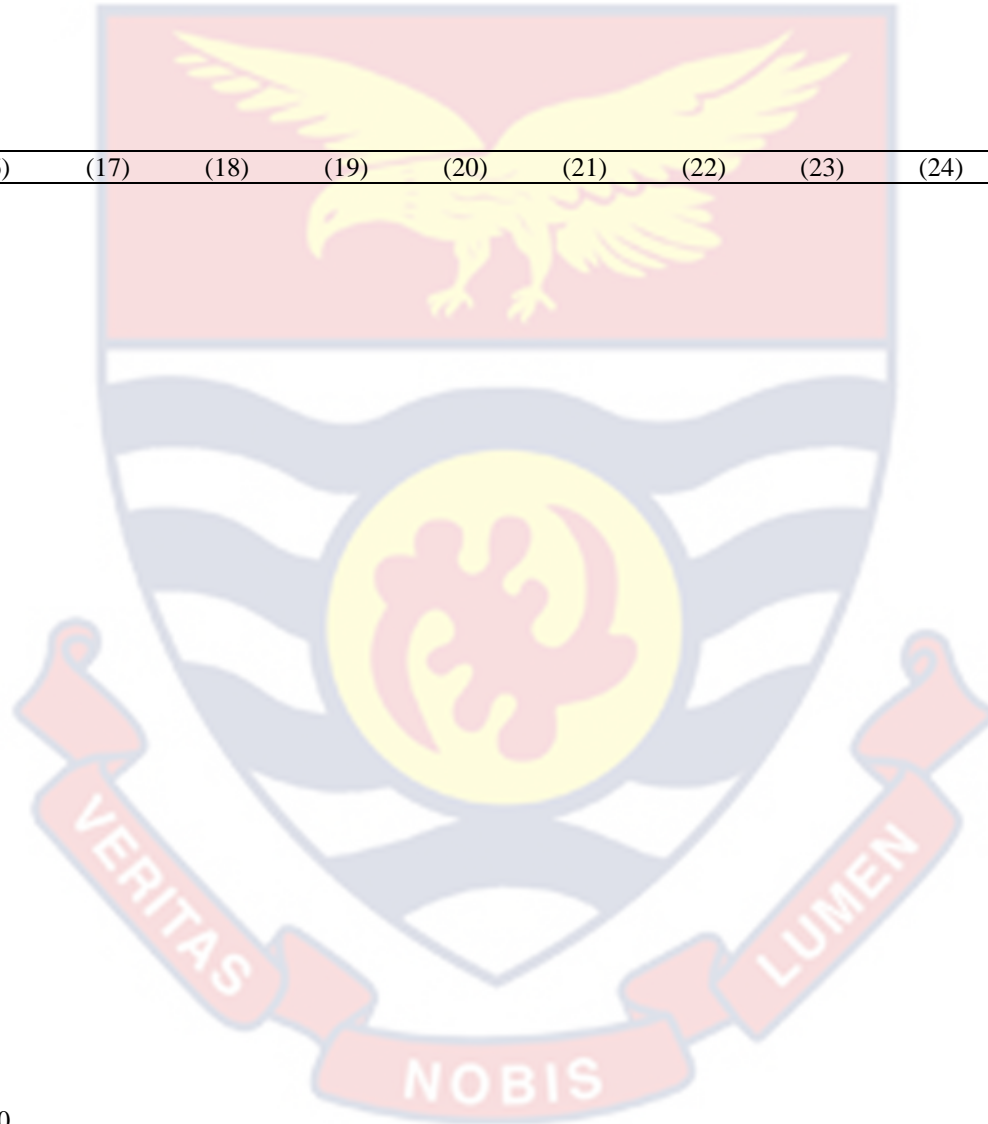
Variables	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
(1) lnetr															
(2) L.lnetr															
(3) curetr															
(4) L.curetr															
(5) roe															
(6) L.roe															
(7) roa															
(8) L.roa															
(9) lntobinsq															
(10) L.lntobinsq															
(11) da															
(12) L.da															
(13) corptrans															
(14) L.corptrans															
(15) ned	1.000														
(16) BGD	0.013	1.000													

	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
	(0.862)														
(17) boardsize	0.387	0.065	1.000												
	(0.000)	(0.397)													
(18) instownp	-0.009	-0.325	0.244	1.000											
	(0.910)	(0.000)	(0.001)												
(19) f1orloc	-0.405	0.102	0.188	0.329	1.000										
	(0.000)	(0.181)	(0.013)	(0.000)											
(20) csrsales	0.127	0.010	0.006	0.180	-0.050	1.000									
	(0.097)	(0.898)	(0.939)	(0.015)	(0.502)										
(21) finconst	0.046	0.018	0.014	0.013	0.127	-0.044	1.000								
	(0.551)	(0.812)	(0.852)	(0.864)	(0.085)	(0.557)									
(22) Polconn	-0.097	-0.218	0.137	0.333	0.101	0.148	-0.180	1.000							
	(0.203)	(0.004)	(0.072)	(0.000)	(0.166)	(0.046)	(0.014)								
(23) sdofetr	0.025	0.015	0.064	0.107	0.299	-0.099	0.616	-0.168	1.000						
	(0.741)	(0.843)	(0.402)	(0.143)	(0.000)	(0.185)	(0.000)	(0.021)							
(24) firmsize	-0.097	-0.172	0.389	0.262	0.494	-0.069	-0.382	0.438	-0.108	1.000					
	(0.204)	(0.024)	(0.000)	(0.000)	(0.000)	(0.357)	(0.000)	(0.000)	(0.147)						
(25) liquidity	0.039	-0.179	-0.099	0.110	-0.042	0.213	-0.076	0.292	-0.038	0.016	1.000				
	(0.616)	(0.019)	(0.196)	(0.138)	(0.575)	(0.004)	(0.311)	(0.000)	(0.614)	(0.831)					
(26) lnInvtInt	-0.130	0.036	-0.063	-0.289	-0.192	-0.233	0.084	-0.120	0.084	-0.386	0.078	1.000			
	(0.100)	(0.647)	(0.424)	(0.000)	(0.012)	(0.002)	(0.274)	(0.117)	(0.275)	(0.000)	(0.310)				
(27) grwthprspct	-0.008	-0.079	-0.054	0.031	-0.063	-0.038	-0.260	0.097	-0.021	0.018	-0.017	0.045	1.000		
	(0.925)	(0.327)	(0.508)	(0.690)	(0.424)	(0.628)	(0.001)	(0.216)	(0.790)	(0.821)	(0.830)	(0.577)			
(28) CapStr	0.038	0.019	0.066	0.063	0.169	-0.062	0.826	-0.086	0.584	-0.247	-0.077	0.051	-0.011	1.000	
	(0.625)	(0.806)	(0.388)	(0.398)	(0.023)	(0.403)	(0.000)	(0.247)	(0.000)	(0.001)	(0.304)	(0.511)	(0.894)		
(29) firmage	0.194	0.137	0.067	0.025	-0.253	0.032	-0.065	-0.079	-0.161	-0.282	0.046	0.412	-0.032	-0.093	1.000
	(0.011)	(0.073)	(0.381)	(0.735)	(0.000)	(0.673)	(0.381)	(0.278)	(0.026)	(0.000)	(0.534)	(0.000)	(0.683)	(0.213)	

Notes: p values are held in parentheses; lnETR represents effective tax rate; L.lnETR represents lag of effective tax rate; CurETR represents current effective tax rate; L.CurETR represents lag of current effective tax rate; ROE represents return on equity; L.roe represents lag of the return on equity; ROA represents return on asset; L.roa represents lag of the return on asset; Tobinsq represents Tobins Q; L.lntobinsq represents the lag of lntobinsq; da represents earnings management; L.da represents lag of earnings management; CorpTrans represents corporate transparency; L.CorpTrans represents lag of corporate transparency; NED represents non-executive directors in the firms; BGD measures board gender diversity; BoardSize represents board size; InstOwn is a dummy variable

for institutional ownership; ForLoc is a dummy variable that indicates if foreign owners own a firm or not; CSR is a measure for the corporate social responsibility of the firm; FinConst is a measure of financial constraint; PolConn is a dummy that depicts the political connection level of the firm; TaxRisk (sdofetr) represents tax risk; InvIntsty represents inventory intensity; GrthPrspct is a measure for growth prospect; CapStr represents capital structure; FirmSize represents the size of the firm; Liquidity represents the liquidity of the firm; FirmAge is a measure the age of the firm.

Source: Field Data (2022)
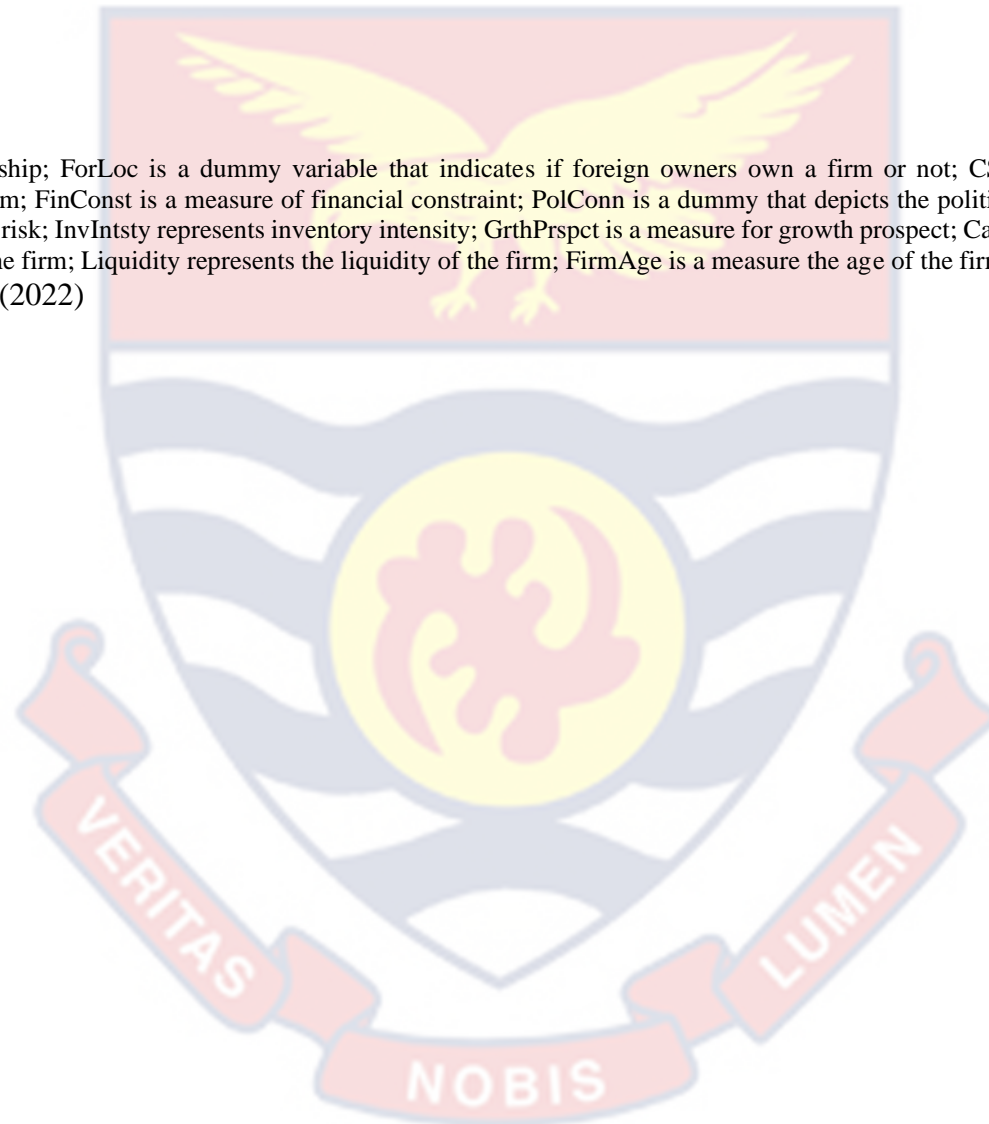
The pairwise correlations between the explanatory variables are in low-to moderate magnitudes. It largely suggests that the models specified in the study could contain these essential new plausible predictors without any issue of multicollinearity. Thus, including these regressors in the various specified models was appropriate.

Main Results

The study sought to investigate the causes of tax aggressiveness, its impact on financial performance (ROE, ROA, and Tobin's Q), corporate transparency, and earnings management, as well as the moderating roles of tax risk and corporate governance in the relationship between tax aggressiveness and financial performance of Ghana's listed non-financial firms. The GMM regression results are organized into four sections. Tables 4 and 5 demonstrate the origins of tax aggression of Ghana's listed non-financial enterprises in the first subsection. The models that investigate the impact of tax aggressiveness on financial performance, company transparency, and earnings management came next. The moderating effect of tax risk on tax aggressiveness and financial performance was examined next. The final subsection looked at the moderating effect of corporate governance on tax aggressiveness and financial performance.

It is important to note that the proxy for tax aggressiveness was an inverse measure in this research. As a result, throughout the discussions in the following subsections, regression results with negative signs are regarded as positive while those with positive signs are explained to be negative.

Objective one: Drivers of tax aggressiveness

This section presents the results of objective one of the study. First, the preliminary diagnostics to assess the efficacy of the specified models under the system GMM framework were discussed, following next were the results for ETR (Table 4) as a proxy of tax aggressiveness. The results on CurETR (Table 5) were presented afterwards. The system GMM estimations were summarised in Tables 4 and 5, and each table contains 8 models, as presented in the respective columns (from left to right). For ETR (Table 4), the main models were the board size (model 1), board-gender diversity (model 2), non-executive directors (model 3), foreign ownership or ownership structure (model 4), institutional ownership (model 5), political connection (model 6), financial constraints (model 7), and corporate social responsibility (model 8). Similarly, for CurETR (Table 5), board size (model 9), board-gender diversity (model 10), non-executive directors (model 11), foreign ownership or ownership structure (model !2), institutional ownership (model 13), political connection (model 14), financial constraints (model 15), and corporate social responsibility (model 16) were the main models. Inventory intensity, firm size, liquidity, growth prospects, capital structure, and firm age were held in each model as control variables explaining tax aggressiveness among listed non-financial entities.

From Tables 4 and 5, in what concerns the GMM diagnostics, the results from the tests of autocorrelation, instruments proliferation, the instrument count, and the count of data points and cross-sections reveal that the predictor variables employed in the various models were exogenous and, hence, the instruments used in the various models were not proliferated. Impliedly, the specifications of the various models were adequate.

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Table 4: Drivers of Tax Aggressiveness – ETR

	(Model 1) Lnetr	(Model 2) lnetr	(Model 3) lnetr	(Model 4) lnetr	(Model 5) Lnetr	(Model 6) lnetr	(Model 7) Lnetr	(Model 8) Lnetr
L.lnetr	-0.135***	-0.185***	-0.209***	-0.00173	-0.109***	-0.475***	-0.445**	0.836***
	(0.0196)	(0.0377)	(0.0164)	(0.0338)	(0.00758)	(0.136)	(0.175)	(0.216)
BSize	-0.227***							
	(0.0666)							
BGD		-8.449*						
		(4.747)						
NED			-2.086***					
			(0.519)					
ForLoc				-4.258***				
				(0.800)				
InstOwnp					-0.0944			
					(1.105)			
PolConn						-2.180*		
						(1.130)		
FinConst.							-15.81*	
							(8.969)	
CSR								0.4033**
								(0.190)
CONTROLS								
lnInvInty	0.612***	1.399**	0.447**	1.760**	0.783**	0.959**	0.420*	1.031**
	(0.133)	(0.558)	(0.155)	(0.638)	(0.306)	(0.416)	(0.207)	(0.463)
FirmSize	0.318**	1.023*	0.350***	1.405***	0.600***	0.317	-0.326	0.273
	(0.150)	(0.580)	(0.115)	(0.306)	(0.153)	(0.349)	(0.310)	(0.228)
Liquidity	-0.514***	-0.263***	-0.371***	-0.324***	-0.284***	0.210	0.416	0.919*
	(0.134)	(0.0693)	(0.0945)	(0.0791)	(0.0638)	(0.443)	(0.421)	(0.473)
GrthPrspct	0.0742	-0.459	0.0195	-0.235**	0.0666	0.0659	-0.562*	-0.00425
	(0.264)	(0.410)	(0.272)	(0.0878)	(0.0732)	(0.0564)	(0.308)	(0.00253)
CapStr	0.0307***	0.0426***	0.0326***	0.0435***	0.0329***	0.0362***	0.255*	0.0107*
	(0.00173)	(0.00647)	(0.00175)	(0.0125)	(0.00245)	(0.00371)	(0.125)	(0.00576)
FirmAge	-0.0391**	-0.0125	-0.0371**	-0.144***	-0.0549**	0.00291	0.0137	0.00744
	(0.0172)	(0.0456)	(0.0155)	(0.0237)	(0.0196)	(0.0352)	(0.0191)	(0.0216)
Constant	0.0416	-8.828**	-1.768	-6.339***	-4.624**	-3.171	-7.777**	-2.818
	(1.628)	(3.571)	(1.538)	(1.897)	(1.865)	(2.775)	(2.776)	(2.937)
Observations	97	97	97	101	101	101	101	101
No. of instruments	17	17	17	17	17	14	17	15
AR1 (p-value)	0.007	0.005	0.018	0.971	0.011	0.970	0.886	0.109
AR2 (p-value)	0.116	0.134	0.146	0.133	0.0704	0.178	0.130	0.369
Sargan OIR	0.197	0.105	0.185	0.243	0.711	0.601	0.906	0.593
Hansen OIR	0.820	0.716	0.709	0.438	0.665	0.761	0.947	0.635
DHT for instruments (a) GMM instrument for levels								
H excluding group	0.323	0.778	0.752	0.728	0.130		0.366	-
Diff(null, H=exogenous	0.843	0.624	0.618	0.347	0.831		0.958	0.635
(b) IV(years, eq(diff))								
H excluding group	0.737	0.665	0.646	0.356	0.694	0.830	0.909	0.657
Diff(null, H=exogenous	0.864	0.516	0.563	0.646	0.290	0.290	0.874	0.311
Fisher	2493.98	479.29	1424.68	125.79	2873.09	201.83	9291.63	9381.41
Firms	17	17	17	17	17	17	17	17

Notes: Standard errors are held in parentheses. ***{1%}, **(5%), and *{10%} denote the various levels of statistical significance. Dif. is difference. OIR denotes over-identifying restrictions; lnETR represents effective tax rate; BSize represents Board Size: BGD measures Board Gender Diversity: NED denotes non-executive directors; BSize measures firms board size; InstOwn is a dummy variable for institutional ownership; ForLoc is a dummy variable that indicates if foreign owners own a firm or not; FinConst is a measure of financial constrain; CSR is a measure for the corporate social responsibility of the firm; PolConn is a dummy that depicts the political connection level of the firm; InvIntsty represents inventory intensity; GrthPrspct is a measure for growth prospect; CapStr represents capital strategy; FirmSize represents the size

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of the firm; Liquidity represents the liquidity of the firm; FirmAge is a measure the age of the firm. All fisher statistics are significant at the 1% significance level.

Source: Field Data (2022)

Table 5: Drivers of Tax Aggressiveness – CurETR

	(Model 9) CurETR	(Model 10) CurETR	(Model 11) CurETR	(Model 12) CurETR	(Model 13) CurETR	(Model 14) CurETR	(Model 15) CurETR	(Model 16) CurETR
L.CurETR	0.0765***	-0.389***	0.967**	-0.103**	-0.294***	-0.300***	0.0778***	-0.268***
	(0.00502)	(0.0616)	(0.347)	(0.0379)	(0.0543)	(0.0638)	(0.00401)	(0.0311)
BSize	-0.0637**							
	(0.0272)							
BGD		-11.83***						
		(2.841)						
NED			-0.160					
			(0.495)					
ForLoc				-1.030**				
				(0.369)				
InstOwnp					-3.541**			
					(1.390)			
PolConn						-0.754**		
						(0.312)		
FinConst.							-0.153***	
							(0.0277)	
CSR								-0.1808**
								(0.8002)
CONTROLS								
LnInvInty	0.174**	1.182	0.183	0.0558	-0.469*	0.486**	0.132*	0.257*
	(0.0810)	(0.815)	(0.167)	(0.121)	(0.243)	(0.210)	(0.0666)	(0.140)
FirmSize	-0.0287	0.695***	0.0211	0.0783	0.187**	-0.119**	0.0347	-0.219***
	(0.0206)	(0.233)	(0.0407)	(0.0681)	(0.0678)	(0.0543)	(0.0347)	(0.0479)
Liquidity	0.0116	0.284**	0.0694	-0.0607	-0.124***	-0.679***	-0.00889	-0.740***
	(0.0538)	(0.103)	(0.130)	(0.0517)	(0.0386)	(0.214)	(0.0282)	(0.108)
GrthPrspct	-0.114**	-0.975*	-0.0654	-0.0123	0.0510	0.00252	-0.000153	0.00152
	(0.0509)	(0.517)	(0.0481)	(0.0848)	(0.130)	(0.00991)	(0.0688)	(0.00487)
CapiStr	-0.0397***	0.0329*	0.00351	-0.00957	-0.0164**	-0.0276***	0.0100***	-0.0233***
	(0.0103)	(0.0156)	(0.0194)	(0.0322)	(0.00669)	(0.00572)	(0.000954)	(0.00307)
FirmAge	0.0168**	0.0221	0.0127	-0.0319***	-0.0841***	-0.0103	0.00473	0.0149
	(0.00707)	(0.0464)	(0.0150)	(0.0101)	(0.0134)	(0.0138)	(0.00585)	(0.0150)
Constant	0.865	-4.917***	-0.277	1.017	3.499*	4.529***	-0.262	3.914***
	(0.592)	(1.629)	(0.499)	(0.724)	(1.940)	(0.725)	(0.330)	(0.467)
Observations	145	145	145	153	153	153	153	153
No. of instruments	18	17	17	17	17	18	18	18
AR1 (p-value)	0.035	0.001	0.153	0.141	0.367	0.009	0.133	0.018
AR2 (p-value)	0.0843	0.128	0.172	0.759	0.314	0.103	0.109	0.106
Sargan OIR	0.128	0.122	0.994	0.962	0.997	0.239	0.287	0.188
Hansen OIR	0.579	0.755	0.936	0.397	0.544	0.588	0.785	0.795
DHT for instruments								
(a) GMM instrument for levels								
H excluding group	0.279	0.101	0.237	0.152	0.076	0.072	0.288	0.278
Diff(null, H=exogenous	0.604	0.939	0.980	0.502	0.805	0.835	0.818	0.833
(b) IV(years, eq(diff))								
H excluding group	0.482	0.751	0.917	0.318	0.522	0.568	0.699	0.754
Diff(null, H=exogenous)	0.848	0.379	0.562	0.643	0.377	0.384	0.925	0.526
Fisher	7977.23	277.13	1944.16	44.36	34.39	1648.66	484.06	125.05
Firms	18	18	18	18	18	18	18	18

Notes: Standard errors are held in parentheses. ***{1%}, **(5%), and *{10%} denote the various levels of statistical significance. Dif. is difference. OIR denotes over-identifying restrictions; L.CurETR measures current effective tax rate; BSize represents Board Size: BGD measures Board Gender Diversity: NED represents non-executive directors in the firms; BSize measures firms board size; InstOwn is a dummy variable for institutional ownership; ForLoc is a dummy variable that indicates if foreign owners own a firm or not; FinConst is a measure of financial constrain; CSR is a measure for the corporate social responsibility of the firm; PolConn is a dummy that depicts the political connection level of the firm; InvIntsty represents inventory intensity; GrthPrspct is a measure for growth prospect; CapStr represents capital strategy; FirmSize represents the size of the firm; Liquidity represents the liquidity of the firm; FirmAge is a measure the age of the firm. All fisher statistics are significant at the 1% significance level.

Source: Field Data (2022)

The ETR-based models were presented in Table 4. The results revealed that board size, board gender diversity, non-executive directors and ownership structure have a positive effect on the effective tax rate (ETR). The relationship between political connection and ETR was also found positive, the same as financial constraints. Meanwhile, CSR was found to be negatively related to ETR.

The Current ETR (CurETR) models are presented in Table 5. The results revealed that board size, board gender diversity, Institutional ownership and ownership structure have a positive effect on the current effective tax rate (CurETR). Political connection, financial constraints and CSR positively relate to CurETR.

Generally, the findings suggest that inventory intensity and firm size negatively relate to tax aggressiveness among listed firms. In contrast, growth prospect, liquidity and firm age have a positive relationship with tax aggressiveness. Meanwhile, mixed relationships were found between capital structure and tax aggressiveness.

Discussion: Drivers of tax aggressiveness

The first research objective examined the drivers of tax aggressiveness among listed non-financial firms in Ghana by incorporating new plausible determinants and control variables. Three fundamental governance metrics (board size, board gender diversity, and non-executive directors) were found to be positively connected to tax aggression. Directors are accountable to shareholders for ensuring that the organization operates within an acceptable risk profile (Deslandes et al., 2019). As a result, it is unexpected that the size of the board and the number of non-executive directors raise the amount of tax-

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aggressive behavior among corporate entities. From a different angle, it is important to note that the discovered relationship between board size and tax aggressiveness is understandable because boards with large numbers would want to reduce their tax burden to cover board compensation and benefits; and the opposite is true for small-sized boards. In terms of non-executive directors (NED), the findings are congruent with those of Agyei et al. (2020), who investigated tax avoidance among Ghanaian commercial banks.

The positive relationship between corporate governance and tax aggressiveness could also be argued from the following viewpoint. As the corporate board, for instance, increases in size, firms tend to be somewhat financially constrained in terms of getting enough funds to meet the levels of compensation required to meet the needs of directors. Thus, when firms are constrained through the channel of the increased size of the corporate board, more actions will be taken to raise funds. By doing so, the firm is likely to first resort to internal means of raising funds, as espoused by the pecking order theory (Myers & Majluf, 1984; Myers, 1984; Wamiori et al., 2016). Conversely, by extension, it could be argued that firms will not be aggressive when they have enough financial resources to meet the growing demands brought about by increases in the size of corporate boards, as the resource dependency theory holds (see, e.g., Pfeffer & Salancick, 1978; Pfeffer, 1973; Kyereboah-Coleman, 2007).

Martinez-Jimenez et al. (2020) contended that diversity of the board improves board effectiveness. Therefore, given the perception that women tend to be risk averse (Loukil & Yousfi, 2016), their participation on corporate boards is expected to result in less aggressive behaviours. The finding does not

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support recent literature that finds evidence that the presence of women on corporate boards can reduce tax aggressiveness (Herawati et al., 2021; Hoseini & Safari Gerayli, 2018; Suleiman & Abubakar, 2021) but is consistent with the observations from the study of Boussaidi and Hamed (2015).

Also, institutional ownership and ownership structure had a significant positive connection with tax aggressiveness. It is assumed that institutional investors' engagement with ownership in Ghanaian listed businesses has resulted in solid corporate governance in these firms since they have been shown to improve business performance in the past (Abor & Biekpe, 2007; Bokpin & Arko, 2009). However, institutional investors may have strong political ties, which may induce aggressive tax behaviours among firms. Hence, this finding is consistent with the existing evidence from Zhou (2011). In terms of foreign ownership, multinational firms' actions are foremost linked with tax avoidance schemes. As a result, it is unsurprising that foreign-owned businesses become tax aggressive. The result is consistent with Shi et al. (2020), although inconsistent with Deef et al. (2021).

Furthermore, political connection was found to be a positive driver of tax aggressiveness. Politically connected enterprises have less market pressure to demonstrate high transparency (Kim & Zhang, 2015), meaning that they may have to be more tax aggressive. From another breadth, because political connection is seen as a personal asset that hinges on reputation, reputational concerns deter board members from hindering tax enforcement. In consequence, board members may want to maintain such a reputation with the government to the extent that it does not go to ruin due to tax aggressive strategies (Lin et al., 2018). Despite being intuitively sound, this finding is contrary to the reported

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conclusion of Iswari et al. (2019), who revealed that politically connected enterprises in Indonesia do not engage in aggressive tax behaviours. In general, the various disparities in cultural, geographical, religious, and political systems between Ghana and Indonesia may be a result of the counter findings.

Financial constraint was found to be a positive driver of tax aggressiveness. Although the value of tax aggressiveness in assisting financially distressed businesses may be debatable, in the particular case of Ghanaian-listed non-financial firms, this may be justified because the sample period was filled with several banking and/or financial sector reforms that, according to the empirical results from Bossman et al.'s (2022) study, were detrimental to non-financial listed corporations. Besides, financially limited firms are thought to be able to save cash internally by participating in more aggressive cash-saving measures (Chen & Lai, 2012). Therefore, tax savings may provide a low-cost source of internal finance to assist underinvestment in cash-strapped businesses. This finding is consistent with the pecking order theory and, hence, emphasises that to rely on internal means of funding during financially constrained periods, firms may engage in tax aggressive practices (see, Myers & Majluf, 1984; Myers, 1984; Wamiori, Namusonge, & Sakwa, 2016).

Regarding CSR, it had mixed relationships with tax aggressiveness. The results, in terms of CSR driving tax aggressiveness, may be counterintuitive to the fact that firms that practice CSR activities tend to be overly concerned about their reputation and, thereby, will likely not engage in aggressive tax practices (Lanis & Richardson, 2015). However, this may be acceptable in a developing economy, like Ghana, where in the midst of financial constraints, firms that embark on CSR may take considerable attempts, through tax aggressiveness, to

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avoid paying high taxes. For example, earlier studies indicate that firms had engaged in some form of earnings management and that CSR was used as a smoke screen by the firms to engage in opportunistic behaviours, including earnings management (Amidu et al., 2016). The findings add that CSR does and does not fuel aggressive tax behaviour among listed non-financial firms in Ghana. Theoretically, through the legitimacy channel, firms may want to attract favourable public attention. As a result, they may not just conform to societal values but may also report them. Meanwhile, when other factors, such as political connection is present, firms rather hide behind their political ties to become aggressive towards tax payments (Salihu, Annuar, & Obid, 2015).

In terms of the control variables, the respective relationships found in the study could be justified as follows. Inventory intensity, which evaluates the amount of money spent on inventory, is considered crucial (Nurfauzi & Firmansyah, 2018; Pratama & Suryarini, 2020). Businesses may employ inventory intensity to increase their profit margins, and with more inventory, firms will earn more money. Consequently, inventory intensity would not necessarily influence firms' tax aggressiveness decisions. Given that companies use inventory intensity to minimise the amount of profits generated, it is understandable that with a large inventory, other aggressive tax behaviour may not be triggered (Pratama & Suryarini 2020).

Larger companies, on the surface, appear to have a reputation to protect and are more likely not to be engaged in tax aggressiveness. This observation does support the extant literature that shows that business size directly impacts tax aggression (Allen et al., 2016; Dunbar et al., 2010; Sari & Tjen, 2017). Also, firms with more liquid assets and high growth prospects may engage in

aggressive tax behaviours to retain their liquidity and growth positions. Thus, a positive relationship between liquidity and tax aggressiveness is unsurprising, likewise in the case of growth prospect and tax aggressiveness.

Lee et al. (2019) presented data supporting the above claim and anticipated that tax avoidance would raise the relative price of debt vs equity. It implies that firms with high gearing tend to be less aggressive. Conversely, businesses have been suggested to employ loan capital to avoid paying taxes. It explains why certain nations' corporate tax rules have thin capitalisation standards. Interest on debts is tax-deductible, and businesses may desire to utilise some gearing to lower their tax bills. It also implies that companies with a high gearing level are likely to be tax aggressive. Thus, premised on the above justifications, mixed relationships between capital structure and aggressive tax behaviours are unsurprising.

Objective two: Effect of tax aggressiveness on financial performance, corporate transparency, and earnings management

The second objective of this research was to examine the effect of tax aggressiveness on financial performance (ROE, ROA, and Tobin's Q), corporate transparency, and earnings management of listed non-financial firms in Ghana. In this research, the regression results from the respective estimated models were presented in Tables 6 (effect of tax aggressiveness (using ETR as a proxy) on financial performance), Table 7 (effect of tax aggressiveness (using CurETR as a proxy) on financial performance), Table 8 (effect of tax aggressiveness on corporate transparency), and Table 9 (effect of tax aggressiveness on earnings management).

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Tables 6 and 7 contain three models each while Tables 8 and 9 contain 2 models each. Under Table 6, models 17, 18, and 19 are for ROE, ROA, and Tobin's Q, respectively while under Table 7, model 20, model 21, and model 22 are for ROE, ROA, and Tobin's Q, respectively. Under Table 8, model 23 and model 24 are in respect of discretionary accruals when CurETR and ETR are proxies for tax aggressiveness while under Table 9, model 25 and model 26 are in respect of corporate transparency when CurETR and ETR are proxies for tax aggressiveness.

The diagnostics of the various models were discussed before the results are presented and discussed.
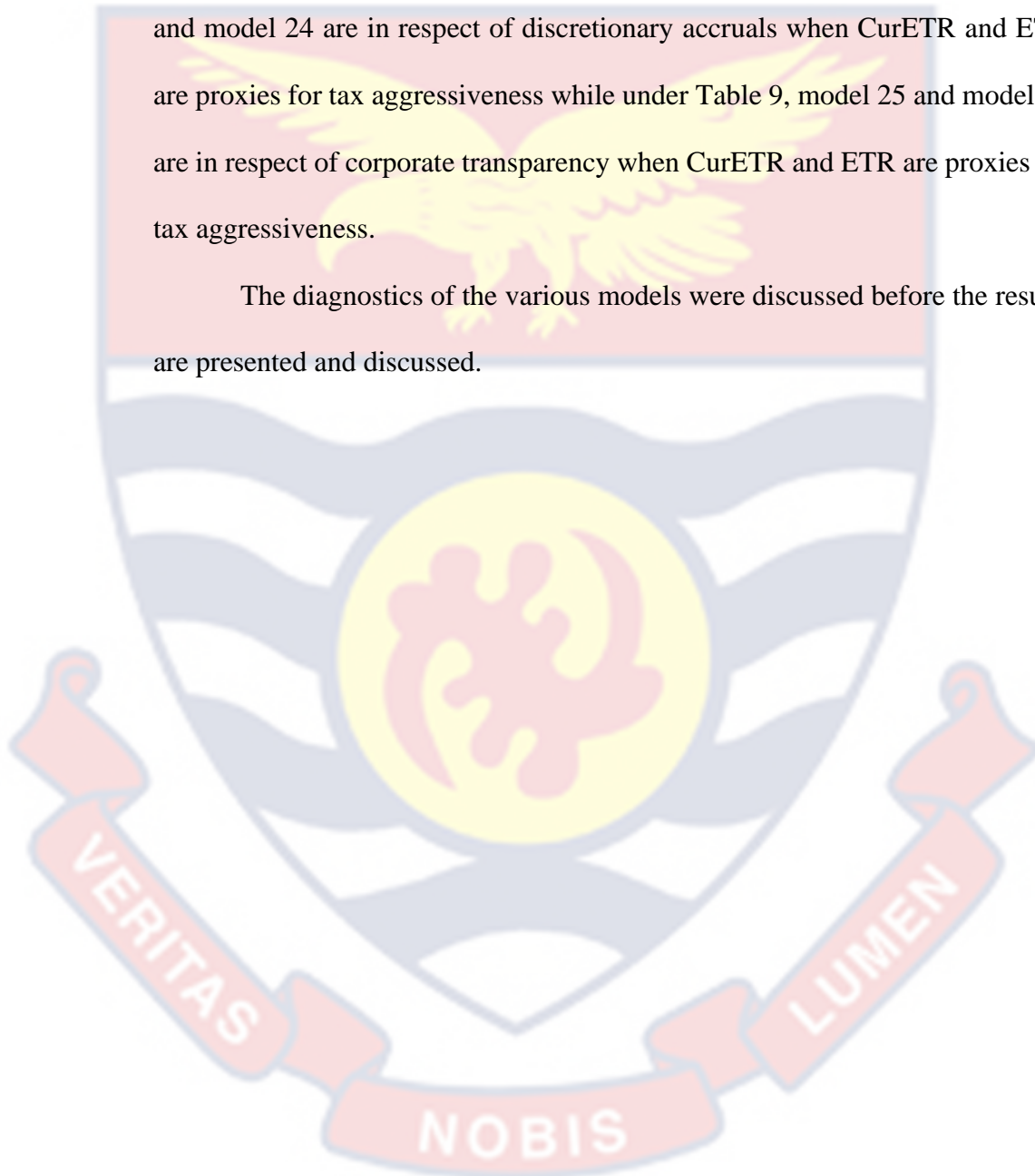
Table 6: Effect of Tax Aggressiveness on Financial Performance – ETR

	(Model 17) roe	(Model 18) roa	(Model 19) lntobinsq
L.roe	0.932***		
	(0.137)		
L.roa		0.962***	
		(0.126)	
L.lntobinsq			1.050***
			(0.137)
lnETR	-1.425*	-0.374***	-0.111**
	(0.765)	(0.0451)	(0.0493)
SDofETR	0.0407***	0.00933***	0.0127
	(0.0127)	(0.00167)	(0.0135)
NED	-2.455	-0.604	-0.924
	(2.472)	(0.468)	(0.721)
lninventoryintensity	0.943**	0.00230	0.0283
	(0.442)	(0.119)	(0.109)
firmsize	0.546*	0.0524	-0.0296
	(0.295)	(0.0647)	(0.141)
liquidity	-0.851***	0.0250	0.187***
	(0.267)	(0.145)	(0.0243)
growthprospect	0.981	-0.0257	-0.316***
	(0.694)	(0.0490)	(0.108)
capitalstructure	0.000998	0.0000683	-0.00300***
	(0.0143)	(0.000266)	(0.000769)
firmage	-0.0598	-0.00226	-0.0120
	(0.0556)	(0.00729)	(0.0186)
_cons	-1.523	-0.724	1.017
	(2.313)	(1.143)	(1.586)
Observations	113	113	107
No. of instruments	17	17	18
AR1 (p-value)	0.238	0.335	0.0552
AR2 (p-value)	0.128	0.338	0.228
Hansen-J (p-value)	0.622	0.707	0.236
Sargan(p-value)	0.996	1.000	0.451

Notes: Standard errors are held in parentheses. ***{1%}, **(5%}, and *{10%} denote the various levels of statistical significance. Dif. is difference. OIR denotes over-identifying restrictions; L.roe represents lag of the return on equity; L.roa represents lag of the return on asset; L.lntobinsq represents the lag of lntobinsq; lnETR represents effective tax rate; TaxRisk represents tax risk; NED represents non-executive directors in the firms; InvIntsty represents inventory intensity; GrthPrspct is a measure for growth prospect; CapStr represents capital structure; FirmSize represents the size of the firm; Liquidity represents the liquidity of the firm; FirmAge is a measure the age of the firm.
Source: Field Data (2022)

Table 7: Effect of Tax Aggressiveness on Financial Performance – CurETR

	(Model 20) roe	(Model 21) roa	(Model 22) lntobinsq
L.roe	0.300***		
	(0.0522)		
L.roa		-0.0187***	
		(0.00166)	
L.lntobinsq			0.418***
			(0.138)
CurETR	-8.024**	-0.0324***	-0.0524*
	(3.285)	(0.00247)	(0.0287)
SDofETR	-0.00478	0.000667	0.0128*
	(0.0479)	(0.00541)	(0.00718)
NED	-1.340	0.0940	0.606
	(6.698)	(0.221)	(0.881)
lninventoryintensity	-1.229	-0.0812*	0.0950
	(0.746)	(0.0449)	(0.168)
firmsize	0.103	-0.0232	0.190**
	(1.286)	(0.0421)	(0.0877)
liquidity	-0.458	0.303***	0.105
	(0.911)	(0.0529)	(0.0796)
growthprospect	2.836	-0.00194	-0.249*
	(5.440)	(0.0366)	(0.142)
capitalstructure	0.0000497	-0.000148	0.00287
	(0.0110)	(0.00230)	(0.00362)
firmage	-0.0765	0.00312	-0.0523***
	(0.116)	(0.00358)	(0.0111)
constant	0.611	-0.419	-1.053
	(19.18)	(0.647)	(1.518)
Observations	145	145	138
No. of instruments	18	18	18
AR1 (p-value)	0.0852	0.315	.
AR2 (p-value)	0.377	0.306	0.672
Hansen-J (p-value)	0.846	0.696	0.502
Sargan(p-value)	0.911	1.000	0.00547

Notes: Standard errors are held in parentheses. ***{1%}, **(5%), and *{10%} denote the various levels of statistical significance. Dif. is difference. OIR denotes over-identifying restrictions; L.roe represents lag of the return on equity; L.roa represents lag of the return on asset; L.lntobinsq represents the lag of lntobinsq; CurETR represents current effective tax rate; TaxRisk represents tax risk; NED represents non-executive directors in the firms; InvIntsty represents inventory intensity; GrthPrspct is a measure for growth prospect; CapStr represents capital structure; FirmSize represents the size of the firm; Liquidity represents the liquidity of the firm; FirmAge is a measure the age of the firm.

Source: Field Data (2022)

Table 8: Effect of Tax Aggressiveness on Earnings Management

	(Model 23) da	(Model 24) da
L.da	0.975***	-1.562***
	(0.212)	(0.0158)
CurETR		-3.602***
		(0.970)
lnETR	-0.305**	
	(0.134)	
SDofETR	0.889***	0.407***
	(0.0391)	(0.0126)
NED	1.944	-1.664
	(1.450)	(6.198)
lninventoryintensity	0.168*	-0.430
	(0.0947)	(0.482)
firmsize	0.279	-0.0856
	(0.204)	(0.563)
liquidity	-0.338***	-0.149
	(0.101)	(0.329)
growthprospect	-0.293***	1.168
	(0.0928)	(4.986)
capitalstructure	-0.208***	-0.268***
	(0.00876)	(0.00273)
firmage	-0.00819	0.0186
	(0.0333)	(0.0725)
_cons	-4.292	0.197
	(2.577)	(3.885)
Observations	113	145
No. of instruments	18	18
AR1 (p-value)	0.277	0.166
AR2 (p-value)	0.246	0.826
Hansen-J (p-value)	0.825	0.532
Sargan(p-value)	0.994	0.0142

Notes: Standard errors are held in parentheses. ***{1%}, **(5%), and *{10%} denote the various levels of statistical significance. Dif. is difference. OIR denotes over-identifying restrictions; L.EM represents lag of earnings management; da is discretionary accruals; CurETR represents current effective tax rate; lnETR represents effective tax rate; TaxRisk represents tax risk; NED represents non-executive directors in the firms; InvIntsty represents inventory intensity; GrthPrspct is a measure for growth prospect; CapStr represents capital structure; FirmSize represents the size of the firm; Liquidity represents the liquidity of the firm; FirmAge is a measure the age of the firm.
Source: Field Data (2022)

Table 9: Effect of Tax Aggressiveness on Corporate Transparency

	(Model 25) corptrans	(Model 26) corptrans
L.corptrans	0.544**	0.998***
	(0.210)	(0.0604)
lnETR	0.0623**	
	(0.0291)	
CurETR		0.249*
		(0.141)
NED	1.433	0.242
	(0.835)	(0.272)
SDofETR	-0.00581	0.00126
	(0.00462)	(0.00139)
lninventoryintensity	0.417	-0.000753
	(0.321)	(0.0734)
Firmsize	0.0989	0.00650
	(0.0817)	(0.0622)
Liquidity	0.0883	0.0222
	(0.0935)	(0.0855)
Growthprospect	-0.135	-0.0645
	(0.145)	(0.103)
Capitalstructure	0.00650	-0.000239
	(0.00558)	(0.000644)
Firmage	0.0729***	0.00346
	(0.0247)	(0.00702)
_cons	-0.832	-0.367
	(2.249)	(0.623)
Observations	113	145
No. of instruments	18	18
AR1 (p-value)	0.179	0.0333
AR2 (p-value)	0.853	0.569
Hansen-J (p-value)	0.395	0.547
Sargan(p-value)	0.891	0.674

Notes: Standard errors are held in parentheses. ***{1%}, **(5%), and *{10%} denote the various levels of statistical significance. Dif. is difference. OIR denotes over-identifying restrictions; L.corptrans represents lag of corporate transparency; CurETR represents current effective tax rate; lnETR represents effective tax rate; TaxRisk represents tax risk; NED represents non-executive directors in the firms; InvIntsty represents inventory intensity; GrthPrspct is a measure for growth prospect; CapStr represents capital structure; FirmSize represents the size of the firm; Liquidity represents the liquidity of the firm; FirmAge is a measure the age of the firm.
Source: Field Data (2022)

In terms of the diagnostics for the various models in Tables 6-9, Asongu and Acha-Anyi (2019) and Asongu and Nnanna (2019) demonstrated that persistence is established in standard GMM results when the coefficient of the lag-dependent variable is significant, and the absolute value of the coefficient is

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within the interval of 0 to 1. The lagged estimate for the dependent variables supports the idea that the dependent variables are durable across all models, justifying the robustness of using the dynamic model, particularly the two-step system GMM.

The Sargan/ Hansen test p-value ($p > 0.1$ in all cases) indicates that there is no instrument proliferation and, as a result, the study failed to reject the null hypotheses of instrument validity. Similarly, the investigation failed to reject the null hypothesis of no autocorrelation because all AR2 p-values were more than 10%. Due to the absence of instrument proliferation and autocorrelation, it was concluded that the findings and conclusions derived from this research were reliable and unbiased.

Discussion: Objective Two

Effect of tax aggressiveness on financial performance

Models 17 to 22 in Tables 6 and 7 give estimates for the impact of tax aggression on the financial performance of Ghana Stock Exchange-listed non-financial enterprises. According to the findings, both ETR and current ETR have a considerable negative impact on the financial performance (both ROA and ROE) of the selected enterprises. This means that non-financial firms on the GSE that undertake aggressive tax practices record higher returns on assets and equity. This finding is not startling given that tax aggressiveness can be beneficial to firms (Vu & Le, 2021).

Provided that the listed non-financial firms can generate tax savings from their aggressive practices, then there will be higher after-tax profits. Moreover, tax savings can provide a cheaper source of funding for re-investments which create further income. This is consistent with Chen, Hu,

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Wang, and Tang's (2014) proposition that firms that are mostly profitable pay less taxes. However, Kawor and Kportorgbi (2014) found that tax planning did not play a significant role in determining the performance of listed non-financial firms in Ghana.

Models 17 to 22 in Tables 6 and 7 give estimates for the impact of tax aggression on the financial performance of Ghana Stock Exchange-listed non-financial enterprises. According to the findings, both ETR and current ETR have a considerable negative impact on the financial performance (both ROA and ROE) of the selected enterprises. and Agyemin-Boateng (2016) found that tax avoidance has a positive influence on the value of listed firms in Ghana, albeit the negative effect of earnings management on firm value makes the net impact negligible. Similar to the abovementioned existing literature, Lestari, and Wardhani (2015) found a positive effect of tax aggressiveness on the value firms, but the effect was moderated by board gender diversity.

The findings in the present study were, however, inconsistent with the results of Vu and Le (2021) and Mbroh, Monney and Bonsu (2019). Presumably, economies with sophisticated and advanced tax administration authorities can identify aggressive tax practices.

Effect of tax aggressiveness on earnings management

Models 23 and 24 in Table 8 also showed the results of the influence of tax aggressiveness on the earnings management of listed non-financial firms in Ghana. At a significant level of 5%, in Model 23, and 1% in Model 24, the findings revealed a significant negative relationship between tax aggressiveness and earnings management, signifying that there is no trade-off between

aggressive financial reporting and aggressive tax reporting for the non-financial firms listed on the Ghana Stock Exchange.

The findings from the current research also meant that listed non-financial companies that engage in tax aggressive practices usually have low earnings quality (note that the proxy for tax aggressiveness is an inverse measure). This is not surprising because corporate tax aggressiveness may include actions that are manipulative, such as manipulations of earnings, related party arrangements, and other activities carried out by management. Consequently, Frank, Lynch and Rego (2009) proposed that efforts aimed at manipulating earnings are examples of aggressive financial reporting. The findings could also suggest that managers of the selected firms may tend to use discretionary accruals such as tax contingency reserves, tax accruals (expenses), and valuation allowances to smooth earnings and meet tax reporting goals.

Moreover, since there are some disparities between financial reporting standards and tax reporting rules in Ghana, this allows the managers of the listed firms to exploit such differences, thereby reporting lower incomes for tax purposes and, probably, higher profits in the financial statements for the same reporting period. Amidu, Coffie, and Acquah (2019) documented that transfer pricing and earnings management are positively connected with aggressive tax avoidance when they used a sample of listed and non-listed multinational firms in Ghana. Likewise, Herusetya and Stefani (2020) tested this relationship using a sample of manufacturing companies in Indonesia and documented supporting evidence. Thus, the findings from the current study were consistent with notable observations and conclusions from the existing literature.

Effect of tax aggressiveness on corporate transparency

The study documented a significant positive (at 5% and 10% in Models 25 and 26, respectively in Table 9) relationship between corporate transparency and tax aggressiveness. Specifically, the findings reported in Models 25 and 26 (Table 9) indicate that listed non-financial firms that employ tax-aggressive practices tend to be opaque. This finding is probably because companies that engage in effective tax avoidance and aggressive behaviours may have to undertake investments in different jurisdictions and in complex instruments to circumvent the payment of taxes. This may likely change the cash flow patterns within the firm.

Moreover, since tax aggressiveness moves in tandem with earnings management, listed firms that engage in these practices trade off earnings quality for tax savings. These activities can confound outsiders' understanding of the sources and persistence of earnings and cash flows, causing opacity in its financial and operating environment. Finally, these firms may also adopt a complex organisational structure to accommodate foreign subsidiaries, enhancing their complexities and opaqueness. As a consequence of this, Balakrishnan, Blouin, and Guay (2019), in support of this finding, also documented a trade-off between benefits from tax savings and corporate transparency.

Objective three: The moderating role of tax risk on the relationship between tax aggressiveness and the financial performance

The third objective was to examine the moderating role of tax risk on the relationship between tax aggressiveness and the financial performance of

listed firms in Ghana. The results were presented in Table 10 under models 27,

28, and 29 for ROE, ROA, and Tobin's Q, respectively.

Table 10: Tax Aggressiveness, Tax Risk, and Financial Performance

	(Model 27) roe	(Model 28) roa	(Model 29) lntobinsq
L.roe	0.733***		
	(0.185)		
L.roa		-0.0252*	
		(0.0121)	
L.lntobinsq			0.767***
			(0.177)
lnETR	-4.151***	1.081**	-0.307**
	(0.875)	(0.469)	(0.113)
c.lnETR#c.SDofETR	**0.113****	**-0.127****	**0.0357***
	(0.0401)	**(0.0569)**	**(0.0189)**
SDofETR	-0.727**	0.896**	-0.260
	(0.293)	(0.403)	(0.166)
firmsize	0.171	0.159	0.208
	(1.618)	(0.196)	(0.313)
NED	-2.000	3.060	0.120
	(4.329)	(1.958)	(0.470)
lninventoryintensity	1.837	-0.136	0.452*
	(1.625)	(0.224)	(0.235)
liquidity	-2.324**	0.330	0.0664
	(0.980)	(0.243)	(0.111)
growthprospect	0.154	0.117	-0.560***
	(1.295)	(0.303)	(0.0945)
capitalstructure	0.0300**	-0.0341**	0.00680
	(0.0133)	(0.0151)	(0.00534)
firmage	-0.0112	0.0118	-0.0682
	(0.152)	(0.0155)	(0.0414)
_cons	2.054	-4.244	1.049
	(14.20)	(4.171)	(1.892)
Net Effect	**-1.991**	**-1.349**	**0.376**
Observations	113	113	107
No. of instruments	18	18	18
AR1 (p-value)	0.269	0.304	0.0601
AR2 (p-value)	0.415	0.402	0.241
Hansen-J (p-value)	0.465	0.867	0.477
Sargan (p-value)	0.910	1.000	0.0357

Notes: Standard errors are held in parentheses. ***{1%}, **(5%}, and *{10%} denote the various levels of statistical significance. Dif. is difference. OIR denotes over-identifying restrictions; L.roe represents lag of the return on equity; L.roa represents lag of the return on asset; L.lntobinsq represents the lag of lntobinsq; lnETR represents effective tax rate; TaxRisk (SD of ETR) represents tax risk; Interactive term represents the interaction between effective tax rate and tax risk; NED represents non-executive directors in the firms; InvIntsty represents inventory intensity; GrthPrspct is a measure for growth prospect; CapStr represents capital structure; FirmSize represents the size of the firm; Liquidity represents the liquidity of the firm; FirmAge is a measure the age of the firm.

Source: Field Data (2022)

Discussion: The moderating role of tax risk on the relationship between tax aggressiveness and the financial performance

At this point, it is important to reiterate that, as per Markowitz (1952), the level of risk acceptable by a corporation could influence its tax planning or tax aggressiveness practices (see, e.g., Drake, Lusch, & Stekelberg, 2019; Saavedra, 2017). Thus, the degree of risk of a given corporation may lessen or increase how tax aggressiveness influences its financial performance. Hence, for a comprehensive view of the relationship between tax aggressiveness and firm performance, it was important to analyse the role of tax risk.

In Table 10, Models 27 to 29, the study interacted tax risk (SDofETR) with tax aggressiveness (lnETR) to test their effects on performance. The purpose was to examine the moderating role of tax risk in the relationship between tax aggressiveness and the performance of the listed non-financial firms. Models 27, 28, and 29 report the interaction on ROE, ROA, and Tobinsq respectively.

In Models 27 and 29, the study reported that the interaction between tax aggressiveness and tax risk is negative and statistically significant, signifying they could be substitutive in boosting returns for equity investors and firm value. This means that to enhance the interest of equity holders, firms will have to be less tax aggressive in an environment with high tax risk and vice versa. Further, the study, in model 28, documented that the interaction term is positive and statistically significant for boosting return on assets.

However, the marginal effect of tax aggressiveness on performance after the introduction of the interaction terms is quite insightful. In the first two models, that is model 27 and 28, the marginal effect of tax aggressiveness is

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negative, indicating that tax aggressiveness exerts a stronger positive effect (note that ETR is an inverse measure of aggressiveness) on ROE and ROA when tax risk is higher as compared to when tax risk is lower. This probably confirms the possibility of risk and return trade-off in book values of performance. This is because tax risk refers to the quantitative dispersion around the average amount of taxes payable. Thus, when the possibility of not paying the planned taxes is high, it is possible that firms that engage in aggressive tax practices heavily underpay their taxes when tax risk is higher, thereby, generating higher savings which, in turn, improves performance.

Further, the marginal effect of tax aggressiveness on Tobinsq is positive, indicating that firm value decreases when firms undertake aggressive tax practices in a high tax-risk environment. Whilst this result is contrary to Drake, Lusch, and Stekelberg (2019), this finding is not surprising given that Tobinsq represents the ratio of market to book values. Thus, while profits may increase when firms engage in such behaviours in a high-risk environment, it only exerts a positive influence on book values but does not reflect market values, dwarfing the numerator of Tobinsq relative to the denominator. This is probably because market values may reflect investor sentiments and expectations.

Consequently, in a high tax risk environment, firms that are seen as tax aggressive may be considered highly risky, making them assign low probabilities to the future cashflows of such firms which in turn, harms firm value. Future cash flows of listed firms who undertake aggressive tax practices in a high tax-risk environment could be considered highly risky because tax aggressive practices are believed not to follow the spirit of the law and, thus, excessiveness in its use is likely to result in back clashes with relevant tax

authorities.

In a high tax risk environment, there is a risk that certain transactions may be disregarded, resulting in hefty fines, penalties, and other costs which may cumulatively outweigh the potential savings. In addition, the reputational damage associated with being branded as a firm that does not pay taxes can also result in a loss of future revenues (Wahab, Ariff, Marzuki, & Sanusi, 2017).

Objective four: the moderating role of corporate governance on the relationship between tax aggressiveness and the financial performance

The fourth and final objective was to examine the moderating role of corporate governance on the relationship between tax aggressiveness and the financial performance of listed non-financial firms in Ghana. Table 11 depicts the moderating role played by corporate governance on the relationship between tax aggressiveness and the financial performance of listed non-financial firms on the Ghana Stock Exchange. The various results depicted by model 30, model 31, and model 32 show the moderating role played by corporate governance on the relationship between tax aggressiveness and the various financial performance variables (ROE, ROA and Tobin's Q). All the models are shown in Table 11.

By way of diagnostics, Asongu and Acha-Anyi (2019) and Asongu and Nnanna (2019) demonstrated persistence is established in standard GMM results when the coefficient of the lag-dependent variable is significant and the absolute value of the coefficient is within the interval of 0 to 1. Across all the models, the lagged estimate for the dependent variables supports the argument that the dependent variables are persistent, justifying the use of a dynamic model, particularly the two-step system GMM. The p-value of the

Sargan/Hansen tests ($p > 0.1$) signifies that there is no instrument proliferation as the study fails to reject the null hypotheses of instrument validity. Likewise, the study fails to reject the null hypothesis of no autocorrelation as the p-values of AR2 are all greater than 10%. Due to the absence of instrument proliferation and autocorrelation, it can be concluded that the findings are reliable.

Table 11: Tax Aggressiveness, Corporate Governance, and Financial Performance

	(Model 30) roe	(Model 31) roa	(Model 32) lntobinsq
L.roe	0.267**		
	(0.123)		
L.roa		0.720**	
		(0.255)	
L.lntobinsq			1.067***
			(0.179)
lnETR	-6.546***	-2.036***	1.583*
	(1.460)	(0.673)	(0.839)
c.lnETR#c.Ned	**8.306*****	**1.512***	**-2.131****
	(2.684)	**(0.746)**	**(0.978)**
SDofETR	-0.0628	0.0214**	0.00883
	(0.115)	(0.00753)	(0.0102)
Firmsize	-1.003	-0.0781	0.0737
	(1.148)	(0.311)	(0.269)
NED	3.435	-0.636	-4.522
	(3.413)	(1.230)	(3.333)
lninventoryintensity	-0.398	0.770	0.366
	(0.726)	(0.485)	(0.318)
liquidity	-0.179	-0.322*	-0.299
	(1.189)	(0.174)	(0.555)
growthprospect	0.942	-0.0307	-0.172
	(0.791)	(0.382)	(1.133)
capitalstructure	0.00946	-0.000269	-0.00497***
	(0.0162)	(0.000476)	(0.00142)
firmage	0.0115	-0.000315	-0.00105
	(0.167)	(0.0474)	(0.0423)
_cons	7.932	2.458	3.317
	(13.04)	(3.118)	(3.486)
Net Effect	**-1.496**	**-1.117**	**0.287**
Observations	113	113	107
No. of instruments	18	18	18
AR1 (p-value)	0.321	0.142	.
AR2 (p-value)	0.340	0.617	0.545
Hansen-J (p-value)	0.917	0.921	0.728
Sargan(p-value)	0.913	0.970	0.995

Notes: Standard errors are held in parentheses. ***{1%}, **{5%}, and *{10%} denote the various levels of statistical significance. Dif. is difference. OIR denotes over-identifying restrictions; L.roe represents lag of the return on equity; L.roa represents lag of the return on asset; L.lntobinsq represents the lag of lntobinsq; lnETR represents effective tax rate; TaxRisk represents tax risk; Interactive term represents the interaction between effective tax rate and non-executive directors; NED represents non-executive directors in the firms; InvIntsty represents inventory intensity; GrthPrspct is a measure for growth prospect; CapStr represents capital structure; FirmSize represents the size of the firm; Liquidity represents the liquidity of the firm; FirmAge is a measure the age of the firm.
Source: Field Data (2022)

Discussion: The moderating role of corporate governance on the relationship between tax aggressiveness and the financial performance

It is necessary to reassert that corporate governance plays a pivotal role in predicting both the behaviour and performance of corporations (Deslandes et al., 2019; Kovermann & Velte 2019; Sikka, 2018; Minnick & Noga, 2010; Tang, 2019; Vu & Le, 2021). From a theoretical perspective, in safeguarding the interest of shareholders, as quantified by financial performance, corporate governance cannot be overlooked (Fama & Jensen, 1983). Similarly, through corporate governance, the board is entrusted with the duty of ensuring that the organisation runs within a risk profile that is acceptable to shareholders. The corporate board does so by discussions on policies that could influence the firm's overall tax risk position (Deslandes et al., 2019). Impliedly, corporate governance affects both the behaviour (in terms of tax aggressiveness) and performance of corporations. Therefore, to disentangle these complex relationships, there was the need to ascertain the how the interaction between corporate governance and tax aggressiveness influences firm performance.

To test the moderating role of corporate governance in the relationship between tax aggressiveness and firm performance, the study interacted lnETR and NED (i.e., the proxies for tax aggressiveness and corporate governance, respectively) in Models 30, 31 and 32. Specifically, Models 30, 31, and 32 show the coefficients of the interaction between lnETR and NED on ROE, ROA and Tobinsq, respectively.

In Models 30 and 31, the study reported that the interaction between the corporate governance variable (presence of non-executive directors) and tax aggressiveness is positive, signifying that firms with higher numbers of non-

executive directors tend to employ less aggressive practices to boost profitability (proxied with ROE and ROA). This implies that in the presence of non-executive directors, managers' incentives to engage in opportunistic tax-aggressive behaviour are limited, which can increase the frequency of tax aggressive practices. However, the negative interaction between tax aggressiveness and non-executive directors in Model 32 could also signify that the interest of managers of non-executive directors can be aligned. Since non-executive directors are likely to serve the interest of shareholders, their interaction can boost firm value.

Further, it can be seen that the magnitude of the coefficient of tax aggressiveness has increased following its interaction with non-executive directors. The improvement in the negative impact of lnETR on ROE and ROA suggests that listed non-financial firms with more non-executive directors employ tax-aggressive practices to improve performance. This is not surprising given that the effect of tax aggressiveness on firm performance hinges on the heterogeneous agency costs of each firm (Tang, 2019; Vu & Le, 2021). Thus, the findings suggest that the presence of sound corporate governance structures (non-executive directors) can smoothen out part of the agency costs that arise from opportunistic managerial behaviours in tax aggressiveness, improving ROE and ROA.

Nevertheless, the findings also revealed that even in the presence of non-executive directors, tax aggressiveness may still be detrimental to firm value, evidenced by the significant positive impact of lnETR in Model 32. While this is contrary to the findings for the moderating effect of non-executive directors in the relationship between tax aggressiveness and ROE or ROA, the finding is

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not shocking. Although outside directors can act as referees to smooth out opportunistic incentives of corporate insiders in tax planning, well-governed firms are expected to be less tax aggressive. This is because increasing the number of external directors on the corporate board should increase the board's effectiveness in oversight and monitoring activities, which are expected to improve management effectiveness and corporate compliance (Lanis & Richardson, 2011).

As a consequence, greater tax aggressive practices can be viewed by investors as an indication of poor governance and the fear of future fines may make them assign low probabilities to future cashflows of such and, thus, harming firm value. This probably explains why tax aggressiveness exerts a stronger negative influence on Tobinsq when moderated by the presence of non-executive directors.

Chapter Summary

The preliminary and main results from the data processed in this study were reported and discussed in this chapter. The chapter started with the descriptive statistics of the variables employed in the research and followed by the correlation analysis to analyse the association among the various variables and assess multicollinearity issues. The main results and discussion were presented afterwards based on the various objectives. In the next chapter, the study concludes.

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CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This is the last chapter of the study of antecedents of tax aggressiveness and its convoluted effect on the performance of listed non-financial firms on the Ghana Stock Exchange. The chapter summarised the whole study, especially the main findings, then followed by the conclusions before rendering some recommendations. The chapter ended with suggestions for further research.

Summary

The last decade in the history of the Ghanaian economy has been filled with several policy measures – such as banking and financial sector clean-ups and reforms – that have consequences on firms' earnings. This means that corporations are likely to adopt more tax-aggressive measures to curtail the losses brought about by these policy initiatives. Thus, financial crises (global and local) make several firms – especially those from emerging economies like Ghana – more susceptible to managing their earnings and adopting tax aggressive measures to limit the amount they spend on tax whilst boosting their performance.

The relationship between tax aggressiveness and firm performance has been argued to be incomplete until other factors, such as corporate governance (Deslandes, Fortin, & Landry, 2019; Kovermann & Velte 2019; Sikka, 2018) and tax risk (Mangoting, Yuliana, Effendy, Hariono, & Lians, 2021; Neuman, Omer, & Schmidt, 2020; Conte, 2019), are incorporated. As a result, to comprehensively gauge the relationship between tax aggressiveness and firm performance, the role of tax risk cannot be overlooked.

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The antecedents of tax aggression and performance of listed non-financial enterprises in Ghana were explored in this study. The study investigated the antecedents of tax aggressiveness, the influence of tax aggressiveness on financial performance, earnings management, and corporate transparency, and the moderating role of tax risk and corporate governance on the relationship between tax aggressiveness and financial performance of listed companies. It was supported by the agency theory, the tax planning theory, the prospect theory, the resource dependency theory, the legitimacy theory, and the pecking order theory. The study used the system dynamic generalised method of moments approach to analyse secondary data on 19 listed non-financial firms covering the period from 2010 to 2019.

Findings

This study's findings yielded some notable and insightful findings with positive implications. The initial goal was to investigate the causes of tax avoidance among Ghana's publicly traded non-financial enterprises. The second goal investigated the impact of tax aggression on financial performance, earnings management, and corporate transparency in Ghanaian listed non-financial enterprises. The third objective looked at the role of tax risk in moderating the relationship between tax aggressiveness and financial performance of Ghana's listed non-financial firms, while the fourth looked at the role of corporate governance in moderating the relationship between tax aggressiveness and financial performance of Ghana's listed non-financial firms.

This study reported significant discoveries. According to the study's findings, board size, board gender diversity, non-executive directors, institutional ownership, and ownership structure all had a significant beneficial

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effect on tax aggression. Political ties and financial limitations had a strong favorable impact on tax avoidance. However, CSR had a mixed influence on tax aggression.

The study discovered that tax aggression had a considerable beneficial effect on ROA, ROE, and Tobin's Q. Tax aggression was discovered to have a considerable beneficial (negative) effect on earnings management (business transparency) once more. In terms of the third goal, the findings show that tax risk considerably moderates the link between tax aggressiveness and financial performance. Tax aggressiveness had a positive marginal effect on ROE and ROA but a negative effect on Tobin's Q.

Concerning the fourth and final objective, the study discovered that company governance moderates the association between tax aggression and financial performance significantly. Corporate governance had a positive marginal effect on the connection between tax aggression and ROE and ROA, but a negative influence on Tobin's Q.

Conclusions

Inferring from the findings of the research, the following conclusions were made.

The initial goal was to investigate the causes of tax avoidance among Ghana's publicly traded non-financial enterprises. In regard to this goal, financial constraints have an important beneficial effect in boosting tax aggression among Ghana's listed non-financial enterprises. This is consistent with the pecking order theory, which holds that corporations favor internal sources of finance that are less expensive than external sources. Thus, it was concluded that if firms have any means of enlarging their internally generated

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earnings, they will capitalise on it and doing so renders them more tax aggressive. Firms' attempt to enhance the internal funds accessible to them may trigger aggressive tax practices. Another significant positive driver of aggressive tax behaviour among listed non-financial firms in Ghana is a political connection, which is like a resource that firms rely on when it comes to tax aggressiveness. In line with this perspective, it was concluded that the more connections firms have with political parties, especially ruling governments, the more they will intensify their measures for tax aggressiveness for the reason that they will receive protection from such political parties or ruling governments.

Internal corporate governance indicators – such as non-executive directors, board-gender diversity, and board size – are positive drivers of tax aggressiveness. External corporate governance indicators such as institutional ownership and ownership structure were also positive drivers of tax aggressiveness. When it comes to the corporate governance indicators, both internal and external, it was surprising, although there were some reasons behind them, that corporate governance is a driver of tax aggressiveness among listed firms in Ghana. This study, therefore, concluded that corporate governance mechanisms are sub-optimally instituted across firms in Ghana and, hence, are inadequate to prevent tax aggressiveness among corporations.

Regarding the second objective, the study also concluded that tax aggressiveness has a significant positive impact on returns on equity and asset and firm value. This confirms Hoffman's tax planning theory, which suggests that effective tax aggressiveness can result in tax savings, implying a positive effect on profit. Again, the study revealed a significant positive result for earnings management, which suggest that firms that engage in tax

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aggressiveness have low earnings quality. It also suggested that firms that engage in tax aggressiveness tend to be opaque. In the absence of corporate transparency, firms disregard corporate regulations including tax laws. By doing so, firms will engage in aggressive practices to avoid and/or evade taxes. Therefore, the study concluded that the lack of transparency across corporations in Ghana accounts for the high degree of tax aggressiveness among listed firms.

Concerning the third objective, the interaction between tax risk and tax aggressiveness strengthened the impact of tax aggressiveness on return on equity and assets, however, in relation to firm value, the interaction lessens it. This is not surprising because, in an environment where tax risk is high, firms that are seen as tax-aggressive may be considered highly risky, making investors assign low probabilities to the future cashflows of those firms which, in turn, may harm the valuation of the firms. Hence, it was concluded that the market capitalisation of listed firms is significantly driven by the level of tax risk such that high (low) risk shrinks (expands) the capitalisation of listed firms.

Finally, in relation to the fourth objective, the study concludes that the interaction between corporate governance (non-executive directors) and tax aggressiveness significantly positively impacts return on equity and asset. This is so because sound corporate governance structures (non-executive directors) could smoothen out part of the agency costs that might arise from opportunistic managerial behaviours, thereby, improving return on equity and asset, although detrimental (significantly negative) to the firm value. Therefore, consistent with practice, the study concluded that appointing more non-executive directors on the board helps to smoothen out opportunistic incentives of corporate insiders in tax aggressiveness by improving monitoring and corporate compliance.

Contributions of the Study

Theoretical contributions of the study

The study integrated six theories to investigate the antecedents of tax aggressiveness and the performance of listed corporations in Ghana, namely the agency theory, resource dependence theory, legitimacy theory, prospect theory, pecking order theory, and Hoffman's tax planning theory. As a result, the study's initial theoretical contribution arises from its incorporation of these ideas in understanding tax avoidance and the performance of Ghana's listed enterprises.

This study used these theories in explaining what factors drive tax aggressiveness and how firm performance also responds to tax aggressiveness. This resulted in the construction of a conceptual framework underpinned and supported by theoretical viewpoints. This study helps us to understand the role of the pecking order theory in explaining how firms may be motivated to embark on tax aggressiveness to improve internal sources of funds. Based on th empirical results, the study also advances theoretical and practical explanations to why politically connected firms may be highly tax aggressive through the resource dependency theory. These theoretical advancements in the context of an emerging economy like Ghana is the first of its kind to e documented in the literature.

Empirical contributions of the study

The study examined tax aggressiveness in Ghana. Tax aggressiveness is jurisdiction based, which has rarely been undertaken in the literature to date in Ghana. This study used a larger and more recent period between 2010 and 2019, which cover the years before the COVID-19 pandemic but covered several financial and/or banking sector reforms in the Ghanaian economy. The study

contributed to the extant literature on tax aggressiveness with the introduction of corporate social responsibility (CSR), cash or financial constraint, political connection, and tax risk variables, adding new empirical evidence in a research field that has controversial results. The study provided empirical support explaining how firms use corporate governance to push aggressive tax behaviours.

Furthermore, another major contribution of this thesis rests on the fact that, per the extant literature so far, this is the first study to analyse the sensitivity of tax aggressiveness on earnings management, and corporate transparency in the Ghanaian context. The findings stress on the operability of resource dependency theory in an emerging economy like Ghana. The study adds to the literature on corporate transparency in the study of tax aggressiveness in Ghana. This thesis also adds to the extant literature on political connection and tax risk in the study of tax aggressiveness among firms in an emerging economy.

In sum, this study contributed to the existing literature by studying the impact of company-specific, CSR, financial constraint, and political connection variables on tax aggressiveness in Ghana whilst taking into consideration the convoluted relationships (which is depicted by the analysis of moderating effects) between the variables.

Recommendations

Based on the findings and conclusions drawn from this research, some recommendations were made.

To start with, the study recommends that, in developing the national corporate governance guidelines, both internal and external indicators of corporate governance in Ghana need to be examined critically because of the

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revelations from the study. This is to promote a good corporate governance mechanism. There is a need to regulate the number of people appointed to various corporate boards. Firms should not necessarily increase the number of females on the board but rather apply a workable policy to attract and invite the best female directors to the board. Firms should adopt an optimal number of board members to ensure that corporate boards do not instigate tax aggressive practices.

Moreover, given that firm value may deteriorate due to tax risk, the extent of tax avoidance practices should be checked by listed firms in order not to send negative signals to investors. As much as possible, firms should endeavour to fulfil tax obligations to help reduce tax risk, thereby boosting their performance.

The study also recommends that level of tax risk in the area of tax planning should be prioritised by the management of listed non-financial corporations to help improve their overall performance.

From the perspective of policy and regulation, the study recommends that regulators and tax administrators formulate appropriate tax laws to lessen the tax loopholes in the Ghanaian tax system. This is a way to foster the attainment of the first target of SDG17 which aims to promote the strengthening of domestic resource mobilisation, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection.

Furthermore, as much as possible, policymakers should roll out measures that ensure transparent and accountable utilisation of taxpayers' monies. This will reduce the level of aggressiveness of firms in relation to taxes.

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Also, the Ghana Stock Exchange (GSE) needs not only adopt stringent corporate governance measures to govern the operations of firms, but also to ensure stringent compliance to those corporate governance measures. The GSE should also implement policies to promote mass transparency among corporations. The introduction of lucrative incentives should be considered by regulators of the Exchange.

Policymakers need to acknowledge the fact that quality institutions precipitate a welcoming environment for corporate activities. Impliedly, the role of political authorities and institutional owners to use their influence to insist on corporate practices that result in less tax-aggressive measures cannot be overemphasised.

Finally, the study recommends that tax practitioners and policymakers should carefully consider the empirical findings and conclusions from this research to implement their basic strategy not to commit illegality.

Suggestions for Further Research

Since the study focused on a quantitative approached and relied on statistical significance, it was not able to add qualitative insights into the empirical findings. Future studies should explore the possibility of carrying out this kind of study qualitatively. Further, future studies can explore the opinions of tax and accounting professionals on the tax aggressiveness of firms in various sectors of the economy to substantiate the findings from the current study. Distinguishing between accounting and economic earnings management may also be of interest to practitioners. Therefore, future research may probe into how each of these dimensions of earnings management influence tax aggressiveness and firm performance.

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REFERENCES

Abor, J., & Biekpe, N. (2007). Corporate governance, ownership structure and performance of SMEs in Ghana: implications for financing opportunities. *Corporate Governance: The International Journal of Business in Society*, *8*(4), 364-79.

Adela, V., Agyei, S. K., & Peprah, J. A. (2023). Antecedents of tax aggressiveness of listed non-financial firms: Evidence from an emerging economy. *Scientific African*, *20*, e01654.

Agyei, S. K. (2016). *Private investment, labour demand and social welfare in Sub-Saharan Africa* (Doctoral dissertation, University of Ghana). http://ugspace.ug.edu.gh/handle/123456789/22774

Agyei, S. K., & Idan, G. A. (2022). Trade openness, institutions, and inclusive growth in Sub-Saharan Africa. *SAGE Open*, *12*(2), 215824402210990. https://doi.org/10.1177/21582440221099008

Agyei, S. K., Isshaq, Z., Frimpong, S., Adam, A. M., Bossman, A., & Asiamah, O. (2021). COVID-19 and food prices in sub-Saharan Africa. *African Development Review*, *33*(S1), S102–S113. https://doi.org/10.1111/1467-8268.12525

Agyei, S. K., Marfo-Yiadom, E., Ansong, A., & Idun, A. A. A. (2020). Corporate tax avoidance incentives of banks in Ghana. *Journal of African Business*, *21*(4), 544-559.

Allen, A., Francis, B. B., Wu, Q. and Zhao, Y., (2016). Analyst coverage and corporate tax aggressiveness. *Journal of Banking & Finance*, *73*, 84-98.

Amankwah, C. (2014). Tax planning practices of small and medium enterprise. *Unpublished master" s thesis, University of Ghana, Legon*.

Amartey, L. A., Yu, M., & Chukwu-lobelu, O. (2019). Corporate governance in Ghana: An analysis of board accountability in Ghanaian listed banks. *Journal of Financial Regulation and Compliance*, *27*(2), 126-140.

Amidu, M., Coffie, W., & Acquah, P. (2019). Transfer pricing, earnings management and tax avoidance of firms in Ghana. *Journal of Financial Crime*, *26*(1), 235-259.

Amidu, M., Kwakye, T. O., Harvey, S., & Yorke, M. S. (2016). Do firms manage earnings and avoid tax for corporate social responsibility? *Journal of Accounting and Taxation, 8*(2), 11-27

Amidu, M., Yorke, S.M. & Harvey, S. (2016). The effects of financial reporting standards on tax avoidance and earnings quality: a case of an emerging economy. *Journal of Accounting and Finance*, *16*(2), 129-150.

Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, *58*(2), 277–297. https://doi.org/10.2307/2297968

Arismajayanti, N. P. A., & Jati, I. K. (2017). Influence of audit committee competence, audit committee independence, independent commissioner and leverage on tax aggressiveness. *Journal of Auditing*, *5*(2).

125

Armstrong, C. S., Blouin, J. L., Jagolinzer, A. D., & Larcker, D. F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics*, *60*(1), 1-17.

Asiamah, O., Agyei, S. K., Bossman, A., & Animah, E. (2022). Natural resource dependence and the Dutch disease: Evidence from Sub-Saharan Africa. *Resources Policy*, *79*(December), 103042. https://doi.org/10.1016/j.resourpol.2022.103042

Asiamah, O., Agyei, S. K., Bossman, A., Agyei, E. A., Asucam, J., & Arku-Asare, M. (2022). Natural resource dependence and institutional quality: Evidence from Sub-Saharan Africa. *Resources Policy*, *79*(December), 102967. https://doi.org/10.1016/j.resourpol.2022.102967

Asongu, S. A., & Acha-Anyi, P. N. (2019). The murder epidemic: A global comparative study. *International Criminal Justice Review*, *29*(2), 105-120.

Asongu, S. A., & Nnanna, J. (2019). Foreign aid, instability, and governance in Africa. *Politics & Policy*, *47*(4), 807-848.

Avi-Yonah, R. S. (2008). Corporate social responsibility and strategic tax behavior. in *tax and corporate governance*. Springer, Berlin, Heidelberg.

Badertscher, B. A., Katz, S. P., & Rego, S. O. (2013). The separation of ownership and control and corporate tax avoidance. *Journal of Accounting and Economics*, *56*(2-3), 228-250.

Balakrishnan, K., Blouin, J. L., & Guay, W. R. (2019). Tax aggressiveness and corporate transparency. *The Accounting Review*, *94*(1), 45-69.

Bauweraerts, J., Vandernoot, J., & Buchet, A. (2020). Family Firm Heterogeneity and Tax Aggressiveness: A Mixed Gamble Approach. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, *37*(2), 149-163.

Beasley, M. S., Goldman, N. C., Lewellen, C. M., & McAllister, M. (2021). Board risk oversight and corporate tax-planning practices. *Journal of Management Accounting Research*, *33*(1), 7-32.

Bokpin, G. A., & Arko, A. C. (2009). Ownership structure, corporate governance and capital structure decisions of firms: Empirical evidence from Ghana. *Studies in Economics and Finance*, *26*(4), 246-56.

Borji, P. (2020). Political connection, corporate governance and tax aggressiveness. *Journal of Knowledge Accounting*, *10*(4), 143-175.

Bossman, A., Agyei, S. K., Asiamah, O., Agyei, E. A., Arhin, E. Y., & Marfo-Yiadom, E. (2022). Dividend policy and performance of listed firms on Ghana stock exchange. *Cogent Economics & Finance*, *10*(1), 1–28. https://doi.org/10.1080/23322039.2022.2127220

Bosun-Fakunle, Y. F., & Josiah, M. (2019). Board of directors characteristics and tax aggressiveness. *International Journal of Management Science Research*, *5*(1), 133-152.

Budi, P. N. (2019). The role of gender diversity on the board of directors and tax avoidance. *Russian Journal of Agricultural and Socio-Economic Sciences*, *87*(3).

Campbell, J. L., Goldman, N. C., & Li, B. (2021). Do financing constraints lead to incremental tax planning? Evidence from the Pension

Protection Act of 2006. *Contemporary Accounting Research*, *38*(3), 1961-1999.

Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010). The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review*, *18*(5), 396-414.

Cen, L., Maydew, E. L., Zhang, L., & Zuo, L. (2017). Customer–supplier relationships and corporate tax avoidance. *Journal of Financial Economics*, *123*(2), 377-394.

Chang, M. L., Huang, D. F., Ting, C. C., & Chang, H. S. (2019). Gender, political connection, and tax avoidance in China. *Theoretical Economics Letters*, *9*(8), 2839-2863.

Chen, C., & Lai, S. (2012). Financial constraint and tax aggressiveness. *Journal of Financial Economics*, *2012*(11), 1-41.

Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms?. *Journal of Financial Economics*, *95*(1), 41-61.

Chen, X., Hu, N., Wang, X., & Tang, X. (2014). Tax avoidance and firm value: evidence from China. *Nankai Business Review International*, *5*(1), 25-42.

Cheng, C. A., Huang, H. H., Li, Y., & Stanfield, J. (2012). The effect of hedge fund activism on corporate tax avoidance. *The Accounting Review*, *87*(5), 1493-1526.

Chi, S., Huang, S. X., & Sanchez, J. M. (2014). CEO inside debt incentives and corporate tax policy. *Available at SSRN 2410454*.

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https://deliverypdf.ssrn.com/delivery.php?ID=968120070017096017
069088009065094081127015066012065038099103064095067127118
101088000019101125033110002058114103118067030084116013010
054030001000065079094065110087004037003126004031126080117
115118005085116087097080125094097031093008127096027031017
084&EXT=pdf&INDEX=TRUE

Cho, C. H. (2009) Legitimation strategies used in response to environmental disaster: A French case study of total SA's *Erika* and AZF incidents. *European Accounting Review, 18*(1), 33-62.

Cho, C. H., Guidry, R. P., Hageman, A. M., & Patten, D. M. (2012). Do actions speak louder than words? An empirical investigation of corporate environmental reputation. *Accounting, Organizations and society, 37*(1), 14-25.

Christensen, J., & Murphy, R. (2004). The social irresponsibility of corporate tax avoidance: Taking CSR to the bottom line. *Development, 47*(3), 37-44.

Chung, S. G., Goh, B. W., Lee, J., & Shevlin, T. (2019). Corporate tax aggressiveness and insider trading. *Contemporary Accounting Research, 36*(1), 230-258.

Cohen, L. J., Cornett, M. M., Marcus, A. J., & Tehranian, H. (2014). Bank earnings management and tail risk during the financial crisis. *Journal of Money, Credit and Banking, 46*(1), 171-197.

Conte, D. (2019). Tax risk management between tax authorities and large companies: The cooperative compliance regime. In *The Future of Risk Management, Volume I* (pp. 383-396). Palgrave Macmillan, Cham.

Cook, K. A., Moser, W. J., & Omer, T. C. (2017). Tax avoidance and ex-ante cost of capital. *Journal of Business Finance & Accounting*, *44*(7-8), 1109-1136.

Cormier, D. and Gordon, I. (2001), "*An examination of social and environmental reporting strategies*", *Accounting, Auditing & Accountability Journal*, *14*(5), 587-616.

Cortellese, F. (2020). Gender board composition and tax aggressiveness in public listed companies. *Copenhagen Business School, CBS LAW Research Paper*, (20-27). https://ssrn.com/abstract=3688888

Creswell, J. W. (2009). Research design: Qualitative and mixed methods approaches. *London and Thousand Oaks: Sage Publications*.

Daily, C. M., Certo, S. T., & Dalton, D. R. (2000). The future of corporate women: progress toward the executive suite and the boardroom?. *Women on corporate boards of directors: International challenges and opportunities*, 11-23. https://link.springer.com/chapter/10.1007/978-90-481-3401-4_2

Damak, S. T. (2018). Gender diverse board and earnings management: evidence from French listed companies. *Sustainability Accounting, Management and Policy Journal*, *9*(3), 289-312.

Damayanti, T., & Gazali, M. (2018, October). Pengaruh capital intensity ratio dan inventory intensity ratio terhadap effective tax rate. In *Prosiding Seminar Nasional Cendekiawan* (pp. 1237-1242).

De Waegenaere, A., Sansing, R., & Wielhouwer, J. (2010). Financial accounting measures of tax reporting aggressiveness. *Tuck School of Business Working Paper*, *83*(1), 1-32.

DeBacker, J., Heim, B. T., & Tran, A. (2015). Importing corruption culture from overseas: Evidence from corporate tax evasion in the United States. *Journal of Financial Economics*, *117*(1), 122-138.

Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, *79*(1), 145-179.

Desai, M. A., & Hines, J. R. Jr. (2002). Expectations and expatriations: Tracing the causes and consequences of corporate inversions. *National Tax Journal, 55*, 409–441.

Deslandes, M., Fortin, A., & Landry, S. (2019). Audit committee characteristics and tax aggressiveness. *Managerial Auditing Journal, 35*(2), 272-293

Dew-Becker, I., Giglio, S., Le, A., & Rodriguez, M. (2017). The price of variance risk. *Journal of Financial Economics*, *123*(2), 225-250.

Dhaliwal, D. S., Gleason, C. A., & Mills, L. F. (2004). Last-chance earnings management: using the tax expense to meet analysts' forecasts. *Contemporary Accounting Research*, *21*(2), 431-459.

Dhami, S., & Al-Nowaihi, A. (2007). Why do people pay taxes? Prospect theory versus expected utility theory. *Journal of Economic Behavior & Organization*, *64*(1), 171-192.

Donaldson, G. (1961), *Corporate debt capacity: A study of corporate debt policy and determination of corporate debt capacity*, Harvard Graduate School of Management, Boston, MA. https://www.worldcat.org/search?q=au%3ADonaldson%2C

Dowling, G. R. (2014). The curious case of corporate tax avoidance: Is it socially irresponsible? *Journal of Business Ethics*, *124*(1), 173-184.

Drake, K. D., Lusch, S. J., & Stekelberg, J. (2019). Does tax risk affect investor valuation of tax avoidance? *Journal of Accounting, Auditing & Finance*, *34*(1), 151-176.

Dunbar, A., Higgins, D. M., Phillips, J. D., & Plesko, G. A. (2010). What do measures of tax aggressiveness measure? In *Proceedings. Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association*, *103*, 18-26.

Dunbar, A., Higgins, D. M., Phillips, J. D., & Plesko, G. A. (2010). What do measures of tax aggressiveness measure? In *Proceedings. Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association* (Vol. 103, pp. 18-26). National Tax Association.

Duru, A., & Reeb, D. M. (2002). International diversification and analysts' forecast accuracy and bias. *The Accounting Review*, *77*(2), 415-433.

Dwaikat, N., Queiri, A., & Aziz, M. (2014). Capital structure of family companies. In *International Conference on Business, Law and Corporate Social Responsibility, 1*(2), 127-132.

Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2008). Long-run corporate tax avoidance. *The Accounting Review*, *83*(1), 61-82.

Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2019). When does tax avoidance result in tax uncertainty? *The Accounting Review*, *94*(2), 179-203.

Edwards, A., Schwab, C., & Shevlin, T. (2016). Financial constraints and cash tax savings. *The Accounting Review*, *91*(3), 859-881.

Faccio, M. (2016). Discussion of "Corporate political connections and tax aggressiveness". *Contemporary Accounting Research*, *33*(1), 115-120.

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

Firmansyah, A., & Bayuaji, R. (2019). Financial constraints, investment opportunity set, financial reporting aggressiveness, tax aggressiveness: Evidence from Indonesia manufacturing companies. *Academy of Accounting and Financial Studies Journal*, *23*(5), 1-18.

Francis, B. B., Hasan, I., Wu, Q., & Yan, M. (2014). Are female CFOs less tax aggressive? Evidence from tax aggressiveness. *The Journal of the American Taxation Association*, *36*(2), 171-202.

Frank, M. M., & Rego, S. O. (2006). Do managers use the valuation allowance account to manage earnings around certain earnings targets? *Journal of the American Taxation Association*, *28*(1), 43-65.

Frank, M. M., Lynch, L. J., & Rego, S. O. (2009). Tax reporting aggressiveness and its relation to aggressive financial reporting. *The Accounting Review*, *84*(2), 467-496.

Frank, M. M., Lynch, L. J., & Rego, S. O. (2009). Tax reporting aggressiveness and its relation to aggressive financial reporting. *The Accounting Review*, *84*(2), 467-496.

Freedman, J. (2003). Tax and corporate responsibility. *Tax Journal*, *695*(2), 1-4.

Frischmann, P. J., Shevlin, T., & Wilson, R. (2008). Economic consequences of increasing the conformity in accounting for uncertain tax benefits. *Journal of Accounting and Economics*, *46*(2-3), 261-278.

Fuadah, L. L., & kalsum, U. (2021). The impact of corporate social responsibility on firm value: The role of tax aggressiveness in

Indonesia. *The Journal of Asian Finance, Economics and Business*, *8*(3), 209-216.

Gaaya, S., Lakhal, N., & Lakhal, F. (2017). Does family ownership reduce corporate tax avoidance? The moderating effect of audit quality. *Managerial Auditing Journal*, 32(7), 731-744.

Goh, B. W., Lee, J., Lim, C. Y., & Shevlin, T. (2016). The effect of corporate tax avoidance on the cost of equity. *The Accounting Review*, *91*(6), 1647-1670.

Goh, B. W., Lim, C. Y., Shevlin, T. J., & Zang, Y. (2013). Tax aggressiveness and auditor resignation. *Available at SSRN 2277336*.

Goldstein, G. R., & Goldstein, G. R. (2020). A qualitative inquiry on the perspective of tax practitioners on corporate social responsibility and taxation. *International Journal of Business & Applied Sciences*, *9*, 31-53.

Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, *8*(2), 47-101.

Gu, F., & Wang, W. (2005). Intangible assets, information complexity, and analysts' earnings forecasts. *Journal of Business Finance & Accounting*, *32*(9-10), 1673-1702.

Guenther, D. A., Matsunaga, S. R., & Williams, B. M. (2017). Is tax avoidance related to firm risk? *The Accounting Review*, *92*(1), 115-136.

Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, *50*(2-3), 127-178.

Hasan, I., Hoi, C. K. S., Wu, Q., & Zhang, H. (2014). Beauty is in the eye of the beholder: The effect of corporate tax avoidance on the cost of bank loans. *Journal of Financial Economics*, *113*(1), 109-130.

Hasan, M. M., Al-Hadi, A., Taylor, G., & Richardson, G. (2017). Does a firm's life cycle explain its propensity to engage in corporate tax avoidance?. *European Accounting Review*, *26*(3), 469-501.

Hasyim, F., & Jiwayana, A. K. (2021). Tax aggressiveness in manufacturing companies in Indonesia. *Jurnal Akuntansi dan Pajak*, *22*(1), 26-38. http://jurnal.stie-aas.ac.id/index.php/jap

Hawley, J., & Williams, A. (1997). The emergence of fiduciary capitalism. *Corporate Governance: An International Review*, *5*(4), 206-213.

Hennes, K. M., Leone, A. J., & Miller, B. P. (2014). Determinants and market consequences of auditor dismissals after accounting restatements. *The Accounting Review*, *89*(3), 1051-1082.

Hennessy, C. A., & Whited, T. M. (2007). How costly is external financing? Evidence from a structural estimation. *The Journal of Finance*, *62*(4), 1705-1745.

Herawati, N., Rahmawati, R., Indudewi, D., Wardani, M. K., & Susanto, B. (2021). Females on the board of directors and corporate tax aggressiveness in Indonesia: an empirical analysis. *International Journal of Governance and Financial Intermediation*, *1*(2), 105-119.

Herusetya, A., & Stefani, C. (2020). The association of tax aggressiveness on accrual and real earnings management. *Journal of Accounting and Investment*, *21*(3), 434-451.

135

Higgins, D., Omer, T. C., & Phillips, J. D. (2015). The influence of a firm's business strategy on its tax aggressiveness. *Contemporary Accounting Research*, *32*(2), 674-702.

Hodder, L., Hopkins, P. E., & Wood, D. A. (2008). The effects of financial statement and informational complexity on analysts' cash flow forecasts. *The Accounting Review*, *83*(4), 915-956.

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

Hoi, C. K., Wu, Q., & Zhang, H. (2013). Is corporate social responsibility (CSR) associated with tax avoidance? Evidence from irresponsible CSR activities. *The Accounting Review*, *88*(6), 2025-2059.

Holland, K., Lindop, S., & Zainudin, F. (2016). Tax avoidance: A threat to corporate legitimacy? An examination of companies' financial and CSR reports. *Refereed paper. British Tax Review*, (3), 310-338.

Hoseini, M., & Safari Gerayli, M. (2018). The presence of women on the board and tax avoidance: Evidence from Tehran stock exchange. *International Journal of Finance & Managerial Accounting*, *3*(9), 53-62.

Hsiao, C. (2003). In Memoriam: GS Maddala. *Econometric Reviews*, *22*(1), 7-9.

Hutchens, M., & Rego, S. O. (2015). Does greater tax risk lead to increased firm risk?. *Available at SSRN 2186564*.

Ibitamuno, D. A., Onuchuku, O., & Nteegah, A. (2018). Corporate governance and banking sector performance in Nigeria. *Journal of Applied Economics and Business*, *6*(4), 35-50.

ICAEW, 2005. *Agency Theory and the role of audit,* London: Audit quality.

Idun, A. A. (2018). *Bank market power, financial innovation and economic growth in Africa* (Doctoral dissertation, University of Ghana). http://ugspace.ug.edu.gh/handle/123456789/30170.

Innocent, O. C., & Gloria, O. T. (2018). Effect of corporate governance mechanisms on tax aggressiveness of quoted manufacturing firms on the Nigerian stock exchange. *Asian Journal of Economics, Business and Accounting*, *4*(3), *1*-20.

Irawan, F., & Turwanto, T. (2020). The effect of tax avoidance on firm value with tax risk as moderating variable. *Test Engineering & Management*, *83*, 9696-9707.

Issah, O., & Rodrigues, L. L. (2021). Corporate social responsibility and corporate tax aggressiveness: A scientometric analysis of the existing literature to map the future. *Sustainability*, *13*(11), 6225.

Iswari, P., Sudaryono, E. A., & Widarjo, W. (2019). Political connection and tax aggressiveness: A study on the state-owned enterprises registered in Indonesia stock exchange. *Journal of International Studies*, *12*(1).

Jamei, R. (2017). Tax avoidance and corporate governance mechanisms: Evidence from Tehran stock exchange. *International Journal of Economics and Financial Issues*, *7*(4).

Jennings, W. W. (2005). Further evidence on institutional ownership and corporate value. *Advances in Financial Economics, 11*, 167-207.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305-360.

Ji, A. E. Corporate Tax Aggressiveness in the 2007–2008 Financial Crisis. *International Journal of Business & Applied Sciences 7*(2), 38-48.

Johnson, S., & Mitton, T. (2003). Cronyism and capital controls: evidence from Malaysia. *Journal of Financial Economics*, *67*(2), 351-382.

Kahneman, D. & Tversky, A. (1979). On the interpretation of intuitive probability: A reply to Jonathan Cohen. *Cognition, 7*, 409–411.

Kakabadse, N. K., Figueira, C., Nicolopoulou, K., Hong Yang, J., Kakabadse, A. P., & Özbilgin, M. F. (2015). Gender diversity and board performance: Women's experiences and perspectives. *Human Resource Management*, *54*(2), 265-281.

Kamal, Y., & Deegan, C. (2013). Corporate social and environment-related governance disclosure practices in the textile and garment industry: Evidence from a developing country. *Australian accounting review*, *23*(2), 117-134.

Kamalluarifin, W. F. S. W. (2016). The influence of corporate governance and firm characteristics on the timeliness of corporate internet reporting by top 95 companies in Malaysia. *Procedia Economics and Finance*, *35*, 156-165.

Kanagaretnam, K., Lee, J., Lim, C. Y., & Lobo, G. J. (2016). Relation between auditor quality and tax aggressiveness: Implications of cross-country institutional differences. *Auditing: A Journal of Practice & Theory*, *35*(4), 105-135.

Karagiorgos, T. (2010). Corporate social responsibility and financial performance: An empirical analysis on Greek companies. *European Research Studies Journal, 13*(4), 85-108.

Kawor, S., & Kportorgbi, H. K. (2014). Effect of tax planning on firms market performance: evidence from listed firms in Ghana. *International Journal of Economics and Finance*, *6*(3), 162-168.

Kim, C., & Zhang, L. (2016). Corporate political connections and tax aggressiveness. *Contemporary Accounting Research*, *33*(1), 78–114.

Kim, J. H., & Im, C. C. (2017). The study on the effect and determinants of small-and medium-sized entities conducting tax avoidance. *Journal of Applied Business Research (JABR)*, *33*(2), 375-390.

Klassen, K. J., Lisowsky, P., & Mescall, D. (2016). The role of auditors, non-auditors, and internal tax departments in corporate tax aggressiveness. *The Accounting Review*, *91*(1), 179-205.

Kovermann, J., & Velte, P. (2019). The impact of corporate governance on corporate tax avoidance - A literature review. *Journal of International Accounting, Auditing and Taxation*, *36*, 100270.

Kyereboah-Coleman, A. (2007), The impact of capital structure on the performance of microfinance institutions. Journal of Risk Finance, *8*(1), 56-71.

Laguir, I., Staglianò, R., & Elbaz, J. (2015). Does corporate social responsibility affect corporate tax aggressiveness? *Journal of Cleaner Production*, *107*, 662-675.

Lanis, R., & Richardson, G. (2011). The effect of board of director composition on corporate tax aggressiveness. *Journal of Accounting and Public Policy*, *30*(1), 50-70.

Lanis, R., & Richardson, G. (2012). Corporate social responsibility and tax aggressiveness: An empirical analysis. *Journal of Accounting and Public Policy*, *31*(1), 86-108.

Lanis, R., & Richardson, G. (2015). Is corporate social responsibility performance associated with tax avoidance?. *Journal of Business Ethics*, *127*(2), 439-457.

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

Law, K. K., & Mills, L. F. (2015). Taxes and financial constraints: Evidence from linguistic cues. *Journal of Accounting Research*, *53*(4), 777-819.

Lawal, L., Suleiman, M., Adisa, A. O., & Mohammed, A. (2021). Institutional ownership, gender board diversification and corporate tax aggressiveness of listed conglomerates companies in Nigeria. *Copyright© CITN January 2021*, 210.

Lee, C. H., & Bose, S. (2021). Do family firms engage in less tax avoidance than non-family firms? The corporate opacity perspective. *Journal of Contemporary Accounting & Economics*, *17*(2), 100263.

Lee, Y., Shevlin, T. J., & Venkat, A. (2019). The effect of tax avoidance on capital structure choices. *Available at SSRN 3422616*.

Lestari, N., & Wardhani, R. (2015). The effect of the tax planning to firm value with moderating board diversity. *International Journal of Economics and Financial Issues*, *5*(1S), 315-323.

Lightstone, K., & Driscoll, C. (2008). Disclosing elements of disclosure: a test of legitimacy theory and company ethics. *Canadian Journal of*

Administrative Sciences/Revue Canadienne des Sciences de l'Administration, *25*(1), 7-21.

Lin, K. Z., Mills, L. F., Zhang, F., & Li, Y. (2018). Do political connections weaken tax enforcement effectiveness? *Contemporary Accounting Research*, *35*(4), 1941-1972.

Lin, X., Liu, M., So, S., & Yuen, D. (2019). Corporate social responsibility, firm performance and tax risk. *Managerial Auditing Journal*, *34*(9), 1101-1130.

Lisowsky, P., Robinson, L., & Schmidt, A. (2010). An examination of FIN 48: tax shelters, auditor independence, and corporate governance. *University of Illinois at Urbana-Champaign working paper*.

https://www0.gsb.columbia.edu/mygsb/faculty/research/pubfiles/3722/schmidt_FIN48.pdf

Lisowsky, P., Robinson, L., & Schmidt, A. (2013). Do publicly disclosed tax reserves tell us about privately disclosed tax shelter activity? *Journal of Accounting Research*, *51*(3), 583-629.

Liu, L., Liu, Q., Tian, G., & Wang, P. (2018). Government connections and the persistence of profitability: Evidence from Chinese listed firms. *Emerging Markets Review*, *36*, 110-129.

Loukil, N., & Yousfi, O. (2016). Does gender diversity on corporate boards increase risk-taking? *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, *33*(1), 66-81.

141

Luo, J. H., Li, X., Wang, L. C., & Liu, Y. (2021). Owner type, pyramidal structure and R&D investment in China's family firms. *Asia Pacific Journal of Management*, *38*(3), 1085-1111.

Mac an Bhaird, C., & Lucey, B. (2010). Determinants of capital structure in Irish SMEs. *Small Business Economics*, *35*(3), 357-375.

Magness, V. (2006). Strategic posture, financial performance and environmental disclosure: An empirical test of legitimacy theory. *Accounting, Auditing & Accountability Journal*. *19* (4), 540-63.

Mangoting, Y., Yuliana, O. Y., Effendy, J., Hariono, L., & Lians, V. M. (2021). *The Effect of Tax Risk on Tax Avoidance* (Doctoral dissertation, Petra Christian University).

Manning, B., Braam, G., & Reimsbach, D. (2019). Corporate governance and sustainable business conduct – Effects of board monitoring effectiveness and stakeholder engagement on corporate sustainability performance and disclosure choices. *Corporate Social Responsibility and Environmental Management*, *26*(2), 351-366.

Markowitz, H. (1952). The utility of wealth. *Journal of Political Economy*, *60*(2), 151-158.

Martinez, A. L., & Ferreira, B. A. (2019). Business strategy and tax aggressiveness in Brazil. *Journal of Strategy and Management*, *12*(4), 522-535.

Martinez-Jimenez, R., Hernández-Ortiz, M. J., & Fernández, A. I. C. (2020). Gender diversity influence on board effectiveness and business performance. *Corporate Governance: The International Journal of Business in Society, 20*(2), 307-323.

142

Mgbame, C. O., Chijoke-Mgbame, M. A., Yekini, S., & Kemi, Y. C. (2017). Corporate social responsibility performance and tax aggressiveness. *Journal of Accounting and Taxation*, *9*(8), 101-108.

Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman Jr, H. J. (1978). Organizational strategy, structure, and process. *Academy of Management Review*, *3*(3), 546-562.

Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management? *Journal of Corporate Finance*, *16*(5), 703-718.

Mital, P., Goetschalckx, M., & Huang, E. (2015). Robust material handling system design with standard deviation, variance and downside risk as risk measures. *International Journal of Production Economics*, *170*, 815-824.

Mohanadas, N. D., Salim, A. S. A., & Pheng, L. K. (2019). CSR and tax aggressiveness of Malaysian listed companies: evidence from an emerging economy. *Social Responsibility Journal*, *16*(5), 597–612

Mulyadi, M. S., & Anwar, Y. (2015). Corporate governance, earnings management and tax management. *Procedia-Social and Behavioral Sciences*, *177*, 363-366.

Muneer, S., Ahmad, R. A., & Ali, A. (2017). Impact of financial management practices on SMEs profitability with moderating role of agency cost. *Information Management and Business Review*, *9*(1), 23-30.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, *13*(2), 187-221.

143

Myers, S.C. (1984). The Capital Structure Puzzle. *Journal of Finance, 39*(3), 575-592.

Ndung'U, M. W. (2017). *Earnings management and financial performance of listed non-financial firms in Nairobi County, Kenya* (Doctoral dissertation, Kenyatta University). http://ir-library.ku.ac.ke/handle/123456789/19186

Neuman, S. S., Omer, T. C., & Schmidt, A. P. (2020). Assessing tax risk: Practitioner perspectives. *Contemporary Accounting Research*, *37*(3), 1788-1827.

Nurfauzi, R., & Firmansyah, A. (2018). Managerial ability, management compensation, bankruptcy risk, tax aggressiveness. *Media Riset Akuntansi, Auditing & Informasi*, *18*(1), 75-100.

Nurkholisoh, D., & Hidayah, R. (2019). Analysis of the Determinant of Effective Tax Rate. *Accounting Analysis Journal*, *8*(2), 88-94.

Ogbeide, S. O., & Obaretin, O. (2018). Corporate governance mechanisms and tax aggressiveness of listed firms in Nigeria. *Amity Journal of Corporate Governance, 3*(1), 1-12.

Ogundajo, G. O., & Onakoya, A. B. (2016). Tax planning and financial performance of Nigerian manufacturing companies. *International Journal of Advanced Academic Research 2*(7), 64-80.

Orazalin, N. (2019). Board gender diversity, corporate governance, and earnings management: Evidence from an emerging market. *Gender in Management: An International Journal*, *35*(1), 7-60.

144

Ortas, E., & Gallego-Álvarez, I. (2020). Bridging the gap between corporate social responsibility performance and tax aggressiveness. *Accounting, Auditing & Accountability Journal*, *33*(4), 825–855.

Pfeffer, J. (1973). Size, composition, and function of hospital boards of directors: A study of organization-environment linkage. *Administrative Science Quarterly*, 349-364.

Pintea, M. O., & Fulop, M. T. (2015). Literature review on corporate governance-firm performance relationship. *Annals of Faculty of Economics*, *1*(1), 846-854.

Pomeroy, B. (2010). Audit committee member investigation of significant accounting decisions. *Auditing: A Journal of Practice & Theory*, *29*(1), 173-205.

Prastiwi, D. (2017). Does corporate governance moderate the effect of earnings management on tax aggressiveness. *Advances in Social Science, Education and Humanities Research (ASSEHR)*, *108*, 8-13.

Pratama, A. (2017). Company characteristics, corporate governance and aggressive tax avoidance practice: A study of Indonesian companies. *Review of Integrative Business and Economics Research*, *6*(4), 70.

Pratama, I., & Suryarini, T. (2020). The role of independent commissioners in moderating the effect of capital intensity, inventory intensity, and profitability on tax aggressiveness. *Accounting Analysis Journal*, *9*(3), 208-214.

Preuss, L. (2010). Tax avoidance and corporate social responsibility: you can't do both, or can you? *Corporate Governance: The International Journal of Business in Society*. *10*(1), 365 - 374

Rego, S. O., & Wilson, R. (2009). Executive compensation, tax reporting aggressiveness, and future firm performance. *Research Gate*, *47*(4), 469-496.

Rego, S. O., & Wilson, R. (2012). Equity risk incentives and corporate tax aggressiveness. *Journal of Accounting Research*, *50*(3), 775-810.

Reuters (2013), "Fact box: Apple, Amazon, Google and tax avoidance", 22 May.

Richardson, G. A., & Lanis, R. (2011, August). Corporate social responsibility and tax aggressiveness. In *2011 American Accounting Association Annual Meeting-Tax Concurrent Sessions*, *31*(1), 86-108.

Richardson, G., Lanis, R., & Taylor, G. (2015). Financial distress, outside directors and corporate tax aggressiveness spanning the global financial crisis: An empirical analysis. *Journal of Banking & Finance*, *52*, 112-129.

Richardson, G., Taylor, G., & Lanis, R. (2016). Women on the board of directors and corporate tax aggressiveness in Australia: An empirical analysis. *Accounting Research Journal, 29*(3), 313-331.

Ruegger, D., & King, E. W. (1992). A study of the effect of age and gender upon student business ethics. *Journal of Business Ethics*, *11*(3), 179-186.

Saavedra, D. (2019). Is tax volatility priced by lenders in the syndicated loan market?. *European Accounting Review*, *28*(4), 767-789.

Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, *23*(2), 224–253.

Salaudeen, Y. M. (2017). Corporate effective tax rates in the financial services sector: Evidence from Nigeria. *International Journal of Accounting and Taxation*, *5*(1), 68-88.

Salaudeen, Y. M., & Ejeh, B. U. (2018). Equity ownership structure and corporate tax aggressiveness: the Nigerian context. *Research Journal of Business and Management*, *5*(2), 90-99.

Salihu, I. A., Annuar, H. A., & Obid, S. N. S. (2015). Foreign investors' interests and corporate tax avoidance: Evidence from an emerging economy. *Journal of Contemporary Accounting & Economics*, *11*(2), 138-147.

Sarantakos, S. (2005). *Social research*. New York: Palgrave Macmillan.

Sari, D., & Tjen, C. (2017). Corporate social responsibility disclosure, environmental performance, and tax aggressiveness. *International Research Journal of Business Studies*, *9*(2), 93-104.

Sari, M. A., & Etemadi, H. (2019). Corporate tax avoidance and tax risk. *Empirical Research in Accounting*, *9*(3), 353-375.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.

Scholes, M. S., Wilson, G. P., & Wolfson, M. A. (1992). Firms' responses to anticipated reductions in tax rates: The Tax Reform Act of 1986. *Journal of Accounting Research 30 Supplement*, 161-185.

Scott, W. R., & O'Brien, P. C. (2003). *Financial accounting theory* (Vol. 3). Toronto: Prentice Hall.

Seidu, B. A., Queku, Y. N., & Carsamer, E. (2021). Financial constraints and tax planning activity: empirical evidence from Ghanaian banking sector. *Journal of Economic and Administrative Sciences*. https://doi.org/10.1108/JEAS-12-2020-0199

Shehata, N. F. (2014). Theories and determinants of voluntary disclosure. *Accounting and Finance Research (AFR)*, *3*(1).

Shevlin, T., Urcan, O., & Vasvari, F. P. (2020). Corporate tax avoidance and debt costs. *Journal of the American Taxation Association*, *42*(2), 117-143.

Shi, A. A., Concepcion, F. R., Laguinday, C. M. R., Huy, T. A. T. O. H., & Unite, A. A. (2020). An analysis of the effects of foreign ownership on the level of tax avoidance across Philippine publicly listed firms. *DLSU Business & Economics Review*, *30*(1), 1-14.

Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, *94*(3, Part 1), 461-488.

Sikka, P. (2018). Combating corporate tax avoidance by requiring large companies to file their tax returns. *Journal of Capital Markets Studies*, *2*(1), 9-20.

Sohn, B. C. (2016). The effect of accounting comparability on the accrual-based and real earnings management. *Journal of Accounting and Public Policy*, *35*(5), 513-539.

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, *20*(3), 571-610.

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Sugeng, S., Prasetyo, E., & Zaman, B. (2020). Does capital intensity, inventory intensity, firm size, firm risk, and political connections affect tax aggressiveness? *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, *17*(1), 78-87.

Suleiman, S., & Abubakar, Z. (2021). Board heterogeneity and corporate tax aggressiveness. *Copyright© CITN January 2021*, 110.

Suranta, E., Midiastuty, P., & Hasibuan, H. R. (2020). The effect of foreign ownership and foreign board commissioners on tax avoidance. *Journal of Economics, Business, & Accountancy Ventura*, *22*(3), 309-318.

Tackie, G., Agyei, S. K., Bawuah, I., Adela, V., & Bossman, A. (2022). Tax planning and financial performance of insurance companies in Ghana: The moderating role of corporate governance. *Cogent Business & Management, 9*(1), 2144097.

Tang, T. Y. (2019). The value implications of tax avoidance across countries. *Journal of Accounting, Auditing & Finance*, *34*(4), 615-638.

Taylor, G., & Richardson, G. (2012). International corporate tax avoidance practices: Evidence from Australian firms. *The International Journal of Accounting*, *47*(4), 469-496.

Torgler, B. (2007). *Tax compliance and tax morale: A theoretical and empirical analysis*. Edward Elgar Publishing.

Uniamikogbo, E., Bennee, E., & Adeusi, S. A. (2019). Corporate governance and tax aggressiveness in Nigeria. *AE-Funai Journal of Accounting, Business and Finance, 40*(1), 20-33.

Vacca, A., Iazzi, A., Vrontis, D., & Fait, M. (2020). The role of gender diversity on tax aggressiveness and corporate social responsibility: evidence from Italian listed companies. *Sustainability*, *12*(5), 2007.

Vu, T. A. T., & Le, V. H. (2021). The effect of tax planning on firm value: A case study in Vietnam. *The Journal of Asian Finance, Economics, and Business*, *8*(2), 973-979.

Wahab, E. A. A, Ariff, A. M., Marzuki, M. M, & Sanusi, Z. M. (2017). Political connections, corporate governance, and tax aggressiveness in Malaysia. *Asian Review of Accounting*, *25*(3), 424–451. https://doi.org/10.1108/ARA-05-2016-0053

Wahab, N. S. A., & Holland, K. (2012). Tax planning, corporate governance and equity value. *The British Accounting Review*, *44*(2), 111-124.

Wamiori, M. G., Namusonge, S. G. & Sakwa, M. M. (2016). Effect of access to finance on financial performance of manufacturing firms in Kenya. *The Strategic Journal of Business & Change Management, 4*(23), 403-421.

Wang, F., Xu, S., Sun, J., & Cullinan, C. P. (2020). Corporate tax avoidance: A literature review and research agenda. *Journal of Economic Surveys*, *34*(4), 793-811.

Weiss-Lehman, C., Hufbauer, R. A., & Melbourne, B. A. (2017). Rapid trait evolution drives increased speed and variance in experimental range expansions. *Nature communications*, *8*(1), 1-7.

Whait, R. B., Christ, K. L., Ortas, E., & Burritt, R. L. (2018). What do we know about tax aggressiveness and corporate social responsibility? An integrative review. *Journal of Cleaner Production*, *204*, 542-552.

Whited, T. M., & Wu, G. (2006). Financial constraints risk. *The Review of Financial Studies*, *19*(2), 531-559.

Wilbanks, R. M., Hermanson, D. R., & Sharma, V. D. (2017). Audit committee oversight of fraud risk: The role of social ties, professional ties, and governance characteristics. *Accounting Horizons*, *31*(3), 21-38.

Wilde, J. H., & Wilson, R. J. (2018). Perspectives on corporate tax planning: Observations from the past decade. *The Journal of the American Taxation Association*, *40*(2), 63-81.

Xing, X., & Yan, S. (2019). Accounting information quality and systematic risk. *Review of Quantitative Finance and Accounting*, *52*(1), 85-103.

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, *40*(2), 185-211.

Ying, T., Wright, B., & Huang, W. (2017). Ownership structure and tax aggressiveness of Chinese listed companies. *International Journal of Accounting & Information Management*, *5*(3), 313-332

Yorke, S. M., Amidu, M., & Agyemin-Boateng, C. (2016). The effects of earnings management and corporate tax avoidance on firm value. *International Journal of Management Practice*, *9*(2), 112-131.

Yu, H., Liao, L., Qu, S., Fang, D., Luo, L., & Xiong, G. (2021). Environmental regulation and corporate tax avoidance: A quasi-natural experiments study based on China's new environmental protection law. *Journal of Environmental Management*, *296*, 113160.

Yusuf, M. (2019). Effect of board of commissioners, institutional ownership and capital intensity toward tax aggressiveness: Empirical study of

manufacturing companies listed on the IDX in 2011-2016. *South East Asia Journal of Contemporary Business, Economics and Law, 19*(5), 230-238.

Zaitul, Z. & Ilona, D. (2019). Tax aggressiveness and politically connected company. *Tax Aggressiveness and Politically Connected Company. KnE Social Sciences*, 10-19.

Zang, Y., Goh, B. W., Lim, C. Y., & Shevlin, T. (2013). Tax aggressiveness and auditor resignation. *Available at SSRN* 2277336.

Zhu, N., Mbroh, N., Monney, A., & Bonsu, M. O. (2019). Corporate tax avoidance and firm profitability. *European Scientific Journal, 15*(7), 61–70.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods* (9th ed.). Australia: South-Western, Cengage Learning.