MODERATING EFFECT OF INSTITUTIONAL OWNERSHIP ON BOARD CHARACTERISTICS AND TAX AGGRESSIVENESS OF QUOTED FINANCIAL FIRMS IN NIGERIA

[1]Abdulmumuni Ibrahim Itopa
(ibgold4real@gmail.com)
+2347065750078

[2]Friday Audu
(audufriday96@yahoo.com)
+2347036744598

[3]Sani Rufai Abdullahi
(abdullahsanirufai@yahoo.com)
+2347060957441

[1,2 and 3] Department of Accounting, Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria

Abstract

Corporate governance mechanisms, particularly board characteristics, play a pivotal role in influencing tax behaviors. This study examines the moderating effect of institutional ownership on the relationship between board characteristics and tax aggressiveness of listed financial firms in Nigeria. Specifically, it investigates the effect of board financial expertise and board gender diversity on tax aggressiveness, as well as the moderating role of institutional ownership in these relationships. The research adopts an ex-post facto design and utilizes panel data from a sample of 32 listed financial firms on the Nigerian Exchange Group over a 13-year period (2012–2024). Data were analyzed using fixed effect regression model, including moderation analysis with interaction terms. The results showed that board financial expertise has a positive significant effect on cash effective tax rate of quoted financial firms in Nigeria. However, board gender diversity has a negative significant effect on cash effective tax rate of quoted financial firms in Nigeria. While institutional ownership does not moderate the relationships between both board financial expertise, board gender diversity and cash effective tax rate of quoted financial firms in Nigeria. The study recommends that quoted financial firms in Nigeria should prioritize the inclusion of directors with strong financial backgrounds on their boards. Regulatory bodies such as the Securities and Exchange Commission (SEC) and the Central Bank of Nigeria (CBN) should consider strengthening corporate governance guidelines to encourage or mandate a minimum level of financial expertise on company boards.

Keywords: *Board Financial Expertise, Board Gender Diversity, Cash Effective Tax Rate, Financial Firms Institutional Ownership, Tax Aggressiveness.*

INTRODUCTION

The issue of corporate tax aggressiveness is a contentious debate in the global discourse on finance and regulation, mainly because of its implications for revenue mobilization, corporate governance, and ethical responsibility. At the global level, multinational corporations are known to pursue aggressive tax strategies in a bid to reduce their tax burden and increase shareholder value. Such strategies are on the edge of legality and ethical behavior (Hanlon & Heitzman, 2010). The increased focus on corporate tax behavior in the global discourse has resulted in an increased research focus on the internal governance structures that could mitigate such behavior (Lanis & Richardson, 2018).

Board characteristics, including financial expertise and gender diversity, have been established as important elements of an effective corporate governance model, which affect tax planning behavior. Financial expertise of the board enables the board to grasp financial complexities, including tax planning strategies (Armstrong et al., 2015). Similarly, boards with diverse gender composition are associated with higher ethical standards, better decision-making, and regulatory compliance, which may reduce the level of tax aggressiveness (Lanis et al., 2017). Tax compliance in Africa has been an important issue, as the continent's tax-to-GDP ratios are among the lowest in the world. This has been attributed to an inadequate institutional framework, low enforcement capacity, and aggressive tax behavior by large corporations (Organisation for Economic Co-operation and Development [OECD], 2021). Good corporate governance has been proposed as an alternative solution to address this problem. However, little empirical support exists for the effects of board attributes on tax aggressiveness in Africa.

Nigeria, Africa's largest economy by GDP, faces similar challenges. The country has experienced persistent shortfalls in tax revenue, with corporate income tax collection consistently below potential. As of 2023, Nigeria's tax-to-GDP ratio stood at 9.4%, according to the International Monetary Fund (IMF). This figure is notably low compared to the average for African countries, which was 16.0% in 2022. The disparity indicates a tax-to-GDP gap of approximately 6.6 percentage points, highlighting Nigeria's underperformance in tax revenue mobilization relative to its continental peers. Recognizing this shortfall, the Nigerian government has set an ambitious target to nearly double the tax-to-GDP ratio to 18% within three years.

Institutional ownership, which refers to the percentage of institutional investors' ownership of a given firm's outstanding shares, is seen to potentially moderate the link that exists between board composition and tax aggressiveness. Institutional investors are known to be capable of effectively influencing corporate decisions, including tax planning strategies, given that they are motivated to do so (Hartzell & Starks, 2003). It is evident from existing literature that institutional investors' ownership of firms' outstanding shares may limit or boost tax aggressiveness depending on institutional investors' intentions (Chen et al., 2010). Although existing literature has examined the direct impact of board financial expertise and gender diversity composition on tax aggressiveness, little attention has been given to the moderating impact of institutional investors' ownership of firms' outstanding shares on tax aggressiveness, especially in developing nations like Nigeria. Moreover, it is evident that firm size, which is used as a control variable in existing literature, is seen to be positively related to tax planning opportunities and tax aggressiveness because larger firms are known to be capable of effectively taking advantage of tax planning strategies (Ugoh, 2021).

It is against this backdrop that this study seeks to address these gaps by exploring how institutional ownership influences the impact of board financial expertise and gender diversity on tax aggressiveness, measured by the cash effective tax rate of listed financial firms in Nigeria. By bridging global and local knowledge, this study intends to contribute to the growing body of literature on corporate governance and taxation in developing markets.

Tax aggressiveness, which includes strategies that legally and illegally minimize tax liabilities, is a major challenge to fiscal sustainability and balanced economic development in the world at large. This is because multinational corporations use complex tax plans to minimize tax liabilities, hence reducing the tax bases of nations and undermining public confidence in corporate governance (Hanlon & Heitzman, 2010). This is a major challenge in the African continent, where the average tax-to-GDP ratio is 16.0%. However, the case is even worse in Nigeria, where the tax-to-GDP ratio is significantly lower at 9.4% in 2023 (IMF, 2023; OECD, 2023). This has affected the government's ability to finance public services and infrastructure development in the country. To address the problem, the government has set an ambitious goal to increase the tax-to-GDP ratio by almost double to 18% in the next three years, hence improving revenue mobilization in the country and reducing borrowing (Al Jazeera, 2023). This can be achieved by addressing the factors that influence tax aggressiveness in the country.

On one hand, corporate governance practices, especially board characteristics, have been found to be crucial determinants of tax behavior. Boards with financial expertise will be more efficient in managing complex financial strategies, thus reducing tax aggressiveness (Armstrong et al., 2015). Boards with gender diversity will have high ethical standards, thus reducing tax aggressiveness (Lanis et al., 2017). On the other hand, institutional ownership has been found to be a significant factor in corporate tax behavior. Due to their large shareholdings, institutional investors will be able to influence corporate governance practices, thus potentially moderating the relationship between board characteristics and tax aggressiveness (Hartzell & Starks, 2003). However, the role of institutional investors in the Nigerian financial sector remains an understudied phenomenon.

Another important factor to consider is the size of the firm, which may affect its level of tax aggressiveness. Research carried out in Nigeria established that firm size is positively correlated with tax aggressiveness. This means that as firm size increases, the level of tax aggressiveness also increases. This is an indication that large firms are more likely to be involved in aggressive tax planning (Zimmerman, 1983). Even though these factors are considered important, little empirical research has been done to investigate the relationship between board financial expertise, gender diversity, institutional ownership, and tax aggressiveness in Nigeria's financial industry. This has made it difficult to establish policies aimed at enhancing compliance and boosting revenue collection.

In the year 2024, the Nigerian Federal Inland Revenue Service (FIRS) instituted charges of tax evasion against Binance, the world's largest cryptocurrency exchange, for its failure to comply with its legal obligations in the payment of taxes to the government. The charges against Binance included the failure to pay value-added tax (VAT) and company income tax, failure to file its tax returns, and allowing its clients to evade taxes through its platform (Reuters, 2024).

In the same year, the Enugu State Board of Internal Revenue enforced the law by sealing the premises of four commercial banks, namely Guaranty Trust Bank Plc, Sterling Bank Plc, Unity Bank Plc, and Heritage Bank Ltd, for unpaid taxes amounting to approximately ₦200 million. This unpaid tax included unpaid PAYE tax, unpaid withholding tax, and development levies. This was after the commercial banks received demand notices and court orders from the state to comply with the law (Daily Trust, 2024). Furthermore, ACCION Microfinance Bank was also in a legal case with the Anambra State Internal Revenue Service for failure to present the tax returns of the customers in accordance with the provisions of the Personal Income Tax Act (PITA). This non-compliance by the bank resulted in the best judgment assessment of ₦36 million. This case is an indication of the regulatory focus on the tax compliance role of financial institutions in Nigeria (Ojukwu & Iweka, 2024).

Despite the increased research focus on corporate governance and tax aggressiveness in the literature, gaps in the literature are still acknowledged in the context of the Nigerian economy. One such gap is the few research works on the moderating effect of institutional ownership on the relationship between board characteristics, such as financial expertise and board gender diversity, and tax aggressiveness. Even though Chen et al. (2010) and Khurana & Moser (2013) recognized the importance of institutional ownership in corporate governance, the few research works on its moderating effect on board characteristics on tax aggressiveness are still wanting in the context of the Nigerian financial sector. In addition, the research works on the relationship between board gender diversity and tax aggressiveness are inconclusive. For example, a positive relationship was established in the research work by Adamu et al. (2023), while Osuza et al. No effects were found by (2022) and Sani and Ripiye (2024). These findings highlight the unclear nature of when board gender diversity might be an effective predictor of tax behavior, especially when institutional ownership is considered as a moderating variable.

Additionally, some previous studies were conducted using obsolete data that may not capture current regulations or economic conditions. For instance, Ogundeji (2023) used data up to 2018, which does not capture the implementation of new tax regulations or current financial reporting standards such as IFRS in Nigeria. Therefore, it is essential to carry out more contemporary and exhaustive longitudinal studies that consider data from 2012 to 2024 to capture new trends in tax regulations. Finally, no previous study has attempted to integrate institutional, board-level, and firm-level variables to create a unified model to test their collective impact on tax aggressiveness. This absence of holistic approaches to measuring corporate governance variables' impact on corporate tax aggressiveness makes it difficult to fully comprehend how these variables interact to influence corporate tax strategies.

Consequently, this study aims to bridge this gap through an investigation of the moderating effect of institutional ownership on the relationship between board characteristics (financial expertise and gender diversity) and tax aggressiveness as measured by cash effective tax rates for financial firms in Nigeria. The incorporation of firm size as a control variable in this study intends to contribute towards a more nuanced understanding of factors influencing corporate tax behaviors.

The main objective of this study is to examine the moderating effect of institutional ownership on board characteristics and tax aggressiveness of listed financial firms in Nigeria. The study specifically intends to: (i) determine the effect of board financial expertise on cash effective tax rate of listed financial firms in Nigeria; (ii) evaluate the effect of board gender diversity on cash effective tax rate of listed financial firms in Nigeria; (iii) ascertain the moderating effect of institutional ownership on board financial expertise and cash effective tax rate of listed financial firms in Nigeria; and (iv) examine the moderating effect of institutional ownership on board gender diversity and cash effective tax rate of listed financial firms in Nigeria.

Based on the above stated specific objectives, these hypotheses are formulated in null forms thus:

Ho_1: Board financial expertise has no significant effect on cash effective tax rate of listed financial firms in Nigeria.

H_{o2}: Board gender diversity has no significant effect on cash effective tax rate of listed financial firms in Nigeria.

H_{o3}: Institutional ownership has no significant moderating effect on board financial expertise and cash effective tax rate of listed financial firms in Nigeria.

H_{o4}: Institutional ownership has no significant moderating effect on board gender diversity and cash effective tax rate of listed financial firms in Nigeria.

REVIEW OF RELATED LITERATURE

Tax Aggressiveness

Generally, tax aggressiveness is defined as corporate actions that are intentionally designed to lower tax payments by employing tax planning strategies. According to Frank et al. (2009), tax aggressiveness is defined as corporate actions that make use of tax avoidance and sheltering strategies, which may even be against the spirit of tax laws. On the other hand, Lanis and Richardson (2021) defined tax aggressiveness as corporate actions that take advantage of loopholes or ambiguities in tax laws with the aim of lowering tax payments, which may be against the spirit of tax laws. Taylor and Richardson (2020) further defined tax aggressiveness as corporate actions that may be legal or even illegal, depending on how tax laws are enforced. On the other hand, Ofori and Boateng (2023) defined tax aggressiveness as corporate actions that take place in the gray area that lies between tax evasion and tax compliance.

Others focus more on its risky and uncertain aspects. Armstrong et al. (2012) describe tax aggressiveness as actions taken to minimize income taxes, where some of these actions may be legally uncertain or abusive. Another focus of other authors, like Lisowsky (2010) and Rego & Wilson (2012), is that aggressive taxes may increase the probability of being caught by the government. Desai & Dharmapala (2006) also link tax aggressiveness to the utilization of intricate financial structures, as well as opaque reporting, for minimizing taxes. With regard to Nigeria, Adegbie & Fakile (2022) describe tax aggressiveness as "the deliberate attempts of firms to influence their tax obligations through legal planning, as well as possibly illicit means." Similar to

these descriptions, this study describes tax aggressiveness in Nigeria as "deliberate corporate actions aimed at minimizing taxes owed, through legal tax planning as well as possibly dubious means."

Board Characteristics

The importance of board characteristics in the effective corporate governance process has been recognized for a long time. Fama and Jensen (1983) defined board characteristics as the structural and demographic characteristics of the board of a company that influence its effectiveness in monitoring and controlling the company. Van den Berghe and Levrau (2004) also defined board characteristics in the same way, that is, the demographic and structural characteristics of the board that influence its effectiveness in monitoring and controlling the company. More recent studies have defined board characteristics in terms of both structural and behavioral attributes of the board. Al-Matari et al. (2021), Alkurdi and Al-Dmour (2020), and Kouki and Ben Sedrine (2020) have defined board characteristics in terms of structural attributes such as board size, independence, gender diversity, financial expertise, and frequency of meetings.

In this respect, in the Nigerian context, Obigbemi and Uwuigbe (2022) and Ogoun and Ugboma (2023) noted that board characteristics comprise the individual and collective traits of the board directors. Similarly, Aliyu and Bello (2024) and Mouna and Jarboui (2023) noted that board characteristics comprise both quantitative and qualitative attributes of the board. Accordingly, this study adopted the definition of board characteristics as the individual and collective traits of board directors that shape their roles in corporate governance in monitoring the performance of the management and minimizing agency costs.

Board Financial Expertise

Board financial expertise can be defined as the knowledge and qualifications that board directors have in the areas of finance and accounting. It has been viewed as a critical factor in ensuring the effectiveness of financial reporting and strategic decision-making. According to Jensen and Meckling (1976), board financial expertise refers to the financial knowledge and expertise that board directors have in order for them to monitor and advise the company. Hermalin and Weisbach (2003) have viewed board financial expertise as the collective board capacity for financial performance and risk. The U.S. Securities and Exchange Commission (SEC) has viewed a financial expert as an individual who has the appropriate knowledge and qualifications in finance and accounting.

Recent research also points out the importance of financial expertise from a practical point of view. Naheed et al. (2022) emphasize the importance of financially expert directors in terms of enhancing transparency and strengthening the quality of financial reporting. According to Viola et al. (2023), the presence of financially expert directors in the boardroom is also important in terms of identifying inconsistencies. Alshareef and Sulimany (2024) extend the importance of financially expert directors in terms of monitoring the company's management and enhancing its value. Accordingly, the definition of financial expertise in the context of the present study is the knowledge and skills related to finance, accounting, and financial management that the board of directors is able to utilize in order to effectively manage the company's finances.

Board Gender Diversity (BGD)

Board gender diversity is usually used to refer to the level or proportion of female representation in the boards of corporations. According to Carter et al. (2003) and Adams and Ferreira (2009), board gender diversity is the presence of female directors on the boards of corporations. These scholars also emphasize the importance of board gender diversity in enhancing board monitoring and governance. Similarly, Terjesen et al. (2009) and Ntim (2015) define board gender diversity as the level or proportion of female participation on the boards of corporations. These scholars also emphasize the importance of board gender diversity in enhancing inclusiveness, transparency, accountability, and corporate performance. In the context of Nigeria, Olayiwola (2020), Obigbemi and Uwuigbe (2022), and Adewale and Yusuf (2020) define board gender diversity as the level or proportion of female participation on the boards of corporations. These scholars also emphasize the importance of board gender diversity in enhancing ethical behavior, stakeholder trust, and strategic board decisions. Board gender diversity is also important in enhancing risk management, corporate social responsibility, and earnings quality, as emphasized in the works of Alade et al. (2022) and Okoye et al. (2021).

More recent studies highlight the relevance of the concept's governance attributes. Ibrahim & Bello (2023), Uwuigbe et al. (2022), and Onyeka & Eneh (2023) contend that gender diversity on the board improves innovation, sustainability, and monitoring efficacy. Similarly, Kariuki & Kamau (2024) and Okafor & Duru (2024) link gender diversity with better corporate image, compliance, and ethical behavior. Accordingly, board gender diversity in this study refers to the presence of both genders among the board members of a given firm, which improves diversity and monitoring.

Institutional Ownership as a Moderator between Board Characteristics and Tax Aggressiveness

According to Baron and Kenny (1986), testing the moderation requires that three regression equations be run. First, the moderator should be regressed on the dependent variable, then the independent variable should be regressed on the dependent

variable, and finally, the independent variable and the moderator should be entered together with their interaction term. If the interaction term is significant, then the test of moderation is confirmed since the moderator variable affects the nature of the relationship between the independent and dependent variables.

Institutional ownership, which refers to the percentage of company shares owned by institutions such as pension funds, mutual funds, and insurance companies, represents an important governance mechanism. Because of their resources, institutional investors have the potential to impact management and board performance. As a moderator variable, institutional ownership may enhance or weaken the relationship between board characteristics, such as board financial expertise and gender diversity, and tax aggressiveness.

The board of directors is expected to monitor the company and impact its tax decisions. Yet, this could be contingent upon outside monitoring. Active involvement of institutional investors could complement board monitoring in demanding transparency and deterring tax aggressiveness that could threaten their reputational risk (Chen et al., 2010; Khurana & Moser, 2013). For instance, gender-diverse boards that are associated with ethical awareness and risk avoidance (Adams & Ferreira, 2009) could limit tax aggressiveness even further in the presence of active monitoring by institutional investors (Lanis & Richardson, 2015). Yet, in the absence of active and engaged monitoring and in the face of short-termism-oriented investors, tax aggressiveness could be even more pronounced (Desai & Dharmapala, 2006). Hence, we propose institutional investors as a crucial moderator whose impact could vary depending upon the nature and extent of their active involvement and monitoring.

Theoretical Review

The relevant theories in relation to the study's objectives are Resource Dependence Theory (RDT), Agency Theory, and Institutional Theory.

The Resource Dependence Theory was developed by Pfeffer and Salancik in 1978. The theory argues that firms are dependent on external resources such as capital, skills, and legitimacy in order to survive. As such, the board is designed in a strategic way in order to access these resources and mitigate the environmental risks. Therefore, the financial expertise of the board is an important source of information for the firm in dealing with financial and tax complexities. Financially expert boards are able to assess the risks involved in taxes and ensure compliance. As such, the board is less likely to engage in aggressive tax behavior. Therefore, financially expert boards are likely to result in a high CETR, which is an indication of less aggressive tax behavior.

The theory of Agency Theory, developed by Jensen and Meckling (1976), describes the agency conflict between shareholders (principals) and managers (agents). For the agency conflict to be resolved, effective governance is required to ensure that the interests of shareholders and managers are aligned. From the perspective of agency theory, gender diversity in the board is likely to improve monitoring and independence, hence reducing opportunism such as tax aggressiveness.

The Institutional Theory, developed by Meyer and Rowan (1977) and further refined by DiMaggio and Powell (1983), focuses on the idea that organizations respond to social and regulatory pressures in order to attain legitimacy. Institutional investors are a powerful stakeholder group in corporations. If institutional investors are significant stakeholders in a company, the board may focus on compliance and transparency rather than tax aggressiveness. Therefore, institutional ownership may act as a moderator in the relationship between the board's financial expertise and tax behavior, encouraging positive tax behavior and reducing tax aggressiveness.

Empirical Review

Board Financial Expertise and Tax Aggressiveness

Recent Nigerian literature shows inconclusive findings regarding board financial expertise and tax aggressiveness. For instance, Ogochukwu et al. (2025) used Robust Least Squares to examine 15 listed consumer goods companies (2014-2023) and found that directors' financial expertise has a significant negative impact on tax avoidance, suggesting that companies with financially expert boards are less tax aggressive. Bartholomew and Joseph (2024) examined 22 listed insurance companies (2011-2022) and found that board financial expertise has a significant impact on tax aggressiveness, while female directors' impact is negative but insignificant. Both papers concluded that boards should be filled with more directors with accounting and financial expertise to improve board effectiveness and lower tax aggressiveness. Both papers used recent data that represents current economic conditions.

On the other hand, Ogundeji (2023), who adopted a mixed-method approach for a sample of 68 non-financial firms for the period 2004 to 2018, reported that board financial expertise has a positive but statistically insignificant effect on tax compliance. Although this study adopted robust methodologies, it should be noted that it only covered data up to 2018, which makes it less current. In a related study, Adamu et al. (2023), who adopted a mixed-method approach for a sample of deposit money banks for the period 2012 to 2021, reported that board financial expertise and gender diversity have a significant positive effect on tax

avoidance, which suggests that some governance characteristics actually encourage, as opposed to deter, tax avoidance practices.

Osuza et al. (2022) conducted a study on manufacturing firms between 2011 and 2020, while Ugoh (2021) conducted research specifically for insurance companies between 2010 and 2019, and both found that board financial expertise has a significant influence on tax aggressiveness, but the influence of female directors is generally found to be negative but insignificant. All studies recommend that board expertise should be improved to reduce managerial aggressive tax behavior. Thus, it can be concluded that even though the influence of board financial expertise is found to be significant in determining corporate tax behavior in Nigeria, its direction and magnitude vary over time and across sectors, hence the need to conduct more research in the subject matter to update the findings.

Board Gender Diversity and Tax Aggressiveness

Recent empirical studies have yielded different conclusions about board attributes and tax avoidance. Elgharbawy and Aladwey (2025) examined the combined effect of ESG performance and board diversity on tax avoidance among FTSE 350 companies for the period 2017-2023. The authors employed random effects and two-stage least squares regression analysis to deal with endogeneity. The authors found that gender diversity, age diversity, and network diversity lower tax avoidance, whereas nationality diversity increases tax avoidance. Skill diversity has no effect. High ESG performance reduces tax avoidance, whereas better governance increases tax avoidance. The study was carried out in the context of the UK and was found to be robust in different sectors and before/after COVID-19. The study cannot be generalized in the context of Nigeria because of environmental factors.

In Nigeria, Sani and Ripiye (2024) examined the influence of board size, independence, and gender on tax avoidance in 63 manufacturing firms listed on the Nigerian stock exchange (2018-2022). The results revealed a positive significant effect of board size and independence on tax avoidance, but the effect of board gender was negative and insignificant. The study concluded that board size and independence should be strengthened in order for firms to sustain aggressive tax avoidance. Earlier, the study by Uniamikogbo et al. (2019) focused on corporate governance and tax aggressiveness in Oil and Gas Marketing Firms listed on the stock exchange (2013-2017) using the ordinary least squares regression method. The results indicate that gender diversity and board size positively and significantly influence tax aggressiveness, whereas CEO duality has a significant negative influence, and ownership concentration is negatively but not significantly related to tax aggressiveness.

METHODOLOGY

In consideration of the objectives, population, and the panel nature of the data, an ex post facto research design was the kind of research design that was used for the study. This kind of research design would be considered appropriate for the study in view of the fact that the variables in the study were related, where the proxy for the independent variable was measured in comparison to the proxy for the dependent variable. The population of the study comprised forty-five (45) financial sector companies quoted in the Nigerian Exchange Group as of the 31st of December 2024 calendar year. The sample used for the study comprised thirty-two (32) firms that were quoted in the financial sector at least one year prior to the 2012 Implementation of IFRSs in Nigeria, covering the period 2012-2024, subject to the following filter criteria:

The reason for selecting this sector for this study is that it is one of the most capitalized sectors of the Nigeria capital market. The period was selected because of the implementation of International Financial Reporting Standard in Nigeria that has introduced details disclosure in financial statement reporting. A sample size of thirty-two firms was used by the study. The data used for this study were secondary panel data, which were of a quantitative nature. Such data were extracted from audited annual reports and accounts of quoted firms submitted to the Nigerian Exchange Group during the study period.

Model Specification

The study employed two different models in order to attain the objectives. The first model established the direct relationship between board financial expertise (BFE) and board gender diversity (BGD); a control variable of firm size (FSize), the moderating variable. The model also established the relationship between institutional ownership (IO) and cash effective tax rate (CETR) without moderation. The second model established the indirect relationship between board financial expertise (BFE) and board gender diversity (BGD); a control variable of firm size (FSize) as moderated by institutional ownership (IO) and earnings management. The first model established the direct relationship between board financial expertise (BFE) and board gender diversity (BGD); a control variable of firm size (FSize), the moderating variable. The model established the relationship between institutional ownership (IO) and cash effective tax rate (CETR) as follows:

CETR = f(BFE, BGD, IO, FSize)

The expression in the equation is expressed econometrically as follows:

$CETR_{it} = \alpha_0 + \beta_1 BFE_{it} + \beta_2 BGD_{it} + \beta_3 IO_{it} + \beta_4 FSize_{it} + \varepsilon_{it}$…….(1)

Where:
β_1, β_2……β4 are parameters to be estimated with a-priori expectations < 0.
CETR= Cash Effective Tax Rate
BFE = Board Financial Expertise
BGD = Board Gender Diversity
IO = Institutional Ownership
FSize = Firm Size
α = Constant
e = Error term
i = Firms
t = Periods

The second model is specified with the objective of determining the indirect relationship of the independent variables and the dependent variable in the context of institutional ownership (IO). However, in the second model, the researcher was able to collectively capture the direct and indirect relationship between board financial expertise (BFE) and board gender diversity (BGD); moderated by institutional ownership (IO) and controlled by firm size (FSize) as it impacts CETR. The model is specified thus:
CETR = *f*(BFE + BGD + IO*BFE + IO*BGD + FSize
The above function is rewritten econometrically, as follows:
$CETR_{it} = \alpha + \beta_1 BFE_{it} + \beta_2 BGD_{it} + \beta_3 IO*\beta_3 BFE_{it} + \beta_4 IO*\beta_4 BGD_{it} + \beta_5 FSize_{it} + e_{it}$..(Model II)
Where:
CETR = an indicator representing cash effective tax rate (proxy for dependent variable);
α = Intercept term (a constant);
$\beta_1, \beta_2, \beta_3, \beta_4$, = Coefficients of the proxies of independent variable;
β_5 = A coefficient of a control variable;
A-priori expectations: $\beta_1, \beta_2, \beta_3$ and $\beta_4 < 0$
These a priori expectations imply that an increase in board characteristics will lead to a decrease in the tax aggressiveness of quoted financial firms in Nigeria.

The study adopted a fixed effect regression model. The study adopted this model in order to examine the board characteristics in the context of board financial expertise and board gender diversity, as well as institutional ownership in relation to tax aggressiveness of quoted financial firms in Nigeria. Data analysis was carried out using the support of STATA 15 software, and the results were employed in testing the proposed hypotheses. This study adopted the econometric model of Ugoh (2021).

Variables Measurement and Justification

Table 1 below explains the variables measurement under study.

Variable	Acronym	Type of variable	Measurement	Justification
Cash Effective Tax Rate	CETR	Dependent	Total tax cash expenses/profit before tax.	Osuza *et al.* (2022) and Uniamikogbo, *et al.* (2019).
Board Financial Expertise	BFE	Independent	This is the proportion of directors with accounting and finance knowledge.	Bartholomew and Joseph (2024), Ogochukwu *et al.* (2025) and Ogundeji (2023)
Board Gender Diversity	BGD	Independent	This is the percentage of female on the board.	Adamu *et al.* (2023), Bartholomew and Joseph (2024).
Institutional Ownership	IO	Independent	This is the proportion of shares held by institutions in a firm.	Khurana & Moser, 2013
Firm Size	FSize	Control	This is the natural logarithm of total assets.	Ugoh (2021)

Source: Researcher's Compilation, 2025.

DATA PRESENTATION AND ANALYSIS

Data on cash effective tax rate, board financial expertise (BFE), board gender diversity (BGD), institutional ownership, and firm size were presented for thirty-two financial firms. Analysis of the data was done with the help of Stata 15 software. Descriptive Statistics, Shapiro-Wilk Normality test, Pearson Correlation, Variance Inflator Factor (VIF), Heteroscedasticity test, Breusch-Pagan Lagrangian Multiplier test, Hausman Specification Test, and Fixed Effect Regression Model.

Descriptive Statistics

Table 2 summarises the descriptive statistics of the entire data set.

Variable	Obs	Mean	Std. Dev.	Min.	Max.
CETR	416	.1454181	.1053088	.0016319	. 471605
BFE	416	.4011058	.1106579	.11	.67
BGD	416	.1923066	.1441758	0	.67
IO	416	.3299428	.1210391	.066	.584
FSize	416	7.410994	.9745003	.614	10.381

Source: Researcher's Computation using STATA 15 software

Table 2 presented that the minimum value of CETR was .0016319, the maximum value was .471605, and the mean value was .1454181. The table also showed that CETR had a standard deviation of 0.1053088 that was lower than its mean. This stated that CETR was skewed to the left for the period under review.

Table 2 showed that the board financial expertise had a minimum value of .11, a maximum value of .67, and a mean value of .4011058 for the period under review. The table also showed that the board financial expertise had a standard deviation of .1106579 that was lower than its mean. This stated that the board financial expertise was lowly skewed for the period under review. Table 2 stated that the minimum value of board gender diversity was 0 and the maximum value was .67. The mean value of board gender diversity was .1923066within the period studied. The table also stipulated that BGD has a standard deviation of .1441758, which is much less than the mean, indicating that it is lowly skewed within the review period. Table 2 also showed that the institutional ownership is at a minimum of .066, with a maximum value of .584 and a mean value of .3299428 within the period studied. It also indicated from the table that the IO has a standard deviation of .1210391 below its mean, which means that it is lowly skewed for the review period. Table 2 finally showed that the minimum value of firm size is .614, the maximum value being 10.381, with a mean value of 7.410994 within the period studied. The table also revealed that FSize has a standard deviation of .9745003 below the mean, which presumed that it is skewed left for the period under review.

Shapiro-Wilk Normality Test

Table 3 and figure 2 below shows the results obtained for the normality test using the Shapiro Wilk's Normality Test and the normal distribution curve. The decision rule is that if the P-Value > 0.05, the residuals are normally distributed, but if the P-Value is equal to or < 0.05, the residuals are not normally distributed..

Variable	Obs	W	V	Z	Prob>Z
Residual	416	0.96459	10.097	5.512	0.00000

Source: Researcher's Computation using STATA 15 software

Figure 2: Normal Distribution Curve

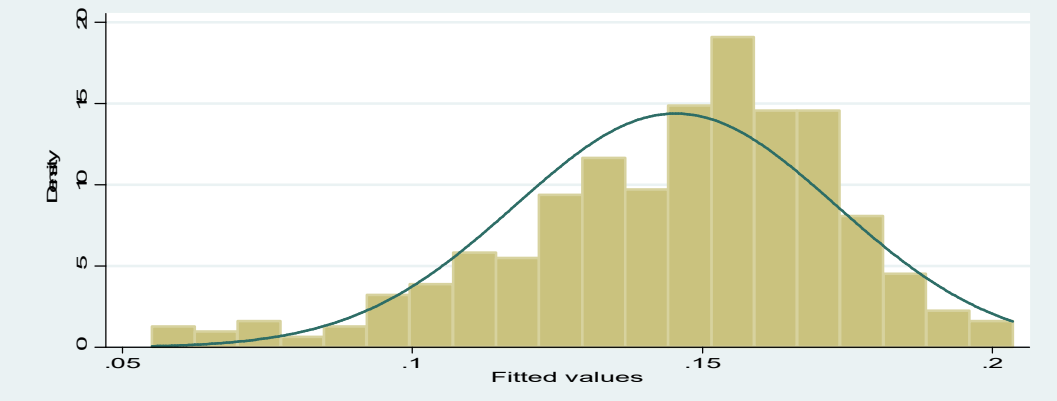

Table 3 above shows that the residual and z value of 5.512 with a probability value of 0.00000 that is less than 0.05 means that the residual is not normally distributed around their mean. This has been collaborated by the normal distribution curve as presented in figure 2 above. This means that one of the assumptions of the linear regression technique is that the residual has a normal distribution. This assumption has been violated. The use of the robust regression technique has been employed.

Pearson Correlation

Table 4 below is the Pearson correlation matrix for the data set to show the extent of associations between the variables. The decision rule is that if a pair or more of the independent variables is equal to or above 0.85, there is a presence of multicollinearity in the model but if the independent variables is less than 0.85, there is no presence of multicollinearity in the model.

Variable	CETR	BFE	BGD	IO	FSZ
CETR	1				
BFE	0.0290	1			
BGD	-0.1478	0.0350	1		
IO	0.1379	0.0052	-0.1339	1	
FSZ	0.1418	-0.4082	0.0674	0.0110	1

Source: Researcher's Computation using STATA 15 software

The correlation matrix measures the degree of association that exists between the proxies of the independent variables and the dependent variable. It is also used to establish the existence of any association among the independent variable proxies in order to establish whether there is a problem of multicollinearity that exists in the model. This is shown in the table, which indicates that 3% positive and weak association that existed between the BFE and CETR of quoted financial firms in Nigeria was a result of a correlation coefficient of 0.0290.

From the table, 15% negative and weak relationships that existed between board gender diversity and cash effective tax rate of quoted financial firms in Nigeria were a result of a correlation coefficient of -0.1478.

The table shows 14% positive weak relationships between institutional ownership and cash effective tax rate of quoted financial firms in Nigeria based on the correlation coefficient of 0.1379. It also shows that 14% positive weak relationships exist between firm size and cash effective tax rate of quoted financial firms in Nigeria based on the correlation coefficient of 0.1418. Relationships between proxies of the independent variable itself are mild, as all coefficients are below 0.80 as suggested by Gujarati (2003) that satisfied one of the assumptions of regression analysis.

Variance Inflator Factor (VIF) Results for Model

Table 5: Variance Inflator Factor (VIF)

Variable	VIF	I/VIF
BGD	1.21	0.826069
IO	1.21	0.829080
FSIZE	1.03	0.972449
BFE	1.02	0.981282
Mean VIF	1.12	

Source: Researcher's Computation using STATA 15 software

The decision rule is that if values of VIF and 1/VIF are up to 10 and 1 and above respectively, then there is a presence of multicollinearity in the model; otherwise, if values of VIF and 1/VIF are less than 10 and 1 respectively, then there is no presence of multicollinearity in the model.

Another attempt at testing for the absence of a problem of multicolinearity among exogenous variables is given by the colinearity diagnostics test, which was observed in the form of the Variance Inflation Factors (VIF) and the Inverse Variance Inflation Factors (I/VIF) values; it portrays that there is no problem of multicolinearity in the data because its values are less than 10 and 1, as shown in table 5. This shows that the variables are well selected and fitted in the same regression model because there is no problem of multicolinearity, which is true because it is one of the prerequisites of regression analysis.

Heteroscedasticity test for Model

Table 6: Heteroscedasticity test

Type of test	Chi2	P-Value
Heteroscedasticity Test	8.67	0.0032

Source: Researcher's Computation Using STATA 15 software

To ensure that the data for this study was appropriate for applying the model, a heteroscedasticity test was conducted. The decision rule for this test is that if the value of $P \leq 0.05$, then there is a problem of heteroscedasticity, but if the value of $P > 0.05$, then there is no problem of heteroscedasticity. From the study, it was established that the data is homoskedastic, which means that the linear regression model is reliable. This is proved by the result of the heteroskedasticity test, as shown in table 6, where the chi2 of 8.67 was proved, together with the value of 0.0032. This proved that the linear regression assumption of homoskedasticity, or constant variance, was satisfied.

Breusch-Pagan Lagrangian Multiplier Test for Model

Table 7 below presents the result of the Breusch-Pagan Lagrangian Multiplier test conducted.

Variable	Chibar2	P-Value
CETR	239.40	0.0000

Source: Researcher's Computation using STATA 15 software

The result of the test using the Breusch-Pagan Lagrangian Multiplier test was conducted to provide an insight into an actual test that will be conducted between the Random Effect Model and Pooled Ordinary Least Square Regression. The decision rule of the Breusch-Pagan Lagrangian Multiplier test states that if the P-value equals and is less than 0.05, then the random effect model is appropriate, otherwise the Pooled Ordinary Least Square Regression is appropriate. Based on the result of the test using the Breusch-Pagan Lagrangian Multiplier test, the chibar2 value of 239.40 and the probability of 0.0000 in table 7 above, therefore, suggests that REM is more appropriate instead of Pooled Ordinary Least Square.

Hausman Specification Test

Table 8 below is a result from a Hausman specification test carried out to ascertain which model between the model, Fixed effect model, and Random effect model would be used. The principle that guides the Hausman specification test is that if prob. Chi2 is equal to and less than 0.05, then the fixed effect model is appropriate, otherwise, the random effect model is more appropriate.

.

Table 8: Hausman Specification Test

Type of test	Chi2	P-Chi2
Hausman Test	15.68	0.0035

Source: Researcher's Computation (2023) Using Stata 15

The result from table 8 indicates that the probability > chi2 is 15.68, which is less than 0.0035. The implication of this result is that the null hypothesis that claims that the difference in coefficient is not systematic is rejected, and thus the fixed effect estimation is the most appropriate model for use.

Table 9: Fixed Effect Regression Results: Institutional ownership Moderating Effect: Board Characteristics and Cash Effective Tax Rate

	Model 1			Model 2		
Variables	Coefficient	t-value	P-value	Coefficient	t-value	P-value
BFE	.1022785	2.18	0.030	.2026361	2.47	0.014
BGD	-.0800526	--2.05	0.040	-0.451265	-0.47	0.642
IO	-.078576	-1.30	0.195			
IO*BFE				-.334818	-1.55	0.122
IO*BGD				-.0523458	-0.18	0.859
FSize	.0036018	0.38	0.702	-.0192185	-1.44	0.149
Constant	.1190211	1.53	0.127	.2627791	2.57	0.011
R-Squared	0.5212			0.5113		
F-statistic	110.02			103.04		
Prob>F	0.0001			0.0105		

Note: Model 1 (IVs, MV and DV) and Model 2 (IVs, MV*DV). *p<0.05, **p<0.01

Results in table 9 model 1 above indicate that the overall coefficient of determination (R-sq) was 0.5212, which implies that board financial expertise, board gender diversity, and institutional ownership used in this study have a combined effect of approximately 52% on the systematic changes in the dependent variable cash effective tax rate during the period under review. Furthermore, results in table 9 model 1 above indicate that the F-statistic of 110.02 and the corresponding prob. > F of 0.0001 indicate that this model is fit and reliable for decision making.

From table 9 model 1 above, it is evident that board financial expertise with a p-value of 0.030 is significant, board gender diversity with a p-value of 0.040 is significant at 5%, while institutional ownership with a p-value of 0.195 is insignificant. Results from model 2 of table 9 above indicated that the coefficient of determination (R-sq) was 0.5113; this shows that when the interacting term is included, it reduces, which is an indication that there is moderation. That is, the proxies of the independent variable moderated by institutional ownership that were used in this study had approximately 51% combined effect on the systematic changes in the dependent variable cash effective tax rate during the period under review. The F-statictic value of 103.04 and prob. > F value of 0.0105 indicates that the model is fit and reliable. This implies that the variables were moderated by the moderator. This implies that the explanatory power of the board characteristics, BFE, and BGD used as a moderator for the study are sufficient for the study.

Discussion of Findings

Board financial expertise and Cash effective tax rate

The findings of this study revealed that board financial expertise had a positive significant effect on the cash effective tax rate of quoted financial firms in Nigeria. This implies that an increase in board financial expertise would result in an increase in the cash effective tax rate of quoted financial firms in Nigeria by .1022785. The finding is not in line with the researcher's a-priori expectation and also does not support the resource dependence theory which posits the importance of the board composition, specifically the addition of directors with financial expertise in the boardroom as a strategic response to external pressures and uncertainties, including those related to taxation. These directors play a pivotal role in the governance of a firm's financial affairs, providing the required knowledge and insight for effective financial governance and therefore curbing the level of tax

aggressiveness. The finding is in line with the empirical findings of Bartholomew and Joseph (2024), Ogochukwu et al. (2025), and Ogundeji (2023). The finding is not in line with the empirical finding of Ogundeji (2023).

Board gender diversity and Cash effective tax rate

The study found that the board gender diversity has a negative significant effect on the cash effective tax rate of quoted financial firms in Nigeria. This means that an increase in board gender diversity will lead to a reduction in the cash effective tax rate of quoted financial firms in Nigeria by -0.0800526. This study finding is in line with the researcher's a-priori expectation and also in line with the Agency Theory because the theory emphasized that the gender diversity in the board can be used as a way to curb agency problems in the company in order to ensure that the managerial decisions, including the tax planning decisions, are in the best interest of the shareholders and other stakeholders in the company. This study finding is in line with the empirical findings of Adamu et al. (2023) and Bartholomew & Joseph (2024) but is in disagreement with the empirical findings of Osuza et al. (2022) and Sani & Ripiye (2024).

Institutional ownership Moderating Board financial expertise and Cash effective tax rate

The research found that board financial expertise with the interaction effect of institutional ownership has a negative but statistically insignificant effect at all levels of significance on the cash effective tax rate of quoted financial firms in Nigeria. The result of board financial expertise without any moderating effect is found to be significant at 1% level of significance, while the indirect effect of board financial expertise as moderated by institutional ownership has a negative but statistically insignificant effect on cash effective tax rate. This, therefore, implies that institutional ownership does not have any moderating effect on the relationship between board financial expertise and cash effective tax rate. The result has supported the a-priori expectation of the researcher as well as the institutional theory because it acts as a moderating theory that strengthens the positive effect of good corporate governance by board financial expertise through directing it towards responsible and legal financial practices.

Institutional ownership Moderating Board gender diversity and Cash effective tax rate

The study found that board gender diversity with institutional ownership as a moderator has a negative insignificant effect on explaining the cash effective tax rate of quoted financial firms in Nigeria. The findings of board gender diversity without moderation were negatively significant, while the indirect relationship of board gender diversity as moderated by institutional ownership has a negative insignificant effect on cash effective tax rate. This, therefore, implies that institutional ownership does not moderate the relationship between board gender diversity and cash effective tax rate of quoted financial firms in Nigeria by -.0523458. This finding is in line with the researcher's a-priori expectation as well as in line with institutional theory as a moderating factor that reinforces positive governance outcomes of board gender diversity to channel it to positive and legitimate financial practices.

CONCLUSION AND RECOMMENDATIONS

The contribution of financial knowledge among board members proves vital in improving tax transparency and compliance. Boards that comprise members with financial knowledge are more likely to understand and implement tax regulations. This way, they are able to pay taxes in line with their financial performance. This improves the integrity of the company and minimizes the risk of engaging in aggressive tax avoidance.

The involvement of more women in corporate boards could be a factor in improving efficiency in minimizing tax burdens. This is because women board members could be able to provide a different approach to financial issues and could be more effective in minimizing tax burdens. This argument aligns with the idea that gender-diverse boards could be different in their approach to financial and tax issues.

The institutional ownership does not moderate the relationship between board financial expertise and CETR in the context of financial firms in Nigeria. This could be because the institutional monitoring is passive in nature, but it could also mean that institutional investors are not exerting influence to improve the effectiveness of the board in managing issues related to tax compliance and planning.

The institutional investors in Nigeria could not be exerting influence in the way that the boards of financial firms in the country address issues related to gender diversity boards in the context of tax strategies. This also implies that there is no synergy between the strategic role of institutional investors and the influence of board diversity in managing issues related to taxes. In other words, the institutional ownership does not moderate the relationship between board gender diversity and taxes in the context of quoted financial firms in Nigeria.

Based on the findings and conclusion, the following recommendations are provided:

(i) This study recommended that financial firms that are quoted in Nigeria should try to avoid the inclusion of directors with financial expertise in the boards of these firms. The regulatory bodies in Nigeria, such as the Securities and Exchange

Commission (SEC) and the Central Bank of Nigeria (CBN), should consider enhancing the corporate governance codes to ensure that there is a certain level of financial expertise included in the boards of the firms.

(ii) This study also recommended that financial firms in Nigeria should try to increase the level of gender diversity to at least 40% in the boards of these firms, not only for the benefits of inclusion but also for the benefits that it would generate in the field of tax planning.

(iii) It is suggested that institutional investors should take a more active role in corporate governance, especially when dealing with tax-related issues. Institutional investors should consider including tax compliance and financial governance in their stewardship and investment evaluation process.

(iv) It is suggested that institutional investors should take a more proactive role in dealing with gender-diverse boards to ensure that tax planning decisions are based on ethical standards.

References

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics, 94*(2), 291–309.

Adamu, Y., Jamilu, A., & Amiru, L. B. (2023). Corporate governance mechanisms and tax avoidance among deposit money banks in Nigeria. *Researchgate.*

Adegbie, F. F., & Fakile, A. S. (2022). *Corporate tax aggressiveness and financial performance of listed firms in Nigeria*. *Journal of Accounting and Taxation, 14*(3), 45–58.

Afolabi, A., & Onabanjo, B. (2022). Board diversity and leadership performance: Evidence from selected Nigerian companies. *Journal of Corporate Leadership*, *11*(1), 88–104.

Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.

Al Jazeera. (2023, July 7). *Nigeria on quest to almost double tax-to-GDP ratio in three years*. https://www.aljazeera.com/news/2023/7/7/nigeria-on-quest-to-almost-double-tax-to-gdp-ratio-in-three-years

Alade, M. E., Adegbie, F. F., & Adeniyi, A. A. (2022). Board characteristics and corporate social responsibility: Evidence from Nigerian listed companies. *Journal of Accounting and Strategic Finance*, *5*(2), 89–104.

Aliyu, A. I., & Bello, A. M. (2024). Board characteristics and firm performance: Evidence from listed non-financial firms in Nigeria. *Journal of African Business*, 25(1), 88–105.

Alkurdi, A., & Al-Dmour, A. (2020). Board characteristics and firm performance: The moderating role of ownership structure. *International Journal of Business and Management*, 15(2), 121–133.

Al-Matari, E. M., Al-Swidi, A. K., & Fadzil, F. H. (2021). Board characteristics and firm performance: Evidence from Oman. *Journal of Accounting and Taxation*, *13*(1), 1–10.

Al-Matari, E. M., Al-Swidi, A. K., & Fadzil, F. H. (2021). Board independence and firm performance: Empirical evidence from Oman. *Journal of Accounting and Taxation*, *13*(1), 1–10.

Alshareef, M. N., & Sulimany, H. G. H. (2024). Board financial expertise and financial sustainability: Evidence from Saudi-listed firms. *Sustainability, 16*(16), 71-80.

Arjaliès, D. L., Mundy, J., Gendron, Y., & Rodrigue, M. (2021). Rethinking the roles of management accounting in strategizing: A Resource Dependence Theory perspective. *Accounting, Organizations and Society*, *94*, 101-113.

Armstrong, C. S., Blouin, J. L., & Larcker, D. F. (2012). The incentives for tax planning. *Journal of Accounting and Economics*, *53*(1–2), 391–411.

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.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182.

Bartholomew, E. O., & Joseph, E. A. (2024). Effect of selected board attributes on tax aggressiveness of quoted insurance companies in Nigeria. *British Journal of Multidisciplinary and Advanced Studies 5*(6), 1-16.

Bushee, B. J. (2001). Do institutional investors prefer near-term earnings over long-run value? *Contemporary Accounting Research, 18*(2), 207–246.

Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *The Financial Review*, *38*(1), 33–53.

Chen, H., Chen, J. S., & Su, X. (2010). Board size and corporate tax avoidance: The role of the audit committee. *Journal of Financial Economics*, *98*(1), 159–176.

Daily Trust. (2024, April 2). *Enugu shuts down 4 banks, 2 other firms over tax evasion*. https://dailytrust.com/enugu-shuts-down-4-banks-2-other-firms-over-tax-evasion-265984/

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

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147–160.

Egbunike, C. F., & Okoye, E. I. (2021). Gender diversity and financial reporting quality of listed firms in Nigeria. *Cogent Business & Management*, *8*(1), 19-26.

Elgharbawy, A., & Aladwey, L. M. A. (2025). ESG performance, board diversity and tax avoidance: Empirical evidence from the UK. *Journal of Financial Reporting and Accounting.*

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

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.

Gujarati, D.N. (2003). *Basic Econometrics*. 4th Ed., New York: McGraw-Hill.

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

Hartzell, J. C., & Starks, L. T. (2003). Institutional investors and executive compensation. *The Journal of Finance*, *58*(6), 2351–2374.

Hermalin, B. E., & Weisbach, M. S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review*, *9*(1), 7–26.

Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, *35*(6), 1404–1427.

Ibrahim, M. A., & Bello, A. M. (2023). Gender diversity on boards and firm sustainability: Evidence from Nigerian listed firms. *African Journal of Corporate Governance*, *8*(1), 45–60.

Ibrahim, R. A., & Oladipo, O. A. (2023). Gender-inclusive boards and firm innovation: Evidence from emerging markets. *Journal of Emerging Market Research*, *5*(2), 33–49.

International Monetary Fund (2024, April). *Nigeria: 2024 Article IV Consultation—Staff Report*. IMF.

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.

Kariuki, M. W., & Kamau, C. N. (2024). Gender diversity and organizational performance in East African firms. *African Journal of Business Governance*, *9*(1), 75–91.

Khurana, I. K., & Moser, W. J. (2013). Institutional shareholders' investment horizons and tax avoidance. *The Journal of the American Taxation Association*, *35*(1), 111–134.

Kılıç, M., Uyar, A., & Ataman, B. (2019). Board gender diversity and tax aggressiveness: Evidence from Turkey. *Sustainability, 11*(6), 1655.

Kouki, M., & Ben Sedrine, N. (2020). Corporate governance and firm performance: Evidence from North African countries. *Corporate Governance*, *20*(1), 148–164.

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. (2015). Is corporate social responsibility performance associated with tax avoidance? *Journal of Business Ethics*, *127*(2), 439–457.

Lanis, R., & Richardson, G. (2018). Outside directors, corporate social responsibility performance, and tax aggressiveness: An empirical analysis. *Journal of Accounting, Auditing & Finance*, *33*(2), 228–251.

Lanis, R., & Richardson, G. (2021). Corporate social responsibility and tax aggressiveness: A test of legitimacy theory. *Accounting, Auditing & Accountability Journal*, 34(1), 174–201.

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.

Lisowsky, P. (2010). Seeking shelter: Empirically modeling tax shelters using financial statement information. *The Accounting Review*, *85*(5), 1693–1720.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*(2), 340–363.

Mouna, A., & Jarboui, A. (2023). Corporate board attributes and risk-taking behavior: Evidence from MENA banks. *Corporate Governance: The International Journal of Business in Society*, *23*(1), 190–208.

Naheed, R., Aslam, E., & Altaf, M. (2022). Board financial expertise and firm performance: Evidence from emerging markets. *Cogent Business & Management*, *9*(1), 20-29.

Ntim, C. G. (2015). Board diversity and organizational valuation: Unravelling the effects of ethnicity and gender. *Journal of Management and Governance*, *19*(1), 167–195.

Obigbemi, F., & Uwuigbe, U. (2022). Corporate board characteristics and financial performance of Nigerian listed companies. *Nigerian Journal of Accounting and Finance*, *14*(1), 45–62.

OECD. (2021). *Revenue Statistics in Africa 2021: Strengthening Tax Capacities in Africa*. OECD Publishing.

Ofori, D. F., & Boateng, A. (2023). Tax aggressiveness, corporate governance and firm value in sub-Saharan Africa. *African Journal of Accounting, Auditing and Finance*, 11(1), 25–43.

Ogochukwu, N. O., Onyekachi, N. O., & Bridget, U. A. (2025). Board financial expertise and tax avoidance of listed consumer goods firms in Nigeria. *Global Journal of Economic and Finance Research 02*(01), 56-66.

Ogoun, S., & Ugboma, M. (2023). Board dynamics and corporate governance: A study of listed firms in Nigeria. *International Journal of Business and Finance Research*, *17*(2), 75–90.

Ogundeji, M. G. (2023). Influence of board financial expertise on tax compliance of non- financial listed firms in Nigeria. *Malete Journal of Accounting and Finance, 2*(1), 107-130.

Ojukwu, M. C., & Iweka, O. (2024). Banks' tax reporting obligations and privacy concerns in Nigeria: A look at ACCION Microfinance Bank v. Anambra State IRS. *Mondaq*. https://www.mondaq.com/nigeria/tax/1474156/banks-tax-reporting-obligations-and-privacy-concerns-in-nigeria-a-look-at-accion-microfinance-bank-vs-anambra-state-irs

Okafor, T. N., & Duru, H. I. (2024). Board gender composition and ethical decision-making in Nigerian listed firms. *International Journal of Corporate Social Responsibility*, *6*(1), 22–38.

Okoye, E., Akenbor, C. O., & Ofor, I. T. (2021). Board independence and firm value of listed companies in Nigeria. *Journal of African Research in Business & Technology*, *2021*, Article ID 202834. https://doi.org/10.5171/2021.202834

Olayiwola, W. K. (2020). Corporate board diversity and governance quality in Nigeria. *Nigerian Journal of Corporate Governance*, *6*(1), 101–117.

Onyeka, A. M., & Eneh, C. A. (2023). Gender-diverse boards and financial sustainability in the Nigerian banking sector. *African Journal of Business and Economic Research*, *18*(1), 101–119.

Organisation for Economic Co-operation and Development (OECD), African Union Commission, & African Tax Administration Forum. (2023). *Revenue Statistics in Africa 2023*. OECD Publishing.

Osuza, A. A., Hassan, I., Abbdulkarim, S. A., & Usman, T. G. (2022). Effect of selected board attributes on tax aggressiveness of quoted manufacturing companies in Nigeria. *TSU-International Journal of Accounting and Finance (TSUIJAF), 1*(3), 284-297.

Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. Harper & Row.

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

Reuters. (2024, March 25). *Nigeria files tax evasion charges against Binance, tax agency says*. https://www.reuters.com/technology/nigeria-files-tax-evasion-charges-against-binance-tax-agency-says-2024-03-25/

Salawu, R. O., & Ajibade, A. T. (2024). Gender diversity and sustainable performance of listed firms in Nigeria. *Journal of Sustainability and Corporate Ethics*, *5*(1), 120–136.

Sani, S., & Ripiye, W. B. (2024). Effect of board attributes on tax avoidance of listed manufacturing firms in Nigeria. *Nigerian Journal of Management Sciences, 25*(1), 158-167.

Taylor, G., & Richardson, G. (2020). Incentives for corporate tax planning and reporting: Evidence from Australia. *Accounting & Finance*, 60(2), 1543–1570.

Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. *Corporate Governance: An International Review*, *17*(3), 320–337.

Ugoh, T. T. (2021). Effect of female directors and board financial expertise on tax aggressiveness of quoted insurance companies in Nigeria. *Conference: 2nd International Conference of Faculty of Business Administration, University of Nigeria, Enugu Campus At: Enugu.*

Uniamikogbo, E., Bennee, E., & Adeusi, S. A. (2019). Corporate governance and tax aggressiveness in Nigeria. *Ae-funai Journal of Accounting, 4*(1), 20-33.

Uwuigbe, U., Olayemi, A. O., & Ajibade, A. T. (2022). Women on boards and corporate sustainability: Evidence from Nigeria. *Corporate Ownership and Control*, *19*(4), 58–68.

Van den Berghe, L. A. A., & Levrau, A. (2004). Evaluating boards of directors: What constitutes a good corporate board? *Corporate Governance: An International Review*, *12*(4), 461–478.

Viola, C., Mariani, M., & Ricci, O. (2023). The impact of board financial expertise on sustainability reporting and performance. *International Journal of Environmental Research and Public Health*, *20*(1), 345.

Zimmerman, J. L. (1983). Taxes and firm size. *Journal of Accounting and Economics*, *5*, 119–149.