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Moderating Effect of Audit Committee Financial Expertise on Firm Attributes and Tax Planning Of Listed Consumer Goods Firms in Nigeria

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Abstract

This research explores the relationship between firm attributes and tax planning within listed consumer goods companies in Nigeria, with a specific focus on the moderating role of audit committee financial expertise. The study adopts an ex-post facto research design, drawing data from the annual reports of 16 selected firms out of the 21 listed on the Nigerian Exchange Group (NGX), chosen through a two-stage sampling technique. Descriptive and inferential statistics were utilised to analyse the data. The results indicate that profitability, firm size, board size, and board independence have a negative and insignificant impact on tax planning, while sales growth shows a positive but insignificant effect. Leverage was found to have a negative and significant impact on tax planning. The financial expertise of the audit committee has a positive but insignificant direct effect on tax planning. However, when audit committee financial expertise was considered as a moderating variable, the results altered: profitability, sales growth, and board size had a positive but insignificant relationship with tax planning; leverage had a positive and significant effect; and firm size showed a negative but significant effect. The study suggests that consumer goods companies should diversify their tax planning strategies, focus on long-term sustainability, maintain a prudent level of leverage to minimise tax liability, diversify their sources of finance, and ensure compliance with the requirements of the Companies and Allied Matters Act (CAMA) 2020 regarding the financial expertise of audit committees.

Keywords: **:** Firm Attributes, Tax planning, Audit committee

Introduction

Taxation is a key tool of fiscal policy for regulating any nation's economy. In Nigeria, the government has historically used tax policies to encourage industrial and corporate growth in the private sector (Nwaobia et al., 2016). Taxes are a fundamental and sustainable source of government revenue, representing mandatory contributions from the private sector, both individuals and corporations, towards governance, development projects, and social amenities for citizens' well-being. Thus, taxes are critical for funding government expenditures. Consequently, the government is expected to maximise tax collection effectively and encourage timely payments to sustain economic growth, given its responsibility for regulating and maintaining economic stability (Iriyadi et al., 2019). Additionally, there must be public awareness of the obligation to pay taxes, which will be achieved when citizens understand the role of taxation. Although taxes are a major source of government revenue, they can reduce a firm's profitability, as companies are

significant taxpayers (Mukti & Fajriah, 2022).

Cao and Xu (2019) observed that firms regard taxes on their income as a cost of doing business. Therefore, the income tax burden directly impacts a company's profits (Noor et al., 2019). As taxes reduce profits, companies strive to minimise their tax liabilities. The most common method for companies to reduce their tax burden is through tax planning. This can lead to conflicts of interest between companies and governments, as firms seek to minimise tax payments while the government aims to maximise tax revenue (Dewi & Noviari, 2017).

Various tax planning methods are used by organisations, such as investing in pension schemes, purchasing second-hand goods, and shopping during holidays in lower-tax countries (Iriyadi et al., 2019). Companies also use estimation techniques to inflate their expenses and allowances to reduce taxable income. The level of tax planning varies across companies; some firms have a greater tendency towards tax planning than others, which may be related to issues of economies of scale and complexity (Wahyuni et al., 2022). Taxation and tax policies in Nigeria can act as a disincentive for consumer goods firms, impacting their ability to create value for stakeholders and engage in effective tax planning (Gatsi et al., 2013). The success of listed consumer goods firms in Nigeria depends on effective tax planning and favourable firm attributes (Ishola et al., 2020). A firm's ability to plan and execute effective tax strategies is influenced by its attributes, such as profitability, sales growth, leverage, firm size, board size, and board independence.

Firm attributes refer to specific characteristics that differentiate one company from another. Shehu and Ahmed (2013) suggest that firm attributes are variables that influence a firm's decisions, often resulting from managerial choices. The performance of firms and the goal of maximising shareholder wealth depend on effective firm attributes, which are categorised into performance attributes (e.g., sales growth), company structure attributes (e.g., firm size), and board structure attributes (e.g., board size) (Ishola et al., 2020). Performance attributes are those that change over time and indicate a firm's performance, while company structure attributes are generally static over time (Naser et al., 2002, in Tanko, 2022).

Financial expertise within the audit committee is crucial for effectively fulfilling its responsibilities (Badolato et al., 2014). Audit committees with financial expertise are better equipped to identify gaps in tax regulations, enabling them to offer valuable opinions on tax planning (Puspita & Harto, 2014). According to Abbott and Parker (2000, in Widani and Bernawati, 2020), an audit committee with extensive financial expertise can make it difficult for management to manipulate financial reports due to the effectiveness of internal controls, thereby improving the audit function and reducing the risk of fraud and aggressive tax planning practices (Widani & Bernawati, 2020). Consequently, audit committee expertise can moderate the relationship between firm attributes and tax

planning in Nigeria's consumer goods sector.

Previous empirical studies have primarily focused on the direct relationship between firm attributes and tax planning without considering the moderating role of audit committee financial expertise. Section 404(5) of the Companies and Allied Matters Act (CAMA) 2020 mandates that all members of an audit committee must be financially literate, and at least one member must belong to a professional accounting body in Nigeria established by an Act of the National Assembly. The absence of studies moderating the relationship between firm attributes and tax planning with audit committee financial expertise, a legally mandated and crucial committee, highlights a gap in the literature.

The mixed results from previous studies leave policymakers, practitioners, managers, and researchers without a clear understanding of the factors influencing tax planning decisions within the consumer goods sector. Without insights into how specific firm attributes affect tax planning practices, there is limited guidance for firms seeking to optimise their tax strategies responsibly and compliantly. The gaps identified and the mixed results from prior studies underscore the need to introduce a moderating variable, extend the study period, and consider additional firm attributes to explore potential differences in the outcomes. Audit committee financial expertise was introduced as a moderating variable in this study to investigate the relationships between firm attributes and tax planning strategies within Nigeria's consumer goods sector.

Literature Review and Hypothesis Development

Profitability and Tax Planning

Profitability is a primary indicator of a business's financial health and success. It represents a company's ability to generate earnings relative to its expenses and investments. Profitable companies often have a higher propensity to engage in tax planning to reduce their tax liabilities, as higher profits typically result in increased tax obligations (Ogbeide, 2017; Kubick & Lockhart, 2016). According to Aghouei and Moradi (2015), the principal reason for firms engaging in tax planning is to enhance profitability.

Empirical studies have explored various aspects of the relationship between tax planning and profitability. For instance, Iriyadi et al. (2019) examined the effect of tax planning and asset utilisation on profitability, with good corporate governance as a moderating variable. Their study, which focused on manufacturing companies in Indonesia's consumer goods industry listed on the Indonesia Stock Exchange over a five-year period (2014–2018), adopted a quantitative statistics method, using multiple linear regression for data analysis. The findings indicated that tax planning significantly and positively affects profitability.

Another study from Indonesia by Mulyati et al. (2019) investigated the effect of profitability, leverage, and firm size on tax planning, collecting data from manufacturing companies in

the consumer goods industry listed on the Indonesia Stock Exchange over four years (2014–2017). Using a purposive sampling technique, the study selected ten companies and employed a quantitative approach. The analysis, conducted using multiple linear regression, revealed that profitability does not significantly affect tax planning. However, the study's small sample size and the limited period covered reduce the robustness of the findings.

Further, Zaro and Ely (2019) examined firm size, return on assets (ROA), and executive characteristics concerning tax planning in five listed companies on the Indonesia Stock Exchange. The study used panel data regression analysis on data obtained from the companies' annual reports. The results showed that profitability had a significant negative effect on tax planning, suggesting that higher profitability may reduce the extent to which firms engage in tax planning. This finding is consistent with a study by Ogbebor et al. (2019) on corporate attributes and tax planning in listed Nigerian companies, which found a positive but statistically insignificant relationship between profitability and tax planning. Similarly, a study by Adenola and Yusuf (2020) on company characteristics and tax planning in Nigerian listed insurance companies from 2010 to 2018 revealed that profitability negatively and significantly impacts tax planning.

In contrast, Dewi and Yasa (2020) provided empirical evidence on the effect of executive characteristics, profitability, leverage, capital intensity, and firm size on tax planning. Their research, conducted on manufacturing companies listed on the Indonesia Stock Exchange from 2016 to 2018, found that profitability positively affects tax planning. However, the short periods covered by these studies and their failure to incorporate moderating or mediating variables limit their findings.

Moreover, Sari et al. (2021) determined the relationship between leverage, profitability, company size, and tax planning in mining sector companies listed on the Indonesian Stock Exchange for the period 2014–2018. Their analysis showed that profitability has no effect on tax planning. Conversely, Ernawati et al. (2021), who analysed the effect of profitability, leverage, and firm size on tax planning through earnings management practices in manufacturing companies going public in Indonesia from 2013 to 2017, found that profitability significantly influences tax planning.

Thus, Wilyaka (2021) examined the effect of return on assets, sales growth, leverage, and capital intensity on tax planning in mining companies listed on the Indonesia Stock Exchange over four years (2017–2020). The study revealed that profitability significantly impacts tax planning. Similarly, Anna and Dian (2022) studied the relationship between profitability, firm size, and tax planning using 196 observations from financial sector companies in Indonesia, with data spanning 2019 to 2021. Their findings showed that profitability significantly affects tax planning. However, these studies' short duration and lack of application of pre- and post-estimation

tests to validate data robustness present limitations.

Furthermore, Mukti and Fajriah (2022) examined the effect of corporate risk, sales growth, and profitability on tax planning in food and beverage sub-sector companies listed on the IDX from 2018 to 2020, employing multiple linear regression analysis with SPSS. Their findings indicated that profitability does not significantly affect tax planning. The study's short period and the lack of moderating or mediating variables limit its distinctiveness from existing research.

Based on the above literature review, the following hypothesis is formulated:
H01: Profitability does not significantly affect tax planning.

Sales Growth and Tax Planning

Sales growth refers to the increase in a company's sales over a specified period. It plays a crucial role in managing working capital. Sales revenue is a key determinant of tax expense, as companies with higher sales may generate more profit, leading to a higher tax burden (Permata et al., 2018). Wilyaka (2021) investigated the effect of return on assets, sales growth, leverage, and capital intensity on tax planning in mining companies listed on the Indonesia Stock Exchange over four years (2017–2020). The study adopted a quantitative approach, with 47 companies in the mining sector as the population, and used purposive sampling to select 12 companies for observation. The data analysis, conducted using multiple linear regression with SPSS version 25, concluded that sales growth does not affect tax planning. However, the study's short duration and its focus outside the Nigerian context limit its applicability.

Similarly, Muti'ah and Ahmad (2021) analysed the effect of sales growth, Debt to Equity Ratio (DER), and related party transactions on tax planning using multiple linear regression in SPSS. The results indicated that sales growth negatively and significantly affects tax planning. The study, however, did not perform advanced tests such as normality tests, multicollinearity, or the Hausman test, reducing its reliability. The results align with Adejumo et al. (2022), who investigated the dynamic effect of firm size on tax planning using data from 17 purposively selected companies from 2012 to 2017. Sales growth was found to have a significant negative influence on tax planning. Nonetheless, the short period covered by the study and the absence of moderating variables limit its distinction from existing studies.

Furthermore, Siyanbola (2022) examined the effect of firm attributes on tax planning in selected firms in Nigeria using quantile regression to analyse secondary data from financial statements. The study found a positive effect of sales growth on the book-tax difference residual (BTDR). Conversely, Tanko et al. (2022) investigated the effect of firm growth on tax planning in listed manufacturing firms in Nigeria, analysing data from 35 companies using panel least squares regression. The results indicated a negative effect of sales growth on tax planning, suggesting that increased sales growth reduces tax planning. This finding is consistent with Mukti and

Fajriah (2022), who observed that sales growth has a negative but significant effect on tax planning in food and beverage sub-sector companies listed on the IDX from 2018 to 2020. However, the short duration of these studies and the lack of moderating or mediating variables limit their distinctiveness.

Additionally, Salsabila (2023) examined the effect of transfer pricing and sales growth on tax planning in listed trading companies from 2016 to 2021, adopting a quantitative and causality approach, with data processed through descriptive analysis and statistical models. Similarly, Maigoshi and Tanko (2023) and Tanko (2023) examined financial attributes and tax planning in listed manufacturing firms, with a focus on the moderating role of real earnings management. Both studies documented a negative effect of sales growth on tax planning, with findings showing that sales growth has a negative and insignificant effect on tax planning. However, these studies were conducted without applying pre- and post-estimation tests to validate data robustness.

Based on the above discussion, the following hypothesis is proposed:
H02: Sales growth does not significantly affect tax planning.

Leverage and Tax Planning

Leverage in finance refers to the use of various financial instruments or borrowed capital, such as loans or debt, to increase the potential return on an investment. It is the extent to which fixed-income securities, such as debt and preferred stock, are used in a company's capital structure (Latipah & Waluyo, 2019). The interest expenses arising from such debt can be used as deductions from taxable income, particularly when the loans are from third parties or creditors who do not have a direct relationship with the company (Wilyaka, 2021).

Empirical studies have examined the impact of leverage on tax planning. Mulyati et al. (2019) studied the effect of profitability, leverage, and firm size on tax planning in manufacturing companies in the consumer goods sector listed on the Indonesia Stock Exchange. The findings showed that leverage influences tax planning. However, the study did not apply pre- and post-estimation tests to validate the robustness of the data, limiting the reliability of the results. Additionally, the study did not incorporate moderating or mediating variables, making it less distinct from existing research.

Another study from Indonesia by Dewi and Yasa (2020) provided empirical evidence on the effect of executive characteristics, profitability, leverage, capital intensity, and firm size on tax planning. This research, conducted on manufacturing companies listed on the Indonesia Stock Exchange from 2016 to 2018, found that leverage negatively affects tax planning. Using a sample of four automotive sector manufacturing companies listed on the Indonesia Stock Exchange, Oktivina et al. (2020) examined the influence of profitability, leverage, company size, and institutional ownership, with board gender diversification as a moderating variable, on tax planning. The study, which employed a quantitative and

causal research method and collected secondary data from the financial statements of the sampled companies over eight years (2012–2019), revealed that leverage negatively affects tax planning. Similarly, Adenola and Yusuf (2020) examined the characteristics of companies and their tax planning in Nigerian listed insurance firms from 2010 to 2018, finding that leverage positively and significantly impacts tax planning. This finding is consistent with Sari et al. (2021), who explored the relationship between leverage, profitability, and company size on tax planning in mining sector companies listed on the Indonesian Stock Exchange from 2014 to 2018. Their analysis indicated that leverage affects tax planning.

Ernawati et al. (2021) analysed the effect of profitability, leverage, and firm size on tax planning through earnings management practices in manufacturing companies going public in Indonesia. Using a purposive sampling technique, the study sampled 66 manufacturing companies over five years (2013–2017). The research, which utilised secondary data from the companies' financial statements and employed descriptive analysis and linear regression analysis, found that leverage directly and significantly influences tax planning. This finding aligns with Wilyaka (2021), who studied the effect of return on assets, sales growth, leverage, and capital intensity on tax planning in mining companies listed on the Indonesia Stock Exchange over four years (2017–2020), revealing that leverage significantly impacts tax planning. However, the short periods covered by these studies' present limitations.

Conversely, Ezekwesili and Ezejiofor (2022) investigated the effect of leverage on the tax planning of Nigerian consumer goods firms using an ex-post facto research design. The study, covering nine financial years (2012–2020), analysed data using descriptive statistics and tested hypotheses with regression analysis via E-views 9.0. The results indicated that leverage does not significantly affect tax planning in Nigerian consumer goods firms. This contrasts with Mukti and Fajriah (2022), who analysed the effect of corporate risk, sales growth, and profitability on tax planning in food and beverage sub-sector companies listed on the IDX within the period of 2018–2020. Their findings showed that leverage has a positive and significant effect on tax planning. However, the short periods covered by these studies and the lack of moderating or mediating variables limit their distinctiveness from existing research.

Based on the above review, the following hypothesis is proposed:
H03: Leverage does not significantly affect tax planning.

Firm Size and Tax Planning

Firm size refers to the magnitude or scale of a business entity, often measured by various indicators such as revenue, assets, market capitalisation, or number of employees. Larger firms can achieve economies of scale via tax planning and may have the resources and incentives to decrease group tax liabilities (Khaoula et al., 2013). Large firms are often reported to have sufficient resources and better opportunities to undertake tax planning strategies, such as utilising available tax incentives.

Mulyati et al. (2019) examined the effect of profitability, leverage, and firm size on tax planning in manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange. The study found that firm size influences tax planning. However, the study did not apply pre- and post-estimation tests to validate the data's robustness, limiting the findings' reliability. Additionally, the study did not incorporate moderating or mediating variables, making it less distinct from other researches.

Similarly, Zaro and Ely (2019) examined firm size, ROA, and executive characteristics in relation to tax planning in five listed companies on the Indonesia Stock Exchange. The results showed that firm size does not affect tax planning. This finding contrasts with the study by Ogbebor et al. (2019), who examined corporate attributes and tax planning in listed Nigerian companies and found that firm size has a positive but statistically insignificant relationship with tax planning. On the other hand, Ba'aba and Bashiru (2019) found a negative and significant relationship between firm size and tax planning, concluding that corporate governance mechanisms significantly influence tax planning and that Nigerian manufacturing companies face higher tax charges compared to Malaysian food and beverage companies.

Dewi and Yasa (2020) also provided empirical evidence on the effect of executive characteristics, profitability, leverage, capital intensity, and firm size on tax planning. Conducted on manufacturing companies listed on the Indonesia Stock Exchange from 2016 to 2018, the study found that firm size positively affects tax planning. In contrast, Oktivina et al. (2020) examined the influence of profitability, leverage, firm size, and institutional ownership, moderated by board gender diversification, on tax planning. Their sample of four automotive sector manufacturing companies listed on the Indonesia Stock Exchange showed that firm size negatively affects tax planning. The short periods covered by these studies and their lack of pre- and post-estimation tests limit their robustness.

Further empirical analysis by Adenola and Yusuf (2020) explored company characteristics and tax planning in Nigerian listed insurance companies. The study assessed the impact of firm size, profitability, leverage, and firm age on tax planning using ex-post facto research design and data from the audited annual reports of 20 randomly selected listed insurance companies from 2010 to 2018. The model of the study was estimated using a two-step system generalised method of moments (GMM) panel model estimator. The findings revealed that firm size positively and significantly impacts tax planning.

Similarly, Sari et al. (2021) determined the relationship between leverage, profitability, firm size, and tax planning in mining sector companies listed on the Indonesian Stock Exchange from 2014 to 2018. The study employed descriptive and explanatory research methods, using financial reports from a total purposive sample of 21 companies in the mining

sector. The results showed that firm size affects tax planning. Ernawati et al. (2021) also analysed the effect of profitability, leverage, and firm size on tax planning through earnings management practices in manufacturing companies going public in Indonesia from 2013 to 2017, finding that firm size directly and significantly influences tax planning. The short periods covered by these studies and the absence of moderating or mediating variables limit their distinctiveness.

Adejumo et al. (2022) investigated the dynamic effect of firm size on tax planning, using the generalised method of moments (GMM) for data from 17 purposively selected companies from 2012 to 2017. The findings reveal that firm size has a significant positive effect on tax planning. However, the study did not apply pre- and post-estimation tests to validate the data's robustness, limiting the findings' reliability.

Based on the above discussion, the following hypothesis is formulated:
H04: Firm size does not significantly affect tax planning.

Board Size and Tax Planning

Board size refers to the total number of members on a company's board, including both executive and non-executive directors (Nauman, 2013). Many studies have established that board size has a positive and significant impact on tax planning, suggesting that larger boards are associated with higher tax payments. This could be attributed to agency issues where managers pursue their own interests, which may not align with those of shareholders. Such interests may lead to decisions that adversely impact tax liabilities, such as a preference for equity financing over debt financing within the company's capital structure (Salawu, 2019).

Onatuyeh and Odu (2019) examined the relationship between corporate board characteristics and tax planning. Their study sampled 49 manufacturing firms listed on the Nigerian Exchange Group from 2011 to 2016, employing a panel data regression approach. Based on the Hausman test, the study preferred the fixed effect model, revealing that board size had a negative and significant impact on tax planning in Nigerian manufacturing firms. However, the period covered by this study was relatively short.

Similarly, Ogbebor et al. (2019) investigated corporate attributes and tax planning in listed Nigerian companies, using data from 50 companies listed on the Nigerian Exchange Group (NGX) over six years (2012–2017). The study employed the Ordinary Least Squares (OLS) method to estimate the data, finding that board size had a positive and statistically significant relationship with tax planning. However, the study did not conduct pre- and post-estimation tests to validate the use of OLS.

Ba'aba and Bashiru (2019) also explored the impact of corporate governance attributes on tax planning in listed manufacturing companies in Nigeria and Malaysia. The study adopted a comparative and ex-post facto research design, utilising panel data from annual reports of listed

companies over five years (2014–2018). The results from the random effect estimation model indicated that board size positively correlates with tax planning. However, the study period was relatively short.

Peter et al. (2020) analysed the effects of board attributes on tax planning in listed non-financial companies in Nigeria. Their study found that board size has a non-significant positive effect on tax planning. Similarly, Michael and Udeh (2022) investigated the influence of corporate governance structure on tax planning in a study covering 35 manufacturing companies listed on the Nigerian Exchange Group from 2008 to 2018. The panel regression results showed that board size has a positive and significant effect on tax planning. However, these studies did not incorporate moderating or mediating variables, which limits their ability to differentiate from existing research.

Adejumo et al. (2022) also examined the dynamic effect of firm size on tax planning, using the Generalized Method of Moments (GMM) to analyse data from 17 purposively selected companies from 2012 to 2017. Their findings revealed that board size has no significant positive effect on tax planning. However, the sample size was small, and the period covered was not recent. Okoh and Ofor (2022) investigated corporate board attributes and tax planning in listed non-financial firms in Nigeria over a 10-year period (2012 to 2021), using an ex-post facto research design. The population consisted of 114 non-financial firms in Nigeria, from which a sample of 75 firms was selected using purposive sampling techniques. The data were analysed using panel least squares regression, and the results indicated that board size had a negative and insignificant effect on tax planning in listed non-financial firms in Nigeria.

Akhor and Inegbedion (2023) also examined board features and tax planning in listed manufacturing companies in Nigeria, covering ten years (2011 to 2020). The study employed descriptive statistics, a correlation matrix, and panel regression techniques as tools of analysis. The results revealed that board size was positively and insignificantly related to tax planning. However, these studies did not incorporate moderating or mediating variables, limiting their distinctiveness. Akims and Akims (2023) sought to examine the effect of board of directors' characteristics on corporate tax planning in manufacturing and allied firms listed on the Nairobi Securities Exchange, Kenya. The study found that board size had an insignificant negative effect on tax planning in these firms. The paper concluded that board independence is most important in predicting tax planning, as a board with greater independence would ensure better corporate tax planning.

Eguavoen et al. (2023) found that board size was positively and significantly related to tax planning in their study on board attributes and tax planning in corporate organisations in Nigeria. However, the study did not apply pre- and post-estimation tests to validate the data's robustness. Moreover, the studies did not incorporate moderating or mediating

variables, limiting their distinctiveness from existing research.

Based on the above review, the following hypothesis is formulated:
H05: Board size does not significantly affect tax planning.

Board Independence and Tax Planning

Board independence refers to the degree to which a company's board of directors comprises individuals who are not influenced by the management or shareholders. Non-executive directors, appointed from outside and without material interests in the firm, are considered independent directors. It can be argued that, unlike inside directors, outside directors are independent of the company's management and are therefore expected to perform their supervisory roles more effectively. Independent boards are also expected to be better positioned to manage a company's resources efficiently, including tax management, as they contribute to monitoring managers and, thus, may contribute to reducing the effective tax rate (ETR) due to more efficient tax burden management.

Aburajab et al. (2019) examined the relationship between board of directors' characteristics and tax planning, sampling 140 Jordanian firms over five years (2013 to 2017). Using regression analysis, the study found a negative relationship between board independence and tax planning. Similarly, Onatuyeh and Odu (2019) investigated the association between corporate board characteristics and tax planning, finding that board independence had a negative and significant impact on tax planning in Nigerian manufacturing firms.

Peter et al. (2020) analysed the effects of board attributes on tax planning in listed non-financial companies in Nigeria. Their quantitative research method involved collecting data from sampled companies over ten years (2008 to 2017). The data were analysed using descriptive statistics to summarise the variables and Pearson product-moment correlation to determine the relationships between dependent and independent variables. The study revealed that board independence has a significant negative effect on tax planning. However, the short periods covered by these studies, as well as the lack of moderating or mediating variables, limit their distinctiveness.

Salihu and Kawi (2021) explored the relationship between board attributes and corporate tax planning in Malaysia. Their quantitative approach involved data collection from 100 companies based on the FTSE tradable index, with panel data analysed using the system Generalized Methods of Moments (GMM). The analysis indicated that board independence had a positive and significant relationship with tax planning, while the interview responses suggested that board members have little influence on the company's tax management strategy. However, the study did not apply pre- and post-estimation tests to validate the data's robustness.

Michael and Udeh (2022) also investigated the influence of corporate governance structure on tax planning,

finding that board independence has a negative but significant impact, suggesting that increased board independence reduces tax planning. Okoh and Ofor (2022) found that board independence had a positive and significant effect on tax planning in listed non-financial firms in Nigeria. The study concluded that board attributes might have little impact on tax planning, as directors are not typically responsible for the firm's tax management strategy. Similarly, Akhor and Inegbedion (2023) examined board features and tax planning in listed manufacturing companies in Nigeria, finding that board independence was positively and significantly related to tax planning.

Akims and Akims (2023) examined the effect of board of directors' characteristics on corporate tax planning in manufacturing and allied firms listed on the Nairobi Securities Exchange, Kenya. The study covered nine companies over ten years (2010 to 2019) and used explanatory research design, with data analysed through descriptive and inferential analyses. The results indicated that board independence had a significant negative effect on tax planning in these firms. On the other hand, Eguavoen et al. (2023) investigated board attributes and tax planning in Nigerian corporate organisations, analysing data from 85 non-financial companies listed on the Nigerian Exchange Group over five years (2016 to 2020) using panel least squares regression. The results indicated that board independence was negatively and insignificantly related to tax planning.

Based on the above literature review, the following hypothesis is proposed:
H06: Board independence does not significantly affect tax planning.

Audit Committee Financial Expertise and Tax Planning

Audit committee financial expertise refers to the knowledge and skills possessed by members of a company's audit committee in areas such as accounting, finance, and auditing (Tanko & Siyanbola, 2019). This expertise is crucial for overseeing the integrity of financial statements, ensuring compliance with legal and regulatory requirements, and assessing the effectiveness of internal controls. When linking audit committee financial expertise to tax planning, such expertise ensures that tax strategies align with regulatory requirements and ethical standards. A knowledgeable audit committee can effectively scrutinise tax planning activities, ensuring they optimise tax benefits while mitigating risks of non-compliance and avoiding aggressive tax positions that could lead to legal and reputational issues.

Sylvester and Okoh (2022) investigated the impact of audit committee attributes on tax planning in listed non-financial firms in Nigeria. The population consisted of 114 non-financial firms in Nigeria, with a purposive sample of 75 firms selected based on data availability from 2012 to 2021. The study tested hypotheses using panel least squares regression and fixed-effect regression models, finding that audit committee financial expertise positively and significantly affects tax planning in listed non-financial firms in Nigeria. In a similar vein, Amelia and Anies (2021) examined audit quality

and tax avoidance, focusing on the role of independent commissioners and the financial expertise of the audit committee. The study, which sampled various companies, concluded that the financial expertise of the audit committee plays a significant role in tax planning, as these experts are better equipped to identify gaps and opportunities within the tax regulatory framework that can be leveraged for tax avoidance or planning purposes.

Further empirical evidence was provided by Ayuso and Argandoña (2017), who discussed responsible corporate governance and the stakeholder model of a board of directors. They argued that the presence of financial expertise within the audit committee enhances the board's capacity to oversee tax planning activities, ensuring that such activities are both compliant and aligned with broader corporate governance objectives. However, despite the positive effects identified in these studies, some research has suggested that the presence of financial expertise on audit committees does not always lead to significant changes in tax planning practices. For example, in the context of Nigerian companies, Adegbite and Bojuwon (2019) found that while audit committee financial expertise is crucial for broader financial oversight, its direct influence on tax planning strategies may be limited due to other prevailing factors such as corporate culture, managerial discretion, and external pressures.

Based on the discussion above, the following hypotheses are proposed:
H07: Audit committee financial expertise does not significantly affect tax planning.
H08: Audit committee financial expertise does not significantly moderate the effect of firm attributes on tax planning.

Research Method

The study adopted an ex-post facto research design, along with longitudinal and correlational designs. The ex-post facto design was chosen because the study evaluated how firm attributes and tax planning have impacted the consumer goods sector in Nigeria over time, using a 10-year period for analysis. This approach is appropriate given the panel nature of the data, and it allows for an investigation of the relationships between firm attributes and tax planning without manipulating any of the variables. The correlation design reflects the strength and direction of the relationships between variables. The study sample comprised 16 consumer goods firms listed on the Nigerian Exchange Group (NGX) out of the 21 firms, selected based on the availability of data and years of listing.

Table 1. Variables and their Measurements

Variables	Measurements	Source(s)
Tax planning (Dependent variable)	Residual of Book Tax Difference.	(Santana & Rezende, 2016; Siyanbola, 2022).
Profitability (Independent variable)	Profit Before Tax Divided by Total Assets.	(Rani et al., 2018: Dewi & Yasa2020).
Sales Growth (Independent variable)	Current Year Sales Minus Previous Year Sales Divided By Previous Year Sales.	(Siyanbola, 2022).

Leverage (Independent variable)	Short-Term And Long-Term Debt by Total Assets.	(Ernawati et al., 2019; Putra et al., 2020).
Firm Size (Independent variable)	Logarithm of Total Assets at the End of Each Financial Year.	(Tahir, 2017; Kartiningsih & Wardiyah, 2020).
Board Size (Independent variable)	Number of Directors on the Board, i.e Executive Plus Non-Executive Directors.	(Ogbeide & Obaretin,2018; Bala, 2019).
Board Independence (Independent variable)	The variable was measured by number of non-executive director of the board divided by the total number of the board members.	Salihu and Kawi (2021)
Audit Committee Financial Expertise (Moderating variable)	Number of Audit Committee Members with Accounting and Financial Skills Divide by the Total Number of Audit Committee Members	(Amelia & Anies, 2021).

Source: Researchers' Compilation, 2024

The study employed two techniques to analyse the data: descriptive statistics and inferential statistics. Descriptive statistics were used to compute summary statistics that describe the central tendency, normality, and variability of the data set. This approach helped describe both the dependent and independent variables, with the maximum, minimum, and mean values used to analyse the central tendency of the data set. Inferential statistics were then used to draw conclusions from the sample data and generalise these to the broader population.

To examine the effect of firm attributes on tax planning, multiple regression analysis was utilised. This served as the primary method for testing hypotheses regarding the relationships between firm attributes and tax planning (Sanni et al., 2020). Correlation analysis and Generalised Least Square (GLS) models were employed to examine the combined and individual effects of different variables, as well as to assess the interaction effect of audit committee financial expertise on the relationship between firm attributes and tax planning.

The general econometric models adopted for the study were modified from Ilaboya et al. (2017). The model is specified as follows:

$$BTDR = \beta0_{it} + \beta_1ROA_{it} + \beta_2SGW_{it} + \beta_3LEV_{it} + \beta_4FS_{it} + \beta_5BS_{it} + \beta_6BI_{it} + \varepsilon_{it} \quad \text{...i}$$

$$BTDR = \beta0_{it} + \beta_1ROA_{it} + \beta_2SGW_{it} + \beta_3LEV_{it} + \beta_4FS_{it} + \beta_5BS_{it} + \beta_6BI_{it} + \beta_7ACFX_{it} + \varepsilon_{it} \quad \text{...ii}$$

$$BTDR = \beta0_{it} + \beta_1ROA_{it} + \beta_2SGW_{it} + \beta_3LEV_{it} + \beta_4FS_{it} + \beta_5BS_{it} + \beta_6BI_{it} + \beta_7ACFX_{it} + \beta_8ROA_{it}{*}ACFX_{it} + \beta_9SGW_{it}{*}ACFX_{it} + \beta_{10}LEV_{it}{*}ACFX_{it} + \beta_{11}FS_{it}{*}ACFX_{it} + \beta_{12}BS_{it}{*}ACFX_{it} + \beta_{13}BI_{it}{*}ACFX_{it} + \varepsilon_{it} \quad \text{...iii}$$

Where:
BTDR = Book-tax difference residual
ROA = Return on assets
SGW = Sales growth
LEV = Leverage
FS = Firm size
BS = Board size

BI = Board independence
ACFX = Audit Committee Financial Expertise
i = firms (1–16)
t = Financial years (2013–2022)
β_0 = The intercept
β_1–13 = The slope coefficients of explanatory variables
* = interaction term
ε = Error term

Results and Discussions

Table 2 Descriptive Statistics

Variables	Observations	Mean	Std. Dev.	Minimum	Maximum
BTDR	160	0	0.1580	-1.8099	0.2039
ROA	160	0.0887	0.1912	-0.1920	2.0652
SGW	160	0.1323	0.3263	-0.9833	2.3019
LEV	160	0.1855	0.5605	0	6.8971
FS	160	7.7905	0.6595	6.1781	8.9168
BS	160	10.0875	2.5288	4	17
BI	160	0.5959	0.1826	0.2	0.9286
ACFX	160	0.1907	0.1251	0	0.5

Note: Stata 14 output based on data extracted from listed consumer goods firms from 2013-2022

Table 2 presents the calculated values for the mean, standard deviation, minimum, and maximum for each of the research variables for the 16 sampled listed consumer goods firms during the ten-year period of the study (2013–2022). The study included 160 firm-year observations for variables such as Book-Tax Difference Residual (BTDR), Return on Assets (ROA), Sales Growth (SGW), Leverage (LEV), Firm Size (FS), Board Size (BS), Board Independence (BI), and Audit Committee Financial Expertise (ACFX).

The mean of BTDR is 0, implying that, on average, there are no systematic opportunities for tax planning based on differences between book tax and actual tax values, with a standard deviation of 0.1580. This suggests significant variability around the mean, as indicated by the relatively high standard deviation. The maximum value of 0.2039 and the minimum value of -1.8099 further illustrate the wide dispersion of the data. For ROA, the average profitability for the listed consumer goods firms is 0.0887, indicating an average gain of 8.87%. The minimum value is -0.1920, representing a loss, while the maximum value is 2.0652, indicating a high profit margin for some firms. The standard deviation of 0.1912 suggests considerable variation in profitability among the sampled firms.

The mean value for SGW is 0.1323, showing that the sampled firms experienced an average sales growth of 13.23% during the period. However, the minimum value of -0.9833 indicates that some firms experienced a decline in sales growth, while the maximum value of 2.3019 suggests that others had significant sales growth. The standard deviation of 0.3263, which is higher than the mean, indicates wide variability in sales growth among the firms. Leverage (LEV) has a mean value of 0.1855, indicating that the sampled firms used about 19% debt to finance their operations, while the remaining 81% was financed by equity. The standard deviation of 0.5605, which is greater than the mean, points to wide variability in leverage among

the firms. The minimum value of 0 indicates some firms had no debt, while the maximum value of 6.8971 reflects high leverage in certain firms.

Firm Size (FS) has an average value of 7.7905, with a minimum of 6.1781 and a maximum of 8.9168. These values represent the logarithm of total assets. The standard deviation of 0.6595 indicates relatively low variability in firm size among the sampled firms. Board Size (BS) averages at 10.0875, with a minimum of 4 directors and a maximum of 17 directors. The standard deviation of 2.5288 suggests that there is some variability in the number of directors among the firms, although this variability is moderate compared to other variables.

Board Independence (BI) averages at 0.5959, indicating that, on average, 59.59% of the board members are independent. The minimum value is 0.2, and the maximum value is 0.9286. The standard deviation of 0.1826 suggests moderate variability in board independence across the sampled firms. Audit Committee Financial Expertise (ACFX) has a mean of 0.1907, indicating an average compliance of 19.07% with the regulatory requirement of having financial expertise among audit committee members. The minimum value is 0, while the maximum is 0.5, with a standard deviation of 0.1251, indicating some variability in the financial expertise of audit committees across the sampled firms.

Correlation Analysis

The correlation analysis examines the extent of relationships between the independent variables to test for multicollinearity. The correlation coefficients for the study variables are presented in Table 3.

Table 3 Correlation Matrix

VAR.	BTDR	ROA	SGW	LEV	FS	BS	BI	ACFX	VIF
BTDR	1.0000								
ROA	0.1800	1.0000							2.65
SGW	0.0109	0.1783	1.0000						2.46
LEV	0.2159	-0.0591	0.1933	1.0000					1.18
FS	-0.0002	0.1857	0.1291	0.1351	1.0000				1.14
BS	0.2586	-0.0630	0.0751	0.1141	0.1055	1.0000			1.06
BI	-0.2102	0.0377	0.0345	-0.1294	0.1516	0.0163	1.0000		1.03
ACFX	0.0549	0.0636	0.0365	0.1622	0.1094	-0.0974	-0.0014	1.0000	1.02

Note. Stata 14 output based on data extracted from listed consumer goods firms from 2013-2022

Table 3 shows the correlation coefficients between the dependent variable (BTDR) and the independent variables (ROA, SGW, LEV, FS, BS, BI, ACFX) in a correlation matrix obtained from the Spearman correlation coefficient. The choice of the Spearman correlation was due to the results from the Shapiro-Wilk normality test, which indicated that the data are not normally distributed. The table reveals a positive relationship between tax planning (BTDR) and profitability (ROA), sales growth (SGW), leverage (LEV), board size (BS), and audit committee financial expertise (ACFX) from 2013 to 2022, with correlation coefficients of 0.1800, 0.0109, 0.2159, 0.2586, and 0.0549, respectively. In contrast, firm size (FS) and board independence (BI) show a negative relationship with tax planning, with correlation coefficients of -0.0002 and -0.2102, respectively.

The low correlation coefficients between the independent variables indicate weak relationships, suggesting that these firm attributes, when considered in isolation, have a limited direct impact on tax planning activities. The positive coefficients suggest that increases in profitability, sales growth, leverage, board size, and audit committee financial expertise are associated with increases in tax planning. Conversely, increases in firm size and board independence are associated with decreases in tax planning. Additionally, the Variance Inflation Factor (VIF) values, all of which are below 10, indicate that multicollinearity is not a significant concern among the independent variables. The lowest VIF is 1.02 for audit committee financial expertise, and the highest VIF is 2.65 for profitability.

Regression Diagnostic Tests

Several diagnostic tests were conducted to ensure the validity and reliability of the regression models. These tests include the normality test, multicollinearity test, heteroscedasticity test, Hausman specification test, and the Breusch-Pagan Langrangian Multiplier test for random effects.

Normality of Residuals

The Shapiro-Wilk test and graphical tests were employed to validate the normality assumption of the Classical Linear Regression Model (CLRM) on the residuals obtained from the models. The Shapiro-Wilk test checks the hypothesis that the error term in the distribution is normally distributed.

Table 4 Shapiro-Wilk W test for normality Dependent Variable Residuals

Variable	Observation	W	V	Z	Prob>z
Model 1	160	0.98268	2.131	1.721	0.04266
Model 2	160	0.98371	2.004	1.581	0.05695
Model 3	160	0.97620	2.927	2.443	0.00728

Note. STATA 14.0 Output (2024)

Table 4 shows that the p-values for models 1 and 3 are significant at the 5% and 1% levels of significance, respectively, while the p-value for model 2 is insignificant. This indicates that the residuals of models 1 and 3 deviate from normality, but the residuals of model 2 are normally distributed. The deviation from normality in models 1 and 3 is minor and considered negligible. Therefore, the study concludes that the residuals are approximately normally distributed.

Multicollinearity

As shown in Table 3, the correlation coefficients and Variance Inflation Factor (VIF) values reveal the absence of harmful multicollinearity among the independent variables. The maximum VIF is 2.65 for Return on Assets (ROA), and the minimum VIF is 1.02 for Audit Committee Financial Expertise (ACFX). Additionally, the correlation matrix shows that none of the explanatory variables has a correlation of 0.8 or higher with another, further confirming the absence of multicollinearity.

Homoscedasticity of the Residuals

Homogeneity of variance (homoscedasticity) of the residuals is another assumption of the CLRM, meaning that the error variance should be consistent across all values of the independent variables. The Breusch-Pagan-Godfrey test was used to assess whether the research model met this assumption.

The results obtained from the Breusch-Pagan test for

heteroscedasticity shows a p-value of 0.0029, 0.0040, 0.0044 for model one, two and three respectively. These results indicate that the probability values for all models are significant at the 1% level, suggesting that the variance of the residuals is not constant across the models. To address the issue of heteroscedasticity, the study employed robust fixed effects for model 1, and robust random effects for models 2 and 3.

Hausman Specification Test

The Hausman Specification test was conducted to examine whether the unique errors in the models are correlated with the regressors, as the presence of endogeneity can cause the OLS estimators to fail. The Hausman Specification tests were applied to models 1, 2, and 3 to determine the more consistent estimator between the Panel Least Squares (PLS) fixed and random effects.

Table 5 Hausman Specification Test

Variable	Chi2	P-value
Model 1	15.53	0.0165
Model 2	13.53	0.0602
Model 3	12.83	0.4617

Note. STATA 14.0 Output (2024)

Table 5 indicates that the chi-square probability for model 1 is 0.0165, significant at the 5% level, suggesting that the unique errors are correlated with the regressors, indicating the need for a fixed effects model. However, the chi-square probabilities for models 2 and 3 are 0.0602 and 0.4617, respectively, which are insignificant, indicating that a random effects model is more appropriate for these models.

Breusch-Pagan Langrangian Multiplier Test for Random Effects

The Breusch-Pagan Langrangian Multiplier (BPLM) test for random effects was used to determine whether a random effects model is more suitable than an OLS model for models 2 and 3, given the Hausman results. Random effects suggest that the variation across entities is random and uncorrelated with the independent variables included in the model.

Table 6 Breusch-Pagan Langrangian Multiplier Test for Random Effects

Variable	Chibar2	P-value
Model 2	15.92	0.0000
Model 3	16.23	0.0000

Note. STATA 14.0 Output (2024)

Table 6 shows that the chi-square probabilities for both models 2 and 3 are 0.0000, which is significant. This supports the use of a random effects model over OLS for these models.

Table 7 Panel Regression Results

	Model one			Model two			Model three		
Variables	**Coef.**	**T**	**P>|t|**	**Coef.**	**z**	**p>/z/**	**Coef.**	**z**	**P>|z**
Constants	0.6796	1.70	0.110	0.1210	0.73	0.465	-0.2023	-1.15	0.249
ROA	-0.1185	-1.11	0.286	-0.0662	-0.84	0.402	-0.0654	-0.37	0.709
SGW	0.0394	1.57	0.137	0.0291	1.18	0.236	0.0153	0.54	0.586
LEV	-0.2206	-7.29	0.000	-0.2360	-12.01	0.000	-0.3651	-6.99	0.000
FS	-0.0697	-1.43	0.174	-0.0072	-0.37	0.713	0.0377	1.80	0.073
BS	-0.0031	-0.93	0.369	0.0023	0.77	0.439	0.0019	0.47	0.640
BI	-0.0990	-1.14	0.272	-0.0914	-1.73	0.084	-0.0960	-1.82	0.069
ACFX				0.0635	1.19	0.234	1.3421	1.68	0.092
ROA_ACFX							0.0290	0.04	0.972

SGW_ACFX					0.1539	0.86	0.387
LEV_ACFX					0.7571	2.50	0.012
FS_ACFX					-0.1922	-2.09	0.037
BS_ACFX					0.0122	1.06	0.291
BI_ACFX					-0.0450	-0.20	0.840
Overall R^2	0.6208		0.7509		0.7769		
Wald Chi2/F-Sta.	462.54	0.0000	3697.91	0.0000	25048.20		0.0000
Hausman	15.53	0.0165	13.53	0.0602	12.82		0.4617
LM chibar2			15.92	0.0000	16.23		0.0000
Hettest Chi2	8.86	0.0029	8.26	0.0040	8.10		0.0044

Note. Stata 14 output based on data extracted from listed consumer goods firms from 2013-2022.

Table 7 indicates that the R-square values for models one, two, and three are 0.6208, 0.7509, and 0.7769, respectively. The R-square, or coefficient of determination, represents the proportion of the dependent variable's variance explained by the independent variables in the regression model. In this instance, the R-square values of 0.6208, 0.7509, and 0.7769 suggest that approximately 62%, 75%, and 78% of the variance in the dependent variable can be accounted for by the independent and moderating variables (ROA, SGW, LEV, FS, BS, BI, ACFX and their interactions) in models one, two, and three, respectively. Moreover, the R-square values imply a moderate explanatory power (Hair et al., 2018). This indicates that factors beyond those included in the models are likely to influence the tax planning practices of listed consumer goods firms in Nigeria.

The R-square increased from 62.08% to 75.09%, and then to 77.69% in models one, two, and three, respectively. This increase suggests that the inclusion of audit committee financial expertise enhances the relationship between firm attributes and tax planning. Nevertheless, the variables within the model explain about 62.08%, 75.09%, and 77.69% of the variability in firm variables in models one, two, and three, respectively, with the remaining 37.92%, 24.91%, and 22.31% of variation attributed to other factors not captured in the study's models. Regarding the random effect, the Wald Chi-square test was employed to assess the significance of the coefficients in a random effects model. The Wald Chi-square values for models two and three are 3697.91 and 25048.20, respectively, whereas for the fixed effect, the F test value is 462.54 for model one. The probability values associated with these tests are 0.0000 across all three models, which is below the conventional threshold of 0.05. Therefore, the study concludes that there is statistically significant evidence that at least one of the independent variables significantly affects the tax planning of listed consumer goods firms in Nigeria.

Model One: Firm Attributes and Tax Planning

The results from model one shows a negative and statistically insignificant relationship between profitability and tax planning, with a coefficient of -0.1185 and a p-value of 0.286. This suggests that an increase in the profitability of the sampled firms may lead to ineffective tax planning strategies, thereby increasing the firm's tax liability and reducing overall profitability. Additionally, the -0.1185 coefficient implies that a one percentage point increase in profitability results in an 11.85% decrease in effective tax planning strategies for the sampled firms, although this is statistically insignificant, assuming other explanatory variables remain constant. This implies that firms with higher profitability may struggle with tax planning.

These findings support agency theory, which posits that managers may prioritise their own interests over those of shareholders, potentially leading to sub-optimal decisions regarding tax planning strategies. In such cases, managers might focus on increasing profitability without considering the implications of high tax liability. This study's findings are consistent with those of Mukti and Fajriah (2022), who found that profitability has a negative and insignificant effect on tax planning. However, the results contrast with the findings of Iriyadi et al. (2019), who reported a positive and significant effect of profitability on tax planning.

Table 7 also shows that sales growth has a positive but insignificant impact on tax planning, with a coefficient of 0.0394 and a p-value of 0.137. This indicates that as sales growth increases, the tax planning strategies of the sampled listed consumer goods firms in Nigeria also improve, although the influence may not be significant. This suggests that factors other than sales growth might have a more substantial impact on the tax planning strategies of firms in this sector.

These findings contradict Hoffman's tax planning theory, which advocates redirecting corporate returns to other investments rather than paying them as taxes to the government. Therefore, even with positive sales growth, if managers are more concerned with personal incentives or short-term performance, they may overlook long-term performance and diversification opportunities to reduce taxable income and engage in other tax planning strategies linked to sales growth. The study's findings align with Wilyaka (2021) but differ from those of Muti'ah and Ahmad (2021), who documented a negative but significant influence of sales growth on tax planning.

Furthermore, Table 7 presents the effect of leverage on tax planning, indicating a negative but significant impact at the 1% significance level, with a coefficient of -0.2206 and a p-value of 0.000. The negative and significant relationship suggests that firms in the consumer goods sector with high leverage are less likely to engage in aggressive tax planning strategies. This could be due to increased interest expenses reducing taxable income, thereby limiting the effectiveness of certain tax-saving techniques.

This finding does not align with Hoffman's tax planning theory, which advocates for redirecting corporate returns to investments rather than paying taxes. The sampled firms in the consumer goods sector may prioritise risk management, creditor concerns, and regulatory compliance over aggressive tax planning strategies in certain situations. This result is consistent with Ogbeide (2017), who documented a negative but significant effect of leverage on tax planning, though it contradicts the findings of Irianto et al. (2017).

Table 7 further reveals that firm size has a statistically insignificant negative impact on tax planning, with a coefficient of -0.0697 and a p-value of 0.174. This suggests that the size of the firm, measured by the natural logarithm of total assets, does not significantly influence tax planning activities. The result also indicates that a percentage increase in firm size leads to a 6.97% decrease in effective tax planning activities. This could imply that effective tax planning strategies are not necessarily associated with firm size, meaning that smaller firms may engage more aggressively in tax planning activities compared to larger firms, despite the latter's advantages in economies of scale, brand recognition, and resource access.

These findings challenge positive accounting theory and align with agency theory, which suggests that managers prioritise their own interests over those of shareholders, leading to suboptimal decisions regarding tax planning. In smaller firms, where ownership and management may be more closely aligned, managers may have less incentive to engage in aggressive tax planning compared to larger firms. Larger firms' managers, with greater incentives, may be more distracted, leading to less focus on aggressive tax planning activities. The negative and insignificant effect of firm size on tax planning may reflect a more conservative approach by managers to minimise potential risks and conflicts of interest. This finding supports Oktivina et al. (2020), who found a negative effect of firm size on tax planning, but contradicts the findings of Adejumo et al. (2022), which reported a positive impact of firm size on tax planning.

Table 7 also shows that board size has a statistically insignificant negative impact on tax planning, with a coefficient of -0.0031 and a p-value of 0.369. This suggests that an increase in board size by one percentage point leads to a 0.31% decrease in tax planning activities, though this decrease is statistically insignificant. Firms with larger boards may struggle to make strategic decisions regarding tax planning. This implies that other factors beyond board size may have a more significant impact on tax planning strategy formulation and implementation.

The negative and insignificant effect of board size on tax planning aligns with agency theory, which suggests that managers may prioritise their own interests over those of shareholders, leading to suboptimal decisions regarding tax planning. This theory explains why board size may not have a significant impact on tax planning activities, despite its potential role in governance, due to the complex interplay of managerial discretion and resource availability in shaping tax planning strategies and implementation. This finding is consistent with Okoh and Ofor (2022), who documented a negative effect of board size on tax planning, but it contrasts with the findings of Onatuyeh and Odu (2019), who reported a positive impact of board size on tax planning.

Table 7 also presents the effect of board independence on tax planning. The result, which tested the proportion of non-executive directors to total directors as a measure of board independence, shows a negative and insignificant effect on tax planning, with a coefficient of -0.0990 and a p-value of 0.272. The negative and insignificant relationship suggests that for each percentage point increase in board independence, tax planning activities decrease by 9.90%. While a higher level of board independence could lead to better-informed decisions free from management influence, the results in this model are statistically insignificant. This implies that a one percentage point increase in board independence, assuming other variables remain constant, would lead to poorer engagement in tax planning activities by the sampled firms.

This finding aligns with agency theory, indicating that if managers have significant influence over tax planning decisions, the independence of the board may not effectively mitigate agency problems related to tax planning within Nigeria's consumer goods firms. This finding is in line with Eguavoen et al. (2023), who documented a negative effect of board independence on tax planning, but it contradicts the findings of Akhor and Inegbedion (2023).

Model Two and Three: Firm Attributes, Audit Committee Financial Expertise, and Tax Planning

Table 7 shows that the coefficient for audit committee financial expertise is 0.0635 in model two, with a p-value of 0.234. This indicates that the direct relationship between audit committee financial expertise and tax planning is positive but insignificant. The positive and statistically insignificant relationship suggests that the committee might have limited focus on tax planning strategies and implementation. The Companies and Allied Matters Act (CAMA) 2020 stipulates that all audit committee members must be financially literate, meaning they should have knowledge, skills, experience, and/or an academic background in finance, with at least one member being a member of a professional accounting body in Nigeria (ICAN or ANAN). This requirement is designed to enable committee members to advise on and oversee financial matters, including tax activities. This finding is consistent with Sylvester and Okoh (2022), who reported a positive influence of audit committee financial expertise on tax planning.

In addition, model three (the moderated model) in Table 7 shows that the moderated ROA has a z-value of 0.04, a coefficient of 0.0290, and a p-value of 0.972, indicating an insignificant impact on tax planning. The moderated model reveals a positive relationship between profitability and tax planning, which differs from the negative relationship observed in model one (-0.1185). This suggests that audit committee financial expertise enhances the relationship between profitability and tax planning.

Table 7 also reveals that the moderated sales growth has a coefficient of 0.1539, a z-value of 0.86, and a p-value of 0.387. This indicates that the interaction between audit committee financial expertise and sales growth improves the relationship between sales growth and tax planning. Although sales growth had a positive but insignificant impact on tax planning in model one, the moderated model shows a stronger but still insignificant effect. This implies that higher variations in sales growth positively influence tax planning activities among the sampled listed consumer goods firms in Nigeria.

The results for moderated leverage show a coefficient of 0.7571 and a p-value of 0.012, indicating a positive and significant effect of leverage on tax planning at the 5% significance level. This moderated result contrasts with the negative relationship observed in model one (-0.2206), suggesting that the interaction with audit committee financial expertise strengthens the relationship between leverage and tax planning. This indicates that an increase in leverage leads to a corresponding increase in tax planning activities.

Table 7 also presents results for moderated firm size, with a z-value of -2.09 and a coefficient of -0.1922, having a significant p-value of 0.037 at the 5% significance level. This indicates that moderated firm size has a negative but significant effect on tax planning. The coefficient value increased from -0.0697 to -0.1922, transitioning from an insignificant to a significant relationship. This implies that audit committee financial expertise enhances the negative relationship between firm size and tax planning among listed consumer goods firms in Nigeria.

Furthermore, board size in the moderated model shows a coefficient of 0.0122, a z-value of 1.06, and a p-value of 0.291. The findings suggest that moderating board size with audit committee financial expertise results in

a positive but insignificant impact on tax planning. While the interaction between audit committee financial expertise and board size has improved the relationship between board size and tax planning, the effect remains insignificant. This indicates that moderating board size with audit committee financial expertise strengthens its relationship with tax planning, though the impact is still not statistically significant.

Board independence in the moderated model has a coefficient of -0.0450, a z-value of -0.20, and a p-value of 0.840, implying an insignificant negative effect on tax planning. Although the moderating effect strengthens the relationship, it remains insignificant. This indicates that a higher number of non-executive directors on the board results in a lesser impact on tax planning strategies and implementation for the sampled firms, though this effect is insignificant.

Conclusion and Recommendations

Despite the importance of profitability in assessing firm performance, other factors beyond financial performance play a more dominant role in influencing tax planning among listed consumer goods firms in Nigeria. Although sales growth reflects business expansion, its insignificant effect on tax planning highlights the complexity of tax planning strategies in this sector. Therefore, broader factors beyond sales growth should be considered to address tax planning issues in the consumer goods sector.

Highly leveraged firms tend to prioritise risk management and financial stability over tax planning activities. While larger firms may engage more in tax planning, firm size alone is not the primary factor influencing tax planning. A larger board might be associated with a slight increase in tax planning activities, but this factor alone is not decisive in tax planning strategies.

Board independence, a crucial component of corporate governance, may have limited impact on tax planning in this specific sector. Although audit committee financial expertise is a legal requirement, it is not the key driver of tax planning strategies and implementation among consumer goods firms in Nigeria. However, there is some indication that having a financially expert audit committee may contribute positively to tax planning efforts, though the effect is not strong enough to be deemed significant. Other unexamined factors might have a more substantial impact on tax planning decisions within these firms. The study concludes that audit committee financial expertise significantly affects the relationship between firm attributes and tax planning.

The study recommends that consumer goods firms diversify their tax planning strategies beyond profitability, exploring options such as tax credits, incentives, or restructuring operations to optimise their tax positions. Firms should ensure continuous sales growth, despite its insignificant direct impact on tax planning, and prioritise tax efficiency and compliance through regular reviews of tax positions, adherence to relevant tax laws, and streamlining tax processes for greater efficiency.

Finance officers should maintain a prudent level of leverage to minimise tax liability and diversify financing sources rather than relying solely on debt. Firms should conduct thorough risk assessments to identify potential risks related to leverage and tax planning, understanding the interplay

between financial leverage, tax planning, and business risks to inform strategic decision-making and mitigate negative outcomes. Developing risk management strategies to address potential tax-related risks, such as audits or changes in regulations, is essential, especially for larger firms, as firm size may still influence tax-related risks despite its insignificant effect on tax planning.

Firms should promote collaboration and communication between the board and management regarding tax planning initiatives. Encouraging open dialogue and information sharing ensures the board is well-informed about tax-related risks, opportunities, and strategies. Establishing clear reporting channels and involving the board in key tax planning decisions are crucial. Additionally, incorporating tax expertise within the audit committee and fostering cross-functional collaboration between finance, tax, and legal departments can enhance the effectiveness of the audit committee and ensure a comprehensive approach to tax planning.

Consumer goods firms should leverage the expertise of the audit committee to identify and mitigate tax-related risks associated with leverage. Developing tax planning strategies tailored to the scale and complexity of larger organisations may involve optimising transfer pricing arrangements, leveraging international tax treaties, or structuring operations to maximise tax efficiency. This approach addresses the unique tax planning needs and challenges faced by larger consumer goods firms compared to smaller ones.

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