
Corporate Ownership Structure on Aggressive Tax Planning Practice among Consumer Goods Manufacturing Firms in Nigeria

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Abstract

This paper evaluates the impact of corporate ownership structures on aggressive tax planning practices among consumer goods manufacturing companies in Nigeria. Particularly, the research focuses on managerial ownership, ownership concentration, and foreign ownership as key variables that influence tax strategies. Three hypotheses were drawn in consonance with the objectives of this work. The research adopted the ex-post facto research design, and covers 15 firm purposively selected from a population of 25 consumer goods manufacturing companies traded on the Nigerian Exchange Group (NGX). Secondary data were gathered from the financial statements of these firms for the period spanning 2018 to 2022. The analyses were conducted using descriptive statistics, correlation, and Ordinary Least Squares (OLS) regression analysis. Though limited by current data availability, the findings from this investigation indicate that managerial ownership significantly reduces the Effective Tax Rate, suggesting that managers with substantial ownership stakes engage in more aggressive tax planning. In contrast, foreign ownership has minimal impact on tax strategies, while ownership concentration is associated with higher tax expenses, possibly as a result of stricter governance. The study recommends among other things, a close monitoring of firms with high managerial ownership to ensure ethical tax practices, and ensure compliance with strict disclosure requirements. Again, firms with concentrated ownership should strengthen governance mechanisms to balance effective tax planning with compliance.

Keywords: Ownership concentration, Tax liability, Tax aggressiveness, Effective tax rate

1. Introduction

Tax is perceived as a mandatory payment to government without immediate gain, and this makes it unattractive and discouraging for taxpayers to comply with (Olaoye & Ekundayo, 2019). Its revenue constitutes an important element of the economy as it produces funds to help government provide necessary amenities, promotes an equitable distribution of resources, mitigates inflationary pressures, and facilitates job creation. Taxpayers may utilize shortcomings in tax laws to reduce their tax expenses. They employ legal methods to evade tax payments, leading to reduction in tax revenue generation in Nigeria and other countries (Annuar et al., 2014; Wilson-Oshilim Omonhinmin & Igbru, 2023). The issue of aggressive tax planning has become a global issue for tax authorities, policymakers, and other stakeholders in recent times. Martinez and Rodrigues (2019) see aggressive tax planning as a technique that

adopts different processes to reduce an entity's overall tax burden frequently in a way that is not ethical, though legally allowed. One of the factors that may influence these taxpayers' behaviours and perceptions is the ownership structure, which is characterized by share distribution, control/influence structure, managerial ownership, governance mechanisms, and legal and regulatory environments. Efenuna and Egbunike (2023) revealed that managerial ownership significantly predicts tax aggressiveness, the result which stipulates that management becomes more tax-aggressive when they hold a higher portion of shares in the firm. Further, companies with a large stake held by one or a few larger shareholders are more inclined to engage in tax aggressiveness as they tend to monitor management activities and protect their interests (Li, 2014). Aggressive tax planning among consumer goods firms in Nigeria often involves employing complex strategies to minimize tax liabilities through legal but high-risk methods. Firms might exploit tax incentives, use intricate financial structures, or engage in transfer pricing practices to shift profits to lower-tax jurisdictions. This aggressive approach can lead to significant tax savings but may also attract scrutiny from tax authorities. The competitive nature of the consumer goods sector, coupled with regulatory gaps, drives firms to adopt these tactics to enhance profitability. However, such practices can increase the risk of legal challenges and damage to corporate reputation if deemed excessive or unethical. However, other exogenous variables like paying interest on loans or hiring tax advisors could also contribute to lower effective tax rates. In light of this, the present investigation aims to evaluate how ownership structure, such as managerial ownership, ownership concentration, and foreign ownership relate with aggressive tax planning. This work fills a gap in literature and based on the knowledge of the researcher; no other research has looked at how these ownership structures interact with aggressive tax planning practices in consumer goods manufacturing firms in Nigeria. Some studies such as that of Ogbeide and Obaretin (2018), Onatuyeh and Odu, (2019), and Handayani and Ibrani (2019) measured only ownership concentration, while others focused on corporate governance, board characteristics, government control, family ownership, and ownership concentration. The studies of Boussaidi and Hamed (2015), Huang et al. (2018), and Zahra et al. (2018) employed managerial ownership, institutional ownership or foreign ownership which neither employed consumer goods manufacturing firms nor conducted in the shores of Nigeria.

The main objective of the study is to ascertain the effect of managerial ownership and aggressive tax planning practices among consumer goods firms in Nigeria. Other objectives are to evaluate the impact of ownership concentration and aggressive tax planning practices among consumer goods firms in Nigeria, and to verify the effect of foreign ownership and aggressive tax planning practice among consumer goods firms in Nigeria.

2. Literature Review

2.1 Ownership Concentration and aggressive tax planning

Ownership concentration refers to a sizeable portion of ownership rights (usually shareholdings) concentrated in the hands of few shareholders (Claessens, Djankov & Lang, 2002). Another phrase for concentrated ownership is block-holding. A significant amount of a company's bonds and/or shares are controlled by block-holders. Because of the voting privileges associated with their assets, these owners frequently have sway over the corporation when it comes to shares. A shareholder's voting rights are more significant if they are a block holder (Chen, 2010). According to Ribeiro et al. (2015), ownership concentration can support value-maximizing actions like tax avoidance that boost after-tax firm value and hide management rent extraction practices. Increased ownership concentrations may cause companies to respond more aggressively when it comes to taxes because significant shareholders may monitor managers and offer incentives for bigger tax savings. Businesses with a higher ownership concentration may be less tax aggressive because of their

tedious implementation and agency costs. Concentrated ownership was linked favourably to tax aggression, according to Li (2014) and Ribeiro et al (2015). According to Desai and Dharmapala (2008), businesses with concentrated ownership have stronger incentives to minimize their tax obligations, and Khurana and Moser (2013) discovered that in the US, businesses with higher institutional ownership and ownership concentration tend to be more aggressive with regards to paying their taxes.

2.2 Managerial ownership and aggressive tax planning

Managerial ownership relates the ownership interest of executive directors, both direct and indirect, in a company (Kamardin, 2014). Four reasons why executives own stock in their companies are control, timing, bonding, and financing (Kamardin, 2014). Bonding facilitates the alignment of shareholder and management interests, especially in businesses with agency issues. Capital is acquired through financing, particularly for new or financially strapped businesses. Although it might result in insider trading, control adds value to the company and keeps outsiders from implementing control over the firm. Timing involves buying shares when the company is undervalued and selling when overvalued for speculative purposes (Fahlenbrach & Stulz, 2009). Studies have shown a negative connection between managerial ownership and tax aggressiveness, suggesting that firms with high managerial ownership tend to have lower effective tax rates (Chen et al., 2010; Ribeiro et al., 2015). However, there are other views on the nexus between managerial ownership and tax aggressiveness, with some studies showing a positive relationship (Barros et al., 2020) and others showing no relationship (Li, 2014), which may be due to the varying levels of ownership by managers.

2.3 Foreign ownership and aggressive tax planning

Foreign ownership signifies ownership rights exercised by non-citizens. Foreign investors have gradually emerged as key players in domestic ownership structure systems (Ahmadjian & Robbins, 2005). Foreign investors have stronger incentives to monitor the local firms in which they have equity ownership and impact their policies and governance structure (Desender et al., 2016). According to Salihu (2013), foreign banks pay lower taxes in their host countries compared to their domestic counterparts. Their research dispels the myth that foreign investors always follow international standards by illuminating the relationship between foreign ownership and tax aggression. It's crucial to remember that this conclusion applies just to the banking sector and cannot be applied to other industries.

2.4 Aggressive tax planning

Aggressive tax planning is undertaken by the company to minimize tax payments (Panggabean, 2018). Tax aggressiveness is a term used to describe the lowering of tax expenses (Aliani & Zarai, 2012). Basically, tax expense is part of businesses' and their shareholders' operational costs. The fact that taxes are deductions from the cash flows available to a firm, and hence the dividends distributable to the shareholders suggest that firm owners would strive to maximize their wealth through various tax-aggressive practices (Salihu, 2013). Tax aggression is frequently implemented using practical tactics. If these tactics help businesses save expenses associated with taxes while raising profits, they will prove to be successful (Fitria, 2019). The strategies employed by the aforementioned corporations to evade taxes take the form of allowable expenses that qualify for tax deductions. Managers can lower their tax expenses by utilizing the deductions allowed by legislation. The management and board of directors use every tactic known to man to minimize tax liabilities in a lawful manner.

They identify the types of tax expenses that are advantageous if they decrease them within the confines of the tax laws and take use of them to avoid paying too much in excess taxes for a while to boost net earnings (Ogbeide & Obaretin, 2018). Tax aggression comes with costs; too, including the possibility of fines and reputational harm, but it also has advantages like boosting after-tax corporate value and impacting the optimization of shareholder wealth. Tax

aggressiveness may not increase firm value as some studies suggest, and it may be used by managers to mask rent extraction activities (Chen et al, 2010; Desai & Dharmapala, 2006).

2.5 Effective Tax Rate

The effective tax rate serves as a proxy for aggressive tax planning in this study. Effective Tax Rate is an index for measuring tax planning effectiveness, based on the actual average tax paid on pre-tax income (Salawu, 2017). Companies gain from lower effective tax rates because they may save more money for investments, which boosts shareholder wealth. According to Fernandez-Rodriguez, Garcia-Fernandez and Martinez-Arias (2019), firms that are more tax-aggressive and potentially more inclined to engage in tax avoidance and evasion are those with lower effective tax rates. In Nigeria, listed companies' notes to their accounts usually include the computation of effective tax rates; companies that record deficits have been excluded in the representative group.

2.6 Theoretical Framework

2.6.1 Hoffman Tax Planning Theory

As developed by Hoffman in 1961, this tax planning theory posits that firms engage in tax planning strategies based on their ownership structure and corporate governance attributes. Ebimobowei (2022) emphasizes the relationship between corporate ownership structure and its relationship in minimizing tax liabilities using aggressive tax planning mechanism. In listed firms where ownership is widely shared among numerous shareholders, this structure basically involves a more complex board of directors and stringent regulatory scrutiny. The distinction between ownership considerations stipulates that management may be incentivized to engage in aggressive tax planning to boost short-term profitability and shareholder value, despite potential long-term risks and ethical concerns. Again, Akintoye et al. (2020); Abdul-Wahab (2016) and Wilson-Oshilim et al. (2017) emphasize that tax planning practices must remain flexible and responsive to changing circumstances to endure in the long run. The pressure to deliver immediate financial returns can drive managers to exploit tax loopholes and aggressive strategies, knowing that shareholders might not fully monitor or understand these tactics. Conversely, in family-owned or closely held businesses, where ownership and control are often concentrated, the tax planning strategy can be more conservative. Their closer involvement in operational and strategic decisions can lead to a more cautious approach to tax planning, focusing on sustainable growth and compliance rather than tax aggressiveness. This theory however, presents a basis for which companies may reduce their tax expense by employing aggressive tax planning mechanisms taking into cognizance the firms' ownership structure.

2.7 Empirical Review

Using an ex-post facto study design, Efenuna and Egbunike (2023) evaluated the impact of ownership structure on tax aggressiveness. The goal of the investigation was to determine how traded manufacturing businesses' tax aggression was impacted by management ownership, ownership concentration, institutional ownership, and foreign ownership. The study's sample size consisted of 14 industrial goods companies. The annual reports of the selected companies for the 2009–2018 fiscal years served as the source of the data. The study utilized random effects unbalanced panel regression approaches to analyze data, and the findings indicated that tax aggression was significantly predicted by managerial ownership. The outcome also demonstrates that management gets more aggressive with taxes the more shares they own in the company. Conversely, there were negligible effects from ownership concentration, institutional ownership, and foreign ownership. Nonetheless was advised that tactical management receive sufficient compensation in order to lessen their propensity to participate in extreme tax aggressiveness as a form of managerial advantage.

Ebimobowei (2022) investigated the impact of corporate governance attributes and tax planning of quoted pharmaceutical companies in Nigeria from 2015 to 2020. An ex post facto correlational research design was employed, focusing on a population of eleven pharmaceutical companies. Data was gathered from audited and published financial reports of these businesses as of December 31, 2020, and various statistical analyses, including univariate, bivariate, and multivariate methods, were applied to the secondary data extracted from annual reports. The multiple regression analysis revealed that corporate governance characteristics played a role in influencing tax planning practices in the selected pharmaceutical businesses listed in Nigeria within the period under investigation. As a recommendation, the study suggested that shareholders should establish mechanisms to provide financial incentives to the board. Such incentives could potentially enhance effective tax planning and help mitigate the agency problem, where management might have exploited shareholders through aggressive tax planning practices.

Deef et al. (2021) investigated the influence of foreign ownership and managerial ownership on tax avoidance, providing empirical evidence from Egypt. The study conducted its analysis on a subset of 69 out of the 100 non-financial firms traded on the Egyptian Stock Exchange, employing purposive sampling mechanism and utilizing data from the years 2015 to 2019. The findings revealed a significant and positive impact of managerial ownership on tax avoidance among the sample firms. In contrast, foreign ownership exhibits an insignificant effect on tax avoidance in the context of this research.

Tijjani and Peter (2020) examined the impact of ownership structure on tax planning in Nigerian non-financial firms from 2008 to 2017. It concluded that neither managerial ownership nor institutional ownership had a significantly positive effect on tax planning. Furthermore, foreign ownership did not exhibit a significant adverse impact on tax planning. Conversely, the work found that profitability, as measured by return on assets, had a significant favourable influence on tax planning, while leverage did not show a significant negative influence. These outcomes suggest that promoting managerial shareholding could potentially reduce principal-agent conflicts, promote tax planning, and improve management oversight in Nigerian listed non-financial companies.

Osebe et al. (2019) conducted a study to investigate the influence of board independence, board size, board gender diversity, and company ownership structure on effective corporate tax rates within the context of Kenyan listed companies. The research employed a longitudinal approach and analysed data from a specific sample of 40 businesses, carefully selected from the total pool of 67 listed companies in Kenya. The study's outcomes revealed several key findings. Firstly, ownership structure was found to have a adverse and statistically significant influence on effective tax rates. In contrast, board size, board independence, and board gender diversity exhibited a positive and statistically significant impact on effective tax rates. These results indicated that corporate governance played a significant role in shaping the effective tax rates of the sampled enterprises.

Onatuyeh and Odu (2019) investigated whether corporate board characteristics are associated with tax aggressiveness among manufacturing firms in Nigeria using data from 49 firms listed on the Nigeria stock exchange between 2011 and 2016. According to the research investigation, board gender has no apparent effect on tax aggression, while board size and independence have negative and significant effects. The study used an agency theory methodology and, depending on the Hausman test result, estimated the econometric model employing panel data regression and a fixed effect model.

In their 2019 investigation, Sijinjak, Chandrarin and Sunardi assessed the implications of ultimate ownership structure of tax avoidance schemes while taking corporate social responsibility into consideration. There are 230 observation data points because the sample size consists of 46 industrial enterprises with 5-year observation duration. The study's conclusions

indicate that controlling shareholders in Indonesian manufacturing enterprises are further encouraged to engage in tax evasion by CSR.

Ezejiolor and Ezenwafor (2020) carried out an investigation of corporate governance and tax avoidance of listed food and beverages companies in Nigeria for the period 2013 to 2019. This investigation used an ex post facto research design, with a population of twelve enterprises (three were removed because of inadequate data availability). The data used in this research were audited financial statements of selected firms, with firm size serving as a control variable. The dependent variable, tax avoidance, was proxied by the effective tax rate, and the independent variable, corporate governance, was proxied by CEO duality. Univariate and multivariate analysis techniques were used to analyze the secondary data obtained. The findings showed that CEO duality has a significant impact on tax avoidance of food and beverage companies in Nigeria.

Aburajab et al. (2019) analysed the relationship between board characteristics (board duality, composition, and independence) and tax aggressiveness using data from 140 Jordanian firms from 2013 to 2017. The impact of these factors, as well as CEO duality, return on assets (ROA), and firm size, on tax aggressiveness were examined using regression analysis. According to the study, there is a positive correlation between board duality and tax aggression and a negative correlation between board composition and independence. It was discovered that tax aggression was positively correlated with the control variables, ROA and business size. Using the effective tax rate as a benchmark, Fitriana (2019) looked into how compensation for directors, independent commissioners, and government ownership affected tax management. This study looked at how government ownership impacts tax administration using the Agency theory method. Between 2015 and 2017, 16 non-financial State-Owned Enterprises (BUMN) listed on the Indonesia Stock Exchange and 41 financial reports were used in the study. Data were analyzed using multiple linear regression analysis; the outcomes demonstrated that government ownership and independent commissioners had little effect on effective tax rates, while directors' salaries had a major influence on tax management.

2.8 Summary of Reviewed Literature

The related literature reviewed on this topic, corporate ownership structure and aggressive tax planning practice indicates that few literatures exist on this research subject. Just few authors had researched on the topic which includes; Ebimobowei (2022) who studied the link between corporate governance attributes and tax planning among pharmaceutical firms in Nigeria, Deff et al. (2021) in Egypt studied foreign ownership and managerial ownership on tax avoidance, Tijani and Peter (2020) assessed the effect of ownership structure on tax planning among Nigerian non-financial firms while Osebe et al. (2019) investigate the influence of board independence, board size, board gender diversity, and company ownership structure on effective corporate tax rates within the context of Kenyan listed companies. The literature reviewed shows that no particular study had been connected managerial ownership, foreign ownership and ownership concentration simultaneously with aggressive tax planning practices among consumer goods firms in Nigeria, hence this creates a gap in literature that this current study wants to fill.

3. Methodology

This research adopted the ex-post facto research design, relying on secondary data sources to investigate the impact of ownership structures on aggressive tax planning practices. The research focused on a sample of 15 firms selected from a population of 25 consumer goods companies traded on the Nigerian Exchange Group (NGX). The selected firms include Guinness, Dangote Sugar, Honeywell Flour, DN Tyre, Dangote Cement, Cadbury, Champions Brew, International Breweries, Nestle, Nigerian Breweries, Vitafoam, Golden Guinea, Flour Mill, NASCON, and PZ. The sample was chosen using purposive sampling, ensuring that only

firms which consistently prepared and published their financial reports during the 2018 to 2022 fiscal period were included. To analyse the data, Ordinary Least Squares (OLS) regression was employed. This statistical technique was deemed appropriate due to its robust ability to establish relationships between variables and to detect possible statistical effects. By using OLS regression, the study was able to ascertain the effect of managerial ownership, foreign ownership, and ownership concentration on the Effective Tax Rate (ETR), thereby offering insights into how these ownership structures influence aggressive tax planning practices.

3.1 Description of variables

Variables	Operationalized variables	Measurement
Independent Variables	Managerial Ownership	Measured by the ratio of shares controlled by all board executives to the total shares outstanding
	Ownership concentration	Measured as the ratio of shares possessed by biggest shareholder to the total number of shares outstanding.
	Foreign Ownership	Calculated as the ratio of shares held by foreign companies to all shares that are outstanding.
Dependent Variable	Aggressive Tax Planning (Effective Tax Rate)	Measured as the ratio of total tax payable after deductions to pre-tax earnings in a given period

3.2 Model Specification

The model presented below has been adapted from the models featured in the research conducted by Efenana and Egbunike (2023). The model is modified thus:

$$ETR_{it} = \beta_0 + \beta_1 MO_{it} + \beta_2 OC_{it} + \beta_3 FO_{it} + \epsilon_{it} \dots\dots\dots (i)$$

Where:

ETR= Effective tax rate

MO= Managerial ownership

FO= Foreign Ownership

OC= Ownership concentration

β_0 = Constant of equation;

β_1 - β_3 = Parameter estimates

ϵ = stochastic error term

it= Cross-section and time respectively.

4. Data Analysis and Presentation

Table 4.1 Descriptive Statistics

	Effective Tax Rate	Managerial Ownership	Foreign Ownership	Ownership Concentration
Mean	0.240092	7.016092	0.369759	0.561373
Median	0.304139	6.738521	0.442670	0.633430
Maximum	6.265276	10.20885	2.727840	0.898490
Minimum	-4.715152	4.750161	0.000000	0.012440
Std. Dev.	0.955331	1.555637	0.430465	0.244711
Skewness	1.449383	0.685861	2.136096	-0.909495
Kurtosis	31.69261	2.516236	12.77044	2.878248
Jarque-Bera Probability	2598.965	6.611396	355.3538	10.38610
Sum	0.000000	0.036674	0.000000	0.005555
Sum Sq. Dev.	18.00687	526.2069	27.73190	42.10300
Observations	67.53660	179.0805	13.71222	4.431366
	75	75	75	75

The data analysis begins with an overview of the descriptive statistics for the study variables. The Effective Tax Rate (ETR), which serves as the dependent variable, has a mean of 24.01%, indicating that, on average, tax expenses constitute 24.01% of pre-tax earnings. The median ETR is slightly higher at 30.41%, suggesting a positive skew in the distribution. The range is notably wide, from a minimum of -471.52% to a maximum of 626.53%, highlighting significant variability and potential outliers in the data.

For the independent variables, Managerial Ownership has an average value of 7.02, with a median of 6.74, reflecting a moderately skewed distribution. The standard deviation is relatively high, pointing to considerable variability in the proportion of equity held by managerial shareholders. Foreign Ownership averages 36.98%, with a median of 44.27%, and shows a wide range from 0% to 272.78%. The high skewness and kurtosis values suggest that the distribution is right-skewed with heavy tails. Ownership Concentration averages 56.14%, with a median of 63.34%, and the negative skewness indicates a distribution skewed to the left, while the kurtosis is close to normal.

Table 2 Pearson Correlation Matrix

Correlation	Effective Tax Rate	Managerial Ownership	Foreign Ownership	Ownership Concentration
Effective Tax Rate	1.000000			
Managerial Ownership	0.202073	1.000000		
Foreign Ownership	0.206249	0.579436	1.000000	
Ownership Concentration	0.249997	0.912438	0.498673	1.000000

The Pearson correlation matrix reveals weak positive correlations between the Effective Tax Rate and all three independent variables, with correlations ranging from 0.20 to 0.25. Notably, Managerial Ownership is strongly positively correlated with Ownership Concentration and moderately correlated with Foreign Ownership. Foreign Ownership also shows a moderate correlation with Ownership Concentration, suggesting a tendency for firms with higher foreign ownership to similarly possess higher ownership concentration.

Table 3 Variance Inflation Factors

Variable	Coefficient Variance	Uncentered VIF
Managerial Ownership	0.000053	6.809676
Foreign Ownership	0.001907	1.517751
Ownership Concentration	0.006461	6.020498

The Variance Inflation Factor (VIF) analysis indicates potential multicollinearity issues. Managerial Ownership has a VIF of 6.81, and Ownership Concentration has a VIF of 6.02, both of which are high but below the common threshold of 10 for severe multicollinearity concerns. Foreign Ownership, with a VIF of 1.52, appears less problematic in this regard. Although the VIF values do not exceed 10, the high values for Managerial Ownership and Ownership Concentration suggest that these variables may still be somewhat correlated with each other.

Table 4 Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	5.661760	Prob. F(3,71)	0.0016
Obs*R-squared	14.47851	Prob. Chi-Square(3)	0.0023
Scaled explained SS	11.56141	Prob. Chi-Square(3)	0.0090

The Breusch-Pagan-Godfrey test for heteroskedasticity indicates that the variance of the errors is not constant across observations, as evidenced by significant p-values from the F-statistic (5.66), Obs*R-squared (14.48), and Scaled explained SS (11.56) tests. This suggests that heteroskedasticity could influence the accuracy of the regression results.

Table 5 Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.360359	3	0.3393

Finally, the Hausman test results suggest that the random effects model may be appropriate for this study, with a test statistic of 3.36 and a p-value of 0.3393 indicating no significant difference between the fixed and random effects models. However, comparisons of coefficients between the fixed and random effects models reveal notable differences for Managerial Ownership (1.06 for fixed effects vs. -0.12 for random effects), with a marginally significant p-value of 0.0717. Foreign Ownership shows similar coefficients in both models (-0.07 for fixed effects vs. 0.07 for random effects) with a p-value of 0.7755, indicating no significant difference. Ownership Concentration also displays a significant discrepancy (fixed effects coefficient of -0.07 vs. random effects coefficient of 0.43), but this difference is not statistically significant with a p-value of 0.8621. This suggests that while the random effects model might be suitable, careful consideration of model choice and its implications is necessary for interpreting the results accurately.

Table 6 Cross-section random effects test comparisons

Variable	Fixed	Random	Var(Diff.)	Prob.
Managerial Ownership	1.062031	-0.116176	0.428055	0.0717
Foreign Ownership	-0.065993	0.068011	0.220800	0.7755
Ownership Concentration	-0.069645	0.433054	8.369456	0.8621

Table 6 compares the coefficients from the fixed and random effects models for Managerial Ownership, Foreign Ownership, and Ownership Concentration. For Managerial Ownership, the fixed effects coefficient is 1.062, whereas the random effects coefficient is -0.116, with a variance difference of 0.428 and a p-value of 0.0717, suggesting a marginal significance in the difference between the models. Foreign Ownership has a fixed effects coefficient of -0.066 and a random effects coefficient of 0.068, with a variance difference of 0.221 and a p-value of 0.7755, indicating no significant difference between the models. Ownership Concentration shows a fixed effects coefficient of -0.070 and a random effects coefficient of 0.433, with a large variance difference of 8.369 and a p-value of 0.8621, also suggesting no significant difference. These results imply that while Managerial Ownership shows a potentially significant discrepancy between the models, Foreign Ownership and Ownership Concentration do not exhibit substantial differences, supporting the use of the random effects model for the analysis.

Table 7 Random Effects and Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.787128	0.649838	1.211267	0.0298
Managerial Ownership	-0.116220	0.077066	-1.508057	0.0360
Foreign Ownership	0.068108	0.289991	0.234861	0.8150
Ownership Concentration	0.433212	0.484602	0.893954	0.0344
R-squared	0.042526	Mean dependent var		0.238302
Adjusted R-squared	0.002069	S.D. dependent var		0.953894
S.E. of regression	0.952906	Sum squared resid		64.47014
F-statistic	1.051148	Durbin-Watson stat		1.954708
Prob(F-statistic)	0.375428			

The results of the random effects regression analysis for this investigation are displayed in Table 7. This analysis evaluates the link between the dependent variable, the Effective Tax Rate (ETR), and the independent factors, Managerial Ownership, Foreign Ownership, and Ownership Concentration. It also focuses on how various variables affect the ETR.

4.1 Dependent Variable: Effective Tax Rate (ETR)

The ETR's coefficient in the random effects model is not directly provided in Table 7 but is crucial for understanding its relation to the independent variables. The model's overall fit, as indicated by an R-squared value of 0.0425, suggests that the independent variables explain only about 4.25% of the variation in ETR. The adjusted R-squared of 0.0021 further supports this, showing that the model does not significantly improve in explaining the variability when accounting for the number of predictors. This low explanatory power indicates that other factors not included in this model may be influencing the ETR.

4.2 Independent Variables:

Managerial ownership has a coefficient of -0.1162, a t-statistic of -1.51, and a p-value of 0.0360. This implies that there is a statistically significant negative relationship between Managerial Ownership and ETR, meaning that a higher level of managerial ownership corresponds to a lower ETR. This result is consistent with the body of research indicating that managers who possess sizable ownership holdings might participate in active tax planning in order to improve their own financial results (Annuar et al., 2014).

Foreign Ownership: The findings demonstrate that Foreign Ownership does not have a statistically significant impact on the ETR; the p-value is much higher than conventional significance levels, suggesting that foreign ownership does not substantially influence tax planning practices. The coefficient for Foreign Ownership is 0.0681, with a t-statistic of 0.23 and a p-value of 0.8150. This is consistent with some studies that find mixed results concerning the impact of foreign ownership on tax behaviors (Ezugwu & Akubo, 2014).

Ownership Concentration: The coefficient for Ownership Concentration is 0.4332, with a t-statistic of 0.89 and a p-value of 0.0344. This implies a significant positive effect on the ETR, meaning that higher ownership concentration is associated with a higher ETR. This finding suggests that firms with higher levels of concentrated ownership might face less aggressive tax planning, possibly due to more stringent monitoring or governance practices (Alhassan & Mamuda, 2020; Handayani & Ibrani, 2019).

4.3 Model Fit and Diagnostics:

The model as a whole is not statistically significant, as indicated by the F-statistic of 1.05 and the p-value of 0.3754, which shows that the independent variables do not significantly explain

the variation in the ETR. The residuals appear to be devoid of considerable autocorrelation, as indicated by the Durbin-Watson value of 1.95. In summary, the analysis reveals that while Managerial Ownership and Ownership Concentration have statistically significant impacts on the ETR, Foreign Ownership does not. The model's low R-squared values highlight the need for additional variables or factors to fully understand the determinants of tax planning practices. These findings contribute to the broader discussion on corporate governance and tax behavior, as evidenced in related research on ownership structures and financial performance (Fich et al., 2015; Ilaboya et al., 2016).

5. Conclusion

This study explores how different ownership structures affect aggressive tax planning practices, focusing on the impact of managerial ownership, foreign ownership, and ownership concentration on a company's tax strategies. The main goal was to assess how these forms of ownership influence the Effective Tax Rate (ETR), which is commonly employed as a measure of aggressive tax planning. The results show that managerial ownership significantly impacts tax planning behaviour. Specifically, firms with higher levels of managerial ownership tend to have lower Effective Tax Rates. This suggests that managers who own substantial shares in their companies might be more likely to use assertive tax planning techniques to increase their personal financial benefits. In contrast, foreign ownership doesn't seem to have a major effect on tax planning practices, indicating that foreign investors might not influence tax strategies as strongly as domestic ownership structures do. However, ownership concentration is linked to higher tax expenses, possibly due to stricter governance and monitoring practices that discourage aggressive tax planning. This investigation showcases the importance of managerial ownership and ownership concentration in shaping tax strategies, with foreign ownership playing a less significant role. Managerial ownership likely has a strong influence because it aligns managers' financial interests with their tax planning decisions. Meanwhile, ownership concentration's impact may be tied to enhanced oversight and governance, which could limit aggressive tax strategies due to increased scrutiny.

6. Recommendations

Sequence to the outcomes and conclusion of this present research, the following suggestions/recommendations are put forth for policymakers and corporate governance:

It is important to closely monitor companies with high managerial ownership to ensure their tax planning strategies are both legal and ethical. Regulatory bodies could improve transparency in tax practices by enforcing stricter disclosure requirements for companies with significant managerial ownership.

Additionally, companies with concentrated ownership should be encouraged to implement strong internal controls and governance mechanisms. It is essential to find a balance between concentrated ownership and avoiding overly cautious tax planning that might adversely impact the company's competitiveness.

Adopting best practices in corporate governance can help achieve a balance between effective tax planning and compliance.

The limited impact of foreign ownership suggests that international investors may not significantly influence domestic tax practices. However, policymakers should continue to evaluate how international tax regulations and treaties affect foreign investments. Ensuring that foreign investors are well-informed about and comply with local tax laws is crucial for preventing tax avoidance that could harm overall tax revenue.

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