Tax Avoidance and Cost of Capital of Listed Manufacturing Companies in Nigeria: The Moderating Effect of Ownership Structure

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ABSTRACT

This study investigates the impact of tax avoidance (measured by effective tax rate, book-tax difference, and cash tax rate) on the cost of capital, proxied by cost of equity, cost of debt, and weighted average cost of capital (WACC), of listed manufacturing companies in Nigeria. It further explores the moderating role of ownership structure (institutional, managerial, and concentrated ownership) within the agency and information asymmetry frameworks. Using a sample of 41 listed manufacturing firms over 2011–2022, the study employed descriptive statistics, correlation, and panel corrected standard error (PCSE) regression analyses. Findings reveal that tax avoidance significantly increases the cost of capital, implying that firms engaging more in tax avoidance face higher financing costs. Institutional ownership showed a positive but insignificant relationship with cost of capital, while managerial and concentrated ownership significantly increased cost of debt and WACC, but negatively and insignificantly affected cost of equity. After moderation, ownership structure demonstrated a significant moderating effect on the link between tax avoidance and cost of capital. The study concludes that tax avoidance meaningfully impacts financing costs of Nigerian manufacturing companies and that ownership structure further shapes this relationship. It recommends that firms adopt balanced tax management strategies to optimize tax savings while maintaining competitive financing costs. Companies should also assess their ownership structures in relation to financing outcomes. Additionally, regulatory bodies such as the Securities and Exchange Commission (SEC) and Federal Inland Revenue Service (FIRS) should enforce transparency and governance standards. Strong corporate governance and disclosure practices are essential to reduce risks tied to tax avoidance and sustain investor and creditor confidence.

Keywords : Tax Avoidance, Cost of Capital, Cost of Equity, Cost of Debt, Ownership Structure,

INTRODUCTION

In recent years, corporate tax avoidance has emerged as a significant concern for stakeholders, policymakers, and academics due to its implications on firm performance, financial transparency, and capital costs. Tax avoidance, defined as the legal utilization of the tax regime to reduce tax liabilities, affects government revenue while shaping how investors and creditors assess a firm's financial health and risk exposure (Desai & Dharmapala, 2006). Firms that aggressively avoid taxes may be perceived as engaging in opaque financial practices, which could increase their risk profile and raise their cost of capital (Chen et al., 2010). This is particularly critical in developing economies like Nigeria, where weak regulatory frameworks and limited investor protection heighten the consequences of tax-related decisions.

The cost of capital comprising cost of equity (COE), cost of debt (COD), and the weighted average cost of capital (WACC) is a vital metric for investment decision-making, as it reflects the return required by investors and lenders to finance a firm's operations (Brigham & Ehrhardt, 2013). Prior studies have shown that tax avoidance strategies may influence a firm's cost of capital, though findings remain inconclusive. While some argue that tax savings lower financing costs (Hasan et al., 2014), others contend that the uncertainty and risks

associated with tax avoidance increase capital costs due to higher perceived risk (Hutchens & Rego, 2015; Goh et al., 2016).

Ownership structure has been identified as a key governance mechanism influencing managerial behavior, including financial and tax-related decisions. Different forms of ownership such as institutional, managerial, and concentrated ownership exert varying degrees of control over management, thereby shaping strategic choices like tax planning and financing (Jensen & Meckling, 1976; Shleifer & Vishny, 1997). For instance, managerial ownership may align managers' interests with those of shareholders, encouraging prudent tax practices and reducing risk premiums (Morck et al., 1988). Conversely, concentrated ownership might encourage aggressive tax strategies that elevate risk and cost of capital. According to La Porta, Lopez-de-Silanes, and Shleifer (1999), ownership structure plays a crucial role in corporate governance, influencing firm policies, performance, and outcomes.

In Nigeria, the manufacturing sector plays a central role in economic development by contributing significantly to GDP and employment. However, firms in the sector face challenges such as high financing costs, weak tax enforcement, and a volatile regulatory environment. These conditions raise pressing concerns about how tax avoidance affects firms' access to capital and the extent to which ownership structures moderate this relationship. While most prior studies have focused on advanced economies with stronger regulatory systems, evidence from developing contexts like Nigeria remains limited. This gap creates uncertainty for investors, policymakers, and managers regarding how governance mechanisms interact with tax planning strategies to influence firm financing outcomes.

Therefore, this study seeks to examine the moderating effect of ownership structure on the relationship between corporate tax avoidance and the cost of capital of listed manufacturing firms in Nigeria. Specifically, it investigates (i) the impact of tax avoidance on the cost of capital (COE, COD, and WACC), (ii) the influence of ownership structure on the cost of capital, and (iii) the moderating role of ownership structure in the tax avoidance cost of capital nexus. The study is anchored on agency theory and information asymmetry theory, which provide insights into how governance mechanisms shape managerial incentives and external perceptions in the capital market (Fama & Jensen, 1983; Myers & Majluf, 1984).

Empirical Literature Review

S/N	Author(s)	Title/Focus	Methodology	Findings	Recommendation	Brief Critique
1	Rego & Wilson (2011)	Corporate tax aggressiveness and equity risk	Regression (S&P 500/400, 2007–2009), 3 tax avoidance proxies	Higher tax risk linked to higher equity risk	Firms should reduce tax aggressiveness to manage risk	Very short study period; focused only on US firms
2	Koester (2011)	Valuation of uncertain tax positions	Cross-sectional valuation regression (Ohlson model), S&P 500 (2007–2009)	Investors positively value uncertain tax avoidance; tax-related liabilities treated uniquely	Improve tax transparency to enhance investor perception	Limited to uncertain tax positions and short timeframe
3	Goh et al. (2013)	Tax avoidance and cost of equity in	Cross-sectional regression (1993–2010), 3 tax	Tax avoidance reduces cost of equity; positive perception for firms with external	Encourage strategic tax planning with strong	Limited to Singapore firms; applicability to other regions may

		Singapore	avoidance measures	monitoring	governance	vary
4	Hutchens & Rego (2015)	Tax risk and implied cost of equity	Regression (North American firms, 2007–2011); 3 tax risk proxies	Tax aggressiveness increases cost of equity due to future cash flow uncertainty	Firms should limit risky tax strategies	Study is aged; lacks recent data beyond 2011
5	Sikes & Verracchia (2014)	Externalities of tax avoidance	Theoretical economic model based on Lambert et al. (2007)	Broad tax avoidance raises cost of equity across firms in the economy	Adopt moderate tax strategies to reduce systemic risk	Focus is theoretical; lacks real-world empirical backing
6	Cook et al. (2015)	Tax avoidance and ex-ante cost of equity	Regression (27,438 US firm-year obs.)	Nonlinear relationship: low tax avoidance lowers COE; high tax avoidance raises COE	Coordinate tax avoidance with investor expectations	Ignores tax governance structures; only U.S. firms analyzed
7	Goh et al. (2016)	Aggressive tax planning and cost of equity	Regression using various proxies including UTBs	Tax avoidance lowers cost of equity; stronger effects for firms with better monitoring	Promote external monitoring and info quality	Inconsistent results for aggressive planning proxies
8	Sikes & Verracchia (2016)	Aggregate tax avoidance and cost of capital	Aggregate-level analysis (Compustat US, 1988–2007)	Higher tax avoidance increases cost of capital	Encourage balanced tax planning at macro level	May not generalize to smaller or developing economies
9	Pulido & Barros (2017)	Tax avoidance and ex-ante cost in Europe	Panel regression (24 countries, 2005–2014)	Ex-ante cost of capital falls as avoidance increases	Leverage tax advantages but disclose transparently	Context-specific to Europe; may not apply to African economies
10	Darke et al. (2017)	Tax risk, investor valuation, and firm value	Panel regression (US firms, 1992–2014); cash ETR SD used	Positive link: tax avoidance & firm value; tax risk reduces value	Manage tax risk to enhance firm value	Results may differ in developing economies like Nigeria
11	Igbinovia & Ekwueme (2018)	Corporate tax avoidance, agency cost & returns	OLS regression, panel data (2010–2016), 54 Nigerian firms	Tax avoidance impacts returns; agency cost moderates relationship	Extend sample and timeframe	Small sample; not recent
12	Manafova (2018)	Tax avoidance & ex-ante equity cost	Global firms (2005–2015), 32,386 obs	No significant relationship found	Use more homogeneous samples	Diverse environments, not comparable

| 13 | Heitzman & Ogneve (2019) | Industry tax planning and stock returns | US firms (1991–2014), OLS cross-sectional regressions | Industry planning boosts returns; firm-specific planning increases cost | Explore sectoral variance | U.S.-specific |
14	Chun et al. (2019)	Cross-country tax avoidance & equity cost	17 countries (2005–2015), regression	Avoidance raises equity cost in weak investor protection countries	Improve proxies used	Results not generalizable
15	Sikes & Verracchia (2020)	Tax avoidance & implied capital cost	US firms (1988–2018), implied cost from stock & cash flows	Positive link between avoidance and cost	Replicate in African context	U.S. context may not apply
16	Dewiyanti & Burhan (2020)	Tax avoidance and accruals on equity cost	Indonesia (2012–2016), manufacturing firms	Avoidance increases equity cost	Extend to other industries	Narrow sector, short period
17	Lim (2011)	Tax avoidance and cost of debt in Korea	Korean firms, regression on institutional ownership	Avoidance lowers debt cost; institutional ownership mitigates agency rent	Apply model to African countries	Country-specific context
18	Utkir (2012)	Tax avoidance and cost of debt	Malaysia (2005–2009), BTD proxy	Avoidance reduces debt cost; no moderating effect from institutional ownership	Update data and methods	Outdated findings
19	Masri & Martani (2014)	Tax avoidance, family ownership & debt cost	Indonesia (2008–2010), manufacturing firms	Avoidance raises debt cost (risky behavior)	Use real creditor interest rates	Short timeframe; limited industry
20	Shin & Woo (2017)	Tax avoidance and debt capital in Korea	4,050 Korean firms (2001–2013), multivariate regression	Positive link to debt cost; reduced by high debt ratio or profitability	Investigate profitability further	Context-specific findings

Source : Authors Draft
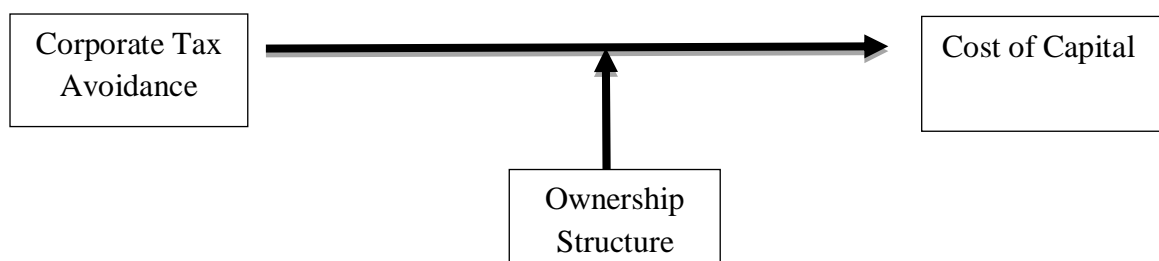
Figure 1: Conceptual Framework

METHODOLOGY

Research Design

This study adopts a descriptive and explanatory research design within the framework of the positivist paradigm. The descriptive design helps to provide a systematic and factual account of the practices of tax avoidance, cost of capital, and ownership structure among listed manufacturing firms in Nigeria. The explanatory aspect of the design enables the researcher to go beyond description and measure the relationships and interactions among variables. The positivist paradigm, which relies on an objective and empirical view of reality, aligns well with this quantitative research. It supports the use of observable data and systematic methodologies to explain the relationships under study.

Population of the Study

The population of the study consists of seventy-five (75) manufacturing companies listed on the Nigerian Exchange Group (NGX) as of December 31, 2022. These companies operate across eight sub-sectors of the Nigerian manufacturing industry: agriculture, conglomerates, construction, consumer goods, industrial goods, natural resources, oil and gas, and healthcare. These firms represent a broad base of the Nigerian industrial landscape, making the study's findings more generalizable across the manufacturing sector.

Sample Size and Sampling Technique

The study employed a purposive sampling technique, guided by a three-point filter to select firms that meet specific inclusion criteria. First, selected firms must have published financial statements for the entire study period (2008–2022). Second, only firms with complete data during the period are included. Third, the firm must have remained listed on the NGX throughout the study period without being delisted. As a result, 41 companies met the criteria and were retained in the final sample. This approach ensures the availability of reliable and consistent data over the study horizon.

Table 3.1 Sample Size of the Study

S/N	Sector	Number of Companies	Sample Size	Removed
1.	Agriculture	5	2	3
2.	Conglomerates	5	3	2
3.	Construction	7	2	5
4.	Consumer Goods	20	14	6
5.	Industrial Goods	16	8	8
6.	Natural Resources	4	3	1
7.	Oil and Gas	9	5	4
8.	Health Care	8	4	4
	Total	**74**	**41**	**33**

Source: Generated by the Researcher 2025.

Measurement of Variables

The study includes dependent, independent, moderating, and control variables. The dependent variable, cost of capital, is measured using three proxies: Cost of Debt (COD), Cost of Equity (COE), and Weighted Average Cost of Capital (WACC). COD is calculated as interest expense over average total debt; COE is derived using the Fama and French 3-factor model, and WACC is computed by averaging the costs of debt and equity capital.

The independent variable, tax avoidance, is measured using three indicators: Effective Tax Rate (ETR), Book-Tax Difference (BTD), and Cash Tax Rate (CTR). ETR is computed as tax paid over pre-tax income; BTD is the difference between financial income and estimated taxable income; CTR is the ratio of cash taxes paid to operating cash flow.

The moderating variable, ownership structure, is captured through three dimensions: institutional ownership (percentage of shares held by institutional investors), managerial ownership (shares held by managers), and concentrated ownership (shares held by the largest shareholders). In addition, the study controls for several firm-specific variables that may influence cost of capital, including firm size, firm age, leverage, return on assets (ROA), and tangibility.

Model Specification

To analyze the relationships among the study variables, the research applies Baron and Kenny's moderation framework, which involves three paths. First, the direct effect of tax avoidance on cost of capital (Path a) is estimated using multiple regression models. Second, the direct effect of ownership structure on cost of capital (Path b) is assessed. Third, the study introduces interaction terms to capture the moderating effect of ownership structure on the relationship between tax avoidance and cost of capital (Path c). Each of these paths is examined using separate regression models for each proxy of cost of capital (COE, COD, and WACC), resulting in a total of nine models.

Based on the functional relationship and building on the empirical models of Goh et al. (2016) and Ghelichi et al. (2017), this study adopts a structured regression approach to examine the effect of tax avoidance on cost of capital and the moderating role of ownership structure. Three modeling stages are applied, consistent with Baron and Kenny's (1986) moderation framework.

Path a estimates the direct effect of tax avoidance on the cost of capital:

$$COC_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 BTD_{it} + \beta_3 CTR_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 SIZE_{it} + \beta_7 AGE_{it} + \beta_8 TANG_{it} + \mu_{it} \ldots\ldots\ldots (i)$$

Path b captures the direct effect of ownership structure on cost of capital:

$$COC_{it} = \beta_0 + \beta_1 OWNSTR_{it} + \beta_2 ROA_{it} + \beta_3 LEV_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \beta_6 TANG_{it} + \mu_{it} \ldots\ldots (ii)$$

Path c introduces the interaction between tax avoidance and ownership structure, to assess moderation:

$$COC_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 BTD_{it} + \beta_3 CTR_{it} + \beta_4 OWNSTR_{it} + \beta_5 ETR\,OWNSTR + \beta_6 BTD\,OWNSTR + \beta_7 CTR*OWNSTR + \beta_8 ROA_{it} + \beta_9 LEV_{it} + \beta_{10} SIZE_{it} + \beta_{11} AGE_{it} + \beta_{12} TANG_{it} + \mu_{it} \ldots\ldots (iii)$$

Where:
COC_{it} = Cost of capital; ETR = Effective tax rate; BTD = Book-tax difference; CTR = Cash tax rate; OWNSTR = Ownership structure; ROA = Return on Assets; LEV_{it} = Leverage; $SIZE_{it}$ = Firm size; AGE_{it} = Firm age; $TANG_{it}$ = Tangibility; μ_{it} = Error term; β = Coefficients.

Given that cost of capital is proxied by COE, COD, and WACC, models (i)–(iii) are adapted into:

Models 1–3 (Direct effects of tax avoidance):

$$Coa_t / COD_{it} / WACC_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 BTD_{it} + \beta_3 CTR_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 SIZE_{it} + \beta_7 AGE_{it} + \beta_8 TANG_{it} + \mu_{it} \ldots\ldots (1–3)$$

Models 4–6 introduce ownership structure (ISOWN, MGROWN, CONOWN) to assess its effect on cost of capital:

$$COE_{it} / COD_{it} / WACC_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 BTD_{it} + \beta_3 CTR_{it} + \beta_4 ISOWN_{it} + \beta_5 MGROWN_{it} + \beta_6 CONOWN_{it} + controls + \mu_{it} \ldots\ldots (4\text{–}6)$$

Models 7–9 test for moderating effects by incorporating interaction terms between each tax avoidance measure and each ownership structure proxy:

Model 7 (ISOWN moderation):

$$COE/COD/WACC_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 BTD_{it} + \beta_3 CTR_{it} + \beta_4 ISOWN_{it} + \beta_5 ETR ISOWN + \beta_6 BTD ISOWN + \beta_7 CTR*ISOWN + controls + \mu_{it}$$

Model 8 (MGROWN moderation):

$$COE/COD/WACC_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 BTD_{it} + \beta_3 CTR_{it} + \beta_4 MGROWN_{it} + \beta_5 ETR MGROWN + \beta_6 BTD MGROWN + \beta_7 CTR*MGROWN + controls + \mu_{it}$$

Model 9 (CONOWN moderation):

$$COE/COD/WACC_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 BTD_{it} + \beta_3 CTR_{it} + \beta_4 CONOWN_{it} + \beta_5 ETR CONOWN + \beta_6 BTD CONOWN + \beta_7 CTR*CONOWN + controls + \mu_{it}$$

Each model includes firm-specific control variables (ROA, LEV, SIZE, AGE, TANG), and panel regression techniques are applied across 41 listed Nigerian manufacturing firms between 2008 and 2022.

Estimation Techniques

The study employs a variety of quantitative analysis techniques. First, descriptive statistics are used to summarize the variables using mean, median, standard deviation, minimum, and maximum values. Next, a correlation analysis is conducted to identify the nature and strength of relationships between variables and to detect potential multicollinearity. Finally, multiple regression analysis is employed using panel data methodology, which is suitable given the data's cross-sectional and time-series structure. This method allows for an in-depth examination of the direct, indirect, and moderating effects among the study's variables. The statistical significance of the regression coefficients is evaluated using t-statistics and p-values, which guide hypothesis testing and interpretation of results.

Result Analysis

Descriptive Statistics

The study adopts a structured empirical framework to examine the relationship between tax avoidance and cost of capital, and the moderating effect of ownership structure. The modeling approach draws on the work of Goh et al. (2016) and Ghelichi et al. (2017), using a three-step regression path to test direct and interaction effects. The models are structured following Baron and Kenny's (1986) approach to moderation analysis.

The first model (Path a) assesses the direct impact of tax avoidance on the cost of capital using three proxies: Effective Tax Rate (ETR), Book-Tax Difference (BTD), and Cash Tax Rate (CTR). The second model (Path b) evaluates the direct effect of ownership structure on the cost of capital, while the third model (Path c) introduces interaction terms to determine whether ownership structure moderates the relationship between tax avoidance and cost of capital. Key control variables across all models include firm profitability (ROA), leverage (LEV), size, age, and asset tangibility (TANG).

Table 4.1 Descriptive Statistics

Variable	Obs.	Mean	Std. Dev	Min	Max	Skewness	Kurtosis
COE	492	0.2816	0.2091	0	0.9874	0.0000	0.0013

COD	492	0.1209	0.1158	0	0.9300	0.0000	0.0000
WACC	492	0.2010	0.1191	0.01	0.68	0.0000	0.0066
ETR	492	0.1159	0.1342	-.02	0.62	0.0000	0.0012
BTD	492	0.0507	0.0476	0	0.3	0.0000	0.0000
CTR	492	0.0273	0.1497	-0.39	0.40	0.1944	0.0052
INSOWN	492	0.3610	0.2667	0	0.8828	0.4683	0.0038
MGROWN	492	0.0890	0.1772	0	0.7330	0.0000	0.0000
CONOWN	492	0.29886	0.2865	0	0.9200	0.0058	0.0000
SIZE	492	10.2116	0.7997	7.7515	11.7897	0.3570	0.0002
AGE	492	34.4532	13.4543	2	62	0.0000	0.0785
LEV	492	0.1713	0.1873	0	0.86	0.0000	0.0000
ROA	492	0.0723	0.1506	-0.52	0.80	0.0592	0.0000
TANG	492	0.3975	0.2321	0.08	0.7636	0.1209	0.0000

Source: STATA Outputs Based on Data Generated (2025)

To enhance the robustness of the analysis, the cost of capital is measured using three proxies: Cost of Equity (COE), Cost of Debt (COD), and Weighted Average Cost of Capital (WACC). Models 1 to 3 examine the direct influence of tax avoidance on each of these proxies. Models 4 to 6 extend the base models by incorporating ownership structure components—Institutional Ownership (ISOWN), Managerial Ownership (MGROWN), and Concentrated Ownership (CONOWN) to assess their individual effects on cost of capital.

Finally, models 7 to 9 are developed to capture the interaction effects between tax avoidance measures and each ownership structure proxy. These models help determine whether ownership structure significantly alters the relationship between tax avoidance and cost of capital. The study applies these models to a panel dataset of 41 listed Nigerian manufacturing firms over the period 2008–2022, with all models including relevant firm-level controls and error terms.

Correlation Analysis

This section summarizes the Pearson correlation results among the study's key variables. The correlation matrix helps explain the strength and direction of the relationships, with coefficients ranging from -1 (perfect negative) to +1 (perfect positive). According to the findings, the Effective Tax Rate (ETR) has a negative correlation with both Cost of Equity (COE) and Weighted Average Cost of Capital (WACC), but a positive correlation with Cost of Debt (COD). In contrast, Book Tax Difference (BTD) and Cash Tax Rate (CTR) show positive associations with all three cost of capital measures.

Regarding the moderating variable ownership structure, the analysis reveals that Institutional Ownership (INSOWN) is positively correlated with COE, COD, and WACC. Managerial Ownership (MGROWN) shows a negative correlation with COE, but a positive one with COD and WACC. Similarly, Concentrated Ownership (CONOWN) has a negative relationship with COE and positive relationships with COD and WACC.

Table 4. 7 Correlation Analysis

Variable	COE	COD	WACC	ETR	BTD	CTR	INSOWN	MGROWN	CONOWN	ROA	LEV	SIZE	AGE	TANG	VIF
COE	1.000														

	COD	WACC	ETR	BTD	CTR	INSOWN	MGROWN	CONOWN	ROA	LEV	SIZE	AGE	TANG	VIF
COD	1.000													
WACC		1.000												
ETR	-0.06	0.061	-0.03	1.000										1.11
BTD	0.097	0.086	0.128	-0.14	1.000									1.08
CTR	0.047	0.064	0.072	0.079	0.014	1.00								1.28
INSOWN	0.067	0.086	0.099	-0.01	-0.061	-0.08	1.000							1.23
MGROWN	-0.059	0.120	0.008	-0.10	-0.054	0.09	-0.08	1.000						1.25
CONOWN	-0.031	0.050	0.053	0.001	0.049	-0.17	0.139	-0.10	1.000					1.18
ROA	-0.02	-0.10	-0.07	0.249	0.008	0.339	0.002	-0.09	-0.00	1.000				1.37
LEV	0.056	0.088	0.093	-0.11	0.067	0.052	-0.077	0.198	-0.04	-0.253	1.000			1.15
SIZE	0.008	0.047	0.028	0.068	-0.05	0.002	0.251	-0.23	0.128	0.127	-0.03	1.000		1.20
AGE	0.098	0.133	0.150	0.047	-0.14	-0.17	0.322	0.053	0.125	-0.07	-0.06	-0.06	1.000	1.22
TANG	0.054	0.040	0.066	-0.05	0.109	-0.24	-0.039	-0.23	-0.21	-0.249	-0.01	-0.10	-0.20	1.00	1.35

Source: STATA Outputs Based on Data Generated (2025)

Among the control variables, leverage (LEV), size (SIZE), age (AGE), and tangibility (TANG) all have positive relationships with the cost of capital proxies. Only Return on Assets (ROA) shows a negative association across COE, COD, and WACC.

Lastly, the results show no multicollinearity concerns. The highest correlation coefficient is 0.773, below the critical threshold of 0.8 (Gujarati, 2004). Additionally, the Variance Inflation Factor (VIF) values have a mean of 1.22, well within the acceptable limit of 5, confirming that multicollinearity is not a problem in the data.

Diagnostic Test Results

The diagnostic and specification test results provide insights into the reliability and suitability of the regression models used in the study. Firstly, the Mean Variance Inflation Factor (VIF) of 1.22 suggests there is no multicollinearity problem among the independent variables, as it falls well below the threshold of 5. This indicates that the variables used in the models are not highly correlated and the estimations are stable.

Table 4.3 Summary of Diagnostic and Specification Tests

Test		P-value Model 1	P-value Model 2	P-value Model 3
Mean VIF	1.22			
Hettest		0.1223	0.0000	0.0000
Pesaran's Test		0.1100	1.1396	0.2311
Hausman Test		0.0001	0.0558	0.1992
Brausch Pagan LM Test		-	0.0000	0.0000

Source: STATE 13.0 outputs based on data generated (2011-2022)

The Heteroskedasticity Test (Hettest) shows mixed results across the models. Model 1 has a p-value of 0.1223, suggesting the absence of heteroskedasticity (constant variance of error terms). However, Models 2 and 3 have p-values of 0.0000, indicating the presence of heteroskedasticity. This implies that robust standard errors may be needed for accurate inference in Models 2 and 3. The Pesaran's Test for cross-sectional dependence shows p-values of 0.1100, 1.1396, and 0.2311 across the models, all of which are above the conventional significance level of 0.05. This indicates that there is no significant cross-sectional dependence in the panels, meaning the residuals are not correlated across entities.

The Hausman Test, used to determine whether to use fixed or random effects, returns a significant p-value (0.0001) for Model 1, indicating that the fixed effects model is more appropriate. However, for Models 2 and 3, the p-values are 0.0558 and 0.1992, which suggest that the random effects model may be preferable in these cases, especially for Model 3.

Lastly, the Breusch-Pagan Lagrange Multiplier (LM) Test, used to decide between pooled OLS and random effects, gives significant p-values (0.0000) for Models 2 and 3. This confirms that the random effects model is more suitable than pooled OLS for these models.

Direct Effect (Tax Avoidance and Cost of Capital)

Table 4.4 presents the direct effect of tax avoidance (ETR, BTD and CTR) on cost of capital (COE, COD and WACC) of listed manufacturing companies in Nigeria using Panel corrected standard error (PCSE) regression.

The Panel Corrected Standard Error (PCSE) regression results in Table 4.4 show the impact of explanatory variables on different proxies of cost of capital—COE, COD, and WACC—while controlling for age, size, leverage, ROA, and tangibility. The R^2 values indicate that the model explains 3.5% of changes in COE, 30.41% in COD, and 27.99% in WACC. Although the PCSE regression doesn't significantly improve R^2 over OLS, the Wald Chi² statistics show that the models are statistically significant and fit the data well, especially for COD and WACC.

In terms of individual effects, effective tax rate (ETR) has a negative and significant impact on cost of equity (COE), meaning that as ETR reduces (indicating more tax avoidance), COE increases. This supports Ghelichi et al. (2017) but contradicts Hutchens and Rego (2015), Cook et al. (2017), and Chun et al. (2019). Book tax difference (BTD), another proxy for tax avoidance, positively and significantly affects COE, indicating that

greater discrepancies between book and tax values raise equity costs. Cash tax rate (CTR), however, shows no significant impact on COE.

Table 4.4 Estimation Using PCSE Regression for Path A

Variable	Model 1 (COE)		Model 2 (COD)		Model 3 (WACC)	
	Z-value	PCSE	Z-value	PCSE	Z-value	PCSE
Constant	2.77	0.114	-2.09	0.499	-0.73	0.279
Independent						
ETR	-2.64***	0.003	1.87*	0.075	-1.67*	0.094
BTD	1.79*	0.053	1.98**	0.244	2.42**	0.139
CTR	1.29[NS]	0.091	0.06[NS]	0.253	0.81[NS]	0.153
Control						
AGE	2.29**	0.000	1.70*	0.002	3.72***	0.001
SIZE	-0.98[NS]	0.011	3.36***	0.037	2.37**	0.022
LEV	0.37[NS]	0.034	10.95***	0.185	10.72***	0.095
ROA	-0.86[NS]	0.066	-0.38[NS]	0.230	-0.74[NS]	0.137
TANG	1.76*	0.044	-0.24[NS]	0.177	0.48[NS]	0.118
Obs	492	**Num Group**	41	**Time Period**	12	
R^2	0.0352		0.3041		0.2799	
Wald chi2 (8)	23.57		225.06		195.14	
Prob>chi2	0.0027		0.0000		0.0000	

Source: STATA Outputs Based on Data Generated (2025)

*** Significant at 1%, ** significant at 5% and * significant at 10% respectively, [NS] Not Significant.

Regarding COD, both ETR and BTD show a positive and significant effect, meaning higher tax avoidance increases the cost of debt. This aligns with the information asymmetry theory, suggesting lenders raise interest rates in response to financial uncertainty caused by tax avoidance. CTR again shows no significant impact on COD.

For WACC, ETR has a negative and significant impact, while BTD shows a positive and significant effect, both at conventional significance levels. This reflects the tax sensitivity of investors and lenders toward discrepancies in financial reporting. CTR remains insignificant in affecting WACC.

Thus, ETR negatively affects COE and WACC but positively influences COD. BTD positively and significantly impacts all three cost of capital proxies, while CTR consistently shows no significant effect. These findings support the study's hypothesis that tax avoidance influences cost of capital and align with agency and information asymmetry theories. It highlights that investors and lenders consider tax avoidance practices in their risk and return assessments for Nigerian manufacturing firms.

Direct Effect (Ownership Structure and Cost of Capital)

Table 4.4 presents the direct effect of the moderator, ownership structure (ISO, MGR and CON) on cost of capital (COE, COD and WACC) of listed manufacturing companies in Nigeria using Panel corrected standard error (PCSE) regression.

Table 4.5 Estimation Using PCSE Regression for Path B

Variable	Model 1 (COE)		Model 2 (COD)		Model 3 (WACC)	
	Z-value	PCSE	Z-value	PCSE	Z-value	PCSE
Constant	3.76	0.100	-3.99	0.471	-2.16	0.261
Independent						
ETR	-2.70***	0.003	0.05 NS	0.023	-0.80 NS	0.011
BTD	1.80**	0.052	1.90**	0.227	2.45**	0.127
CTR	0.99 NS	0.099	2.83***	0.270	2.67***	0.180
Moderator						
ISOWN	1.01 NS	0.043	0.66 NS	0.155	1.26 NS	0.075
MGROWN	-0.62 NS	0.085	5.83***	0.269	5.60***	0.131
CONOWN	-1.41 NS	0.030	6.25***	0.153	5.34***	0.082
Control						
AGE	2.04**	0.000	0.42 NS	0.002	2.10**	0.001
SIZE	-1.67*	0.009	4.38***	0.035	2.96***	0.021
LEV	0.68 NS	0.034	10.77***	0.171	10.37***	0.091
ROA	-0.93 NS	0.064	-0.46 NS	0.219	-0.82 NS	0.135
TANG	1.31 NS	0.040	2.95***	0.200	3.05***	0.114
	Obs	492	**Num Group**	41	**Time Period**	12
R²	0.0413		0.4099		0.3607	
Wald chi2 (8)	35.17		371.62		320.31	
Prob>chi2	0.0002		0.0000		0.0000	

Source: STATA Outputs Based on Data Generated (2024) *** Significant at 1%, ** significant at 5% and * significant at 10% respectively, NS Not Significant.

Table 4.5 reveals that incorporating ownership structure into the model improves its explanatory power. The R^2 values increased from 0.0352 to 0.0413 for cost of equity (COE), from 0.3041 to 0.4099 for cost of debt (COD), and from 0.2799 to 0.3607 for weighted average cost of capital (WACC). This indicates that ownership structure enhances the model's ability to predict changes in cost of capital. The Wald Chi² values of 35.17, 371.62, and 320.31 for COE, COD, and WACC respectively, all significant at 1%, confirm the models' fitness and statistical reliability. Regarding individual ownership variables, institutional ownership (ISO) has a positive but insignificant relationship with all three proxies of cost of capital. The coefficients and p-values—COE (0.043, 0.313), COD (0.102, 0.509), and WACC (0.094, 0.423)—indicate that institutional investors exert minimal influence on the cost of capital components for Nigerian manufacturing firms.

Managerial ownership (MGR) shows a negative and insignificant effect on COE (-0.052, p = 0.537), implying little influence on equity cost. However, it has a strong positive and significant effect on COD (1.573, p = 0.000) and WACC (0.735, p = 0.000). This suggests that managerial ownership may raise the cost of debt and overall capital, possibly due to risk perception by lenders. Lastly, concentrated ownership (CON) demonstrates a significant positive effect on COD (0.962, p = 0.000) and WACC (0.440, p = 0.000). These findings suggest that higher ownership concentration may be perceived as risky, potentially due to agency issues or governance concerns. This supports the agency theory assumption that concentrated control can lead to decisions that increase the firm's cost of capital.

Regression Results of the Moderating Effect

Tax avoidance, Institutional Ownership and Cost of Capital Relationship

Table 4.6 presents the regression results of interaction effect of INSOWN and tax avoidance on the cost of capital.

Table: 4.6 PCSE Regression Results for Moderating Effect of Institutional Ownership

Variable	Model 1 (COE)		Model 2 (COD)		Model 3 (WACC)	
	Z-Value	**PCSE**	**Z-Value**	**PCSE**	**Z-Value**	**PCSE**
Constant	3.28	0105	-1.99	0.460	-0.43	0.263
Independent						
ETR	-2.64***	0.003	1.87*	0.075	-1.67*	0.094
BTD	1.79*	0.053	1.98**	0.244	2.42**	0.139
CTR	1.29 NS	0.091	0.06 NS	0.253	0.81 NS	0.153
ISO	1.12 NS	0.044	0.39 NS	0.223	0.91 NS	0.103
Moderator						
ETR*ISO	-0.05 NS	0.029	0.72 NS	0.080	0.66 NS	0.041
BTD*ISO	-0.55 NS	0.208	-0.97 NS	1.376	-1.07 NS	0.718
CTR*ISO	0.79 NS	0.261	0.01 NS	1.012	0.38 NS	0.555
Control						
AGE	1.79*	0.000	1.32 NS	0.187	2.92***	0.001
SIZE	-1.39 NS	0.010	3.28***	0.001	2.11**	0.020
LEV	0.52 NS	0.033	9.95***	0.201	10.05***	0.101
ROA	-1.11 NS	0.067	-0.84 NS	0.268	-1.28 NS	0.147
TANG	1.62 NS	0.044	-0.23 NS	0.171	0.45 NS	0.115
Obs	492	**Num Group**	41	**Time Period**	12	
R^2	0.0393		0.3078		0.2854	
Wald chi2 (8)	34.38		342.38		289.55	
Prob>chi2	0.0006		0.0000		0.0000	

Source: STATA Outputs Based on Data Generated (2025)

*** Significant at 1%, ** significant at 5% and * significant at 10% respectively, NS Not Significant.

The panel corrected standard error (PCSE) results in Table 4.6 show that the models for COE, COD, and WACC are statistically significant at 1%, with Wald Chi² values of 34.38, 342.38, and 289.55, confirming model fitness. However, the interaction between institutional ownership (ISO) and effective tax rate (ETR) reveals a negative and insignificant impact on COE, and a positive but insignificant impact on COD and WACC. This suggests that ISO does not significantly moderate the relationship between ETR and cost of capital (COC) in listed Nigerian manufacturing firms. For book-tax difference (BTD), while the direct effect is positive and significant on all COC proxies, the interaction term (ISO*BTD) shows a negative and insignificant effect, reversing the direction of the relationship. This weakening effect aligns with Fairchild and Mackinnon (2009), who noted that moderation may alter strength or direction of relationships. Similarly, cash

tax rate (CTR) remains positive and insignificant in both its direct and moderated forms (ISO*CTR) across all COC proxies. Overall, institutional ownership does not significantly moderate the relationship between tax avoidance proxies and cost of capital, consistent with prior studies by Utkir (2012), Pourheydai and Amini Nia (2014), Goh et al. (2014), and Nguyen et al. (2022).

Table 4.7 presents the PCSE regression results assessing the moderating effect of managerial ownership (MGR) on the relationship between tax avoidance and cost of capital (COE, COD, WACC). The Wald Chi² values (40.12 for COE, 278.58 for COD, and 250.64 for WACC) are all statistically significant at 1%, confirming model fitness.

Tax avoidance, Institutional Ownership and Cost of Capital Relationship

Table 4.6 presents the regression results of interaction effect of INSOWN and tax avoidance on the cost of capital.

Table: 4.6 PCSE Regression Results for Moderating Effect of Institutional Ownership

Variable	Model 1 (COE)		Model 2 (COD)		Model 3 (WACC)	
	Z-Value	PCSE	Z-Value	PCSE	Z-Value	PCSE
Constant	3.28	0105	-1.99	0.460	-0.43	0.263
Independent						
ETR	-2.64***	0.003	1.87*	0.075	-1.67*	0.094
BTD	1.79*	0.053	1.98**	0.244	2.42**	0.139
CTR	1.29 NS	0.091	0.06 NS	0.253	0.81 NS	0.153
ISO	1.12 NS	0.044	0.39 NS	0.223	0.91 NS	0.103
Moderator						
ETR*ISO	-0.05 NS	0.029	0.72 NS	0.080	0.66 NS	0.041
BTD*ISO	-0.55 NS	0.208	-0.97 NS	1.376	-1.07 NS	0.718
CTR*ISO	0.79 NS	0.261	0.01 NS	1.012	0.38 NS	0.555
Control						
AGE	1.79*	0.000	1.32 NS	0.187	2.92***	0.001
SIZE	-1.39 NS	0.010	3.28***	0.001	2.11**	0.020
LEV	0.52 NS	0.033	9.95***	0.201	10.05***	0.101
ROA	-1.11 NS	0.067	-0.84 NS	0.268	-1.28 NS	0.147
TANG	1.62 NS	0.044	-0.23 NS	0.171	0.45 NS	0.115
Obs	492	**Num Group**	41	**Time Period**		12
R²	0.0393		0.3078		0.2854	
Wald chi2 (8)	34.38		342.38		289.55	
Prob>chi2	0.0006		0.0000		0.0000	

Source: STATA Outputs Based on Data Generated (2025)

*** Significant at 1%, ** significant at 5% and * significant at 10% respectively, NS Not Significant

Regarding direct effects, effective tax rate (ETR) has a negative and significant impact on COE and WACC, but a positive and significant impact on COD. When interacted with managerial ownership (ETR*MGR), the

relationship becomes negative and significant across all three cost of capital proxies, suggesting that managerial ownership weakens the influence of ETR on cost of capital particularly COD. For book-tax difference (BTD), the interaction with MGR (BTD*MGR) shows no significant moderation, though a change in the direction of relationships is observed. While BTD alone positively impacts all COC proxies, its interaction with MGR yields a negative and insignificant effect on COE and positive but insignificant effects on COD and WACC.

In the case of the cash tax rate (CTR), which originally had a positive and insignificant effect, the interaction term (CTR*MGR) becomes positive and significant across all models. This indicates that managerial ownership significantly moderates the relationship between CTR and all cost of capital proxies. Thus, the findings show that managerial ownership (MGR) plays a moderating role, especially in the ETR and CTR relationships with cost of capital. This implies that as managers hold more equity in their companies, they are more likely to influence how tax avoidance strategies translate into financing costs potentially due to greater accountability and interest alignment with shareholders.

PCSE Regression Results for Moderating Effect of Managerial Ownership

Table 4.7 presents the interaction effects between managerial ownership (MGR) and tax avoidance (TA) on the cost of capital (COC). The PCSE regression results show that the models for COE, COD, and WACC are statistically fit, with Wald chi² values of 40.12, 278.58, and 250.64, all significant at the 1% level. The direct effect of ETR on COC is consistent with Table 4.4: it negatively and significantly affects COE and WACC, but positively affects COD. However, after introducing the interaction term (ETR*MGR), the effect becomes negative and significant across all three models, confirming that managerial ownership moderates this relationship, particularly for COD.

Table: 4.7 PCSE Regression Results for Moderating Effect of Managerial Ownership

Variable	Model 1 (COE)		Model 2 (COD)		Model 3 (WACC)	
	Z-Value	PCSE	Z-Value	PCSE	Z-Value	PCSE
Constant	3.17	0.118	-2.82	0.608	-1.46	0.329
Independent						
ETR	-2.64***	0.003	1.87*	0.075	-1.67*	0.094
BTD	1.79*	0.053	1.98**	0.244	2.42**	0.139
CTR	1.29 NS	0.091	0.06 NS	0.253	0.81 NS	0.153
MGR	0.46 NS	0.102	5.13***	0.337	5.07***	0.180
Moderator						
ETR*MGR	-2.25**	0.065	-1.92*	0.022	-2.08**	0.157
BTD*MGR	-0.07 NS	0.266	1.34 NS	1.351	1.31 NS	0.681
CTR*MGR	1.85*	0.349	2.43**	1.411	2.83***	0.835
Control						
AGE	2.24**	0.000	1.54 NS	0.002	3.39***	0.001
SIZE	-1.41 NS	0.011	3.81***	0.046	2.71***	0.026
LEV	0.31 NS	0.032	10.84***	0.177	10.31***	0.094
ROA	-0.75 NS	0.065	-0.52 NS	0.236	-0.82 NS	0.136
TANG	1.42 NS	0.041	1.02 NS	0.190	1.34 NS	0.117
Time Period	12	**Num**	41	**Obs**	492	

			Group				
R^2	0.0484			0.3542		0.3294	
Wald chi2 (8)	40.12			278.58		250.64	
Prob>chi2	0.0001			0.0000		0.0000	

Source: STATA Outputs Based on Data Generated (2023) *** Significant at 1%, ** significant at 5% and * significant at 10% respectively, [NS] Not Significant.

In the case of BTD, while it originally showed a positive and significant effect on all proxies of COC, the interaction term (BTD*MGR) turns insignificant and changes direction, implying a weakened but statistically insignificant moderating effect. For CTR, which had an insignificant direct effect in Table 4.4, the interaction with managerial ownership (CTR*MGR) becomes positive and significant across COE, COD, and WACC, showing that MGR meaningfully moderates the impact of cash tax rate on cost of capital. Thus, managerial ownership significantly moderates the relationship between tax avoidance (especially ETR and CTR) and cost of capital. This suggests that when managers hold equity stakes, they may act more responsibly, reducing risk perception among investors and lenders. This finding aligns with agency theory, as managerial ownership aligns managers' interests with those of shareholders, potentially reducing the cost of capital in tax-avoiding firms.

Tax avoidance, Concentrated Ownership and Cost of Capital Relationship

Table 4.8 presents the regression results of interaction effect of CONOWN on tax avoidance and cost of capital relationship.

Table: 4.8 PCSE Regression Results for Moderating Effect of Concentrated Ownership

Variable	Model 1 (COE)		Model 2 (COD)		Model 3 (WACC)	
	Z-Value	PCSE	Z-Value	PCSE	Z-Value	PCSE
Constant	3.09	0.114	-2.31	0.503	-0.80	0.284
Independent						
ETR	-2.64***	0.003	1.87*	0.075	-1.67*	0.094
BTD	1.79*	0.053	1.98**	0.244	2.42**	0.139
CTR	1.29 [NS]	0.091	0.06 [NS]	0.253	0.81 [NS]	0.153
CON	-2.34**	0.029	5.76***	0.153	4.99***	0.075
Moderator						
ETR*CON	-1.97**	0.016	1.92*	0.022	1.85*	0.349
BTD*CON	0.17 [NS]	0.236	1.76*	0.974	1.52 [NS]	0.599
CTR*CON	-3.37***	0.227	1.55*	1.014	1.79*	0.597
Control						
AGE	2.04**	0.000	1.18 [NS]	0.002	2.80***	0.005
SIZE	-1.07 [NS]	0.011	3.01***	0.037	1.92**	0.001
LEV	0.45 [NS]	0.035	10.25***	0.185	10.04***	0.096
ROA	-0.86 [NS]	0.068	-0.63 [NS]	0.245	-0.90 [NS]	0.152
TANG	1.48 [NS]	0.043	0.85 [NS]	0.186	1.21 [NS]	0.119
Obs	492		Num Group = 41		Time Period = 12	

R^2	0.0628		0.3595		0.3186	
Wald chi2 (8)	50.09		352.30		237.63	
Prob>chi2	0.0000		0.0000		0.0000	

Source: STATA outputs based on data generated (2025)

*** Significant at 1%, ** significant at 5% and * significant at 10%, [NS] Not Significant.

Table 4.8 presents the interaction effects of ownership concentration (CON) and tax avoidance on cost of capital (COC). The models for COE, COD, and WACC are statistically fit, with Wald Chi² values of 50.09, 352.30, and 237.63, all significant at the 1% level. Regarding ETR, its interaction with concentrated ownership (ETR*CON) shows a negative and significant effect on COE, and positive and significant effects on COD and WACC, suggesting that CON moderates ETR's influence, especially for WACC. For BTD, although its direct effect is positive and significant across all COC measures, the interaction term (BTD*CON) is insignificant for COE and WACC, but positive and significant for COD. This indicates that ownership concentration partially moderates the relationship between BTD and cost of debt.

Lastly, the interaction between CTR and CON (CTR*CON) reveals a significant negative impact on COE, and positive, significant impacts on COD and WACC, showing that concentrated ownership significantly moderates the effect of cash tax rate on all COC components. Overall, the results affirm that ownership concentration plays a strong moderating role, particularly in the relationship between tax avoidance proxies and COD/WACC, in line with findings by Lastiati et al. (2020).

CONCLUSION AND RECOMMENDATIONS

This study explored the relationship between corporate tax avoidance and the cost of capital, with a focus on how ownership structure moderates this relationship in listed Nigerian manufacturing firms between 2008 and 2022. The cost of capital was assessed through three key proxies: cost of equity (COE), cost of debt (COD), and weighted average cost of capital (WACC), while tax avoidance was measured using effective tax rate (ETR), book-tax difference (BTD), and cash tax rate (CTR). Ownership structure was examined through institutional ownership (INSOWN), managerial ownership (MGROWN), and concentrated ownership (CONOWN). The findings indicate that tax avoidance significantly affects the cost of capital. Specifically, ETR negatively and significantly influences COE and WACC, suggesting that firms with lower effective tax rates (indicative of greater tax avoidance) experience higher costs of equity and capital. However, ETR positively affects COD, implying that debt providers respond to tax avoidance with higher interest demands due to increased risk perception. Furthermore, BTD has a consistent and positive impact on all three cost of capital proxies, supporting the notion that discrepancies between financial and tax reporting heighten perceived opacity and risk. In contrast, CTR shows no significant direct effect on any of the cost of capital components, suggesting it may be a weaker measure of tax avoidance in this context.

Regarding the direct influence of ownership structure, institutional ownership (INSOWN) does not show any significant effect on COE, COD, or WACC. Managerial ownership (MGROWN), while not significant for COE, significantly increases COD and WACC, implying that higher managerial ownership may raise borrowing costs, potentially due to heightened risk aversion from creditors. Concentrated ownership (CONOWN) significantly increases both COD and WACC, consistent with agency theory which suggests that concentrated control may lead to governance concerns that raise financing costs. In terms of moderating effects, institutional ownership does not significantly moderate the relationship between tax avoidance and cost of capital. This suggests that institutional investors in the Nigerian context may not exercise sufficient oversight to influence capital market responses to tax behavior. Managerial ownership, however, exhibits a significant moderating effect, particularly in the relationship between ETR and all three cost of capital proxies. The interaction of managerial ownership with ETR results in a negative and significant effect, implying that when managers have equity stakes, the negative perception associated with tax avoidance is reduced. Additionally, while CTR on its own is insignificant, its interaction with managerial ownership becomes significant and positive, indicating that managerial ownership enhances the interpretability and impact of cash

tax strategies on financing decisions. Similarly, concentrated ownership plays a strong moderating role. The interaction between CONOWN and ETR significantly affects all three cost of capital proxies negatively for COE and positively for COD and WACC. This reflects that firms with dominant shareholders may face higher financing costs when engaging in aggressive tax strategies, likely due to investor and lender concerns about governance risks. The interaction between CONOWN and CTR also produces significant effects across all cost of capital proxies, further reinforcing the role of ownership concentration in shaping the financial market's response to tax avoidance.

Based on these findings, several recommendations are proposed. First, corporate managers should exercise caution in tax planning. While tax avoidance can improve immediate profitability, excessive avoidance increases the cost of capital by undermining investor and creditor confidence. Managers should aim for balanced and transparent tax strategies. Encouraging moderate managerial ownership can also be beneficial, as it aligns managerial and shareholder interests, potentially reducing perceived risk and financing costs.

Second, institutional investors should become more proactive in governance roles. Their current insignificant impact suggests a need for stronger advocacy and monitoring to influence firm behavior and reduce the risk premiums associated with tax avoidance. Third, firms with high concentrated ownership should adopt stricter governance mechanisms and enhanced disclosure practices. This can help mitigate the negative market perception that often accompanies dominant ownership structures, especially in the context of tax avoidance. For policymakers and regulators, there is a need to strengthen disclosure requirements around tax practices and ownership structures. This can enhance transparency, reduce information asymmetry, and promote investor confidence. Encouraging corporate governance reforms that empower institutional investors and protect minority shareholders is also essential.

Thus, investors and lenders should consider ownership structure when evaluating the financial risk of firms engaging in tax avoidance. Managerial ownership may reduce perceived risk, while concentrated ownership may heighten it. A nuanced understanding of these dynamics can inform better investment and lending decisions.

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