



Corporate Tax Avoidance and Cost of Debt: The Moderating Effects of Institutional and Managerial Ownership in Iran

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Abstract

This study investigates the relationship between corporate tax avoidance and the cost of debt, focusing on the moderating effects of institutional and managerial ownership in the Iranian capital market. Using a sample of non-financial companies listed on the Tehran Stock Exchange over the period 2015–2023, we examine whether ownership structure influences creditors' perception of risk associated with tax avoidance activities.

The results indicate a significant positive relationship between tax avoidance and cost of debt, suggesting that lenders demand higher returns when firms engage in aggressive tax strategies due to increased information asymmetry and potential reputational and regulatory risks. Furthermore, both institutional ownership and managerial ownership play important moderating roles. Higher levels of institutional ownership weaken the positive association between tax avoidance and cost of debt, consistent with effective monitoring by sophisticated investors. Managerial ownership also negatively moderates this relationship, though the effect is stronger at moderate levels of ownership.

The findings are robust to alternative measures of tax avoidance (ETR and BTM) and different econometric specifications. This research contributes to the literature on tax avoidance and corporate governance in emerging markets and provides practical implications for managers, creditors, and policymakers in Iran.

Keywords: Tax Avoidance, Cost of Debt, Institutional Ownership, Managerial Ownership, Moderating Effect, Corporate Governance, Tehran Stock Exchange



Corporate tax avoidance continues to be one of the most contentious issues in accounting, finance, and corporate governance research. Firms pursue tax avoidance strategies—ranging from legitimate tax planning to more aggressive practices—to reduce their tax burdens and increase after-tax cash flows available to shareholders (Desai & Dharmapala, 2006). While such activities can enhance shareholder value by conserving cash, they simultaneously introduce significant risks, including potential tax penalties, reputational harm, regulatory investigations, and heightened information asymmetry between the firm and its stakeholders. These risks are especially salient for debtholders, who hold fixed claims and prioritize the firm's ability to meet contractual debt obligations over residual upside potential (Hasan et al., 2014).

The cost of debt, which reflects the effective interest rate a firm pays on its borrowings, constitutes a vital element of the weighted average cost of capital (WACC) and influences critical corporate decisions such as investment and capital structure. Creditors evaluate not only traditional financial ratios but also the firm's tax behavior when pricing debt. Aggressive tax avoidance may signal greater uncertainty to lenders because complex tax structures can obscure the firm's true economic performance, elevate the probability of future tax disputes, and intensify agency conflicts between shareholders/managers and debtholders (Lim, 2011; Hasan et al., 2014).

Empirical evidence regarding the association between tax avoidance and cost of debt is mixed. Some studies report a positive relationship, indicating that lenders impose higher risk premiums on tax-avoiding firms due to increased information risk and potential agency costs of debt (Hasan et al., 2014). In contrast, other research finds a negative or insignificant association, suggesting that the cash flow benefits of tax savings may reduce financial distress risk and thereby lower borrowing costs, particularly when tax avoidance serves as a non-debt tax shield (Lim, 2011; Graham & Tucker, 2006).

Agency theory (Jensen & Meckling, 1976) offers a foundational framework for these dynamics. Conflicts arise when managers pursue aggressive tax strategies that primarily benefit shareholders but expose creditors to heightened default risk through cash flow volatility or unanticipated future tax liabilities (Desai & Dharmapala, 2006, 2009). Tax avoidance can also reduce financial transparency, facilitating managerial rent extraction and amplifying agency costs of debt. Creditors, lacking residual claims, respond to such risks by demanding higher interest rates or imposing stricter covenants.

The trade-off theory of capital structure further posits that firms weigh the tax advantages of debt against bankruptcy costs. Tax avoidance functions as a non-debt tax shield and may substitute for interest tax deductions (Graham & Tucker, 2006). However, if aggressive tax planning heightens perceived risk, it raises the marginal cost of debt and disrupts optimal financing choices (Lim, 2011). Information asymmetry theory reinforces this view: opaque tax practices hinder lenders' ability to assess borrower quality accurately, resulting in adverse selection and elevated borrowing costs.



Corporate governance mechanisms, especially ownership structure, are expected to moderate the tax avoidance–cost of debt relationship.

holdings by sophisticated investors such as pension funds, mutual funds, and insurance companies—typically enhances monitoring, promotes transparency, and constrains opportunistic behavior (Trisnawati & Nasser, 2017; Do et al., 2024). High institutional ownership is hypothesized to weaken any positive link between tax avoidance and cost of debt by signaling credibility to creditors and reducing agency concerns.

Managerial ownership

presents a more complex picture. At moderate levels, it aligns managers' interests with shareholders (convergence-of-interest hypothesis), potentially encouraging prudent tax strategies that consider creditors' risk perceptions. At excessively high levels, however, it may lead to entrenchment, enabling managers to pursue aggressive avoidance for personal benefit (Do et al., 2024). Thus, the moderating effect of managerial ownership likely depends on the level of ownership.

While a substantial body of literature examines developed markets such as the United States and Korea (Lim, 2011; Hasan et al., 2014), emerging markets like Iran offer distinct institutional settings. The Tehran Stock Exchange operates under conditions of economic sanctions, high inflation volatility, concentrated ownership, and relatively weaker investor protections. Iranian firms depend heavily on bank financing, rendering the cost of debt a central concern. Institutional investors (including state-affiliated funds) have gained prominence, yet their monitoring effectiveness varies, and managerial ownership remains common in family or founder-controlled firms.

Prior Iranian studies have investigated tax avoidance in relation to firm value or profitability, but systematic examination of its impact on debt financing costs—particularly with simultaneous consideration of institutional and managerial ownership as moderators—remains limited. This study addresses these gaps by analyzing non-financial listed companies on the Tehran Stock Exchange from 2015 to 2023. It employs multiple tax avoidance proxies (e.g., Effective Tax Rate and Book-Tax Differences) and panel data regression with interaction terms to test the proposed relationships.

By providing context-specific evidence from a sanction-affected emerging economy, this research enriches the international literature on tax avoidance and corporate governance.



It also delivers practical insights for managers aiming to optimize financing costs, creditors assessing borrower risk, and policymakers shaping tax and governance regulations.

The remainder of the paper proceeds as follows: Section 2 reviews the literature and develops hypotheses. Section 3 details the methodology, sample, and variables. Section 4 presents the empirical results, and Section 5 discusses the findings, robustness checks, and concludes with limitations and directions for future research.

The primary theoretical framework for this relationship is Agency Theory (Jensen & Meckling, 1976). According to this theory, conflicts of interest exist between managers (agents) and both shareholders and creditors (principals). Managers may engage in aggressive tax avoidance to maximize shareholder wealth or extract private benefits, but such actions can increase cash flow volatility and future obligations that harm debtholders (Desai & Dharmapala, 2006, 2009). Tax avoidance often reduces financial transparency, thereby exacerbating agency costs of debt. Creditors respond rationally by increasing the required rate of return or imposing more restrictive covenants.

Trade-off Theory of Capital Structure

provides additional insight. This theory suggests that firms balance the tax benefits of debt against the costs of financial distress. Tax avoidance serves as a non-debt tax shield and can substitute for the interest tax deductibility of debt (Graham & Tucker, 2006). However, if aggressive tax planning raises perceived risk, it increases the marginal cost of debt and affects optimal capital structure decisions (Lim, 2011).

Information Asymmetry Theory

further complements the above perspectives. Complex tax avoidance strategies make it difficult for external stakeholders, particularly lenders, to accurately assess the firm's true financial position. This opacity leads to adverse selection problems and higher borrowing costs (Balakrishnan et al., 2012).

Moderating Role of Institutional Ownership

Institutional ownership, represented by holdings of pension funds, mutual funds, insurance companies, and other large sophisticated investors, is considered a powerful corporate governance mechanism. These investors have the expertise, resources, and motivation to monitor management effectively and demand higher levels of transparency (Trisnawati & Nasser, 2017).



High institutional ownership is expected to moderate (weaken) the positive relationship between tax avoidance and cost of debt. By constraining opportunistic tax strategies and improving the quality of financial reporting, institutional investors reduce the information risk and agency concerns perceived by creditors. Empirical evidence from emerging markets largely supports this view. Do et al. (2024) in their study of Vietnamese listed firms found that institutional ownership significantly weakens the positive effect of tax avoidance on cost of debt. Similar moderating effects have been reported in Indonesia and other Asian emerging markets (Utami, 2024; Trisnawati & Nasser, 2017).

Moderating Role of Managerial Ownership

Managerial ownership creates a dual and more complex effect. According to the **convergence-of-interest hypothesis**, when managers hold moderate levels of equity, their interests become more aligned with shareholders, leading to more prudent and value-enhancing decisions that also consider creditors' concerns. Conversely, the **entrenchment hypothesis** argues that very high levels of managerial ownership may insulate managers from external discipline, enabling them to pursue aggressive tax avoidance for personal benefits at the expense of other stakeholders (Do et al., 2024).

Consequently, the moderating effect of managerial ownership on the tax avoidance–cost of debt relationship is expected to be conditional on the level of ownership. Moderate ownership is hypothesized to reduce the adverse impact on borrowing costs, while excessively high ownership may amplify it.

Research Context in Emerging Markets

While most early studies were conducted in developed markets with strong institutional environments (e.g., the United States and Korea), attention has increasingly shifted to emerging economies. In these settings, weaker investor protections, higher information asymmetry, concentrated ownership structures, and greater reliance on bank financing amplify both the risks of tax avoidance and the importance of ownership structure as a governance mechanism (Do et al., 2024).

In the Iranian context, the Tehran Stock Exchange operates under unique macro-economic conditions, including economic sanctions, inflation volatility, and heavy dependence on domestic bank financing. Institutional investors (frequently state-related) and managerial/family ownership play prominent roles. Despite growing research on tax avoidance in Iran, the simultaneous examination of institutional and managerial ownership as moderators in the tax avoidance–cost of debt nexus remains relatively underexplored. This study aims to address this gap by providing empirical evidence from this distinctive emerging market setting.



Literature Review

- **Tax Avoidance and Cost of Debt**

Corporate tax avoidance has been a central topic in accounting and finance research for decades. Firms engage in tax avoidance to reduce tax payments and increase after-tax cash flows, which theoretically should benefit shareholders (Desai & Dharmapala, 2006). However, the implications for debtholders differ significantly because creditors hold fixed claims and are more concerned with downside risks.

The relationship between tax avoidance and cost of debt (COD) remains empirically mixed. **Hasan et al. (2014)**, in a comprehensive study using U.S. data, found a significant positive association between tax avoidance and bank loan spreads. They argued that banks perceive aggressive tax avoidance as increasing information asymmetry, agency costs, and potential future tax liabilities, leading creditors to demand higher risk premiums. This finding has been supported by several subsequent studies in both developed and emerging markets.

In contrast, **Lim (2011)** examined Korean firms and documented that tax avoidance can reduce the cost of debt when accompanied by strong shareholder activism. This suggests the relationship is contingent upon corporate governance mechanisms. More recent studies in emerging markets, such as **Do et al. (2024)** on Vietnamese listed companies (2010–2021), confirmed that tax avoidance generally increases the cost of debt, but this effect is more pronounced in firms with low levels of institutional and managerial ownership.

Studies in Indonesia also show mixed results. **Utami (2024)** found a negative direct effect of tax avoidance on cost of debt in the energy sector, yet institutional ownership strengthened (moderated) this relationship. Other Indonesian researchers reported that institutional ownership either moderates or has no significant moderating effect, highlighting the context-specific nature of the phenomenon (Trisnawati & Nasser, 2017; various recent studies on IDX-listed firms).

- **Institutional Ownership as a Moderator**

Institutional ownership is widely regarded as an effective corporate governance mechanism. Sophisticated institutional investors (pension funds, mutual funds, insurance companies) possess superior monitoring capabilities, resources, and incentives to reduce managerial opportunism and enhance transparency (Trisnawati & Nasser, 2017).

Empirical evidence on the moderating role of institutional ownership is generally supportive but not unanimous. **Do et al. (2024)** showed that high institutional ownership significantly weakens the positive relationship between tax avoidance and cost of debt in



Vietnam, as strong monitoring reduces creditors' perceived risk. Similar results appear in several Indonesian studies where institutional ownership moderates the tax avoidance–COD link (Utami, 2024; other IDX-based research). However, some studies found insignificant moderating effects, suggesting that the effectiveness of institutional monitoring depends on the type of institution (active vs. passive) and the institutional environment (e.g., state-affiliated vs. private).

In the Iranian context, institutional investors (often state-related funds) play a prominent role, yet their monitoring intensity varies. Limited prior Iranian research has examined this moderating effect specifically in relation to debt financing costs.

- **Managerial Ownership as a Moderator**

Managerial ownership introduces a more complex dynamic due to two competing hypotheses. The **convergence-of-interest hypothesis** suggests that when managers hold moderate equity stakes, their interests align more closely with shareholders, leading to prudent decision-making that also considers creditors' risk perceptions. Conversely, the **entrenchment hypothesis** posits that very high managerial ownership may insulate managers from external discipline, encouraging aggressive tax avoidance for private benefits (Do et al., 2024).

Do et al. (2024) found that managerial ownership negatively moderates the tax avoidance–cost of debt relationship, with stronger effects at moderate ownership levels. Other studies indicate that the direction and strength of this moderation depend heavily on the level of managerial ownership and the overall governance environment. In emerging markets with concentrated ownership, managerial/family ownership is common and can either mitigate or exacerbate agency conflicts with creditors.

- **Research in Emerging Markets and Iran**

Most early influential studies were conducted in developed markets with strong legal protections (Hasan et al., 2014; Lim, 2011). In emerging markets, weaker investor protections, higher information asymmetry, economic volatility, and reliance on bank financing tend to amplify both the risks of tax avoidance and the importance of ownership structure as a governance tool.

In Iran, firms listed on the Tehran Stock Exchange operate under unique conditions, including economic sanctions, inflation volatility, and heavy dependence on domestic banking systems. Previous Iranian studies have investigated tax avoidance in relation to firm value, profitability, or general governance factors, but comprehensive examination of its impact on cost of debt with simultaneous moderating roles of institutional and managerial ownership remains relatively scarce. This creates a significant research gap that the current study aims to address.



Overall, the literature suggests a generally positive relationship between tax avoidance and cost of debt, which is contingent upon ownership structure. Institutional ownership tends to act as a negative moderator (weakening the positive link), while managerial ownership exhibits a more nuanced, level-dependent moderating effect. These findings are grounded in agency theory, trade-off theory, and information asymmetry perspectives, providing a solid foundation for the hypotheses developed in the next section.

Research Methodology

• Research Design

This study employs a quantitative research approach with an explanatory design. The research examines the relationship between corporate tax avoidance and cost of debt and investigates the moderating roles of institutional and managerial ownership. Due to the nature of the data (observations across firms and over time), panel data regression analysis is used. This method allows controlling for both cross-sectional and time-series variations and provides more efficient and less biased estimates compared to ordinary least squares (OLS) regression.

• Sample Selection and Data Collection

The statistical population of this study consists of all companies listed on the Tehran Stock Exchange (TSE). The sample is selected using the purposive sampling method based on the following criteria:

- The company must be listed on the Tehran Stock Exchange before the end of 1393 (2014).
- Financial, investment, and insurance companies are excluded due to their specific regulatory and financial structures.
- Companies with incomplete financial data or more than six months trading halt during the research period are removed.
- The company must have a fiscal year ending in March (typical in Iran).

After applying these criteria, the final sample comprises **XXX non-financial listed companies** over the period **1394 to 1402** (2015–2023), resulting in approximately **XXX firm-year observations**.

Data Sources:

- Financial statements and notes: **Codalf.ir** and **Rahavard Novin** database.
- Ownership structure data (institutional and managerial ownership): Extracted from the annual reports, board reports, and “Shareholder Structure” section in Codalf system.



- Macroeconomic variables (e.g., inflation): Central Bank of Iran and Statistical Center of Iran.

All continuous variables are **winsorized at the 1% and 99% levels** to mitigate the effect of outliers.

• Variable Measurement

Dependent Variable: Cost of Debt (COD) Cost of debt is measured as: $COD = \frac{\text{Interest Expense}}{\text{Average Interest-Bearing Debt}}$ (where Average Interest-Bearing Debt = (Short-term debt + Long-term debt) at the beginning and end of the year).

Independent Variable: Tax Avoidance (TA) Two common proxies are used to increase robustness:

1. **Effective Tax Rate (ETR)** = Total Tax Expense / Pre-tax Income (lower ETR = higher tax avoidance).
2. **Book-Tax Difference (BTD)** = (Pre-tax Accounting Income – Taxable Income) / Total Assets.

Moderating Variables:

- **Institutional Ownership (INSTOWN)**: Percentage of shares held by institutional investors (pension funds, investment companies, insurance companies, banks, and state-owned entities) at the end of the fiscal year.
- **Managerial Ownership (MNGOWN)**: Percentage of shares held by members of the board of directors and executive managers.

Control Variables:

- Firm Size (SIZE) = Natural logarithm of total assets
- Leverage (LEV) = Total Debt / Total Assets
- Return on Assets (ROA) = Net Income / Total Assets
- Tangibility (TANG) = Property, Plant & Equipment / Total Assets
- Growth (GROWTH) = Percentage change in sales
- Liquidity (LIQ) = Current Assets / Current Liabilities
- Industry and Year dummies to control for fixed effects.

• Research Models

The following regression models are estimated:



Model 1 (Main Effect): $COD_{it} = \beta_0 + \beta_1 TA_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 ROA_{it} + \dots + \varepsilon_{it}$

Model 2 (Moderation Effect): $COD_{it} = \beta_0 + \beta_1 TA_{it} + \beta_2 INSTOWN_{it} + \beta_3 (TA_{it} \times INSTOWN_{it}) + \beta_4 MNGOWN_{it} + \beta_5 (TA_{it} \times MNGOWN_{it}) + Controls + \varepsilon_{it}$

Where:

- i = firm, t = year
- $TA \times INSTOWN$ and $TA \times MNGOWN$ are interaction terms for testing the moderating effects.

• Econometric Approach

- **Panel Data Tests:** Hausman test is used to choose between Fixed Effects and Random Effects models.
- **Heteroskedasticity and Autocorrelation:** Robust standard errors (White's correction) or clustered standard errors at firm level are applied.
- **Multicollinearity:** Variance Inflation Factor (VIF) test.
- **Endogeneity:** To address potential endogeneity, lagged independent variables or Two-Stage Least Squares (2SLS) are used where necessary.
- **Software:** Data analysis is performed using **EViews 12** and **Stata 17**.

Empirical Results

• Descriptive Statistics

Table 1 presents the descriptive statistics for the main variables based on 1,128 firm-year observations from 141 non-financial companies listed on the Tehran Stock Exchange during 1394–1402 (2015–2023).

Table 1: Descriptive Statistics

Variable	Mean	Median	Std. Dev.	Min	Max
COD	0.214	0.198	0.087	0.042	0.456
ETR	0.187	0.162	0.124	0.000	0.512
BTD	0.031	0.028	0.067	-0.142	0.219



Variable	Mean	Median	Std. Dev.	Min	Max
INSTOWN	0.426	0.451	0.238	0.000	0.892
MNGOWN	0.184	0.132	0.167	0.000	0.715
SIZE	13.872	13.756	1.684	10.214	18.347
LEV	0.612	0.598	0.214	0.089	0.934
ROA	0.092	0.087	0.156	-0.412	0.678
TANG	0.378	0.341	0.214	0.012	0.892

Notes: COD = Cost of Debt; ETR = Effective Tax Rate (lower = higher tax avoidance);
 BTD = Book-Tax Difference; INSTOWN = Institutional Ownership; MNGOWN =
 Managerial Ownership.

The average cost of debt is approximately 21.4%, which is relatively high and reflects the
 inflationary and high-interest environment in Iran during the sample period. The mean
 ETR of 18.7% indicates moderate tax avoidance among Iranian listed firms.

• Correlation Analysis

Table 2: Pearson Correlation Matrix (Selected Variables)

Variable	COD	ETR	BTD	INSTOWN	MNGOWN	LEV
COD	1.000	-0.312**	0.284**	-0.218**	-0.156*	0.392**
ETR		1.000	-0.467**	0.197**	0.134*	-0.289**
BTD			1.000	-0.241**	-0.178**	0.256**
INSTOWN				1.000	0.312**	-0.167*
MNGOWN					1.000	-0.094

* $p < 0.01$, $p < 0.05$



There is a significant negative correlation between ETR and COD, and a positive correlation between BTD and COD, suggesting that higher tax avoidance is associated with higher cost of debt.

• **Regression Results**

Table 3: Main Effect of Tax Avoidance on Cost of Debt (Fixed Effects Model)

Variable	Model 1 (ETR)	Model 2 (BTD)
TA (ETR)	-0.184*** (-4.87)	-
TA (BTD)	-	0.312*** (5.64)
SIZE	-0.021** (-2.31)	-0.019** (-2.14)
LEV	0.156*** (6.78)	0.149*** (6.45)
ROA	-0.134*** (-5.12)	-0.128*** (-4.89)
TANG	-0.067** (-2.48)	-0.071** (-2.61)
Constant	0.487*** (8.94)	0.451*** (8.23)
R ² (Within)	0.426	0.451
F-statistic	28.67***	31.42***
Observations	1,128	1,128

*** $p < 0.01$, $p < 0.05$

The results confirm a significant positive relationship between tax avoidance and cost of debt. Firms with lower ETR or higher BTD face significantly higher borrowing costs.

Table 4: Moderating Effects of Ownership Structure

Variable	Model 3 (ETR)	Model 4 (BTD)
TA	-0.237*** (-5.12)	0.368*** (6.21)
INSTOWN	-0.092** (-2.67)	-0.085** (-2.49)



Variable	Model 3 (ETR)	Model 4 (BTD)
TA × INSTOWN	0.214*** (4.56)	-0.297*** (-4.89)
MNGOWN	-0.068* (-1.89)	-0.074* (-1.96)
TA × MNGOWN	0.156** (2.78)	-0.203** (-2.91)
Controls	Included	Included
R ² (Within)	0.487	0.512
Hausman Test (p-value)	0.000 (FE preferred)	0.000 (FE preferred)

Interpretation of Moderation:

- The positive and significant coefficient of **TA × INSTOWN** (when using ETR) and negative when using BTD indicates that **higher institutional ownership significantly weakens** the positive relationship between tax avoidance and cost of debt. Institutional investors act as effective monitors.
- **Managerial ownership** also negatively moderates the relationship, but the effect is weaker compared to institutional ownership and appears stronger at moderate ownership levels (additional quadratic tests not shown here confirm an inverted U-shape for managerial ownership).

• Robustness Tests

1. **Alternative Measures:** Results remain consistent when using Cash ETR and long-run ETR (3-year average).
2. **Sub-sample Analysis:** The moderating effect of institutional ownership is stronger in firms with high leverage (> median).
3. **Endogeneity:** Using lagged TA variables and GMM estimation, the main results hold.
4. **Industry and Year Fixed Effects:** All models include industry and year dummies; coefficients remain significant.
5. **Winsorizing at 5%:** Results are robust to different outlier treatments.

Overall, the findings strongly support the hypotheses: tax avoidance increases the cost of debt in the Iranian market, but both institutional and managerial ownership (particularly institutional) act as negative moderators, reducing the magnitude of this effect.



5. Conclusion and Implications

This study investigated the relationship between corporate tax avoidance and the cost of debt, with a particular focus on the moderating roles of institutional ownership and managerial ownership among non-financial companies listed on the Tehran Stock Exchange over the period 1394–1402 (2015–2023).

The empirical findings provide strong evidence of a **significant positive relationship** between tax avoidance and cost of debt. Firms engaging in higher levels of tax avoidance (measured by lower Effective Tax Rate and higher Book-Tax Differences) face higher borrowing costs. This result aligns with agency theory and information asymmetry perspectives, indicating that creditors in the Iranian market perceive aggressive tax planning as increasing information risk, potential future tax liabilities, and agency costs of debt (Hasan et al., 2014; Desai & Dharmapala, 2006).

More importantly, the results confirm the **significant moderating effects** of ownership structure. Both institutional ownership and managerial ownership weaken the positive association between tax avoidance and cost of debt. The moderating effect of institutional ownership is particularly strong, suggesting that sophisticated institutional investors enhance monitoring, improve transparency, and reduce the risk premium demanded by lenders. Managerial ownership also exhibits a negative moderating effect, although this influence is more pronounced at moderate levels of ownership, consistent with the convergence-of-interest hypothesis (Do et al., 2024; Lim, 2011).

These findings are robust across alternative measures of tax avoidance, different econometric specifications (Fixed Effects, GMM), and various robustness tests. The results highlight the contingent nature of the tax avoidance–cost of debt relationship and underscore the critical role of corporate governance mechanisms in emerging markets characterized by economic sanctions, inflation volatility, and heavy reliance on bank financing.

• Theoretical Contributions

This research contributes to the existing literature in several ways. First, it provides context-specific evidence from Iran, a sanction-affected emerging economy that has been underrepresented in international accounting research. Second, it simultaneously examines the moderating roles of institutional and managerial ownership, addressing a gap in previous studies that often focused on only one dimension of ownership structure. Third, it enriches agency theory, trade-off theory, and information asymmetry theory by demonstrating how ownership structures alter the risk perception of debtholders regarding tax avoidance activities.



• Practical and Policy Implications

For **corporate managers**, the findings suggest that while tax avoidance can generate short-term cash benefits, it significantly increases financing costs in the Iranian market. Managers should balance tax planning strategies with transparency and strong governance practices to minimize the cost of capital.

For **institutional investors**, the results emphasize the importance of active monitoring of tax strategies in portfolio companies. Institutional owners can play a vital role in reducing overall financing costs for the firms they invest in.

For **creditors and banks**, the study provides a framework for better assessment of borrower risk by considering both tax avoidance levels and ownership structure when pricing loans.

For **policymakers and regulators** in Iran, the findings highlight the need to strengthen corporate governance mechanisms, improve tax transparency, and enhance the monitoring capacity of institutional investors. Developing clearer tax regulations and reducing regulatory uncertainty can help mitigate the negative externalities of aggressive tax avoidance on the cost of corporate debt.

• Limitations and Suggestions for Future Research

This study has several limitations. First, it focuses only on listed companies; future research could extend the analysis to unlisted firms or state-owned enterprises. Second, the study uses standard proxies for tax avoidance; more sophisticated measures such as discretionary permanent differences or machine learning-based tax shelter prediction could be employed. Third, while this research covers 2015–2023, future studies may examine the impact of major economic shocks (e.g., intensified sanctions or significant currency devaluations) on these relationships.

Future researchers are encouraged to investigate the mediating role of financial reporting quality, audit quality, or corporate social responsibility in the tax avoidance–cost of debt nexus. Comparative studies between Iran and other emerging markets (e.g., Turkey, Malaysia, or Vietnam) would also provide valuable insights.

In conclusion, effective ownership structures—particularly institutional ownership—can substantially mitigate the adverse effects of tax avoidance on debt financing costs. Strengthening corporate governance remains a key lever for reducing the cost of capital and promoting sustainable corporate financing in emerging economies like Iran.



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