

Financial strategy and tax avoidance: the influence of profit, capital structure, liquidity, and firm size as a moderator

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ABSTRACT

The purpose of this study is to examine the effect of profitability, capital structure, and liquidity on tax avoidance, with firm size as a moderating factor. This study was conducted on manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period, using multiple linear regression techniques and Moderated Regression Analysis (MRA). The results show a significant effect of profitability on tax avoidance, with firms with higher profits more likely to engage in tax avoidance. Conversely, capital structure does not show a significant relationship with tax avoidance, and debt financing is not a dominant tool for reducing corporate tax liabilities. On the other hand, liquidity shows a negative impact on tax avoidance, indicating that more liquid firms are generally more compliant in fulfilling their tax responsibilities. Furthermore, this study confirms that firm size moderates the relationship between the independent variables and tax avoidance, with larger firms being better equipped to implement complex tax strategies due to their sufficient financial and operational capacity. These findings provide valuable insights for corporate decision-makers, policymakers, and investors, emphasizing the importance of maintaining a strategic yet compliant approach to tax planning.

Keywords: Capital Structure, Company Size, Liquidity, Profit, Tax Avoidance

1. Introduction

Taxes are one of the primary sources of state revenue, playing a crucial role in supporting national development and the provision of public services [1]. As the backbone of the State Budget (APBN), taxes contribute significantly to funding various sectors, including infrastructure, education, health, and security. As the largest source of state revenue, tax revenue remains the primary source of government income [2]. Taxes also play a role in ensuring equitable income distribution, reducing economic inequality, and improving the quality of public services accessible to all citizens. However, in practice, not all taxpayers comply with their tax obligations. One phenomenon that frequently occurs is tax avoidance [3], where companies or individuals seek to reduce their tax liabilities by legally exploiting loopholes in tax regulations. Although tax avoidance differs from tax evasion, which is illegal, this practice still has negative consequences for the national economy.

Tax avoidance is a strategy employed by companies to minimize their tax burden by taking advantage of loopholes in tax regulations. This practice has become a major concern for many countries, particularly Indonesia, because tax avoidance is legally permissible. As a result, it can significantly reduce the potential state revenue. According to [4], [5], to lower their tax obligations, companies often utilize tax incentive policies, shift profits to jurisdictions with lower tax rates, or engage in transfer pricing schemes. One example of the impact of tax avoidance in Indonesia was reported in 2020 by the Tax Justice Network, which estimated that the country suffers annual losses of Rp 68.7 trillion due to tax avoidance. It was stated that US\$ 4.78 billion of this amount resulted from corporate tax avoidance in Indonesia.

To measure the level of tax avoidance, various metrics have been used, one of which is the Cash Effective Tax Rate (CETR). CETR is calculated by dividing income tax paid in cash by pre-tax income. This ratio reflects the percentage of pre-tax income paid as cash taxes, providing a clear representation of the tax burden borne by companies. CETR offers insight into how much tax a company actually pays in cash, making it a key indicator in assessing the aggressiveness of its tax strategies. A study by [6] found a declining trend in CETR among companies in the United States. However, this trend can be explained by the growth in pre-tax income, indicating that concerns over increasing tax avoidance may not be entirely accurate if measured solely using CETR. Additionally, [7] suggest that CETR can be influenced by profitability, highlighting the importance of considering other factors that may affect tax avoidance practices. Using CETR as a tax avoidance measurement tool provides a more realistic perspective on the actual tax burden borne by companies. By relying on real cash flow data, CETR enables a more transparent and accurate analysis of the tax avoidance strategies implemented by businesses.

Another factor suspected to influence tax avoidance is profit. Profit represents the positive difference between revenue and expenses over a specific period, reflecting a company's operational success. Generally, profit indicates how efficiently a company manages its resources to generate earnings [8]. Profit plays a crucial role in a company, serving as the primary indicator of financial performance and a key basis for strategic decision-making. A company's profit is directly related to its tax obligations. As a financial performance indicator, profit significantly influences corporate tax decisions. The motivation for tax avoidance is often linked to efforts to minimize tax payments and manage reported earnings. Profitability can be measured using the Return on Assets (ROA) ratio. Several studies have shown that earnings management can be used to reduce taxable income, meaning that the more aggressively a company engages in earnings management, the higher its level of tax avoidance. Research by [4], [9], [10], [11] suggests that the higher a company's profit, the greater its likelihood of engaging in tax avoidance.

ROA reflects a company's efficiency in generating profit from its assets. The higher the profit a company generates, the better its financial position, as profit serves as the primary basis for tax calculation [12]. However, this contrasts with the findings of [13], [14], who found that a high ROA influences a company's tendency to engage in tax avoidance practices. Profit has

a significant impact on corporate tax decisions. Companies with high profits are more likely to seek strategies to optimize their tax payments, whether through tax incentives, tax planning, or even tax avoidance. However, these tax decisions must be made with full compliance with regulations to avoid potential legal risks in the future.

In the business world, tax avoidance is a common strategy used by companies to legally minimize their tax burden. One factor suspected to influence tax avoidance is capital structure. Capital structure refers to the balance between the use of long-term debt and equity in financing a company's assets [15]. One of the benefits of effective capital structure management for companies is tax optimization. The use of debt in capital structure can provide tax benefits through deductible interest expenses, thereby reducing borrowing costs. A company's capital structure can be measured using solvency ratios, such as the Debt-to-Equity Ratio (DER). Companies with a high DER have a greater proportion of debt compared to equity. The interest expense incurred from debt can be deducted from taxable income, thus lowering corporate tax obligations. This may encourage companies to increase their debt as a legitimate tax avoidance strategy. Several studies have explored the relationship between capital structure and tax avoidance, yielding mixed results. [16] found that DER has a significant positive effect on tax avoidance, meaning that the higher the DER, the more likely a company is to engage in tax avoidance. Furthermore, [17], [18] found that capital structure, measured by DER, has a significant impact on tax avoidance, indicating that companies with higher leverage levels tend to be more involved in tax avoidance practices. Conversely, [19] found that DER has no effect on tax avoidance behavior. Similarly, [20], [21] concluded that capital structure does not significantly influence tax avoidance. The impact of capital structure on tax avoidance is a complex issue influenced by various factors. Empirical research has shown inconsistent results, highlighting the need for further studies to gain a deeper understanding of this relationship.

Based on the two previously discussed variables, there are still mixed findings regarding their impact on tax avoidance. Another factor suspected to influence tax avoidance is liquidity. This ratio indicates how quickly and easily a company can convert its assets into cash to pay off its short-term obligations. In other words, liquidity ratios measure a company's ability to meet its immediate financial obligations. Liquidity can be assessed using the CR, which helps companies evaluate their ability to fulfill short-term liabilities. In the context of tax avoidance, companies with a higher current ratio may have greater flexibility in planning tax avoidance strategies. A larger amount of current assets provides companies with the capability to exploit tax loopholes, such as profit shifting between subsidiaries or utilizing available tax incentives, without affecting the cash flow necessary for short-term operations. [4], [22] found that an increase in short-term debt levels can lead to higher tax avoidance by companies. However, [23] suggested that companies with a high CR tend to engage in less tax avoidance. This may be because firms with strong liquidity do not need tax avoidance strategies to enhance their financial performance. Conversely, [24] stated that CR has no significant effect on tax avoidance. Although CR is an important indicator for assessing a company's liquidity, empirical evidence on its influence on tax avoidance remains inconclusive. Some studies suggest that CR does not significantly impact tax avoidance, whereas other factors such as leverage and profitability tend to play a more dominant role. Therefore, further research is needed to gain a deeper understanding of how liquidity, as measured by CR, affects the tax avoidance strategies adopted by companies.

Research on the factors influencing tax avoidance has been widely conducted using various financial variables, such as ROA, DER, and CR. However, previous studies have shown inconsistencies in the relationship between these variables and tax avoidance. For instance, some studies have found that ROA has a positive effect on tax avoidance, while others suggest a negative or insignificant influence. Similarly, the relationship between DER and tax avoidance has yielded mixed results, with some studies indicating a positive effect, while others find no significant impact. In this context, the latest research will introduce firm size as a moderating variable to explore how it influences the relationship between ROA, DER, CR, and

tax avoidance. Firm size is expected to moderate the effects of these financial ratios on corporate tax avoidance practices.

Firm size can influence the relationship between ROA, DER, and CR on tax avoidance due to various factors. Larger companies tend to have more resources and access to sophisticated tax planning strategies. In contrast, smaller companies may have lower flexibility in engaging in tax avoidance due to financial management constraints and stricter oversight from tax authorities. According to Agency Theory, larger firms often have more dispersed ownership structures, which may lead to greater pressure from shareholders to optimize tax payments through specific strategies. By considering firm size, this study aims to provide a more comprehensive understanding of the factors influencing tax avoidance.

Based on the explanations above and previous research findings, there are still inconsistencies in the results, making tax avoidance a relevant topic for further study. This study adds additional factors that are suspected to influence tax avoidance, including solvency, measured using the leverage ratio, and firm size. Companies with high leverage levels typically have larger interest obligations, which can be deducted from taxable income. This creates an incentive for tax avoidance by maximizing debt utilization. Meanwhile, larger firms have more resources and operational complexity, allowing them to more effectively plan and implement tax avoidance strategies. They are also more likely to have stronger internal tax teams and access to advanced tax planning strategies.

Agency Theory

Agency theory assumes the existence of a conflict of interest between shareholders and managers, where managers may seek to maximize short-term profits, including by reducing tax obligations through tax avoidance. In the context of tax avoidance, agency theory highlights the potential conflict between the principal and the agent, which can influence tax-related decisions. The principal expects the agent (management) to maximize corporate profits [25]. This conflict of interest may drive tax avoidance behavior as a means to increase reported net income, which, in turn, can benefit management. Information asymmetry further exacerbates this issue, as managers have greater access to company information compared to shareholders. This allows management to leverage their informational advantage to engage in tax avoidance practices that may not fully align with shareholders' best interests. According to agency theory, individuals tend to act in their own self-interest [26], [27]. Variables such as ROA, leverage, CR, and company size can influence managerial decisions regarding tax avoidance. Agency theory suggests that tax avoidance can arise as a result of conflicts of interest between managers and shareholders. Managers who focus on reducing tax obligations to boost short-term net income may be more likely to engage in tax avoidance strategies.

The Influence of Profit on Tax Avoidance

Companies with a high ROA can be considered successful, as they effectively utilize their assets to generate profits. ROA measures the amount of net income generated from each unit of assets owned by the company. This ratio is crucial as it provides insight into management efficiency in utilizing available resources. A high profit level indicates that a company has the ability to fulfill its tax obligations and is less likely to engage in tax avoidance practices. However, based on agency theory, management that successfully increases profitability may be inclined to engage in tax avoidance to maintain or further enhance the company's net income. This implies that as corporate profits increase, tax compliance is likely to improve, reducing the probability of tax avoidance practices [8], [9], [10].

H1: Profit influences tax avoidance.

The Influence of Capital Structure on Tax Avoidance

The DER is a metric used to assess the extent to which a company relies on debt to finance its assets. This ratio provides insights into the company's financial risk and its ability to meet debt obligations. A high DER can enhance profit potential but also increases the risk of bankruptcy if the company fails to generate sufficient revenue to cover its debt obligations. A company with a high DER indicates that a significant portion of its assets is financed through external

borrowing, whereas a low DER suggests that the company primarily relies on internal funding. Companies with a high DER face higher interest expenses, which reduce their net income. Consequently, lower earnings result in lower taxable income, leading to reduced tax payments. Thus, corporate financing decisions involving debt can effectively lower the amount of taxes paid to the government [28], [29].

H2: Capital structure influences tax avoidance.

The Influence of Liquidity on Tax Avoidance

The current ratio is a financial metric that measures a company's ability to meet its short-term obligations using its current assets. This ratio provides insight into a company's liquidity, indicating how well it can pay off debts that are due in the near future. A company with high liquidity demonstrates that it does not face difficulties in settling its short-term liabilities. One of the company's key obligations is tax payment. A high level of liquidity suggests that the company has no financial constraints in fulfilling its tax obligations, meaning it is less likely to engage in tax avoidance practices. Conversely, companies with low liquidity may struggle to pay taxes to the government, whereas financially stable companies are less likely to face such issues [30], [31], [32].

H3: Liquidity influences tax avoidance.

The Influence of Profit, Capital Structure, and Liquidity on Tax Avoidance

Tax avoidance is a strategy used by companies to minimize their tax burden through legal means. Several factors can influence tax avoidance, including ROA, DER, and CR. ROA measures a company's ability to generate profit from its total assets. A high ROA indicates efficient asset utilization to generate income, which can influence tax avoidance [9]. DER represents the proportion of debt to equity in a company's capital structure. While high debt usage can provide tax benefits through interest expense deductions, it also increases financial risk [4]. Meanwhile, CR reflects a company's ability to meet its short-term obligations. A high CR indicates strong liquidity, providing flexibility in tax planning [30].

H4: Profit, capital structure, and liquidity influence tax avoidance.

The Moderating Effect of Firm Size on the Relationship Between Profit and Tax Avoidance

ROA illustrates a company's efficiency in utilizing its assets to generate profits. Companies with a high ROA demonstrate strong financial performance in generating earnings. However, the relationship between ROA and tax avoidance remains a subject of debate. Some studies suggest that highly profitable companies tend to engage in tax avoidance to maximize net income, while others find that more profitable firms are generally more compliant with tax regulations. Additionally, firm size is considered a moderating factor in the relationship between ROA and tax avoidance. Larger companies may have more resources and capacity to implement aggressive tax planning strategies compared to smaller firms. However, they are also subject to greater public and regulatory scrutiny, which may limit their ability to engage in tax avoidance. Firm size is believed to influence tax avoidance practices, as larger firms have greater ability to manage taxation through tax-saving strategies and exploit regulatory loopholes [33]. Furthermore, companies with larger total assets indicate greater economic stability [34]. Therefore, firm size is expected to moderate the relationship between profit and tax avoidance.

H5: The effect of profit on tax avoidance is moderated by firm size.

The Influence of Capital Structure on Tax Avoidance Moderated by Firm Size

Tax avoidance is a practice carried out by companies to reduce their tax obligations by exploiting loopholes in tax regulations. One of the factors influencing tax avoidance is a company's capital structure, often measured by the DER. DER reflects the proportion of debt to equity in a company's capital structure. Previous studies suggest that capital structure can impact corporate tax decisions, as companies with higher debt levels may have incentives to engage in tax avoidance to take advantage of tax savings from interest expenses. The use of debt in capital structure has tax implications because interest expenses are tax-deductible,

thereby reducing the company's tax burden. However, the relationship between DER and tax avoidance remains debated. Some studies indicate that highly leveraged companies tend to engage in tax avoidance to maximize tax benefits from interest expenses, while others argue that high leverage increases financial risk, making companies more cautious in their tax avoidance strategies [23]. Furthermore, firm size is considered a moderating factor in the relationship between DER and tax avoidance. Larger firms may have greater resources and capacity to implement complex tax planning strategies compared to smaller firms. However, large firms are also subject to greater public and regulatory scrutiny, which may limit their ability to engage in tax avoidance [35]. Therefore, firm size is suspected to moderate the relationship between capital structure and tax avoidance.

H6: The influence of capital structure on tax avoidance, moderated by firm size.

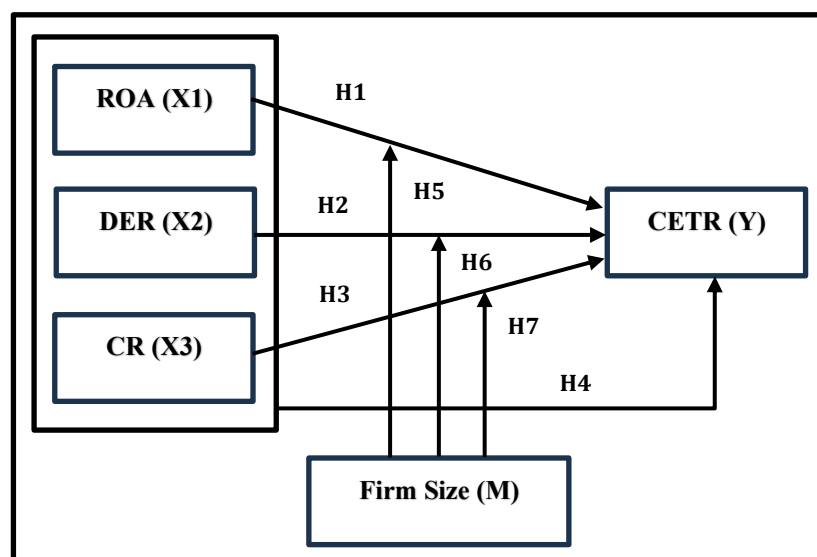
The Influence of Liquidity on Tax Avoidance Moderated by Firm Size

Tax avoidance is a strategy used by companies to legally reduce their tax liabilities. One factor that may influence tax avoidance is liquidity, which is typically measured by the CR. CR represents a company's ability to meet its short-term obligations using current assets [36]. Previous research indicates that liquidity can affect corporate tax decisions, where companies with high liquidity levels are generally better able to fulfill their tax obligations and may feel less need to engage in tax avoidance. Firm size is also considered to influence tax avoidance. Larger companies may have greater resources to engage in complex tax planning; however, they are also subject to stricter regulatory oversight compared to smaller firms [37]. Thus, firm size is suspected to moderate the relationship between liquidity and tax avoidance.

H7: The influence of liquidity on tax avoidance, moderated by firm size.

2. Method

A quantitative study with an associative approach was conducted to analyze the effect of profitability, capital structure, and liquidity on tax avoidance, with firm size as a moderating variable. Multiple Linear Regression analysis was used to examine the effect of ROA, DER, and CR on tax avoidance. MRA was employed to test the role of firm size as a moderating variable.



Source: Processed primary data, 2025

Figure 1. Research Model

The population in this study consists of manufacturing companies listed on the IDX during the 2020–2024 period. The sampling technique used is purposive sampling, based on specific criteria. The selected companies must: (1) belong to the manufacturing sector, (2) have complete financial statements for 2020–2024, (3) have their financial statements audited by a

public accounting firm, (4) present financial statements in Indonesian Rupiah (IDR), and (5) not have incurred losses during the five-year study period. Based on these criteria, a total of 23 manufacturing companies were selected as the research sample for the 2020–2024 period. The regression model equation used in this study is as follows:

$$TA_{it} = \alpha + \beta_1 ROA_{it} + \beta_2 DER_{it} + \beta_3 CR_{it} + e \quad (1) \text{ without moderation}$$

$$TA_{it} = \alpha + \beta_1 ROA_{it} + \beta_2 DER_{it} + \beta_3 CR_{it} + \beta_4 ROA_{it} * UP_{it} + \beta_5 DER_{it} * UP_{it} + \beta_6 CR_{it} * UP_{it} + e \quad (2) \text{ with moderation}$$

TA	= Tax avoidance
α	= Constans
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$	= Regression coefficient of each variable
ROA	= Profits
DER	= Capital Structure
CR	= Liquidity
UP	= Company Size
e	= Error

3. Results and Discussion

Normality Test

The normality test is conducted to assess whether the data used in a study follows a normal distribution. One of the methods for testing normality is the Kolmogorov-Smirnov test. Data is considered to be normally distributed if it has a significance level greater than 0.05. Based on the test results presented in Table 1, the obtained significance level is 0.200, indicating that the data in this study follows a normal distribution.

Tabel 1. One Sample Kolmogorov-Smirnov

	Unstandardize Residual
N	115
Asymp. Sig 2-tailed	0,199

Source: Processed primary data, 2025

Multicollinearity Test

Multicollinearity is a method in regression analysis used to detect the presence of a high linear relationship among independent variables within a regression model. Multicollinearity can lead to invalid regression results, as it makes it difficult to accurately determine the individual impact of each independent variable on the dependent variable. Data is considered free from multicollinearity issues if the Variance Inflation Factor (VIF) is less than 10 and the Tolerance value is greater than 0.1. Based on Table 3, the VIF values for each independent variable are below 10, and the tolerance values exceed 0.1, indicating that the data is free from multicollinearity issues.

Table 2. Multicollinearity Test

Description	Tolerance	VIF	Result
Profits	0,722	1,385	No Multicollinearity Issue
Capital Structure	0,667	1,500	No Multicollinearity Issue
Liquidity	0,861	1,162	No Multicollinearity Issue

Source: Processed primary data, 2025

Heteroscedasticity Test

Heteroscedasticity is a method in regression analysis used to detect whether the variance of residuals (errors) in a regression model is not constant. In classical linear regression assumptions, one of the key requirements is homoscedasticity, which refers to a condition

where the residual variance remains constant across all values of the independent variable. If the residual variance fluctuates, heteroscedasticity occurs, which can lead to inefficient regression results and reduce the reliability of parameter estimation. The Glejser test is used to detect the presence of heteroscedasticity in a regression model. If the significance value is greater than 0.05, it indicates that heteroscedasticity is not present in the model. Based on the obtained results, each variable in this study has a significance value greater than 0.05, meaning that the regression model does not experience heteroscedasticity issues.

Table 3. Glejser Test

Variabel	Sig.
Profits	.065
Capital Structure	.142
Liquidity	.071

Source: Processed primary data, 2025

Coefficient of Determination Test

The coefficient of determination is a measure in regression analysis that indicates the extent to which independent variables can explain variations in the dependent variable. Based on the results obtained, the R^2 value is 0.421, meaning that 42% of tax avoidance can be explained by the variables profitability, capital structure, and liquidity, while the remaining 58% is influenced by other factors outside this study.

Table 4. R^2 Before Moderation

Models	R	R Square	Adjusted R Square
Profits, Capital Structure, Liquidity	.449	.421	.395

Source: Processed primary data, 2025

Next, after incorporating firm size as a moderating variable into the research model, the R^2 value obtained was 0.901, indicating that 90% of tax avoidance can be explained by the variables profitability, capital structure, liquidity, and firm size, while the remaining 10% is influenced by other factors outside the study. The increase in the R^2 value suggests that firm size plays a role in influencing factors related to tax avoidance.

Table 5. R^2 After Moderation

Models	R	R Square	Adjusted R Square
Profits, Capital Structure, Liquidity	.949	.901	.895

Source: Processed primary data, 2025

Hypothesis Testing

Table 6. Hypothesis Testing

Hypothesis	B	Sig	Explanation
Profit influences tax avoidance	1,046	0,013	H1 Accepted
Capital structure influences tax avoidance	-0,028	0,137	H2 Rejected
Liquidity influences tax avoidance	-0,418	0,000	H3 Accepted

Source: Processed primary data, 2025

The linear regression equation is as follows: $TA_{it} = \alpha + \beta_1 ROA_{it} + \beta_2 DER_{it} + \beta_3 CR_{it} + e$. The t-test is a statistical method used in hypothesis testing to determine whether there is a significant difference between the means of two data groups. A hypothesis is accepted if the significance value is < 0.05 , whereas if the significance value is > 0.05 , the hypothesis is

rejected. Based on the test results, the hypotheses for ROA, CR, and firm size were accepted, as their significance values were < 0.05 . In contrast, the hypothesis for leverage was rejected because its significance value was > 0.05 .

Discussion

Profit and Tax Avoidance

The first hypothesis states that profit significantly influences tax avoidance at a 0.013 significance level with a coefficient of 1.046. The positive coefficient indicates that the higher a company's profit, the greater its tendency to engage in tax avoidance. This aligns with the theory that firms with substantial profits will seek strategies to minimize their tax burden in order to maintain profitability. Therefore, the first hypothesis in this study is accepted. Higher profits lead to increased tax obligations payable to the government. Based on agency theory, which explains the relationship between company owners and management, conflicts of interest may arise when management makes decisions that do not align with shareholders' interests [4]. However, there are risks associated with aggressive tax avoidance strategies. If management focuses excessively on reducing tax liabilities without considering reputational or legal risks, it may act against the long-term interests of shareholders. In this regard, agency theory highlights the importance of transparency and accountability in tax decision-making. In this context, management may engage in tax avoidance behavior, as evidenced by companies with high profits not necessarily paying higher taxes but instead reducing their tax obligations. Therefore, even though high profits reflect strong company performance, tax avoidance practices remain prevalent. These findings are consistent with previous research that reported similar results [10], [33], [38], [39].

Capital Structure and Tax Avoidance

The second hypothesis suggests that capital structure does not influence tax avoidance at a 0.137 significance level with a coefficient of -0.028. These results indicate that capital structure does not significantly impact tax avoidance. Although theoretically, debt usage can create a tax shield (tax protection through interest expenses), in this study, the effect is not statistically significant. This may be due to variations in tax regulations or financial strategies applied by the sampled companies. Therefore, the second hypothesis is rejected. A larger capital structure does not necessarily influence a company's efforts to avoid taxes. This may be because management tends to be more conservative in financial reporting, especially for operational activities involving large amounts of debt [40]. Furthermore, research conducted by [41] found that leverage does not significantly affect earnings quality, which serves as a proxy for tax avoidance practices. If a company primarily uses debt for operational activities, its impact on tax avoidance may be minimal. In this case, debt is not utilized as a tool for tax avoidance. While interest expenses can be deducted to reduce taxable income, companies with high leverage tend to pay lower taxes. However, agency theory states that highly leveraged firms aim to maintain their current earnings levels, leading to lower tax avoidance tendencies. These findings align with previous [19], [29], [40], [42], [43].

Liquidity and Tax Avoidance

The third hypothesis states that liquidity significantly influences tax avoidance at a 0.000 significance level with a coefficient of -0.418. This result indicates that liquidity has a significant and negative impact on tax avoidance. In other words, the higher a company's liquidity, the lower its tendency to engage in tax avoidance. This may occur because highly liquid companies have more cash available to fully meet their tax obligations, reducing the need for tax avoidance strategies. Therefore, the third hypothesis in this study is accepted. High liquidity levels provide financial flexibility, allowing companies to engage in strategic tax planning. Companies with strong liquidity have more resources to develop and implement tax avoidance strategies, which in turn lowers their CETR. According to [24], companies with high liquidity tend to comply with tax regulations. They have sufficient resources to pay taxes on time and in accordance with legal requirements, reducing their risk of being subjected to tax audits or penalties. [22] found that CR significantly influences tax avoidance, suggesting that

highly liquid firms are more likely to engage in tax avoidance. This can be explained by the fact that financially stable companies have more flexibility and resources to plan complex tax strategies. From the perspective of agency theory, tax avoidance can be a means of increasing net profit and ROA, ultimately enhancing firm value. However, management must also consider the reputational and legal risks associated with aggressive tax avoidance. When a company has a high CR, it possesses more available resources, which can be utilized for tax avoidance planning. However, management must weigh the costs and benefits of such strategies. If the costs of implementing tax avoidance outweigh the benefits or pose significant risks, the company may opt not to engage in tax avoidance. These findings are consistent with previous research [5], [7], [44].

F-Test

The F-test is conducted to assess whether the independent variables as a whole have an influence on the dependent variable. Based on the results obtained, the significance level is $0.000 < 0.05$, indicating that Hypothesis 4, which states that profitability, capital structure, and liquidity influence tax avoidance, is accepted. Overall, profitability, capital structure, and liquidity have a significant impact on tax avoidance, although the strength of their relationships varies depending on company policies and the prevailing regulatory environment. Companies with high profitability tend to engage in tax avoidance to reduce their tax burden, while a debt-based capital structure provides tax incentives that encourage the use of tax shield strategies. On the other hand, high liquidity offers flexibility in tax management, although it is not always directly related to the aggressiveness of tax avoidance. These findings are consistent with previous research conducted by [4], [10].

Table 7. F-Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	8622,898	1	2874,299	7,984	0,000
Residual	39953,589	111	359,942		
Total	48576,489	114			

Source: Processed primary data, 2025

Moderation Test

The moderation test in SPSS aims to examine whether a moderating variable can strengthen or weaken the relationship between an independent variable (X) and a dependent variable (Y). This test is commonly used in interaction regression analysis. The moderation test in this study was conducted using Moderated Regression Analysis (MRA). The results of the moderation test are presented below.

Table 8. Moderation Test

Hypothesis	B	Sig.	Result
Profits	5.411	0.347	
Capital Structure	0.286	0.461	
Liquidity	-1.893	0.365	
The effect of profit on tax avoidance is moderated by firm size	0.153	0.024	H5 Accepted
The influence of capital structure on tax avoidance, moderated by firm size	0.004	0.025	H6 Accepted
The influence of liquidity on tax avoidance, moderated by firm size	0.690	0.000	H7 Accepted

Source: Processed primary data, 2025

The linear regression equation is as follows: $TAit = \alpha + \beta1 ROAit + \beta2 DERit + \beta3 CRit + \beta4 ROAUPit + \beta5 DERUPit + \beta6 CR*UPit + e$.

A coefficient of 0.153 with a significance value of $0.024 < 0.05$ indicates that the fifth moderation hypothesis is accepted, meaning that firm size moderates the effect of profitability on tax avoidance. Although profitability does not directly influence tax avoidance, its impact becomes significant when moderated by firm size. This suggests that the relationship between profitability and tax avoidance depends on the size of the company. Larger firms tend to have more flexibility in tax planning due to their access to greater resources and more sophisticated tax avoidance strategies. In contrast, smaller firms face limitations in implementing tax avoidance strategies due to restricted access to resources and tighter regulatory oversight. Firm size is commonly measured by total assets, revenue, or the number of employees. Larger firms generally have more resources, better access to information, and more complex tax planning strategies. This enables them to engage in tax avoidance more efficiently compared to smaller firms. [45] found that firm size moderates the relationship between profitability and tax avoidance, with the results indicating that firm size weakens the relationship between profitability and tax avoidance in certain companies.

A coefficient of 0.004 with a significance value of $0.025 < 0.05$ confirms that the sixth moderation hypothesis is accepted, indicating that firm size moderates the effect of capital structure on tax avoidance. Although capital structure does not directly influence tax avoidance, its impact becomes significant when moderated by firm size. This suggests that the size of a company affects how capital structure contributes to tax avoidance strategies. Larger firms may use debt as a tax reduction tool more effectively since they have a higher capacity to handle interest expenses, which can be deducted from taxable income. In contrast, smaller firms may be less inclined to use debt for tax avoidance due to limited access to financing. Firm size plays a critical role as a moderating variable in the relationship between the DER and tax avoidance. Larger companies, with greater access to resources and financial expertise, tend to adopt different tax avoidance approaches compared to smaller companies. Therefore, it is essential for researchers and practitioners to consider firm size when analyzing corporate tax decisions and tax avoidance strategies.

A coefficient of 0.690 with a significance value of $0.000 < 0.05$ confirms that the seventh moderation hypothesis is accepted, meaning that firm size moderates the effect of liquidity on tax avoidance. Liquidity does not directly influence tax avoidance, but its impact becomes significant when moderated by firm size. Larger firms with high liquidity are more capable of engaging in tax avoidance strategies because they have sufficient funds to hire tax consultants or implement more sophisticated tax planning schemes. Conversely, smaller firms with high liquidity may prefer to comply with tax regulations rather than take risks associated with tax avoidance. Larger companies typically have well-equipped financial teams and tax consultants who can develop more effective tax avoidance strategies. If a large company has high liquidity, it is more likely to allocate funds to optimize its tax strategies, such as tax planning or utilizing tax incentives. Understanding how firm size moderates the relationship between liquidity and tax avoidance can help management formulate more effective tax policies suited to their company's characteristics. Further research is needed to explore these dynamics more deeply and provide additional insights for stakeholders in developing optimal tax strategies.

4. Conclusion

Based on the findings of a study conducted on manufacturing companies listed on the BEI for the 2020–2024 period, several key conclusions were drawn regarding the impact of profitability, capital structure, and liquidity on tax avoidance, with firm size as a moderating variable. The results indicate that the higher a company's profit, the greater the likelihood of engaging in tax avoidance strategies. This finding supports agency theory, where management, seeking to maximize net income, may be inclined to adopt tax avoidance strategies to optimize corporate profits. The capital structure, measured by the DER, was found to have no significant

effect on tax avoidance. This suggests that while debt financing can create a tax shield through interest expenses, in this case, capital structure is not a primary factor in a company's decision to engage in tax avoidance. It is likely that companies rely more on other strategies to reduce their tax burden rather than leveraging debt utilization. Liquidity, measured by the CR, has a negative and significant impact on tax avoidance, meaning that the higher a company's liquidity, the lower its tendency to engage in tax avoidance. This result indicates that highly liquid companies tend to comply with their tax obligations more diligently than those with lower liquidity, which may be more inclined to avoid taxes to maintain financial stability. Furthermore, firm size strengthens the relationship between profitability, capital structure, liquidity, and tax avoidance, implying that larger companies with high profitability are more likely to engage in tax avoidance strategies compared to smaller companies.

Implications and Recommendations: For management, strategic tax planning is necessary to maximize financial efficiency without violating tax regulations. For government and regulators, stricter monitoring of companies with high profitability and liquidity is essential to prevent excessive tax avoidance practices. For investors and shareholders, understanding how financial factors influence tax avoidance can aid in making informed investment decisions. This study focuses solely on manufacturing companies listed on the BEI, meaning the results may not be generalizable to other sectors. Additionally, the independent variables used in this study are limited, suggesting that other factors may also influence tax avoidance. Lastly, as the data only covers the 2020–2024 period, it may not fully reflect the long-term trends in corporate tax avoidance strategies.

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