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Research Article

The Effect of Leverage and Capital Intensity on Tax Avoidance with Independent Commissioners as a Moderating Variable

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Abstract: This study aims to examine the effect of Leverage and capital intensity on tax avoidance with independent commissioners as a moderating variable in property and real estate companies listed on the Indonesia Stock Exchange (IDX). Tax avoidance practices in this sector are considered relatively high due to the complexity of fixed asset management and financing structures. The study applies a quantitative approach with an associative method and purposive sampling, resulting in 21 companies as the final sample with a total of 105 observations during the 2020–2024 period. Data were analyzed using multiple linear regression and Moderated Regression Analysis (MRA) with SPSS version 25. The results show that leverage has a positive and significant effect on tax avoidance, indicating that a higher level of debt usage increases the likelihood of tax avoidance through interest expenses. Capital intensity also has a positive and significant effect on tax avoidance, as higher investment in fixed assets provides opportunities for firms to utilize depreciation expenses in reducing taxable income. The moderating test reveals that independent commissioners do not moderate the relationship between leverage and tax avoidance but significantly moderate the relationship between capital intensity and tax avoidance in a negative direction, thereby weakening the effect. These findings highlight the importance of corporate governance mechanisms through the presence of independent commissioners in mitigating tax avoidance, although their effectiveness remains limited to specific aspects. This study contributes empirically to the taxation and corporate governance literature and provides recommendations for regulators and tax authorities in strengthening tax compliance monitoring in the property sector.

Keywords: Capital Intensity; Corporate Governance; Independent Commissioners; Leverage; Tax Avoidance

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1. Introduction

Taxation plays a major role as a fiscal policy instrument used to finance the provision of public services and promote national economic growth (Toumi et al., 2022). In Indonesia, fiscal levies are a major pillar of state revenue that plays an essential role in ensuring the continuity of the State Budget (APBN). Provisions related to tax rates are stipulated in Law Number 7 of 2021 concerning Harmonization of Tax Regulations, which regulates that the Income Tax (PPh) rate for entities is set at 22% starting from the 2022 tax year.Indonesia implements a tax administration system based on the principle of self-assessment, whereby each taxpayer has the obligation to autonomously calculate, deposit, and report their respective tax liabilities. The success of this system depends heavily on the integrity and voluntary compliance of taxpayers in fulfilling their tax obligations. The digitization of tax services through platforms such as DJP Online has simplified the reporting process, but challenges remain due to low tax literacy and minimal supervision. This situation creates opportunities for tax violations caused by ignorance or deliberate intent (Hidayah et al., 2025;Putra Kurniawan et al., 2021;Nagari et al., 2024).

In 2020, the international organization Tax Justice Network released findings suggesting that Indonesia faces potential fiscal revenue leakage of USD 4.8 billion annually as a consequence of tax avoidance practices. If this figure is converted into domestic currency, the value is around IDR 7.6 trillion. The largest source of the deficit comes from tax avoidance strategies carried out by business entities or corporations, while the estimated loss from individual taxpayers reaches around IDR 1.1 trillion. Among the various economic sectors, property and real estate rank highest as the areas with the highest vulnerability to fiscal avoidance practices. This phenomenon became even more prominent when the international community was rocked by a global data leak known as the Pandora Papers in 2021, an event that followed on from the Panama Papers scandal, which had previously exposed hidden financial practices.The massive leak included nearly 12 million confidential documents exposing asset storage methods in tax havens, attempts to evade fiscal responsibility, and strong indications of cross-border money laundering by elite figures from around the world. Among the names listed in the documents are two businessmen from Indonesia, one of whom is Ciputra Harun Haraji the current President Director of the Ciputra Group, a large corporation engaged in the property and real estate sector and listed on the Indonesia Stock Exchange (Madia et al., 2023).

PT Citra Development Tbk, as one of the top four property companies listed on the Indonesia Stock Exchange (IDX), is known to have hidden US$1.6 billion in assets, equivalent to around Rp 21.6 trillion, to avoid tax liabilities, reflecting the high potential for financial reporting fraud in the property industry, including in the form of tax evasion (Artiarno et al., 2024). A similar practice was also found at PT BAPI Tbk, which was suspected of submitting incomplete or incorrect Periodic Income Tax Return (SPT) Form 4 Paragraph (2) during the period from August 2018 to December 2019, resulting in a state loss of Rp 2.9 billion due to non-compliance in tax deductions and payments on an apartment project in Ciledug. and this company was named a corporate suspect because the violations were committed on behalf of and for the benefit of the entity (DJP, 2024). A similar scenario was observed in PT Fortune Mate Indonesia (FMII), which recorded a continuous increase in tax debt for four consecutive years, where the amount of unpaid tax was recorded as tax debt, reflecting a delay in tax payments, which is a form of tax avoidance in the property and real estate sector (Abdurachman dan Abidin 2021).

Tax avoidance can be defined as the act of exploiting loopholes or provisions in the tax system to reduce the amount of tax payable, through approaches that remain within the framework of legality. This practice is generally carried out through strategic financial decisions, with the main objective of reducing the fiscal burden without violating applicable legal provisions (Hossain et al., 2024). Conversely, actions by taxpayers who attempt to avoid their tax obligations using illegal methods are known as tax evasion. This strategy often takes advantage of certain provisions such as fiscal incentives, payment deferrals, or the recognition of expenses that are valid under tax regulations (Felix & Iskak, 2021). These actions pose a risk to the effectiveness and fairness of the tax system because they reduce the tax base and potentially shift income to countries with lower tax rates. (Roslita dan Safitri 2022).

Several internal factors within a company are known to influence decisions to engage in tax avoidance. One such factor is the level of leverage, which is the proportion of debt used relative to a company's equity. Leverage can increase interest expenses, which reduce taxable income. Studies by (Adijanto et al., 2025) and Putri & Sembiring (2022) indicate that leverage has a significant impact on the tendency to engage in tax avoidance practices. Research shows varying results. Sari & Kinasih (2021), Dewi & Oktaviani (2022), and Lukito & Oktaviani (2022) did not identify a significant influence between leverage and tax avoidance.

The level of capital intensity is one of the determinants that influence a company's tendency to engage in tax avoidance. This indicator reflects the ratio between investment allocation in fixed assets and the total assets controlled by the entity. Based on the provisions of Article 11 of Law Number 36 of 2008, fixed assets other than land are allowed to undergo a depreciation process, whereby the depreciation expense can be used as a deductible component in calculating taxable income. Research by (Putra Kurniawan et al., 2021), Rahma et al. (2022), dan (Amandha Cahyamustika and Meita Oktaviani 2024) shows a significant influence between capital intensity and tax avoidance. Conversely, (Hilmi et al., 2022) as well as (Wati dan Astuti 2020) stating that the two have no significant connection.

The quality of corporate governance plays an important role in reducing tax avoidance practices. The presence of independent commissioners who are not affiliated with majority shareholders is believed to strengthen internal oversight mechanisms over management policies, including ensuring compliance with tax regulations(Putra dan Pratami, 2024; Asmoro et al., 2024). The comparison between the number of independent commissioners and the total number of board members is used as an indicator to measure the supervisory role.

Empirical studies on the role of independent commissioners as a moderating variable in the relationship between leverage structure and capital intensity and tax avoidance practices still show inconsistencies. Findings from various studies show significant variations, so there is no conclusive consensus on the effectiveness of the supervisory function of independent commissioners in this context. (Anggraeni, Mardi, dan Respati 2024) shows that the presence of independent commissioners significantly affects the strength of the relationship between leverage and tax avoidance, while (Badoa, 2020) and (Andi Ghifary et al., 2022) did not find such an effect. (Dewi dan Oktaviani 2022) revealed that independent commissioners act as a moderating variable in the relationship between capital intensity and tax avoidance, a finding that deviates from the results of previous documented studies.

Findings from previous studies that show inconsistencies indicate that the relationship between internal company attributes and tax avoidance behavior still requires further in-depth research, particularly with regard to the role of effective company management. One important aspect of company management is the presence of independent commissioners. The role of independent commissioners includes overseeing management policies, including strategic decision-making processes related to taxation. In this context, independent commissioners serve as a control mechanism aimed at reducing the possibility of conflicts of interest between management and shareholders, as well as limiting the possibility of abuse of company tax policies for the benefit of certain parties.

This study was conducted with the aim of empirically analyzing the impact of leverage and capital intensity on tax avoidance practices, as well as evaluating the position of independent commissioners as a moderating variable in this relationship. This approach is expected to enrich the literature in the field of taxation and corporate governance, while also providing policy input that supports the creation of a more transparent, accountable, and fair taxation system. The findings of this study are also expected to serve as a reference for relevant authorities, particularly the Directorate General of Taxes, in formulating more effective supervision strategies, especially in the property and real estate sectors, which present a relatively high potential for tax compliance risks.

2. Literatur Review

Agency Theory

Agency theory describes the contractual relationship between company owners as principals and managers as agents, which has the potential to cause conflicts of interest due to differences in objectives and imbalances in the information possessed by each party. Based on this view, Jensen and Meckling (1976), this relationship is a form of cooperation based on a contract, whereby shareholders delegate authority to management to run the company's operations and make strategic decisions. In practice, conflicts can arise when management makes decisions that are more beneficial to themselves, such as tax avoidance practices, which can actually harm the interests of shareholders. This theory seeks to strengthen the capacity of principals and agents to assess and understand the context of decision-making more accurately, thereby minimizing the potential for abuse of authority and misalignment of interests. (Rahmad dan Mujiyati 2024).

The Effect of Leverage on Tax Avoidance

Leverage is a ratio in financial analysis that reflects a company's level of dependence on financing through total debt compared to total equity (Zainuddin dan Anfas 2021). The leverage ratio reflects the proportion of external funding used by companies in conducting their business operations. From an agency theory perspective, the divergence of interests between shareholders and management can trigger potential conflicts, especially when making crucial strategic decisions. Companies with fixed asset dominance usually optimize depreciation expenses as a mechanism to reduce taxable income, while shareholders expect maximum and sustainable returns on investment. Research results Antari and Ery Setiawan (2020), shows that leverage has a positive impact on the implementation of tax avoidance practices. These findings are consistent with the results of studies Nuraini Ulya Wiriatmaja et al. (2025), which also found that leverage contributes significantly and positively to tax avoidance. Based on the theoretical foundation and empirical evidence from previous studies, the hypothesis proposed in this study can be explained as follows:

H1 : Leverage plays a positive role in tax avoidance efforts.

The Effect of Capital Intensity on Tax Avoidance

The Capital intensity represents a company's financial policy through the ratio of fixed assets to total assets Marsahala et al. (2020), which reflects the level of investment in assets such as buildings, machinery, and equipment in operational activities. One implication is depreciation, which may reduce taxable income and potentially be used to avoid taxes. The higher the capital intensity, the greater the opportunity for companies to reduce their tax burden through fiscal income reduction. From an agency theory perspective, the depreciation expense of fixed assets can help control conflicts of interest between management and shareholders, as it allows operations to continue without reducing the returns earned by shareholders. Research by Amandha Cahyamustika and Meita Oktaviani (2024) and Dewi and Oktaviani (2022), shows that capital intensity has a significant effect on tax avoidance practices. Referring to this theory and empirical results, the hypothesis proposed is as follows:
H2: Capital intensity plays a positive role in tax avoidance efforts.

The Influence of Independent Commissioners Moderates The Relationship Between Leverage and Tax Avoidance

Workload An independent commissioner is defined as an individual who is free from any form of ownership ties, family relationships, or economic interests with dominant shareholders, executive management, and other members of the supervisory board. In addition, the person concerned also does not hold a strategic position such as director in another entity that has an affiliation with the company being supervised. Although functioning as a supervisor, in practice independent commissioners often have limited understanding of internal operations, making them less responsive to indications of tax avoidance by management (Rani, Mulyadi, dan Darminto 2021). Agency theory emphasizes the importance of independent directors in resolving conflicts of interest between management and shareholders through their supervisory and strategic guidance functions. A larger proportion of independent directors is believed to be able to curb opportunistic behavior by management, including the tendency to engage in tax avoidance. The findings of Rani et al. (2021) support this view, proving that the role of independent commissioners can moderate the relationship between leverage and tax avoidance. Based on this theory and empirical results, the hypothesis formulated in this study is as follows:
H3 : Independent commissioners strengthen the effect of leverage on tax avoidance

The Influence of Independent Commissioners Moderates The Relationship Between Capital Intensity and Tax Avoidance

Capital intensity is a ratio that reflects the proportion of a business entity's investment in fixed assets and inventories (Rani et al., 2021). Independent commissioners are members of the board who are free from ties to the business entity (Oktaviani et al., 2023). Based on agency theory, the existence of independent commissioners can strengthen supervisory functions and reduce conflicts between agents and principals. The use of capital intensity has the potential to cause depreciation expenses that impact taxable income, thereby reducing the company's tax burden. An adequate proportion of independent commissioners is expected to be able to oversee the implications of managerial decisions related to taxation policies on the use of fixed assets. The results of research byDewi dan Oktaviani (2022), found that the presence of independent commissioners does not affect the moderation of the relationship between capital levels and tax avoidance practices. Referring to the theoretical basis and empirical findings, the hypothesis formulated is as follows:
H4: Independent commissioners weaken the impact of capital intensity on tax avoidance practices Organizational Commitment.

3. Research Method

Population and Sample

Population

The population covered in this study includes all corporations engaged in the property and real estate sector that are officially listed as issuers on the Indonesia Stock Exchange (IDX). The focus on this sector is based on the consideration that the property industry has a high level of complexity in terms of fixed asset management and financing frameworks, including the use of leverage and capital structure composition. The high dynamics and variability in the management of these long-term assets make this sector a suitable empirical basis for examining the relationship between the level of leverage and capital intensity and the behavior of business entities in avoiding tax obligations. Thus, this sector is considered representative for testing the significance of independent variables and the moderating role of independent commissioners in the context of tax avoidance practices.

Sampling Technique

The samples in this study were determined using a purposive sampling approach, which is a method of selecting units of analysis based on specific considerations and criteria that are in line with the focus and objectives of the study. The parameters used as references in the sample selection process include:

a. Entities that are not listed as public companies on the Indonesia Stock Exchange (IDX);
b. Entities that do not publish their financial reports publicly;
c. Entities that recorded losses or did not earn profits during the observation period.

Based on these screening criteria, 21 companies were found to be eligible for inclusion in the research sample. Each entity was observed continuously for five consecutive years, resulting in a total of 105 observations (21 companies multiplied by 5 years of research) in the form of panel data.

Operational Definition of Variables

Table 1. Operational Definition of Variables

Variable Name	Operational Definition	Calculation Formula
Leverage (DER)	Leverage is defined as the ratio between total debt and total company equity (Fortuna dan Khristiana (2021); Setyaningsih et al. (2023)).	DER = Total Debt / Total Equity (Fortuna dan Khristiana (2021); Setyaningsih et al. (2023)).
Capital Intensity (CI)	Capital intensity describes the proportion of fixed assets to total company assets (Bandaro dan Ariyanto (2020); Dewi dan Oktaviani (2021)).	CI = Total Fixed Assets / Total Assets (Bandaro dan Ariyanto (2020); Dewi dan Oktaviani (2021)).
Tax Avoidance (ETR)	The company's strategy to legally reduce tax liabilities through loopholes in tax regulations (Agustina, Eprianto, dan Pramukty (2023); Sari dan Pramiana (2024)).	ETR = Income Tax Expense / Profit Before Tax (Agustina, Eprianto, dan Pramukty (2023); Sari dan Pramiana (2024)).
Independent Commissioner (IC)	The proportion of independent commissioners to total commissioners, serves as an independent supervisor (Fidiana, 2022)).	CI = Number of Independent Commissioners / Total Commissioners (Fidiana, 2022)).

Data Analysis Techniques

This study applied multiple linear regression analysis using Statistical Package for the Social Sciences (SPSS) version 25 software as a data processing tool. The approach used is Moderated Regression Analysis (MRA), a statistical technique designed to identify the effect of independent variables on dependent variables, while also examining the extent to which a moderating variable can strengthen or weaken this relationship. MRA is a development of the conventional multiple linear regression model that explicitly includes interaction elements—in the form of the product of the independent variable and the moderator variable—into the regression equation model, thereby enabling the detection of moderation effects more accurately and measurably.

4. Results and Discussion

Qualitative Descriptive Analysis

Table 2. Qualitative Description Results

Descriptive Statistics					
	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Y	105	.00	.95	.0690	.14786
X1	105	.00	7.61	.6250	.79544
X2	105	.00	.65	.0957	.13309
Z	105	.25	1.00	.4224	.10281
Valid N (listwise)	105				

Source: Data processed with SPSS version 25

Based on the descriptive statistics summary presented in Table 1, it was found that the average value of the tax avoidance variable (Y) was 0.0690. Meanwhile, the leverage variable (X1) has an average of 0.6250, capital intensity shows an average of 0.957, and independent commissioners record an average of 0.4224. These descriptive data indicate that the companies in the research sample have a moderate level of leverage, a relatively high capital intensity, and a relatively significant percentage of independent commissioners. These conditions show that tax avoidance practices still occur but at a relatively low level, with variations influenced by funding structure, fixed asset ownership, and corporate governance.

Normality Test

Table 2. Normality Result

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		105
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.44245997
Most Extreme Differences	Absolute	.071
	Positive	.071
	Negative	-.036
Test Statistic		.071
Asymp. Sig. (2-tailed)		.200[c,d]

Source: Data processed with SPSS version 25

Based on the data normality test conducted using the One-Sample Kolmogorov-Smirnov Test method as shown in Table 2, an Asymptotic Significance (2-tailed) value of 0.200 was obtained. Since this value exceeds the significance threshold of 0.05, it can be concluded that the data used in this study meets the assumption of normality, making it suitable for further analysis using parametric statistical techniques.

Multicollinearity Test

Table 3. Multicollinearity Test Results

Coefficients[a]			
Model		Collinearity Statistics	
		Tolerance	VIF
1	X1	.905	1.104
	X2	.972	1.028
	Z	.907	1.103

Source: Data Processed with SPSS version 25

The multicollinearity test results listed in Table 3 show that all variables have tolerance values above 0.1 and variance inflation factor (VIF) values below 10. These conditions indicate that the model used does not experience multicollinearity problems.

Heteroscedasticity Test

Table 4. Heteroscedasticity Test Result

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.437	1.226		-2.803	.006
	X1	.211	.352	.065	.601	.550
	X2	1.363	2.047	.071	.666	.507
	Z	5.483	2.757	.216	1.989	.050

Source: Data processed with SPSS version 25

The tests shown in Table 4 indicate that the variables of leverage, capital intensity, tax avoidance, and independent commissioners have significance values above 0.05. These findings indicate that this research model does not contain heteroscedasticity problems.

Multiple Linear Regression Test

Table 5. Multiple Linear Test Results

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.672	.677		-6.901	.000
	X1	.461	.194	.249	2.375	.020
	X2	2.984	1.130	.272	2.641	.010
	Z	.898	1.522	.062	.590	.557

Source: Data processed with SPSS version 25

A constant value of -4.672 indicates that if all independent variables including leverage (X1), capital intensity (X2), and independent commissioners as moderating variables (Z) are neutral or show no change (zero value), the estimated value of the dependent variable, namely tax avoidance, is projected to be at a negative level of -4.672. This constant reflects the baseline of the regression model, which is the assumed value when there is no contribution from the predictor variables. Meanwhile, the regression coefficient for the leverage variable (X1) is 0.461 with a significance level of 0.020. This value is below the probability threshold of $\alpha = 0.05$, which indicates that the relationship between leverage and tax avoidance is statistically significant. This means that every increase of one unit or 1% in leverage implies an increase of 0.461 in the value of tax avoidance. These findings indicate a positive and significant relationship between debt-based financing structures and entities' propensity to engage in tax avoidance. Thus, leverage can be considered an important determinant that influences companies' behavior in strategically managing their tax liabilities. The regression coefficient for variable X2 (capital intensity) is 2.984 with a significance level of 0.010. This means that every 1% increase in X2 will increase the dependent variable (tax avoidance) by 2.984, and this effect is significant. Meanwhile, the regression coefficient for variable Z (independent commissioners) is 0.898 with a significance level of 0.557. In other words, although a 1% increase in variable Z has the potential to drive an increase in the dependent variable, namely tax avoidance, by 0.898 units, this effect is not statistically significant because the significance value exceeds the threshold of 0.05.

Moderated Regresion Analysis Test

Table 6. Moderated Regression Analysis Test Result

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.343	.434		-5.404	.000
	X1	-.142	.334	-.129	-.426	.671
	X2	1.110	.292	.950	3.795	.000
	X1Z	.815	.543	.449	1.502	.137
	X2Z	-1.713	.622	-.715	-2.753	.007

Source: Data processed with SPSS version 25

The constant value of -2.343 reflects the intercept in the regression model, which describes the estimated value of the dependent variable namely tax avoidance when all independent variables are zero or show no change. In other words, this constant represents the basis for predictive calculations when there is no contribution from the independent variables included in the model. For the leverage variable (X1), a t-statistic value of -0.426 was obtained with a significance level of 0.671, which clearly exceeds the 5% significance threshold ($\alpha = 0.05$). This result indicates that there is no statistically significant effect between leverage and tax avoidance. Therefore, the first alternative hypothesis (H1) does not receive empirical support and is rejected, while the null hypothesis (H0) is accepted. Conversely, the capital intensity variable (X2) shows a t-value of 3.795 with a significance value of 0.000, which is substantially below the significance threshold. This provides strong evidence that capital intensity has a significant effect on tax avoidance practices, so that the second alternative hypothesis (H2) is accepted, and the null hypothesis is simultaneously rejected. Furthermore, the interaction between leverage and independent commissioners (X1Z) produced a t-value of 1.502 with a significance of 0.137. Since this value exceeds the significance threshold of 0.05, it can be concluded that the role of independent commissioners does not function as a moderator in the relationship between leverage and tax avoidance. Thus, the third alternative hypothesis (H3) cannot be accepted, and the null hypothesis is valid. In contrast, the interaction between capital intensity and independent commissioners (X2Z) recorded a t-statistic value of -2.753 with a significance value of 0.007. This value indicates a statistically significant interaction effect, so the fourth alternative hypothesis (H4) is accepted, and the null hypothesis is rejected. Overall, these findings imply that the presence of independent commissioners is unable to perform a moderating function in the context of the relationship between leverage and a company's tendency to engage in tax avoidance. However, the moderating role of independent commissioners has been proven to be effective in weakening or strengthening the relationship between capital intensity and tax avoidance practices, which demonstrates the relevance of board oversight mechanisms to fixed asset allocation policies in relation to corporate fiscal strategies.

The Effect of Leverage on Tax Avoidance

The The results of this study indicate that capital intensity contributes positively and significantly to companies' tendency to engage in tax avoidance. This is reflected in a t-statistic value of 2.641 and a significance level of 0.010, which is below the threshold of 0.05, so that the alternative hypothesis is empirically accepted. A high capital intensity ratio which reflects a substantial proportion of a company's fund allocation to fixed assets inc reases the likelihood of tax avoidance. This is due to the emergence of depreciation expenses as a consequence of fixed asset ownership, which are legally recognized as deductible expenses in the calculation of taxable income, thus directly implying a reduction in the amount of tax payable by the company. Within the framework of agency theory, this condition can be interpreted as a form of opportunistic behavior by managers driven by incentive motives. Managers tend to accumulate fixed assets as a strategic instrument to reduce fiscal burdens while improving the company's accounting performance. Thus, managers not only optimize net income, but also have the potential to obtain greater compensation as a form of reward for apparent improved financial performance. These findings reinforce the argument that depreciation of fixed assets plays an important role in aggressive tax planning schemes, and these results are consistent with research conducted by Hasyim et al (2022), which also identified a positive and significant relationship between capital intensity and tax avoidance actions.

The Effect of Leverage on Tax Avoidance in The Moderation of Independent Commissioners

The findings of the analysis show that the interaction between leverage and the presence of independent commissioners has no significant effect on the intensity of companies in carrying out tax avoidance practices. This indication is reflected in the t-test results, which produced a value of 1.052 with a significance level of 0.137 a figure that is still above the probability threshold of 0.05. Thus, there is insufficient empirical evidence to support the third hypothesis (H3), and therefore this hypothesis is rejected. These results imply that the supervisory function performed by independent commissioners has not been able to strengthen or weaken the relationship between leverage and the tendency of entities to manage their tax obligations strategically. Leverage represents the degree of a company's dependence on debt-based financing sources in carrying out its operational activities. Meanwhile, the role of independent commissioners as part of the corporate oversight system serves to reduce the possibility of opportunistic managerial behavior, including tax avoidance strategies. Strict oversight has the potential to increase compliance with tax regulations and reduce fiscal avoidance practices. These findings imply that company value is influenced by the level of leverage through the intervention of independent commissioners, supporting the research results conducted by Khasanah & Afiqoh (2023), which highlight the significant role of independent commissioners in strengthening the relationship between leverage and tax avoidance activities.

The Effect of Capital Intensity on Tax Avoidance Moderated By Independent Commissioners

The research findings show that a significant effect was identified between capital intensity influenced by the presence of independent commissioners and tax avoidance practices, as reflected in the t-test result of -2.753 with a probability level of 0.007, thus accepting the fourth hypothesis (H4). The allocation of company funds to long-term tangible assets has an impact on increasing depreciation expenses, which in turn reduces fiscal profits and reduces tax liabilities. On the other hand, the role of independent commissioners as part of the corporate governance control system has a crucial function in supervising and limiting the potential for opportunistic actions by management who may take advantage of capital intensity to reduce tax burdens. These results reinforce the evidence that independent commissioners are effective in moderating the relationship between capital intensity and tax avoidance, in line with a study by N. Hidayah & Ernandi (2022), which also identified a significant relationship between the two variables.

5. Conclusion

The level of leverage and capital intensity as independent variables has been proven to have the capacity to influence tax avoidance practices. However, the presence of independent commissioners as a moderating factor does not show effectiveness in strengthening the relationship between leverage and tax avoidance. Despite this, independent commissioners play a significant role in moderating the relationship between capital intensity and tax avoidance, indicating their partial effectiveness in reducing aggressive tax behavior related to asset investment decisions.

6. Suggestions

Based on the findings of this study, several suggestions can be made. First, for financial entities, it is recommended to pay closer attention to the significance of fiscal avoidance measures, as these can serve as important indicators in evaluating overall corporate performance. Effective monitoring and management of tax avoidance practices can help ensure compliance while maintaining a company's financial stability and reputation.

Second, for academics and future researchers, it is suggested to consider replacing or adding other relevant independent variables that may influence tax avoidance behavior. Expanding the temporal scope of the research is also recommended to capture broader trends and variations over time. Additionally, exploring similar variables using different measurement approaches could provide deeper insights and enhance the validity and generalizability of the findings.

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