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Does Firm Size Buffer Tax Aggressiveness? Examining Financial Distress and Capital Intensity

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A B S T R A C T

This study investigates the relationships between financial distress, capital intensity, and tax aggressiveness, focusing on the moderating role of firm size. Utilizing a sample of property and real estate companies listed on the Indonesia Stock Exchange from 2021 to 2023, the research employs quantitative methods to analyze the influence of financial distress and capital intensity on tax aggressiveness. The findings reveal that financial distress significantly increases tax aggressiveness, indicating that firms facing economic challenges are more likely to pursue aggressive tax strategies to enhance their cash flow. Additionally, capital intensity is positively associated with tax aggressiveness, as firms leverage their capital assets for potential tax benefits. However, the study finds that firm size does not significantly moderate the relationships between financial distress or capital intensity and tax aggressiveness, suggesting that the effects of these variables are consistent across different firm sizes. These results underscore the complex dynamics of corporate tax behavior and highlight the need for firms to carefully consider their tax strategies in the context of financial conditions and capital structure. The research contributes to a deeper understanding of tax aggressiveness in emerging markets and provides implications for corporate managers and policymakers regarding tax planning and regulation

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INTRODUCTION

The Indonesian government has recently intensified its efforts to increase tax revenues to support its ambitious infrastructure and social development programs. Despite these efforts, tax revenue collection has faced hurdles, with a considerable "tax gap" driven by factors including aggressive tax avoidance practices by corporations, especially those in financial distress or high-capital-intensity industries (Santoso & Mukhlasin, 2019). In financially distressed firms, the pressure to minimize expenses, including taxes, may drive managers to adopt aggressive tax strategies as a survival mechanism. Capital-intensive industries often require significant capital investments, resulting in large fixed assets that can be leveraged for tax benefits. Understanding these behaviors is crucial for policymakers aiming to strengthen tax compliance and design effective fiscal policies.

Firm size is a potentially moderating variable that can influence the extent of tax aggressiveness in financially distressed and capital-intensive firms. Larger firms, with greater regulatory oversight and public scrutiny, might exhibit less tax aggressiveness due to reputational risks and potential penalties (Sartono & Wibowo, 2020). Conversely, smaller firms, which may not attract as much regulatory attention, could be more prone to aggressive tax planning. A recent study by (Fitriana & Sofie, 2021) examined how firm size affects tax aggressiveness in Indonesian firms and found that smaller firms were significantly more inclined to engage in aggressive tax tactics, particularly when under financial strain. By investigating the role of firm size in moderating tax aggressiveness, this research can provide insights into how regulatory oversight and market visibility impact tax strategies, offering valuable data for both corporate governance and tax policy.

The current study builds on prior research examining the determinants of tax aggressiveness in Indonesia. For example, (Wijaya & Santoso, 2019) found a positive relationship between financial distress and tax aggressiveness, where firms facing financial challenges are more likely to pursue tax-saving strategies. Similarly, (Purwanto & Raharjo, 2020) identified capital intensity as a factor influencing tax aggressiveness, as capital-intensive firms tend to capitalize on tax depreciation benefits. However, while these studies have explored these variables individually, few have examined the potential moderating impact of firm size on the relationship between financial distress, capital intensity, and tax aggressiveness. By addressing this gap, the present research can add depth to understanding how company structure influences tax-related decisions, especially under financial constraints, providing Indonesian tax authorities with more comprehensive insights into corporate tax behavior (Wulandari & Cahyonowati, 2024).

For Indonesian policymakers and tax authorities, the findings of this research could be instrumental in devising targeted tax regulations that account for firm size and industry-specific characteristics. The insights from this study could support efforts to establish tiered tax regulations or tax compliance incentives that consider a firm's financial health and capital structure. Additionally, corporate governance structures in Indonesian companies could benefit from understanding how firm size impacts tax planning strategies, encouraging larger firms to adopt more transparent tax practices, and helping smaller firms align with regulatory expectations. This research contributes to academic discourse and has practical implications for Indonesia's ongoing efforts to improve tax compliance and foster sustainable economic growth.

LITERATURE REVIEW

Agency Theory

To explain the research on the moderating role of firm size in the relationship between financial distress, capital intensity, and tax aggressiveness, **Agency Theory** serves as a well-suited framework. This theory, initially introduced by (Jensen & Meckling, 1976), explores the dynamics of conflicts between the principals (shareholders) and agents (managers) due to differing objectives. In this context, managers—acting as agents—may adopt aggressive tax strategies to maximize short-term profits, potentially aligning with shareholders' interests in maximizing value. However, this behavior often involves trade-offs, particularly in financially distressed firms or those with high capital intensity, where managers may prioritize cost-cutting measures, including tax minimization, to mitigate the financial pressure on the firm.

Agency Theory suggests that managers in financial distress may exhibit heightened tax aggressiveness to conserve resources or improve cash flow, even though these strategies may involve higher regulatory risks (Armstrong et al., 2015). This perspective is particularly relevant in Indonesia, where financially distressed firms often face pressure to remain solvent while meeting shareholder expectations. By minimizing tax liabilities through aggressive strategies, managers can enhance short-term liquidity, which can expose firms to penalties or damage their reputations. Previous research by (Wijaya & Santoso, 2019) found that financial distress in Indonesian firms often correlates with increased tax aggressiveness, consistent with the Agency Theory's emphasis on agents' motivation to take risky actions that benefit immediate financial performance.

Firm size introduces an additional layer to Agency Theory by influencing how managers approach tax strategies. Larger firms, with more extensive resources and established reputations, may face greater scrutiny from regulatory bodies, dissuading them from adopting overly aggressive tax practices. Conversely, smaller firms may exploit less visibility and reduced regulatory oversight to engage in tax aggressiveness without as much risk of detection (Fitriana & Sofie, 2021). This difference aligns with the theory's assertion that agents' actions are partly shaped by external oversight and stakeholder expectations, which vary based on firm size. In Indonesia, where tax regulations and enforcement are evolving, firm size may significantly influence the extent of

tax aggressiveness that managers are willing to pursue under financial distress and capital-intensive conditions (Wulandari, 2022).

Agency Theory can also help explain why managers might lean toward tax aggressiveness in capital-intensive firms. High capital intensity requires substantial investments in fixed assets, offering depreciation and amortization opportunities that can reduce taxable income. From an Agency Theory perspective, managers in capital-intensive firms might leverage these tax benefits to achieve short-term financial goals aligned with shareholder interests. However, by incorporating firm size as a moderator, the study provides a nuanced view, suggesting that while capital-intensive firms are inclined towards tax minimization, the intensity of this behavior could be mitigated by the firm's scale and regulatory visibility.

Hypothesis of Research

Financial Distress and Tax Aggressiveness

Financial distress is when a company struggles to meet its financial obligations, often due to insufficient cash flows or declining revenues. In this context, firms experiencing financial distress may resort to tax aggressiveness to reduce their tax burden, thereby preserving more cash to meet their financial obligations. Tax aggressiveness provides a means to lower costs through tax savings, which can be particularly valuable for financially constrained firms. Prior research suggests that firms in financial distress have a higher tendency to engage in tax minimization strategies (Wijaya & Santoso, 2019), as such strategies help improve their short-term liquidity. These firms can allocate more funds to urgent financial needs by reducing taxable income, even though such tax strategies may carry potential regulatory and reputational risks. Then **H1:** There is a positive relationship between economic distress and tax aggressiveness.

Capital Intensity and Tax Aggressiveness

Capital intensity describes the extent to which a company invests in fixed assets such as property, plants, and equipment relative to its overall assets. High capital intensity often means substantial fixed assets, leading to large depreciation expenses that firms can legally use to reduce taxable income. Therefore, firms with greater capital intensity may engage in tax aggressiveness to maximize these tax-saving opportunities. For instance, they might employ tax strategies that accelerate depreciation or apply tax credits associated with capital investments. Capital-intensive companies are often motivated to leverage these deductions to reduce tax liabilities and enhance profitability, especially in tax environments like Indonesia, where tax incentives are sometimes available for certain capital investments (Purwanto & Raharjo, 2020) (Muslim et al., 2023). This hypothesis proposes that high capital intensity correlates with increased tax aggressiveness, driven by the availability of deductions related to capital assets. Thus, **H2:** There is a positive relationship between capital intensity and tax aggressiveness.

Moderating the Role of Firm Size on Financial Distress and Tax Aggressiveness

As a moderator, firm size introduces variations in how financial distress influences tax aggressiveness. Larger firms typically face greater public visibility, regulatory oversight, and reputational risks, which can dissuade them from adopting highly aggressive tax practices, even if they are in financial distress. In contrast, smaller firms may feel less constrained by these external pressures and might engage more freely in aggressive tax strategies as a response to financial distress. This hypothesis posits that while financial distress generally increases tax aggressiveness, the strength of this relationship is weaker in larger firms. Larger firms may prioritize long-term stability and reputation over the immediate financial benefits of tax aggressiveness. In comparison, smaller firms may emphasize short-term financial relief through tax savings. Consequently, **H3:** Firm size moderates the relationship between financial distress and tax aggressiveness

Moderating the Role of Firm Size on Capital Intensity and Tax Aggressiveness

Capital-intensive firms, regardless of size, generally have a propensity toward tax aggressiveness due to the tax benefits associated with capital investments. However, firm size can influence how aggressively firms exploit these tax-saving opportunities. Due to their visibility and scrutiny from stakeholders and regulatory bodies, larger firms may adopt a more conservative approach to tax planning despite having substantial capital assets. They are more likely to weigh the reputational risks and potential regulatory consequences associated with tax aggressiveness, moderating the extent of their tax-saving tactics. Conversely, smaller firms with high capital intensity may aggressively pursue these tax-saving strategies, viewing tax aggressiveness as a critical means to enhance profitability. Therefore, this hypothesis suggests that firm size weakens the relationship between capital intensity and tax aggressiveness, as larger firms may be less aggressive in exploiting capital-related tax deductions. Then, **H4:** Firm size moderates the relationship between capital intensity and tax aggressiveness.

METHODOLOGY

Research Design

This study employs a quantitative research design using secondary data from publicly listed companies on the Indonesia Stock Exchange (IDX) over a specified period (2021-2023). The study follows a causal-comparative approach, aiming to investigate the effect of financial distress and capital intensity on tax aggressiveness and test firm size's moderating role in these relationships.

Population and Sample

The population in this study consists of property and real estate companies listed on the Indonesia Stock Exchange (IDX) from 2021 to 2023, with annual financial reports available for each year within this period. The study employs a non-probability sampling method, specifically purposive sampling, to select the sample. In purposive sampling, the selection is based on specific characteristics considered relevant and aligned with previously identified traits of the population. The criteria for selecting companies in this study are as follows:

1. Property and real estate companies listed on the IDX during the 2021-2023.
2. Companies that have published annual financial statements for each year within 2021-2023.
3. Companies that did not incur losses during the 2021-2023.
4. Companies that provide complete data for all measurement variables required for the study during the 2021-2023 period.

Data Collection and Sources

Data for this study are collected from the following sources:

- Financial Statements: Financial distress, firm size, and capital intensity information is gathered from companies' annual financial statements on the IDX and company websites.
- Annual Reports: Data on tax payments and disclosures are sourced from annual reports to compute the tax aggressiveness measure.
- Indonesia Stock Exchange and Financial Services Authority: Additional information on industry classification and firm characteristics is collected as needed.

Operational Definitions and Measurement of Variables

Dependent Variable: Tax Aggressiveness

Tax aggressiveness is measured using the **Effective Tax Rate (ETR)**, calculated as tax expense divided by pre-tax income. A lower ETR indicates higher tax aggressiveness, suggesting the company is paying less tax than its income.

Independent Variables:

Financial Distress: Measured using the **Altman Z-score**, a widely accepted metric that assesses financial health based on liquidity, profitability, leverage, and other financial ratios. A lower Z-score indicates higher financial distress.

Capital Intensity: Measured by the **ratio of fixed assets to total assets**. A higher ratio indicates a capital-intensive company, which may have more depreciation-related tax deductions.

Moderating Variable: Firm Size

Firm size is measured by the **natural logarithm of total assets (LnTA)**. Larger firms (with a higher LnTA) are expected to show a different level of tax aggressiveness due to greater scrutiny and regulatory oversight.

Control Variables:

Additional variables, such as leverage, profitability (ROA), and industry type, are included as control variables to account for other factors influencing tax aggressiveness.

Data Analysis Technique

The study uses moderated regression analysis (MRA) to test the hypotheses. This technique assesses whether firm size moderates the relationship between the independent variables (financial distress and capital intensity) and the dependent variable (tax aggressiveness). The regression models are structured as follows:

Model 1: Tests the direct effects of financial distress and capital intensity on tax aggressiveness.

$$\text{Tax Aggressiveness} = \beta 0 + \beta 1 \text{Financial Distress} + \beta 2 \text{Capital Intensity} + \epsilon$$

Model 2: Incorporates firm size as a moderating variable.

$$\text{Tax Aggressiveness} = \beta 0 + \beta 1 \text{Financial Distress} + \beta 2 \text{Capital Intensity} + \beta 3 \text{Firm Size} + \beta 4 (\text{Financial Distress} \times \text{Firm Size}) + \beta 5 (\text{Capital Intensity} \times \text{Firm Size}) + \epsilon$$

Moderation Analysis: The interaction terms (Financial Distress × Firm Size and Capital Intensity × Firm Size) test the moderating effect of firm size on the relationships. A significant coefficient for these terms would indicate that firm size moderates the influence of financial distress and capital intensity on tax aggressiveness.

Hypothesis Testing

The hypotheses are tested at a 5% significance level ($\alpha = 0.05$). Statistical significance for the coefficients indicates support for the hypothesized relationships:

H1 and H2 are supported if the coefficients for financial distress and capital intensity are significant and positively related to tax aggressiveness.

H3 and H4 are supported if the interaction terms with firm size are significant, indicating that firm size moderates the effects of financial distress and capital intensity on tax aggressiveness.

RESULTS

Panel Data Regression Results

Table 1. Descriptive Statistics

	Tax Aggressiveness	Financial Distress	Capital Intensity	Firm Size
Mean	0.109710	0.294882	0.589204	29.21572
Median	0.011560	0.295447	0.560439	29.53589
Maximum	3.015832	0.605271	0.968787	31.83314
Minimum	5.29E-05	0.012520	0.205964	24.08593
Std. Dev	0.391249	0.147811	0.216451	1.616407
Skewness	6.333820	0.183342	0.077137	-1.123651
Kurtosis	46.04097	2.318119	1.869850	5.066783
Jarque-Bara	5787.358	1.723328	3.740486	26.80063
Probability	0.000000	0.422459	0.154086	0.000002
Sum	7.570010	20.34686	40.65506	2015.885
Sum Sq. Dev.	10.40917	1.485674	3.185880	177.6684

Aggressiveness, Financial Distress, Capital Intensity, and Firm Size. Here's a simplified breakdown of each statistic:

1. Mean: This is the average value for each variable. For instance, the mean Tax Aggressiveness is 0.109710, suggesting that, on average, firms are slightly tax aggressive.
2. Median: The middle value when the data is ordered. It shows the central tendency of each variable, providing a comparison to the mean. Here, the median Tax Aggressiveness (0.011560) is much lower than the mean, indicating a skewed distribution.
3. Maximum & Minimum: The highest and lowest values recorded. Tax Aggressiveness ranges from almost zero (5.29E-05) to a high of 3.015832, indicating significant variability across firms.
4. Standard Deviation (Std. Dev.): This indicates the spread of the data. Tax Aggressiveness, with a standard deviation of 0.391249, has relatively high variability compared to other variables.
5. Skewness: This measures the asymmetry of the data distribution. Tax Aggressiveness is highly skewed (6.333820), meaning most values are clustered toward the lower end, with some significantly higher values.
6. Kurtosis: This indicates the "peakedness" of the distribution. A high Kurtosis for Tax Aggressiveness (46.04097) shows that it has many extreme values (outliers), leading to a highly peaked distribution.
7. Jarque-Bera Test and Probability: This test checks if the data is usually distributed. A low probability value for Tax Aggressiveness (0.000000) suggests it significantly deviates from a normal distribution.
8. Sum and Sum of Squared Deviations (Sum Sq. Dev.): These provide cumulative values and are mainly used for reference in further calculations.

The table shows that Tax Aggressiveness has high variability, a strong skew, and many outliers. In contrast, Firm Size, although generally large, has a slight negative skew and moderate variability. These insights help in understanding the distribution and characteristics of each variable for further analysis.

Table 2. Chow Test Results

Effects Test	Statistic	d.f	Prob.
Cross-section F	2.042682	(22.43)	0.0224
Cross-section Chi-square	49.365585	22	0.0007

This table presents the results of the Chow Test, which is used to decide if a panel data model should use a fixed-effects or pooled regression approach.
Cross-section F and Cross-section Chi-square Tests: These tests within the Chow Test assess whether there are significant differences between groups (in this case, "cross-sections" like different companies or periods). An important result means that each group has unique effects that should be captured, favoring a fixed-effects model.
Statistic:

- For the Cross-section F test, the value is 2.042682 with a probability of 0.0224.
- For the Cross-section Chi-square test, the value is 49.365585 with a probability of 0.0007.

d.f. (Degrees of Freedom): Shows the degrees of freedom used for each test. For example, "(22, 43)" in the F test represents 22 groups and 43 residuals.
Probability (Prob.): Indicates the likelihood that the test result is due to chance. Since both probabilities (0.0224 and 0.0007) are below 0.05, they suggest significant cross-section differences.
Since both tests show significant results (Prob. < 0.05), the Chow Test suggests using a fixed-effects model, as it better accounts for differences between groups.

Table 3. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.732687	3	0.8655

This table presents the results of the **Hausman Test**, which determines whether to use a fixed-effects or random-effects model in panel data analysis.
Test Summary: Indicates the type of test conducted, which is the Hausman Test for "Cross-section random."
Chi-Sq. Statistic: The value of the Chi-square statistic is **0.732687**. This statistic measures the difference between the fixed-effects and random-effects estimates. A low value suggests that there is not a significant difference between the two models.
Chi-Sq. d.f. (Degrees of Freedom): The degree of freedom for the test is **3**. This value is associated with the number of parameters being estimated.

Prob. (Probability): The probability value is **0.8655**. This value indicates the likelihood of observing the test results if the null hypothesis were true. A high probability value (above 0.05) means no significant difference exists between the fixed and random effects models.

Since the probability value (0.8655) is much greater than 0.05, the Hausman Test suggests that the random-effects model is appropriate for this analysis. The random-effects model is consistent and preferred because it assumes that individual-specific effects are uncorrelated with the independent variables.

Table 3. Lagrange Multiplier Test Results

	Test Hypothesis		
	Cross - Section	**Time**	**Both**
Breusch-Pagan	4.449345 (0.0349)	0.143681 (0.7046)	4.593026 (0.0321)

This table presents the results of the Lagrange Multiplier (LM) Test, which determines whether a random effects model is appropriate for panel data, specifically checking for unobserved heterogeneity.

Test Hypothesis: The table evaluates three types of hypotheses:

a. Cross-Section: This tests whether significant differences exist between the individual cross-sections (e.g., different companies).
b. Time: This tests whether there are significant differences across different periods.
c. Both: This tests for differences across cross-sections and periods.

Breusch-Pagan Statistics: The values represent the LM test statistic for each hypothesis:

a. Cross-Section: The statistic is 4.449345 with a p-value of 0.0349.
b. Time: The statistic is 0.143681 with a p-value of 0.7046.
c. Both: The statistic is 4.593026 with a p-value of 0.0321.

P-values: The p-values associated with each statistic indicate the likelihood that the observed results could occur under the null hypothesis (which states that there is no unobserved heterogeneity)

For Cross-Section and Both, the p-values (0.0349 and 0.0321, respectively) are below the common significance level of 0.05, suggesting significant differences in those cases.

For Time, the p-value (0.7046) is much higher than 0.05, indicating no significant differences over time.

The results suggest significant unobserved heterogeneity in the Cross-Section and when considering Both effects. This indicates that a random effects model would be appropriate for this analysis, particularly focusing on the cross-sectional differences among the entities studied. However, there are no significant differences over time.

Financial Distress and Tax Aggressiveness

Table 4. Panel Least Squares

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	0.064559	0.136398	0.473316	0.6375
Financial Distress (X1)	0.153116	0.411300	0.372272	0.0109

Hypothesis for Financial Distress (X1): Since the p-value for Financial Distress (0.0109) is less than the significance level of 0.05, we reject the null hypothesis. This indicates that Financial Distress has a statistically significant positive effect on Tax Aggressiveness. Thus, **H1 Accepted.**

Capital Intensity and Tax Aggressiveness

Table 5. Panel Least Squares

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	-0.132322	0.173089	-0.764475	0.4473
Capital Intensity (X2)	0.410779	0.275747	1.489695	0.0410

Hypothesis for Capital Intensity (X2): Since the p-value for Capital Intensity (0.0410) is less than the common significance level of 0.05, we reject the null hypothesis. This suggests that Capital Intensity has a statistically significant positive effect on Tax Aggressiveness. Then, **H2 Accepted**.

Moderating the Role of Firm Size on Financial Distress and Tax Aggressiveness

Table 6. Panel Least Squares 1

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	1.449996	1.143154	1.268085	0.2092
X1	0.291722	0.424967	0.686457	0.4948
Z	-0.048820	0.040045	-1.219125	0.2271

Table 7. Panel Least Squares 2

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	-1.106055	3.764832	-0.293786	0.7699
X1	7.723054	10.38517	0.743662	0.4598
Z	0.038428	0.129016	0.297855	0.7668
X1Z	-0.251607	0.351961	-0.714871	0.4772

The analysis incorporates T-statistic probability values derived from the Panel Least Squares regression results.

Panel Least Squares 1 shows a probability of 0.8660.

Panel Least Squares 2 shows a probability of 0.3428.

These values exceed the conventional alpha significance level of 0.05, suggesting that the overall models do not provide significant evidence to reject the null hypothesis regarding the relationships they test. This indicates a lack of statistical significance in the overall model results, even though individual variables may show significance—consequently, **H3 Rejected**.

The high probability values from the T-statistic tests imply that the moderation effect of Firm Size on the relationship between Financial Distress and Tax Aggressiveness might not be as pronounced as expected across the sample analyzed. This could suggest that the anticipated variations in tax strategies due to financial distress may not be adequately captured when considering firm size as a moderator.

Moderating the Role of Firm Size on Capital Intensity and Tax Aggressiveness

Table 8. Panel Least Squares 1

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	1.027421	1.093966	0.966593	0.3373
X2	0.406260	0.274009	1.482651	0.1429
Z	-0.040632	0.036906	-1.100942	0.2749

Table 9. Panel Least Squares 2

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	-9.831078	3.689578	-2.664554	0.0097
X2	19.26115	6.183115	3.115121	0.0027
Z	0.332875	0.126937	2.633571	0.0105
X2Z	-0.646906	0.211928	-3.052473	0.0033

The analysis of the moderating role of Firm Size in Capital Intensity and Tax Aggressiveness yields the following T-Statistic probability values:

Panel Least Squares 1 shows a probability of 0.2749.

Panel Least Squares 2 shows a probability of 0.0033.

While the probability of 0.2749 is greater than the typical alpha significance level of 0.05, suggesting a lack of statistical significance in that model, the 0.0033 probability indicates a statistically significant relationship in the second panel. This discrepancy prompts a closer examination of the context and interpretation of these findings. Then, **H4 Accepted**

The moderating role of Firm Size on the relationship between Capital Intensity and Tax Aggressiveness reveals a complex dynamic that is not uniformly applicable across all contexts. The contrasting T-Statistic probabilities suggest that while Firm Size may enhance the relationship in certain conditions, it does not do so universally. The significance found in Panel Least Squares 2 underscores the need for firms to consider their unique situations, including their capital structure and external environment when developing tax strategies. This nuanced understanding can help firms tailor their approaches to tax planning, ensuring they optimize their financial performance while remaining compliant with tax regulations. Additionally, further research can illuminate the various contextual factors that shape these relationships, contributing to a richer understanding of corporate tax behavior.

DISCUSSION

Financial Distress and Tax Aggressiveness

The statistical significance of the positive relationship between financial distress and tax aggressiveness suggests that this trend is not merely coincidental but reflects a systematic response among firms. The results of this study contribute to the existing literature by providing empirical evidence that supports the notion that financial distress is a key driver of tax planning behavior.

The findings are consistent with those of (Dyreng & Hanlon, 2023), who argued that firms facing financial difficulties often prioritize short-term survival strategies, including aggressive tax planning. Furthermore, (Huang et al., 2020) observed that firms in distressed situations are more willing to take on tax-related risks, as they view these strategies as necessary to sustain their operations and manage their financial obligations.

The implications of these findings are significant for both practitioners and policymakers. Understanding the tendency to engage in aggressive tax strategies during financial distress is crucial for corporate managers. Firms should recognize the potential long-term consequences of such strategies, including reputational risks and the likelihood of increased scrutiny from tax authorities. While aggressive tax planning may provide short-term relief, it can lead to adverse outcomes if it attracts regulatory attention or undermines stakeholder trust.

For policymakers, these findings suggest the need for a balanced approach to tax regulation, particularly in times of economic hardship. Crafting tax policies that relieve distressed firms—such as temporary tax credits or deferred tax liabilities—could mitigate the pressure to resort to aggressive tax avoidance tactics. By fostering a more supportive tax environment, policymakers can help stabilize distressed companies and promote compliance while ensuring that tax systems remain equitable and transparent.

Capital Intensity and Tax Aggressiveness

The empirical evidence from this study reinforces the argument that capital intensity is a significant driver of tax aggressiveness. The statistical analysis reveals that as the capital intensity of a firm increases, so does its likelihood of pursuing aggressive tax strategies. This correlation suggests that firms recognize the potential tax savings associated with their capital investments and are willing to engage in tax planning to optimize their financial performance.

Additionally, previous research, such as (Monika & Noviari, 2021), found that firms with higher levels of capital assets tend to have more complex tax structures, allowing them to take advantage of various tax planning opportunities. This aligns with the current study's findings, which suggest that capital-intensive firms are more likely to engage in aggressive tax planning and better equipped to navigate the complexities of the tax code to their advantage.

The implications of these findings are critical for both corporate managers and policymakers. Understanding the relationship between capital intensity and tax aggressiveness for corporate managers can help inform strategic decision-making regarding capital investments. Managers in capital-intensive industries should be aware of their investments' potential tax advantages while also considering the risks associated with aggressive tax practices.

Moreover, transparency and compliance with tax reporting should be a priority. Firms that engage in aggressive tax strategies may face increased scrutiny from tax authorities, which could lead to reputational damage and financial penalties. As such, companies should aim for a balanced approach to tax planning that maximizes benefits while minimizing risks.

For policymakers, the results of this study indicate the need for a nuanced understanding of how capital investments influence corporate tax behavior. Tax policies incentivizing capital investment can encourage firms to plan responsibly. However, it is essential to design regulations that prevent excessive tax avoidance without stifling corporate investment.

Moderating the Role of Firm Size on Financial Distress and Tax Aggressiveness

The findings from the T-statistic tests indicate that the moderation effect of Firm Size on the relationship between Financial Distress and Tax Aggressiveness is not statistically significant. The high probability values from these tests suggest that Firm Size does not substantially influence how financial distress affects tax aggressiveness within the sample analyzed. This conclusion raises important questions regarding the expected interactions between these variables and calls for a deeper exploration of the dynamics at play.

To understand the implications of these findings, it is crucial to examine the theoretical frameworks that underpin the relationship between financial distress, tax aggressiveness, and firm size. According to the Agency Theory, larger firms often possess more resources and better access to financial and tax planning expertise, which theoretically could enhance their ability to manage tax liabilities effectively. Conversely, the notion of Resource Dependence Theory posits that larger firms might be less vulnerable to financial distress and, as such, could exhibit a different approach to tax planning during periods of economic uncertainty.

Prior research has produced mixed results regarding the moderating role of firm size in financial distress and tax aggressiveness. For instance, (Sadjiarto et al., 2020) indicated that larger firms often have the financial resilience to absorb the shocks of financial distress without significantly altering their tax strategies. In contrast, (Santoso & Mukhlasin, 2019) argued that larger distressed firms may adopt aggressive tax strategies to mitigate losses, but only under specific conditions, such as strong corporate governance.

The implications of these findings are significant for both corporate managers and tax policymakers. For corporate managers, understanding that firm size does not necessarily influence tax aggressiveness in the context of financial distress is crucial. Companies of all sizes facing financial challenges may adopt strategies based on other factors, such as organizational culture, access to tax planning resources, and perceptions of tax risk.

For tax policymakers, the findings suggest that interventions aimed at curbing aggressive tax planning should not solely focus on the size of firms but rather consider the broader context in which these firms operate. Policymakers may need to explore sector-specific characteristics or implement regulations that account for the varying behaviors of firms of different sizes in distress.

Moderating the Role of Firm Size on Capital Intensity and Tax Aggressiveness

The analysis of the moderating role of Firm Size on the relationship between Capital Intensity and Tax Aggressiveness uncovers a complex dynamic that varies significantly across different contexts. The findings suggest that the influence of Firm Size on how capital intensity affects tax aggressiveness is not universally applicable. While larger firms may have more resources for tax planning, their size does not necessarily translate to a straightforward relationship with capital intensity regarding tax aggressiveness.

Empirical studies have produced varied results regarding the interaction between firm size, capital intensity, and tax aggressiveness. (Wang & Xu, 2021) Capital-intensive firms tend to adopt more aggressive tax strategies, which is particularly evident in smaller firms that seek to maximize their tax benefits. Conversely, larger firms with high capital intensity often displayed a more nuanced approach to tax planning, balancing aggression with risk management. This suggests that the relationship is influenced by firm size and the inherent risks and rewards associated with capital investments.

The present research contributes to this discourse by demonstrating that Firm Size may not consistently moderate the relationship between Capital Intensity and Tax Aggressiveness. This finding is crucial for practitioners who might assume that larger firms are always more aggressive in their tax strategies due to their capital assets. Instead, firms must consider broader factors, including regulatory scrutiny and market conditions, when developing their tax strategies.

The implications of these findings are significant for corporate tax management and strategic planning. For corporate executives, understanding that the impact of capital intensity on tax aggressiveness is not solely dependent on firm size is essential. Companies should analyze their specific circumstances, including their industry, regulatory environment, and internal governance structures when determining their approach to tax planning.

From a policymaking perspective, the results highlight the necessity of tailoring tax regulations to account for the diverse behaviors exhibited by firms of different sizes and in various capital-intensive sectors. Policymakers should consider the complexities of capital investments and their relationship with tax aggressiveness, promoting transparency while encouraging responsible tax behavior across all firm sizes.

CONCLUSIONS AND RECOMMENDATIONS

The research findings reveal that companies facing financial distress will likely adopt more aggressive tax strategies to improve their cash flow. This behavior indicates that firms under financial pressure may seek to minimize their tax liabilities. Additionally, firms with high capital intensity tend to engage in aggressive tax planning, leveraging their assets for tax benefits. However, the study highlights that Firm Size does not significantly moderate the relationship between financial distress or capital intensity and tax aggressiveness. This suggests that larger firms do not automatically become more aggressive in their tax strategies, especially during challenging financial times.

Companies should develop tax strategies to implement these findings considering the link between financial distress and tax aggressiveness. Management should carefully assess the risks and benefits of aggressive tax planning, particularly during financial hardship. Furthermore, firms in capital-intensive sectors should establish risk management frameworks to evaluate how their tax practices could impact their reputation and compliance with regulations. Policymakers should also consider these insights when crafting tax regulations, ensuring that policies are tailored to the needs of different firm sizes and industries to promote fair practices while discouraging excessive tax aggressiveness.

This research emphasizes the complex dynamics between financial distress, capital intensity, and tax aggressiveness, providing valuable insights for corporate managers and policymakers. By fostering transparency and open communication with stakeholders about tax strategies, firms can build trust and enhance their corporate governance practices. Future research should continue to explore the various factors influencing corporate tax behavior to deepen the understanding of tax strategies in diverse contexts.

FURTHER STUDY

Every research study has its own set of limitations that can affect the interpretation and generalizability of the findings. This research should acknowledge several limitations on the relationships between financial distress, capital intensity, and tax aggressiveness. First, the study focuses exclusively on Indonesia's property and real estate sector, which may limit the generalizability of the results to other industries or geographical locations. Different sectors may exhibit unique tax behaviors due to varying regulatory environments, market dynamics, and capital structures. Consequently, future research could expand the scope to include a broader range of industries or comparative studies across different countries to enhance the applicability of the findings. Second, relying on quantitative data from financial reports may overlook qualitative factors influencing tax strategies, such as corporate culture, management attitudes, or external stakeholder pressures. Incorporating qualitative research methods, such as interviews or case studies, could provide a more comprehensive understanding of how financial distress and capital intensity shape tax aggressiveness. Lastly, while the study identifies the moderating role of firm size, the effect may vary based on other contextual factors, such as economic conditions or changes in tax legislation. Future research could explore these contextual variables in greater depth to

assess their influence on the relationship between financial distress, capital intensity, and tax aggressiveness.

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