



Sales Growth as a Moderating Variable: The Effect of Capital Intensity and Financial Distress on Tax Aggressiveness

Nur Indah Ambarwati¹, Napisah^{2*}

^{1,2} Department of Accounting, Pamulang University, Indonesia

ABSTRACT

Purpose: This study aims to examine the effect of capital intensity and financial distress on tax aggressiveness, with sales growth as a moderating variable, in industrial sector companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period.

Methodology: This research employs a quantitative associative approach using secondary data obtained from the annual financial statements of industrial sector firms listed on the IDX. The sample consists of 14 companies selected through purposive sampling, resulting in 70 firm-year observations. Panel data regression and Moderated Regression Analysis (MRA) were applied using EViews 12.

Finding: The findings indicate that tax aggressiveness is strongly impacted negatively by financial difficulty but not significantly by capital intensity. Furthermore, neither the association between financial distress and tax aggressiveness nor the relationship between capital intensity and tax aggressiveness are moderated by sales growth.

Implication: The findings provide practical implications for management, investors, and policymakers in understanding corporate tax behavior, particularly under financial distress conditions.

Originality: This study contributes to the tax aggressiveness literature by incorporating sales growth as a moderating variable in the Indonesian industrial sector context.

Keywords: capital intensity, financial distress, sales growth, tax aggressiveness

ARTICLE INFO

JEL Classification:

H26, G32, M41

Corresponding Author:

Napisah

(dosen02500@unpam.ac.id)

Received: 21-08-2025

Revised: 19-09-2025

Accepted: 05-12-2025

Published: 31-12-2025



1. Introduction

Tax revenue plays a crucial role as the primary source of government funding to support national development, including public services such as education, healthcare, infrastructure, and security. Law No. 28 of 2007 governs taxes in Indonesia, and Article 23A of the 1945 Constitution, which states that taxes and other mandatory levies for governmental purposes must be governed by law, further supports this regulation. Despite its significance, tax revenue collection is still difficult, especially because businesses want to pay as little tax as possible in order to increase profits. (Manurung, 2019).

Taxes are viewed by corporations as an expense that lowers net income. Companies are profit-driven businesses that seek to increase shareholder value by raising earnings, which also raises tax burdens. This requirement incentivizes businesses to participate in tax aggressiveness, which is described as a set of legal or illicit tactics designed to lower taxable income through tax planning activities (Rusli, 2021). The self-assessment tax system in Indonesia gives taxpayers complete control over determining, paying, and reporting their own tax liabilities. While the goal of this system is to increase compliance, it also introduces regulatory gaps that businesses could take advantage of to lower their tax obligations. (Syahnandevito et al., 2024).

The industrial sector was selected as the focus of this study due to its substantial contribution to national tax revenue and its receipt of significant fiscal incentives. In the first half of 2023, the industrial sector contributed approximately 27.4 percent of Indonesia's total tax revenue, and by October 2024 this contribution reached IDR 369.72 trillion, accounting for 25.8 percent of total tax income (kontan.co.id, 2023) and (ssas.co.id, 2024). At the same time, the sector received a large share of tax incentives, amounting to IDR 91.7 trillion or 25.3 percent of total national tax expenditures (pajak.com, 2023). This dual condition raises concerns regarding the effectiveness of tax policy implementation and the potential for aggressive tax behavior within the industrial sector.

Previous studies have identified several firm-specific factors influencing tax aggressiveness, including capital intensity, financial distress, and sales growth. The ratio of a company's fixed assets to its overall assets is known as capital intensity. Depreciation costs from large fixed asset investments might lower taxable income and even promote tax aggressiveness. (Firdaus & Poerwati, 2022). However, empirical findings regarding the effect of capital intensity on tax aggressiveness remain inconclusive, with some studies reporting a significant relationship (Prihana et al., 2023) and (Ngadi et al., 2023) and others finding no effect (Marta & Nofryanti, 2023) and (Cahaya & Prasetya, 2024).

Financial distress represents a condition in which a company experiences financial difficulties that increase the risk of insolvency (Nadhifah & Arif, 2020). Firms under financial pressure may attempt to conserve cash by reducing various expenditures, including tax payments (Ari & Sudjawoto, 2021). Several studies find that financial distress significantly affects tax aggressiveness (Handayani & Mardiansyah, 2021), (Nugroho et al., 2022), (Syahnandevito et al., 2024) dan (Wesly & Kuntadi, 2024), while other studies report insignificant results (Silalahi & Simbolon, 2023), indicating inconsistent empirical evidence.

A company's capacity to raise revenue over time is reflected in sales growth, which is frequently linked to better performance and increased profitability (Ramadhania et al., 2020). Growing sales may lead to increased earnings and tax obligations, which encourages businesses to implement tax-aggressive tactics. However, there is still conflicting empirical data about how sales growth affects tax aggressiveness, with some research finding substantial effects. (Cahaya & Prasetya, 2024), (Nugroho et al., 2022) and others finding no effect (Nisadiyanti & Yuliandhari, 2021), (Ningsih & Noviani, 2022), (Fajarwati & Ramadhanti, 2021) dan (Syahnandevito et al., 2024).

An obvious research vacuum is shown by the contradiction of earlier empirical findings. In order to determine if sales growth improves or degrades the relationship between capital intensity, financial distress, and tax aggression, this study includes it as a moderating variable. This study is innovative in that it uses panel data and moderated regression analysis to examine these correlations within industrial sector companies listed on the Indonesia Stock Exchange between 2019 and 2023, incorporating sales growth as a moderating variable. Unlike prior studies that predominantly focus on direct relationships or different industrial contexts, this study provides updated empirical evidence using recent panel data and Moderated Regression Analysis to capture dynamic interactions among variables.

The objective of this study is to analyze the effect of capital intensity and financial distress on tax aggressiveness and to examine whether sales growth moderates these relationships. The findings are expected to contribute theoretically by clarifying inconsistent empirical results and extending the application of agency and signaling theories in the context of corporate taxation. Practically, this study provides insights for corporate management in designing tax strategies, for investors in assessing corporate financial risk, and for policymakers in evaluating the effectiveness of tax regulations and fiscal incentive policies within the industrial sector.

Literature Review and Hypotheses

Conflict of interest arises in every interaction between a principal and an agent, and (Jensen and Meckling's, 1976) agency theory attempts to explain this phenomenon. Disagreements emerge when each side has different goals in mind while they carry out their duties. Management engages in tax aggressiveness when they try to engineer corporate profits to lower the tax burden, even though doing so goes against investor interests and could put the

company in legal hot water, which could ruin its reputation and make it impossible for it to stay in business (Ramadhania et al., 2020).

Growth in sales and capital intensity are two other areas where agency theory is applicable. Capital intensity allows for tax savings via asset depreciation (Prihana et al., 2023) for management. When it comes to sales growth, agency theory comes into play. This is because managers are motivated to make decisions based on specific policies in order to increase profits, which in turn reduces the company's tax burden. The theory suggests that this is because agents and principals have different interests. Source: Susan and Faizal (2023).

According to (Brigham and Houston, 2001), signal theory states that when a company discloses information about itself, it gives investors a clue about the company's future prospects. This information is significant because it affects the investment decisions made by third parties by giving a picture of the company's history, present, and potential. For investors to ensure corporate continuation, the information that the firm releases is crucial (Efendy, 2023). When investors see that a firm is unstable or can go bankrupt, they avoid investing, which leads to financial hardship (Suryati & Setyawati, 2024).

According to signal theory, which is based on the idea that a firm may send signals to investors about its potential to enhance the value of its sales from year to year, consistent sales growth suggests that rivals are highly competitive (Putri & Noor, 2022). While the relationship with capital intensity is the delivery of information to the public through financial reports, profits, and company assets that increase so as to attract investors to invest (Suryati & Setyawati, 2024).

According to (Rusli, 2021), tax aggressiveness occurs when a firm takes legal or unlawful measures to reduce its taxable revenue via tax planning. Corporate taxpayers, like the government, see taxes as a means to an end—a means to collect money from citizens (Nisadiyanti & Yuliandhari, 2021). As a result, businesses strive to minimize their tax liabilities wherever possible. According to (Nurwati et al., 2023), owners may boost their earnings and use such funds for investment purposes. How much tax regulatory gaps are used by firms determines their degree of tax aggression.

Both the Effective Tax Rate (ETR) and the Cash Effective Tax Rate (CETR) may be used to measure tax aggression. A low effective tax rate (ETR) suggests a high degree of tax aggression, whereas a high ETR implies a poor level of tax compliance (Islami et al., 2021). According to (Jafar & Diana (2020), CETR may be used to find tax planning methods by comparing the amount of cash tax paid to the profit before tax.

When a business has a high concentration of fixed assets relative to its overall asset base, this is known as capital intensity. Companies who have a lot of fixed assets will have to pay a lot in depreciation, which means their revenue and taxable profit would go down. Managers might take advantage of depreciation expenditure as a tax benefit by investing idle cash in fixed assets (Sudrajat et al., 2024). The tax burden may be reduced as a result of asset depreciation if there are a significant percentage of fixed assets.

According to (Ngadi et al., 2023), An indicator of how well a business uses its investments—such as its inventory and fixed assets—to produce income is the capital intensity ratio. One method of calculating capital intensity is to divide total assets by total fixed assets. The capital intensity ratio is the name given to this ratio. The high ratio suggests that the firm has invested a lot in fixed assets, which might lead to significant depreciation costs and lower taxable income (Marta & Nofryanti, 2023) due to the expenses associated with them.

Financial distress is a condition of financial difficulty that increases the risk of bankruptcy (Damayanti & Stiawan, 2023). However, this condition also encourages companies to look for ways out, for example by utilizing tax avoidance to minimize the tax burden (Ari & Sudjawoto, 2021). Financial distress is usually characterized by increased costs, decreased access to funding, and inability to pay obligations, so managers seek solutions through tax aggressiveness. In addition, financial distress can also encourage accounting manipulation to increase profits, so aggressive tax practices are carried out to maintain company funds (Septanta et al., 2023).

The Altman Z-Score technique measures financial hardship by combining financial variables to estimate the health of a firm (Melia & Deswita, 2020). The research in this paper makes use of (Romadhina, 2023) uses the modified Altman Z-Score (Altman, 1995) to detect possible financial troubles, and it is considered accurate and adaptable enough to be used to different industries.

Because it displays changes in sales from one year to another, which represent the company's prospects and profitability, sales growth is an essential indication that might impact tax aggressiveness (Susan & Faizal, 2023) according to Susan and Faizal. According to (Marta & Nofryanti, 2023), when sales go up, it means the firm has been successful in increasing its operational capacity. On the other hand, when sales go down, it can mean that efficiency and competitiveness are a problem, and it also shows how investments have paid off in the past and how well the company is expected to do in the future.

According to (Ramadhania et al., 2020), a business's performance is measured by its consistent sales growth, which in turn affects the company's assets via new cash inflows. This metric is useful for a number of other purposes as well, including sales force performance evaluation, firm strategy formulation, management decision support, and investor sentiment analysis (Cahyo & Napisah, 2023)

The potential for a greater tax burden as a result of increased sales volume and profit prospects is one reason why organizations may engage in tax evasion strategies while experiencing rapid sales growth (Nisadiyanti & Yuliandhari, 2021). The ratio of sales in one period to those in another is used to determine sales growth (Richa & Yuniarwati, 2020).

1.1. Effect of Capital Intensity on Tax Aggressiveness

Investment in fixed assets with high depreciation costs reduces a company's capital intensity, which in turn lowers its earnings and tax burden (Firdaus & Poerwati, 2022). In agency theory, capital intensity is defined as the amount of money a company spends on fixed assets, the useful life of which is decided by the company itself. This leads to discrepancies in accounting and tax calculations, which management can use to their advantage when trying to control tax expenses. However, this also reflects a conflict of interest and an information gap between the principals and agents (Gea & Sembiring, 2024).

Tax aggression is significantly affected by capital intensity, according to research (Ngadi et al., 2023). Buildings, machinery, and equipment are examples of fixed assets that businesses with a lot of capital tend to have more of, and their value may be depreciated, making them more tax deductible. Therefore, capital-intensive businesses often take a more proactive approach to tax planning by depreciating their assets, which lowers their tax bills and boosts their bottom line.

H1: Capital Intensity affects Tax Aggressiveness.

1.2. The Effect of Financial Distress on Tax Aggressiveness

When a business is in financial trouble, it means it's losing money and can't pay its bills. To get out of this jam, it's looking for ways to cut costs, which could mean lowering taxes (Handayani & Mardiansyah, 2021). Companies may engage in tax avoidance due to this circumstance, since they have good motivations to do so (Arizoni et al., 2020). Financial statement information reveals a company's financial capacity and condition, which is the foundation of signal theory and financial distress. This information allows one to predict if a company is experiencing financial distress and, if caught early enough, to take preventative measures to avoid bankruptcy (Rismaniar & Aulia, 2022).

A higher degree of tax avoidance is associated with more severe financial suffering, according to research (Nugroho et al., 2022), suggesting that financial difficulty influences tax aggression. Companies are more likely to take active measures to reduce their tax liabilities when the bankruptcy risk is high, which triggers this circumstance.

H2: Financial Distress affects Tax Aggressiveness.

1.3. Sales Growth Moderates the Relationship between Capital Intensity and Tax Aggressiveness

The capacity of a corporation to sustain its economic position may be measured by its sales growth ratio. A higher capital intensity ratio indicates that a company is able to spend more money in fixed assets as a result of higher sales. Management is used for the purpose of evading taxes due to the fact that large fixed assets will raise depreciation expenses while lowering tax obligations (Firdaus & Poerwati, 2022)

According to agency theory, as sales go up, management feels pressured to be more tax aggressive in order to satisfy shareholder expectations. Because capital intensity might lead to tax

avoidance in order to retain firm profits, research (Nadhifah & Arif, 2020) demonstrates that sales growth reinforces the association between capital intensity and tax aggression.

H3: Sales Growth strengthens the influence of Capital Intensity on Tax Aggressiveness.

1.4. Sales Growth Moderates the Relationship between Financial Distress and Tax Aggressiveness

When sales go up, a company's income and assets go up as well. When sales go down, a company's finances go into crisis, making it hard to fund operations and even encouraging tax aggression. Under these circumstances, management strives to keep profits up while keeping the tax burden to a minimum in order to ensure the survival of the firm.

High earnings indicate a huge tax burden, hence managers are pressured and motivated to avoid paying their fair share of taxes as sales rise, according to agency theory (Ningsih & Noviari, 2022). So, sales growth may moderate the association between tax aggression and financial difficulty. According to studies done by Nadhifah and (Arif, 2020), sales growth accentuates the correlation between financial hardship and tax aggression.

H4: Sales Growth strengthens the influence of Financial Distress on Tax Aggressiveness.

Framework of Thought

Literature evaluation and prior research findings form the basis of this study's framework. Research hypotheses are based on this framework, which describes the link between the study's object variables (Rahman Rahim, 2020: 44).

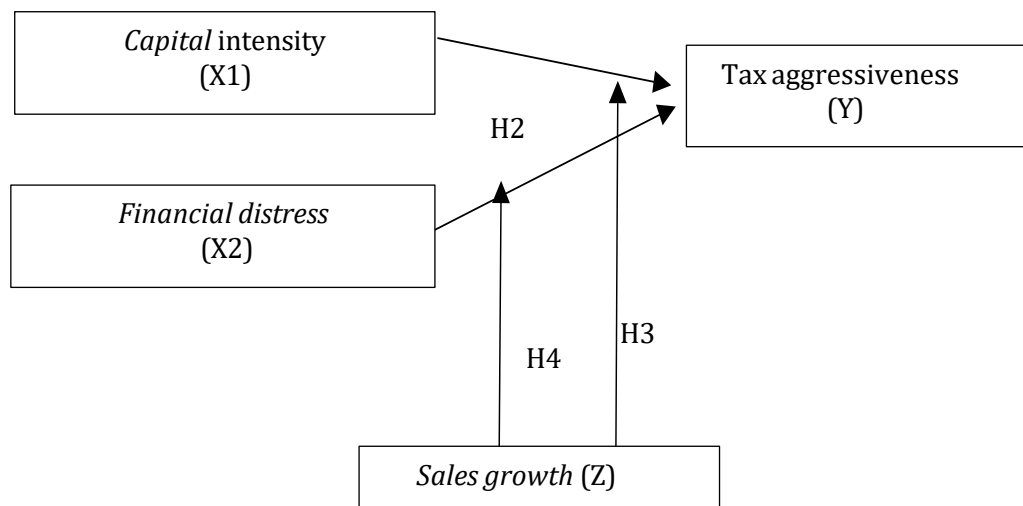


Figure 1. Thinking Framework
Source: Primary data processed (2025)

2. Methodology

This study uses associative research methodologies in a quantitative manner. The yearly financial statements of industrial sector businesses listed on the Indonesia Stock Exchange (IDX) for the years 2019–2023, which can be accessible on the official IDX website, provided the secondary data used in this study. All businesses in the industrial sector that were listed on the IDX throughout the observation period make up the population. In order to guarantee data consistency and completeness, the sample is chosen through purposive sampling according to predetermined criteria, yielding 14 companies with a total of 70 firm-year observations. The research can capture both cross-sectional and time-series differences in business tax behavior thanks to the use of panel data.

To examine the direct effects of capital intensity and financial distress on tax aggressiveness, this study applies panel data regression analysis, as the dataset consists of observations across multiple firms and years during the 2019–2023 period. Panel data analysis is able to capture cross-sectoral variance between firms and time series fluctuations over time.

Several model specification tests are used to determine the best panel data model. These tests include the Chow test, which compares the General Effects Model and the Fixed Effects Model; the Hausman test, which determines whether the Fixed Effects Model or the Random Effects Model is more appropriate; and the Lagrange Multiplier (LM) test, which compares the General Effects Model and the Random Effects Model. Classical assumption tests, such as normality, multicollinearity, heteroscedasticity, and autocorrelation, are conducted to verify the validity of the regression model after the best panel data model is selected. The partial impact of each independent variable is then examined using a t-test, and their joint effect on tax aggressiveness is evaluated using an F-test. The explanatory power of the regression model is assessed using the coefficient of determination (R^2). In addition, by adding interaction terms between sales growth and each independent variable—capital intensity and financial distress—Modified Regression Analysis (MRA) is used to investigate the moderating effect of sales growth. Sales growth can increase or decrease the relationship between the independent variables and tax aggressiveness, according to a significant interaction term. The following regression model is used in this study.:

Basic model (without moderation):

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

Model with moderation (MRA):

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 Z + \beta_4 (X_1 \times Z) + \beta_5 (X_2 \times Z) + e$$

Description:

Y = Tax Aggressiveness (ETR) X1 = Capital Intensity

X2 = Financial Distress Z = Sales Growth

α = Constant

$\beta_1 \dots \beta_5$ = Regression coefficient

e = error.

2.1. Population and Sample

All firms listed on the Indonesia Stock Exchange (IDX) in the industrial sector from 2019 to 2023 made up the population in this research. This study's sample was selected using the purposive sampling approach, which allows researchers to tailor their selection to meet specific research goals. This research used the following criteria:

Table 1. Sample Selection Results

No	Sample Criteria	Does Not Meet the Criteria	Meets the Criteria
1	Industrial sector companies listed on the Indonesia Stock Exchange (IDX) as of December 31, 2023	–	63
2	Industrial sector companies listed on the IDX during 2019–2023	-15	48
3	Industrial sector companies listed on the IDX that present and publish financial statements for five consecutive years (2019–2023)	-7	41
4	Industrial sector companies that experienced profits for five consecutive years (2019–2023)	-26	15
5	Industrial sector companies that retained earnings for five consecutive years	-1	14
Total Company Sample			14
Year of Observation			5
Total Observations (2019–2023)			70

Source: Primary data processed (2025)

Operational Variable

Table 2. Operational Variable

No	Variable	Formula
1.	Tax Aggressiveness	$ETR = \frac{\text{Income Tax Expense}}{\text{Earnings Before Tax}}$
2.	Capital intensity	$CIR = \frac{\text{Total Fixed Assets}}{\text{Total Assets}}$
3.	Financial distress	$Z = 6.56 X_1 + 3.26 X_2 + 6.72 X_3 + 1.05 X_4$
4.	Sales growth	$SG = \frac{\text{Sales}_t - \text{Sales}_{t-1}}{\text{Sales}_{t-1}}$

Source: Primary data processed (2025)

3. Results and Discussion

3.1. Results

Here we provide the study's empirical results that were derived by Moderated Regression Analysis (MRA) and panel data regression analysis. After doing model selection tests to determine which panel data regression model was most appropriate, we tested hypotheses to see if they held water, and finally, we conducted classic assumption tests to make sure the model was correct. Hypothesis testing using the F-test, t-test, and coefficient of determination was then used to evaluate the model's explanatory power. To delve further into the moderating effect of sales growth, the interaction terms of the MRA model were used. The results of each analysis are shown in the tables that follow.

Table 3. Panel Data Regression Model Selection Results

No	Test Type	Probability / Statistic	Compared Models	Decision
1	Chow Test	F-Statistic = 0.0000	Common Effect Model (CEM) vs Fixed Effect Model (FEM)	Fixed Effect Model selected
2	Hausman Test	Chi-Square = 0.0012	Fixed Effect Model (FEM) vs Random Effect Model (REM)	Fixed Effect Model selected
3	Lagrange Multiplier Test	Both = 0.0000	Common Effect Model (CEM) vs Random Effect Model (REM)	Random Effect Model rejected

Source: Processed by Eviews-10, (2025)

The Chow, Hausman, and Lagrange Multiplier tests all pointed to the Fixed Effect Model (FEM) as the best fit for this investigation. To make sure the regression model was normal, multicollinear, heteroscedastic, and autocorrelation, we ran it through classical assumption tests before we tested any hypotheses. According to table 4, the conventional assumption tests were successful.

Table 4. Classical Assumption Test Results

Test Type	Statistical Value / Probability	Criteria	Conclusion
Normality	Prob = 0.2287	> 0.05	Normal
Multicollinearity	Correlation among variables < 0.90	No high correlation	No multicollinearity
Heteroscedasticity	Glejser Test Prob > 0.05	> 0.05	No heteroscedasticity
Autocorrelation	Durbin-Watson (DW) = 2.2132	$DU < DW < 4 - DU$	No autocorrelation

Source: Processed by Eviews-10, (2025)

There is no evidence of heteroscedasticity in the Glejser test, no evidence of multicollinearity among the independent variables, and no evidence of autocorrelation in the Durbin-Watson statistic; all of these findings are in line with the predictions made by the classical assumption

tests, which conclude that the regression model is normal. So, to continue testing hypotheses, the regression model is suitable.

The links between capital intensity, financial hardship, sales growth, and tax aggressiveness were examined by hypothesis testing after establishing that the chosen panel data regression model met the classical assumptions. The model fit was evaluated using the F-test, while the individual effects of the independent variables were examined using the t-test. Furthermore, the moderating role of sales growth was tested using Moderated Regression Analysis (MRA) through interaction terms. The results of the hypothesis testing are presented in Table 5.

Table 5. Results of Hypothesis Testing Using Panel Data Regression and MRA

Variable / Test	Coefficient	Statistic	Prob.	Result
F-test (Model Fit)	–	F = 6.921845	0.0000	Model is significant
Capital Intensity (X1)	-0.125638	t = -0.175573	0.8613	Not significant
Financial Distress (X2)	-0.185620	t = -2.877.114	0.0057	Significant
X1 × Z	-1.410.811	–	0.1587	No moderating effect
X2 × Z	-0.145004	–	0.2415	No moderating effect
Adjusted R ²	–	–	0.5628	–

Source: Processed by Eviews-10, (2025)

The results provide a statistically significant regression model, suggesting that capital intensity and financial difficulty are factors that impact tax aggression. Based on the results of the partial test, tax aggression is considerably affected by financial difficulty, but not by capital intensity. Tax aggressiveness and capital intensity are inversely related, and neither sales growth nor financial difficulty moderates either link, according to the Moderated Regression Analysis. Overall, these findings disprove the notion that sales growth mediates the relationship between the variables in the proposed research model.

3.2. Discussion

Effect of Capital Intensity on Tax Aggressiveness

The findings indicate that capital intensity does not influence tax aggressiveness. Although firms with higher capital intensity tend to invest more in fixed assets that generate depreciation expenses, these expenses are not necessarily used as a strategic tool to reduce corporate tax burdens. In practice, depreciation arising from fixed asset utilization is relatively predictable and regulated, limiting its effectiveness as a mechanism for aggressive tax planning. Consequently, capital-intensive firms do not automatically engage in more aggressive tax behavior. However, this study's results contradict agency theory.

Nevertheless, tax aggressiveness is unaffected by capital intensity levels since the actual and relatively small depreciation expenses incurred from using fixed assets are not believed to significantly affect tax avoidance strategies (Fajarwati & Ramadhanti, 2021). The findings of earlier studies by (Mulya & Anggraeni, 2022) and (Pratiningsih & Fajriana, 2022) contradict this study's conclusions, which hold that capital-intensive businesses tend to own more long-term, depreciable assets like buildings, machinery, and equipment. Businesses with a high capital intensity may take advantage of a more aggressive tax approach since depreciation charges on these assets can lower the tax amount that has to be paid. From a practical perspective, these findings suggest that company management should not rely on capital investment decisions as a primary tax planning strategy. Instead, investments in fixed assets should be evaluated based on operational efficiency and long-term productivity rather than potential tax advantages. For policymakers, this result indicates that depreciation policies may not significantly encourage aggressive tax behavior, reducing concerns over misuse of capital investment incentives.

The Effect of Financial Distress on Tax Aggressiveness

The results demonstrate that financial distress influences corporate tax aggressiveness. Firms experiencing financial difficulties tend to adjust their tax behavior as part of broader efforts to manage financial pressure and maintain liquidity. This finding aligns with agency theory, which explains that managers under financial stress may seek to reduce cash outflows, including tax

payments, to stabilize firm performance. According to agency theory, when corporations are having financial troubles, they try to keep their image up by cutting costs anywhere they can, including taxes. However, this strategy might backfire if investors start to worry that the company will go bankrupt (Aulia & Jarno, 2024).

Consistent with previous research (Wesly & Kuntadi, 2024), we find that companies aggressively push the tax burden to enhance financial ratios when financial hardship is significant. Nevertheless, contrary to what is stated by (Ari & Sudjawoto, 2021), tax evasion remains unaffected when enterprises are financially distressed. This is because corporations choose to seek external funding instead. In practical terms, the findings highlight that financial distress is a critical factor influencing corporate tax behavior. For company management, this underscores the importance of maintaining financial stability to avoid resorting to risky tax strategies that could increase regulatory scrutiny. For investors, financial distress may serve as a signal of potential tax-related risks. For tax authorities, financially distressed firms may require closer monitoring due to their higher incentive to engage in aggressive tax practices.

Sales Growth as a moderating variable between Capital Intensity and Tax Aggressiveness

The data shows that capital intensity and tax aggression are positively correlated regardless of sales growth. That capital investment choices still have an effect on tax behavior even when sales are up is suggested by this. Even when sales growth is larger, fixed assets are still mostly used to assist manufacturing and distribution rather than to avoid taxes. The findings show that the company's fixed assets are mostly used for production and distribution, which are operational operations, rather than to lower the tax burden. That is to say, rather from being used for tax avoidance tactics, fixed assets are devoted to supporting commercial operations, even when the company's revenues have increased.

That capital intensity is not always associated with tax aggression is supported by the results of (Nisadiyanti & Yuliandhari, 2021). Another study that claims capital intensity influences tax evasion is contradicted by this one (Dwiyanti & Jati, 2019). The results of this research do not, however, suggest that managers should use capital intensity as a tax strategy due to weak sales growth. Therefore, sales growth does not have a moderating function. From a practical standpoint, this result implies that growing firms do not automatically exploit capital investments for tax purposes. Managers should therefore prioritize aligning capital expenditures with operational expansion rather than tax planning motives. For policymakers, the result suggests that economic growth driven by increased sales does not inherently increase tax avoidance risks related to capital investment.

Sales Growth as a moderating variable between Financial Distress and Tax Aggressiveness

The results demonstrate that the correlation between financial hardship and tax aggression remains unmodified by sales growth. This suggests that regardless of changes in sales success, the effect of financial strain on tax behavior is constant. Firms experiencing financial difficulties tend to adopt cautious strategies, focusing on maintaining investor confidence rather than engaging in aggressive tax practices, even when sales increase.

Companies in financial trouble would rather take alternative measures, such as requesting finance from outside sources, than engage in tax dodging, according to this study (Ari & Sudjawoto, 2021). Thus, it is clear that the corporation is not automatically going to engage in tax evasion just because it is under financial pressures due to its rapid sales development. Actually, businesses are more cautious about how they seem to investors so as not to make the bankruptcy risk even worse.

On the other hand, studies (Aulia & Jarno, 2024) and (Juliana et al., 2020) have shown the opposite: that tax aggressiveness practices tend to grow in times of financial difficulty, particularly when driven by large sales and profits. Within the context of this study, sales growth does not reduce the effect of financial stress on tax aggressiveness since more sales do not always result in higher net profits. This establishes that the correlation between financial hardship and tax aggression is independent of sales growth. Practically, this finding implies that firms experiencing financial distress should focus on improving operational performance and financial transparency rather than relying on tax aggressiveness as a coping mechanism. For investors, sales growth alone should not be interpreted as a signal of aggressive tax behavior. For regulators, the result

indicates that monitoring efforts should focus more on financial distress indicators than on sales performance alone.

4. Conclusion

Using sales growth as a moderating variable, this research examines the influence of capital intensity, financial distress, and tax aggression on industrial sector businesses listed on the Indonesia Stock Exchange from 2019 to 2023. Capital intensity has little effect on tax aggressiveness, according to the results, suggesting that operational concerns, not tax planning, are the primary motivators for fixed asset investment. On the other hand, tax aggression is affected by financial difficulty, indicating that the relationship between corporate tax behavior and enterprises' financial situations is stronger. Growth in sales also has no moderating effect on the correlation between tax aggression, financial hardship, and capital intensity. Financial pressure, not asset structure or sales success, seems to be the primary factor influencing tax aggression in the industrial sector, according to the data.

Several limitations are included in this investigation. Because this study only includes businesses in the industrial sector and employs a small number of explanatory factors, its results may not be applicable outside of that specific industry. More industries should be included, the observation time should be extended, and new factors like corporate governance or leverage should be included in future study. To make the findings more solid, future research may use other ways to quantify tax aggression.

References

- Altman, E. I. (1995). *Corporate financial distress and bankruptcy: A complete guide to predicting & avoiding distress and profiting from bankruptcy*. John Wiley & Sons.
- Ari, T. T. F., & Sudjawoto, E. (2021). The Effect of Financial Distress and Sales Growth on Tax Avoidance. *Journal of Administration and Business*, 15(2), 82-88.
- Arizoni, S. S., Ratnawati, V., & Andreas. (2020). The Effect of Accrual Earnings Management, Real Earnings Management, and Inventory Intensity on Tax Aggressiveness: The Moderating Role of Foreign Operation. *Bilancia: Scientific Journal of Accounting*, 4(1), 35-47.
- Aulia, R., & Jarno. (2024). The Effect of Ownership Structure and Financial Difficulty on Tax Aggressiveness. *Balance Sheet Journal of Economics, Management and Accounting*, 1192(28), 304-317.
- Brigham, E. F., & Houston, J. F. (2001). *Fundamentals of financial management* (9th ed.). Harcourt College Publishers.
- Cahaya, S., & Prasetya, E. R. (2024). The Effect of Sales Growth, Capital Intensity, and Independent Commissioners on Tax Aggressiveness. *Perwira Journal of Economics & Business*, 4(2), 153-166. <https://doi.org/10.54199/pjeb.v4i2.229>
- Cahyo, M. K., & Napisah. (2023). The Effect of Capital Intensity, Sales Growth, Company Size, and Corporate Governance on Tax Avoidance. *Journal of Revenue Journal of Accounting*, 4, 14-32.
- Damayanti, & Stiawan, H. (2023). The Effect of Sales Growth, Financial Distress and Company Size on Tax Avoidance. *AKUA: Journal of Accounting and Finance*, 2(4), 286-292. <https://doi.org/10.54259/akua.v2i4.1954>
- Dwiyanti, I. A. I., & Jati, I. K. (2019). The Effect of Profitability, Capital Intensity, and Inventory Intensity on Tax Avoidance. *E-Journal of Accounting*, Udayana University, 27(3), 2293-2321. <https://doi.org/https://doi.org/10.24843/EJA.2019.v27.i03.p24>
- Efendy, M. R. (2023). The Effect of Financial Distress, Earnings Persistence, Company Size on Tax Avoidance in Companies with Sales Growth as a Moderating Variable. In Syarif Hidayatullah State Islamic University Jakarta.
- Fajarwati, P. A. N., & Ramadhanti, W. (2021). The Effect of Accounting Information (Roa, Leverage, Sales Growth, Capital Intensity and Company Size) and Company Age on Tax Avoidance. *Investment Journal*, 7(1), 1-15. <https://doi.org/10.31943/investasi.v7i1.112>

- Firdaus, V. A., & Poerwati, R. T. (2022). The Effect of Capital Intensity, Sales Growth, and Executive Compensation on Tax Avoidance (Study of Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX) for the 2018-2020 Period). *JIMAT (Scientific Journal of Accounting Students) Ganesha University of Education*, 13(01), 180-189.
- Gea, M., & Sembiring, E. A. (2024). The Effect of Capital Intensity, Profitability and Earnings Management on Tax Aggressiveness in Coal Mining Companies Listed on the Indonesia Stock Exchange for the 2018-2021 Period. *Management, Accounting, Islamic Banking and Islamic Economic Journal*, 2(1), 112-123.
- Handayani, H. R., & Mardiansyah, S. (2021). The Effect of Earnings Management and Financial Distress on Tax Aggressiveness in Manufacturing Companies in Indonesia. *Scientific Journal of Reflection: Economic, Accounting, Management and Business*, 4(2), 311-320.
- Islami, W., Syafitri, Y., & Meyla, D. N. (2021). The Effect of Inventory Intensity, Sales Growth, and Profitability on Tax Aggressiveness (In Automotive Sub-Sector Manufacturing Companies Listed on the IDX for the 2011-2018 Period). *Pareso Journal*, 3(4), 775-788.
- Jafar, S. R., & Diana, P. (2020). Tax Aggressiveness based on Company Size, Asset Funding, Asset Composition, and Profitability. *Ultimaccounting: Journal of Accounting Science, Universitas Multimedia Nusantara*, 12(2), 194-213.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Juliana, D., Arieftiara, D., & Nugraheni, R. (2020). The Effect of Capital Intensity, Sales Growth, and CSR on Tax Avoidance. *Proceedings of BIEMA (Business Management, Economic, and Accounting National Seminar)*, 1, 1257-1271.
- Kontan.co.id. (2023). Industrial sector contribution to national tax revenue. <https://www.kontan.co.id>
- Manurung, A. H. (2019). The Influence of Liquidity, Profitability, Inventory Intensity, Related Party Debt, and Company Size to Aggressive Tax Rate. *Archives of Business Research*, 7(3), 105-115. <https://doi.org/10.14738/abr.73.6319>
- Marta, D., & Nofryanti, N. (2023). The Effect of Capital Intensity, Sales Growth, and Company Size on Tax Avoidance. *Journal of Accounting and Finance*, 28(1), 55-65.
- Melia, Y., & Deswita, R. (2020). Analysis of Bankruptcy Prededction Using the Altman Z-Score Method. 13(1), 71-80.
- Mulya, A. A., & Anggraeni, D. (2022). Company size, Capital Intensity, Asset funding and profitability as determinants of tax aggressiveness factors. *Owner: Accounting Research & Journal*, 6(4), 4263-4271. <https://doi.org/https://doi.org/10.33395/owner.v6i4.1152>
- Nadhifah, M., & Arif, A. (2020). The Effect of Transfer Pricing, Thin Capitalization, Financial Distress, Earning Management, and Capital Intensity on Tax Avoidance Moderated by Sales Growth. *Journal of Master of Accounting Trisakti*, 7(2), 145-170. <https://doi.org/http://dx.doi.org/10.25105/jmat.v7il.6311>
- Ngadi, S., Sumual, F. M., & Sumampouw, O. O. (2023). The Effect of Liquidity and Capital Intensity on Tax Aggressiveness (Empirical Study of Manufacturing Companies Listed on the Indonesia Stock Exchange in 2019-2021). *INNOVATIVE: Journal of Social Science Research*, 3(2), 7521-7535.
- Ningsih, I. A. M. W., & Noviani, N. (2022). Financial Distress, Sales Growth, Profitability and Tax Avoidance. *E-Journal of Accounting*, 32(1), 229-244.
- Nisadiyanti, F., & Yuliandhari, W. S. (2021). The Effect of Capital Intensity, Liquidity and Sales Growth on Tax Aggressiveness. *Scientific Journal of Unitary Accounting*, 9(3), 461-470. <https://doi.org/10.37641/jiakes.v9i3.888>
- Nugroho, A. C., Mulyanto, M., & Afifi, Z. (2022). The Effect of Financial Distress, Leverage, Sales Growth, Earnings Management, and Fixed Asset Intensity on Tax Avoidance (Empirical Study of Manufacturing Companies Listed in Indonesia during 2018-2021). *Economina Journal*, 1(2), 140-151. <https://doi.org/10.55681/economina.v1i2.27>
- Nurwati, Husnayettii, & Cusyana, S. R. (2023). The Effect of Corporate Governance and Managerial Ownership on Tax Aggressiveness in Banking Sub-Sector Service Companies Listed on the Indonesia Stock Exchange (Bei) for the 2016-2020 Period. *Journal of Information System, Applied, Management, Accounting and Research.*, 7(1), 89-102. <https://doi.org/10.52362/jisamar.v7i1.1007>

- Pajak.com. (2023). Tax incentive allocation in Indonesia. <https://www.pajak.com>
- Pratiningsih, Y., & Fajriana, I. (2022). The Effect of Capital Intensity and Inventory Intensity on Tax Aggressiveness in Mining Sector Companies Listed on the Indonesia Stock Exchange in 2020-2022. *Accounting Student Research Publication (PRIMA)*, 4(2), 192-204.
- Prihana, M. S., Astuti, T. P., & Suseno, A. E. (2023). The Effect of Profitability, Leverage, Company and Capital Intensity on Tax Aggressiveness (Empirical Study of Property and Real Estate Companies listed on the Indonesia Stock Exchange in 2017-2021). *Tambusai Education Journal*, 7(1), 4550-4556.
- Putri, M., & Noor, A. (2022). The Effect of Earnings per Share, Profitability, Leverage, and Sales Growth on Firm Value in the Food and Beverage Industry Listed on the Indonesia Stock Exchange (IDX). 19(2), 286-294. <https://doi.org/10.29264/jkin.v19i2.11589>
- Rahim, R. (2020). *Metodologi penelitian bisnis*. RajaGrafindo Persada.
- Ramadhania, W. S., Triyantob, D. N., & Kurnia. (2020). The Effect of Hedging, Financial Lease and Sales Growth on Tax Aggressiveness. *Journal of Applied Accounting and Taxation*, 5(1), 107-116.
- Richa, & Yuniarwati. (2020). The Effect of Company Characteristics, Corporate Governance, and Sales Growth on Tax Avoidance. *Journal of Accounting Paradigms*, 2(2), 893. <https://doi.org/10.24912/jpa.v2i2.7672>
- Rismaniar, N. A., & Aulia, Y. (2022). The Effect of Profit, Capital Intensity and Leverage on Financial Distress with Cash Flow as Moderation in Manufacturing Companies for the 2018- 2021 Period Listed on the Indonesia Stock Exchange. *Soetomo Accounting Review*, 2(0), 1- 23.
- Romadhina, A. P. (2023). The Effect of Institutional Ownership, Fixed Asset Intensity, and Financial Distress on Tax Aggressiveness. *Gorontalo Accounting Journal*, 6(2), 272-282. <https://doi.org/10.32662/gaj.v6i2.3171>
- Rusli, Y. M. (2021). Corporate Tax Aggressiveness during the Covid-19 Pandemic in Indonesia and Malaysia Moderated by Corporate Financial Performance. *Journal of Accounting and Taxation Analysis*, 5(2), 176-195.
- SSAS.co.id. (2024). Tax revenue performance of the industrial sector. <https://www.ssas.co.id>
- Septanta, R., Ramdani, C. S., Latif, A. S., & Lutfi, R. A. (2023). The Effect of Corporate Social Responsibility and Financial Distress on Tax Aggressiveness. *Journal of Management and Business*, 3(1), 18-26.
- Silalahi, F. M., & Simbolon, R. F. (2023). The Effect of Financial Distress and Profitability on Tax Avoidance in Pharmaceutical Sub-Sector Companies Listed on the IDX Years 2020-2022. *COSTING: Journal of Economic, Business and Accounting*, 7(1), 2478-2487.
- Sudrajat, D. M. L., Yuniati, T., & Prayogo, B. (2024). The Effect of Profitability, Capital Intensity, and Leverage on Tax Aggressiveness in Energy Sector Companies Listed on the IDX for the 2018-2022 Period**. *Indonesian Journal of Economics and Strategic Management (IJESM)*, 2(1), 519-530.
- Suryati, & Setyawati, W. (2024). The Effect of Financial Distress, Capital Intensity, and Tax Planning on Firm Value (Empirical Study of Energy Companies Listed on the Indonesia Stock Exchange 2018-2022). *Journal of Economics, Management and Accounting*, 2(5), 437-453.
- Susan, A. N., & Faizal, A. (2023). The Effect of Leverage, Capital Intensity, Sales Growth and Institutional Ownership on Tax Avoidance. *TRISAKTI ECONOMIC JOURNAL*, 3(1), 877-888.
- Syahnandevito, Basri, Y. M., Rusli, & Darlis, E. (2024). The effect of financial difficulties, sales growth, institutional ownership, and managerial ownership on tax avoidance. *JOURNAL OF ACCOUNTING AND AUDITING STUDIES*, 20(1), 13-26.
- Wesly, J., & Kuntadi, C. (2024). The Effect of Earnings Management and Financial Distress on Tax Aggressiveness. *Neraca Journal of Economics, Management and Accounting*, 2(3), 473-483.