

# The Effect of Capital Intensity and Leverage on Corporate Tax Aggressiveness in Companies Listed on the Indonesia Stock Exchange with Corporate Governance as a Moderating Variable

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## **Keywords:**

*Capital intensity, leverage, tax aggressiveness, corporate governance, profitability*

## **Abstract**

*This research investigates the influence of capital intensity and leverage on corporate tax aggressiveness, while also examining the moderating role of corporate governance in manufacturing firms within the consumer non-cyclical sector listed on the Indonesia Stock Exchange from 2021 to 2024. The study proposes that capital intensity and leverage contribute to tax aggressiveness and assumes that corporate governance may strengthen or weaken these relationships. A quantitative method with an associative research design was applied in this study. The sample consisted of 150 firm-year observations selected through purposive sampling techniques. Secondary data were collected from the annual financial statements published by the companies. The variables were measured using several financial indicators, including capital intensity represented by the ratio of fixed assets to total assets, leverage measured using the Debt to Asset Ratio (DAR), tax aggressiveness measured through the Effective Tax Rate (ETR), corporate governance assessed by the proportion of independent commissioners, and profitability represented by Return on Assets (ROA) as a control variable. Data processing employed panel data regression and Moderated Regression Analysis (MRA) using Python software. The selection of the most appropriate regression model was conducted through the Hausman and Lagrange Multiplier (LM) tests, while descriptive statistical analysis and classical assumption tests were performed using SPSS. The findings reveal that, individually, capital intensity and leverage positively and significantly affect tax aggressiveness. Profitability as a control variable also demonstrates a positive and significant relationship with tax aggressiveness. Simultaneous testing further confirms that both capital intensity and leverage jointly influence tax aggressiveness. Furthermore, the MRA findings indicate that corporate governance does not significantly moderate the relationship between capital intensity and leverage toward tax aggressiveness. These results imply that tax aggressiveness is shaped by multiple internal organizational factors, and the proposed model provides considerable explanatory capability regarding the phenomenon. The findings also suggest that strengthening corporate governance structures alone may not be sufficient to reduce aggressive tax practices unless accompanied by effective implementation. Therefore, companies should improve transparency and accountability in managing tax-related activities, while policymakers are encouraged to reinforce regulations associated with corporate taxation practices. Future studies are recommended to incorporate additional variables, such as company size, liquidity, and audit quality, as well as expand research coverage across different sectors and longer periods of observation to achieve broader and more comprehensive findings.*

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## INTRODUCTION

The increasingly competitive business environment in the current era of globalization requires companies to manage their resources efficiently and effectively, including fulfilling their tax obligations. Taxes constitute a significant cost component that directly affects corporate profits, making tax management an important aspect of financial planning (Ramadanty et al., 2024). In practice, companies often adopt various strategies to reduce their tax burden in an effort to maximize profits. Such practices are commonly known as tax aggressiveness, a phenomenon that has attracted considerable attention because it reflects the conflict between corporate profit-oriented objectives and the government's efforts to optimize tax revenue.

Tax aggressiveness is not solely determined by external aspects, including tax policies and regulations, but is also affected by internal company conditions associated with financial characteristics and managerial decision-making processes (Wahab et al., 2025). One internal factor that has received considerable attention in previous research is capital intensity, which represents the proportion of a company's investment allocated to fixed assets. Firms with higher levels of capital intensity tend to have greater opportunities to take advantage of depreciation expenses as deductible components of taxable income, which may consequently reduce their tax obligations (Raainaa & Firmansyah, 2025). This situation suggests that the composition of corporate assets can function as a legitimate tax planning mechanism to optimize tax management practices.

Apart from capital intensity, leverage is also considered a factor that may contribute to tax aggressiveness. Leverage reflects the extent to which a company relies on debt financing within its capital structure. Debt financing generates interest expenses that may be recognized as deductible costs in calculating taxable income, thereby creating opportunities to lower the company's tax burden (Kurniawan et al., 2021). However, debt financing also involves financial risk, including a higher possibility of default and increased pressure from creditors. Therefore, companies must carefully consider their overall financial condition when making leverage-related decisions.

On the other hand, corporate governance is an important aspect that may influence managerial behavior in decision-making processes, including tax planning activities. The application of sound corporate governance practices is expected to create an efficient monitoring mechanism capable of controlling managerial behavior and reducing opportunistic actions, including the implementation of excessive tax aggressiveness strategies (Apriani & Martini, 2024). Through supervisory mechanisms such as independent commissioners, companies are expected to conduct their business activities in a transparent and accountable manner, thereby maintaining a balance between corporate interest and compliance with applicable regulations.

Previous studies have investigated the relationship between capital intensity, leverage, and tax aggressiveness; however, the empirical findings remain inconclusive. Several studies have reported that capital intensity positively influences tax aggressiveness, arguing that firms with larger investments in fixed assets are more likely to utilize depreciation expenses as a mechanism for reducing taxable income and minimizing tax obligations (Soelistiono & Adi, 2022). Conversely, other studies have found no significant relationship between capital intensity and tax aggressiveness, suggesting that fixed assets are not consistently employed as instruments for tax avoidance practices (Jannah et al., 2026). Similar inconsistencies are evident in the findings regarding leverage, where some studies identify a significant positive relationship with tax aggressiveness, while others report insignificant effects.

The contradictory results found in previous studies highlight the presence of a research gap that warrants further examination, particularly by incorporating moderating variables such as corporate governance (Susilawati & Sutopo, 2026). Furthermore, empirical studies focusing on

manufacturing companies within the consumer non-cyclical sector listed on the Indonesia Stock Exchange during recent periods remain relatively scarce. This sector is characterized by relatively stable business conditions due to its close connection with essential consumer needs, thereby offering an opportunity to obtain a more precise understanding of corporate behavior in managing tax obligations.

Based on these considerations, the present study seeks to investigate the influence of capital intensity and leverage on tax aggressiveness, while incorporating corporate governance as a moderating variable in consumer non-cyclical manufacturing firms listed on the Indonesia Stock Exchange throughout the 2021–2024 period. Additionally, profitability is included as a control variable to enhance the robustness and accuracy of the analytical results. The novelty of this research lies in the examination of corporate governance as a moderating mechanism in the relationship between financial characteristics and tax aggressiveness, along with the utilization of recent data obtained from a relatively stable industrial sector. Therefore, this study is expected to contribute broader empirical evidence and enrich the existing literature in the field of tax accounting research.

### Conceptual Framework

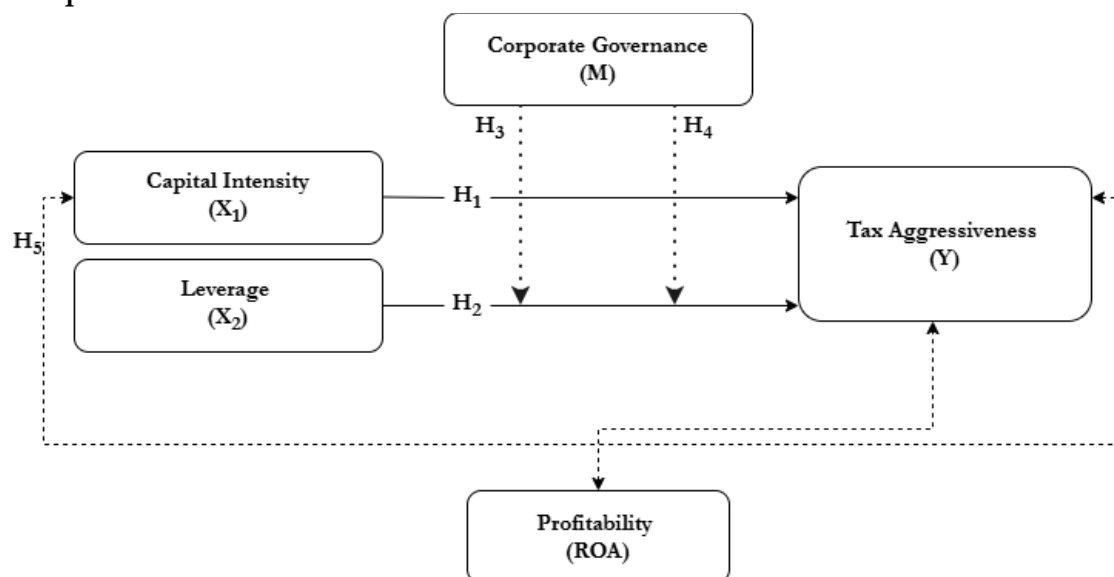


Figure 1. Concept Framework

Description:

H1: Capital intensity affects tax aggressiveness

H2: Leverage affects tax aggressiveness

H3: Corporate governance moderates the effect of capital intensity on tax aggressiveness

H4: Corporate governance moderates the effect of leverage on tax aggressiveness

H5: Capital intensity and leverage simultaneously affect tax aggressiveness

### METHODS

This study adopts a quantitative method with an associative research design to investigate the influence of capital intensity and leverage on tax aggressiveness, while also examining the moderating role of corporate governance. This design was selected because it is considered suitable for identifying and analyzing causal relationships among research variables through statistical procedures. The research population comprised all consumer non-cyclical manufacturing firms

listed on the Indonesia Stock Exchange (IDX) during the 2021–2024 period. Sample selection was conducted using purposive sampling based on several predetermined criteria, including companies that consistently published complete annual financial reports during the observation period, utilized the Indonesian rupiah as the reporting currency, did not report consecutive financial losses, and provided complete data relevant to the research variables. Based on these criteria, 39 companies were selected, producing a total of 156 firm-year observations. Following the outlier screening process, the final sample used in the study consisted of 150 observations.

The research utilized secondary data obtained from annual reports and financial statements published through the official Indonesia Stock Exchange website and each company's official website. The data collected included total fixed assets, total liabilities, income tax expenses, profit before tax, the number of independent commissioners, the total number of commissioners, and net income values. Variable measurements were carried out using financial indicators frequently applied in prior empirical studies. Capital intensity was represented by the ratio of fixed assets to total assets, while leverage was measured using the Debt to Asset Ratio (DAR), calculated by dividing total liabilities by total assets. Tax aggressiveness was proxied using the Effective Tax Rate (ETR), measured by comparing income tax expense to profit before tax. Corporate governance was represented by the proportion of independent commissioners relative to the total board of commissioners. Furthermore, profitability was included as a control variable and measured using Return on Assets (ROA), which was calculated by dividing net income by total assets. To test the moderating effect, interaction terms were generated between capital intensity and corporate governance as well as between leverage and corporate governance.

The analytical procedures in this study were performed using SPSS and Python software. Descriptive statistical analysis together with classical assumption testing, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests, were conducted through SPSS. Hypothesis testing was subsequently performed using panel data regression techniques with Python support. Determination of the most suitable panel regression model involved the Lagrange Multiplier (LM) test and Hausman test to identify the best model among the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Hypothesis testing employed the t-test to assess partial effects, the F-test to evaluate simultaneous effects, and the coefficient of determination ( $R^2$ ) to measure explanatory power. Moreover, Moderated Regression Analysis (MRA) was applied to assess the moderating role of corporate governance in the relationship between capital intensity, leverage, and tax aggressiveness. The entire analytical process was conducted systematically to ensure the validity and reliability of the study findings from an academic perspective.

## RESULTS AND DISCUSSION

### Results of the Lagrange Multiplier (LM) Test

**Table 1. Results of the Lagrange Multiplier Test**

| Description        | Value  |
|--------------------|--------|
| Significance Value | 0.0000 |
| Selected Model     | REM    |

The Lagrange Multiplier (LM) test was applied to identify the most appropriate panel data regression model between the Common Effect Model (CEM) and the Random Effect Model (REM). The purpose of this test is to evaluate whether the random effect approach provides a better estimation than the common effect approach in explaining the relationships among the

variables examined in this study. The decision criterion states that when the significance value is below 0.05, the Random Effect Model (REM) is preferred. On the other hand, if the significance value exceeds 0.05, the Common Effect Model (CEM) is considered more suitable. The results of the Lagrange Multiplier (LM) test revealed a significance value of 0.0000, which is below the threshold of 0.05. This finding indicates that the Random Effect Model (REM) offers a better fit compared to the Common Effect Model (CEM) in explaining the data structure of this research. Therefore, the Random Effect Model (REM) was selected and utilized as the panel regression model in this study.

### Results of the Hausman Test

**Table 2. Results of the Hausman Test**

| Description        | Value  |
|--------------------|--------|
| Hausman Statistic  | 4.7474 |
| Significance Value | 0.3142 |
| Selected Model     | REM    |

The Hausman test was employed to identify the most suitable panel data regression model between the Fixed Effect Model (FEM) and the Random Effect Model (REM). The main objective of this test is to determine which model provides a more appropriate estimation for explaining the relationships among the variables investigated in the study. The decision rule indicates that a significance value below 0.05 leads to the selection of the Fixed Effect Model (FEM), whereas a significance value above 0.05 suggests that the Random Effect Model (REM) is more appropriate. Based on the results of the Hausman test, the significance value obtained was 0.3142, which exceeds the significance threshold of 0.05. This result indicates that the Random Effect Model (REM) is more suitable than the Fixed Effect Model (FEM) for analyzing the data in this research. Therefore, the Random Effect Model (REM) was selected as the final regression model, and all hypothesis testing procedures in this study were subsequently carried out using the REM approach.

### Results of Descriptive Statistical Analysis

**Table 3. Results of Descriptive Statistical Analysis**

|                      | N   | Minimum | Maximum | Mean   | Std. Deviation |
|----------------------|-----|---------|---------|--------|----------------|
| Capital Intensity    | 150 | .064    | .767    | .32754 | .144758        |
| Leverage             | 150 | .067    | .866    | .43312 | .185389        |
| Tax Aggressiveness   | 150 | .144    | .377    | .22728 | .039885        |
| Corporate Governance | 150 | .250    | .833    | .41559 | .112815        |
| Profitability        | 150 | -.019   | .332    | .09722 | .067171        |
| Valid N (listwise)   | 150 |         |         |        |                |

Descriptive statistical analysis was performed to examine the characteristics and distribution patterns of each variable included in the study. The analysis involved a total of 150 observations. The results showed that the capital intensity variable recorded a mean value of 0.32754, indicating that the proportion of fixed assets owned by the sampled companies was generally within a moderate range. The leverage variable produced an average value of 0.43312, suggesting that the level of debt utilization within the companies' capital structures differed across firms. Furthermore, the tax aggressiveness variable generated a mean value of 0.22728 and demonstrated relatively low variation among the observations, implying that the degree of tax aggressiveness across the companies tended to be relatively consistent. The corporate governance

variable showed an average value of 0.41559, reflecting a moderate level of governance implementation among the sampled firms. Meanwhile, the profitability variable had a mean value of 0.09722, while its minimum value was negative, indicating that several companies experienced financial losses during the observation period. Overall, the data demonstrated a non-extreme distribution, indicating that the dataset was appropriate for further analysis.

## Results of Classical Assumption Tests

### Results of the Normality Test

**Table 4. Results of the Kolmogorov-Smirnov Normality Test**

|                                     |                | Unstandardized Residual |
|-------------------------------------|----------------|-------------------------|
| N                                   |                | 150                     |
| Normal Parameters <sup>a,b</sup>    | Mean           | .0000000                |
|                                     | Std. Deviation | .03799984               |
| Most Extreme Differences            | Absolute       | .072                    |
|                                     | Positive       | .072                    |
|                                     | Negative       | -.042                   |
| Test Statistic                      |                | .072                    |
| Asymp. Sig. (2-tailed) <sup>c</sup> |                | .054                    |

The normality test was performed using the Kolmogorov–Smirnov method to determine whether the residual data followed a normal distribution pattern. The test results showed an Asymp. Sig. (2-tailed) value of 0.054. Since this value exceeds the significance threshold of 0.05, it indicates that the residuals are normally distributed. Thus, it can be concluded that the regression model applied in this study fulfills the normality assumption requirement.

### Results of the Multicollinearity Test

**Table 5. Results of the Multicollinearity Test**

| Model                                    | Unstandardized Coefficients |            | Standardized Coefficients |        |      | Collinearity Statistics |       |
|--|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
|  | B                           | Std. Error | Beta                      | t      | Sig. | Tolerance               | VIF   |
| 1 (Constant)                             | .240                        | .006       |                           | 39.391 | .000 |                         |       |
| Capital Intensity                        | .061                        | .026       | .221                      | 2.349  | .020 | .699                    | 1.430 |
| Leverage                                 | -.006                       | .019       | -.029                     | -.324  | .746 | .754                    | 1.326 |
| Corporate Governance                     | .105                        | .039       | .298                      | 2.720  | .007 | .515                    | 1.943 |
| Capital Intensity x Corporate Governance | .021                        | .265       | .010                      | .079   | .937 | .382                    | 2.617 |
| Leverage x Corporate Governance          | -.346                       | .225       | -.248                     | -1.540 | .126 | .238                    | 4.197 |
| Profitability                            | -.109                       | .056       | -.184                     | -1.959 | .052 | .701                    | 1.426 |

The multicollinearity test was performed on the moderation regression model by incorporating the independent variables, moderating variable, interaction terms, and control variable. Based on the results displayed in the coefficients table, all variables produced tolerance

values greater than 0.10 and Variance Inflation Factor (VIF) values below the threshold of 10. These findings indicate that no multicollinearity issue exists among the variables included in the regression model. Therefore, it can be concluded that the model satisfies the multicollinearity assumption requirement.

## Results of the Heteroscedasticity Test

### Glejser Method

**Table 6. Results of the Heteroscedasticity Test**

| Model                                    | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|--|-----------------------------|------------|---------------------------|--------|------|
|  | B                           | Std. Error | Beta                      |        |      |
| 1 (Constant)                             | .039                        | .004       |                           | 10.391 | .000 |
| Capital Intensity                        | .016                        | .016       | .090                      | .991   | .324 |
| Leverage                                 | .005                        | .012       | .040                      | .457   | .649 |
| Corporate Governance                     | .051                        | .024       | .226                      | 2.135  | .035 |
| Capital Intensity x Corporate Governance | -.326                       | .163       | -.246                     | -1.998 | .048 |
| Leverage x Corporate Governance          | .085                        | .138       | .095                      | .611   | .542 |
| Profitability                            | -.119                       | .034       | -.316                     | -3.473 | .001 |

The Glejser test results show that several variables have significance values below 0.05. However, based on observations of the scatterplot graph, the residual distribution does not show any clear specific pattern. Therefore, the level of heteroscedasticity in the research model is still considered acceptable, allowing the regression model to be applied for further analysis.

## Results of the Autocorrelation Test

**Table 7. Results of the Autocorrelation Test**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1     | .304 <sup>a</sup> | .092     | .067              | .038520                    | .915          |

The Durbin–Watson method was applied to examine whether correlations occurred among the residual values in the regression model. The test results showed a Durbin–Watson value of 0.915, which suggests the existence of positive autocorrelation. However, considering that this study employed panel data analysis using the Random Effect Model (REM), the presence of autocorrelation is not regarded as a substantial issue in the estimation process. Therefore, the regression model is still considered appropriate and can be utilized for subsequent analyses.

## Results of Hypothesis Testing

### Panel Data Regression Analysis

#### Results of the T-Test (Partial Test)

**Table 8. Results of the t-Test (Partial Test)**

| Variable          | Coefficient | t-Statistic | Sig    | Description |
|-------------------|-------------|-------------|--------|-------------|
| Capital Intensity | 0.2366      | 6.0013      | 0.0000 | Significant |
| Leverage          | 0.2073      | 7.2121      | 0.0000 | Significant |
| Profitability     | 0.3138      | 3.8572      | 0.0002 | Significant |

The t-test was performed to examine the partial influence of each independent variable on tax aggressiveness. Based on the results obtained using the Random Effect Model (REM), the capital intensity variable showed a significance value of 0.0000, which is below the 0.05 threshold, with a coefficient of 0.2366. These findings indicate that capital intensity positively and significantly affects tax aggressiveness. Similarly, the leverage variable produced a significance value of 0.0000, which is lower than 0.05, along with a regression coefficient of 0.2073, suggesting a positive and significant relationship with tax aggressiveness. Furthermore, profitability as the control variable generated a significance value of 0.0002, which is below the significance level of 0.05, with a coefficient value of 0.3138. This result demonstrates that profitability also exerts a positive and significant influence on tax aggressiveness.

### Results of the F-Test (Simultaneous Test)

**Table 9. Results of the F-Test (Simultaneous Test)**

| Model                     | F-Statistic | Sig    |
|---------------------------|-------------|--------|
| Random Effect Model (REM) | 242.46      | 0.0000 |

The F-test was performed to assess the simultaneous influence of the independent variables on the dependent variable. Based on the analysis using the Random Effect Model (REM), the obtained F-statistic value was 242.46 with a significance value of 0.0000, which is below the significance level of 0.05. These findings indicate that capital intensity and leverage jointly have a significant effect on tax aggressiveness.

### Results of the Coefficient of Determination (R<sup>2</sup>)

**Table 10. Results of the Coefficient of Determination (R<sup>2</sup>)**

| Model                     | R-squared | Percentage |
|---------------------------|-----------|------------|
| Random Effect Model (REM) | 0.8319    | 83.19%     |

The coefficient of determination test was employed to assess the extent to which the independent variables explain variations in the dependent variable. Based on the results obtained using the Random Effect Model (REM), the R-Square value was 0.8319 or 83.19%. This finding indicates that capital intensity, leverage, and profitability collectively account for 83.19% of the variation in tax aggressiveness, while the remaining 16.81% can be attributed to other variables not included in this study.

### Results of the Moderated Regression Analysis (MRA)

**Table 11. Results of the Moderated Regression Analysis (MRA)**

| Interaction Variable                     | Coefficient (B) | T – Statistik | Sig.   | Description    |
|--|-----------------|---------------|--------|----------------|
| Capital Intensity x Corporate Governance | -0.5844         | -1.1231       | 0.2633 | Not moderating |
| Leverage x Corporate Governance          | -0.4386         | -1.0027       | 0.3177 | Not moderating |

Moderation testing was performed using the Moderated Regression Analysis (MRA) method by creating interaction terms between the independent variables and the moderating variable. The results revealed that the interaction between capital intensity and corporate

governance generated a significance value of 0.2633, which exceeds the 0.05 significance threshold. Similarly, the interaction between leverage and corporate governance produced a significance value of 0.3177, which is also greater than 0.05. These findings suggest that corporate governance is unable to moderate the relationship between capital intensity and leverage toward tax aggressiveness.

## DISCUSSION

### The Effect of Capital Intensity on Tax Aggressiveness

Based on the estimation results using the Random Effect Model (REM), capital intensity was found to have a positive and significant influence on tax aggressiveness. This finding is supported by a significance value of 0.0000, which is below the 0.05 threshold, and a regression coefficient value of 0.2366. Therefore, the proposed hypothesis is accepted. The results suggest that an increase in capital intensity tends to be associated with a higher level of tax aggressiveness. This condition implies that companies with a larger proportion of fixed assets have greater opportunities to utilize depreciation expenses as a mechanism to reduce taxable income. As the amount of fixed assets owned by a company increases, the depreciation expenses generated also become larger, providing an opportunity to lower taxable profit. This finding is in line with the study conducted by (Novitasari et al., 2025) which explained that capital intensity reflects the level of company investment in fixed assets that generate depreciation costs, which can be used as deductions from taxable income. Therefore, capital intensity may play a role in influencing corporate tax-related decisions.

The findings of this study are also consistent with the results reported by (Soelistiono & Adi, 2022), who found that capital intensity positively affects tax aggressiveness. Their study indicated that companies with a higher proportion of fixed assets tend to take advantage of depreciation expenses as an approach to minimize tax obligations. However, the present findings differ from those of (Jannah et al., 2026), who reported that capital intensity does not significantly influence tax aggressiveness. These contrasting findings suggest that the relationship between capital intensity and tax aggressiveness may vary depending on the characteristics and policies adopted by individual companies.

### The Effect of Leverage on Tax Aggressiveness

Based on the estimation results obtained using the Random Effect Model (REM), leverage was found to have a positive and significant influence on tax aggressiveness in consumer non-cyclical manufacturing companies listed on the Indonesia Stock Exchange during the 2021–2024 period. This finding is supported by a significance value of 0.0000, which is below the significance level of 0.05, and a regression coefficient of 0.2073. Accordingly, the proposed hypothesis is accepted. The results indicate that higher leverage tends to increase the level of tax aggressiveness within a company. This finding suggests that firms with higher debt levels are more likely to utilize interest expenses as deductible components of taxable income to reduce their tax burden. An increase in debt usage leads to larger interest expenses, which may be employed as a strategy for improving tax efficiency.

The findings of this study are in line with the research conducted by (Soelistiono & Adi, 2022), which reported that leverage has a positive effect on tax aggressiveness. This result implies that the use of debt financing may provide tax advantages through the recognition of interest expenses. However, the results differ from those reported by (Kurniawan et al., 2021), who

found no significant relationship between leverage and tax aggressiveness. Likewise, research conducted by (Jannah et al., 2026), also concluded that leverage does not significantly influence the level of corporate tax aggressiveness.

### **The Effect of Profitability on Tax Aggressiveness (Control Variable)**

Based on the test findings, profitability as a control variable demonstrates a positive and significant influence on tax aggressiveness, as indicated by a significance value of 0.0002, which is below the 0.05 threshold, and a regression coefficient of 0.3138. These results suggest that companies with higher profitability levels tend to exhibit greater tax aggressiveness. This condition indicates that firms generating larger profits are more likely to implement tax planning strategies aimed at reducing their tax obligations. The findings are consistent with the study conducted by (Nugroho & Suprpto, 2024), which stated that profitability is closely associated with a company's tendency to engage in tax management activities. Furthermore, increasing profit levels may encourage management to adopt tax efficiency measures to maintain optimal levels of after-tax earnings.

The results of this study also support the findings reported by (Suyanto et al., 2025) which indicated that profitability significantly affects tax aggressiveness. Their study explained that firms with greater profitability generally possess stronger incentives to undertake tax management practices. However, the present findings differ from those of (Kurniawan et al., 2021) who reported that profitability does not significantly influence tax aggressiveness. These contrasting findings suggest that the relationship between profitability and tax aggressiveness may vary depending on financial conditions, managerial decisions, and specific company characteristics.

### **The Simultaneous Effect of Capital Intensity and Leverage on Tax Aggressiveness**

According to the simultaneous test (F-test) results, the significance value obtained was 0.0000, which is lower than 0.05. This result indicates that capital intensity and leverage jointly have a significant impact on tax aggressiveness. The findings imply that both independent variables are capable of explaining variations in corporate tax aggressiveness simultaneously. This condition reflects that company decisions regarding fixed asset management and financing structures are related to tax management behavior. Capital intensity is associated with investment in fixed assets that generate depreciation expenses, while leverage is linked to debt utilization that may provide tax advantages through interest expenses.

The findings of this study are in accordance with previous research conducted by (Ersyafdi & Irianti, 2019) which concluded that corporate financial factors simultaneously affect tax aggressiveness. Similarly, the study by (Raainaa & Firmansyah, 2025) also explained that a company's asset and financing structures can influence tax-related policies. These findings support agency theory, which explains that differences in interests between management and shareholders may affect decision-making processes, including tax policy decisions. Therefore, the simultaneous influence of capital intensity and leverage indicates that the combination of investment and financing strategies may contribute to the level of tax aggressiveness within a company.

### **The Role of Corporate Governance in Moderating the Effect of Capital Intensity on Tax Aggressiveness**

The results of the Moderated Regression Analysis (MRA) show that the interaction between capital intensity and corporate governance does not significantly influence tax aggressiveness, as evidenced by a significance value of 0.2633, which exceeds the threshold of 0.05. These findings indicate that corporate governance has not been effective in either strengthening or weakening the relationship between capital intensity and tax aggressiveness in consumer non-cyclical manufacturing companies during the 2021–2024 observation period. From a theoretical perspective, corporate governance is expected to improve monitoring mechanisms related to managerial actions, including decisions associated with taxation policies. However, in this study, the corporate governance mechanism has not demonstrated optimal effectiveness in controlling the utilization of fixed assets associated with tax aggressiveness practices. In addition, decisions related to fixed asset investments tend to be more influenced by operational policies and corporate needs rather than by corporate monitoring mechanisms.

The findings of this study are in line with several previous studies which reported that corporate governance is unable to moderate the relationship between capital intensity and tax aggressiveness. Research conducted by (Latifah & Ardiami, 2026) indicated that corporate governance mechanisms do not strengthen or weaken the influence of capital intensity on tax avoidance practices. Similar results were also identified by (Serly et al., 2023) who found that corporate governance does not perform a significant moderating function in this relationship. Furthermore, the study by (Solihati et al., 2025) explained that the effectiveness of corporate governance mechanisms in controlling tax aggressiveness practices remains relatively limited. These findings suggest that the implementation of corporate governance has not yet fully succeeded in controlling corporate tax-related policies, particularly those associated with the utilization of fixed assets.

### **The Role of Corporate Governance in Moderating the Effect of Leverage on Tax Aggressiveness**

The results of the Moderated Regression Analysis (MRA) demonstrate that the interaction between leverage and corporate governance does not significantly affect tax aggressiveness. This finding is supported by a significance value of 0.3177, which exceeds the threshold value of 0.05. These results indicate that corporate governance is not capable of moderating the relationship between leverage and tax aggressiveness in consumer non-cyclical manufacturing companies during the 2021–2024 period. From a theoretical perspective, leverage is closely associated with debt utilization, which may generate tax advantages through interest expenses and potentially encourage tax aggressiveness practices. Corporate governance is expected to provide oversight of financing decisions in order to prevent the excessive use of tax avoidance strategies. However, the findings of this study suggest that corporate governance mechanisms have not been sufficiently effective in controlling the relationship between leverage and tax aggressiveness. Moreover, decisions regarding debt utilization are more likely to be influenced by operational requirements and financial strategies rather than by corporate governance mechanisms.

The findings of this study are consistent with several previous studies showing that corporate governance does not function as a moderating variable in the relationship between leverage and tax aggressiveness. Research conducted by (Hidayah & Ernandi, 2022) reported that corporate governance was unable to moderate the influence of leverage on tax avoidance. Similarly, the study by (H. P. Sari et al., 2022) found that corporate governance mechanisms neither strengthen nor weaken the relationship between leverage and tax aggressiveness. Comparable

findings were also reported by (Solihati et al., 2025) who explained that the effectiveness of corporate governance in controlling tax avoidance practices remains relatively limited. Such ineffectiveness may arise from the monitoring function of corporate governance mechanisms not being implemented optimally in supervising financial and tax-related policies. In addition, differences in interests between management and shareholders may also contribute to the leverage policies adopted by companies.

## CONCLUSION

Based on the findings of this study, it can be concluded that capital intensity and leverage have a positive and significant influence on tax aggressiveness. Profitability, which was included as a control variable, also shows a positive and significant relationship with tax aggressiveness. Furthermore, the simultaneous test results reveal that capital intensity and leverage jointly have a significant effect on tax aggressiveness. These findings indicate that company decisions concerning fixed asset management and financing structures may contribute to the level of tax aggressiveness practiced by firms. The results of the Moderated Regression Analysis (MRA) further demonstrate that corporate governance is not capable of moderating the influence of either capital intensity or leverage on tax aggressiveness. This suggests that the implementation of corporate governance mechanisms has not yet been sufficiently effective in controlling corporate tax policies, particularly those associated with fixed asset utilization and debt management strategies. Several limitations were identified in this study, including restrictions related to the selected sector and observation period, which limit the broader generalization of the findings. Therefore, future studies are encouraged to incorporate additional variables such as firm size, liquidity, and audit quality, as well as broaden the scope of research sectors and observation periods to obtain more comprehensive results. In addition, future research may consider applying alternative variable proxies and analytical approaches to provide deeper insights into the factors affecting tax aggressiveness.

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