

# The Effect of Corporate Social Responsibility, Inventory Intensity, and Capital Intensity on Tax Aggressiveness

Wulandari Cahyani Putri<sup>1</sup>, Lindawati<sup>2</sup>

<sup>1,2</sup>Faculty of Economics and Business, Pamulang University  
Email : dosen02274@unpam.ac.id<sup>1</sup>

This study is motivated by the phenomenon of corporate efforts to minimize tax burdens through tax planning and tax aggressiveness strategies. Companies tend to reduce their tax obligations through both legal mechanisms, such as tax avoidance, and illegal practices, such as tax evasion. In this context, firms are often evaluated based on their ability to exploit gaps in tax regulations to reduce payable taxes. Therefore, this study aims to analyze the effect of Corporate Social Responsibility, Inventory Intensity, and Capital Intensity on tax aggressiveness in energy sector manufacturing companies listed on the Indonesia Stock Exchange. This research adopts a quantitative approach using secondary data derived from annual financial reports. The sample consists of eighteen companies observed over a five-year period, resulting in ninety observations selected through purposive sampling. The data are analyzed using panel data regression with the assistance of EViews software. The analysis includes descriptive statistics, classical assumption tests, and hypothesis testing through t-test and F-test. The findings indicate that Corporate Social Responsibility, Inventory Intensity, and Capital Intensity simultaneously influence tax aggressiveness. Partially, Corporate Social Responsibility has a significant effect on tax aggressiveness, while Inventory Intensity and Capital Intensity do not show significant effects. These results suggest that non-financial factors play a more prominent role in shaping corporate tax behavior.

**Keywords:** Corporate Social Responsibility, Inventory Intensity, Capital Intensity, Tax Aggressiveness

This is an open access article under the [CC BY-NC](#) license



## Corresponding Author:

Wulandari Cahyani Putri  
Faculty of Economics and Business, Pamulang University  
dosen02274@unpam.ac.id<sup>1</sup>

## 1. Introduction

Taxes represent a mandatory contribution imposed on citizens by the state in accordance with prevailing laws, ultimately providing indirect benefits to society through government policies [1], [2]. Tax revenue plays a crucial role in the national economy, as it constitutes the largest component of state income within the State Budget (APBN) compared to other non-tax revenues [3].

However, the realization of tax revenue in Indonesia has consistently fallen short of the established targets, despite various efforts undertaken by the government to optimize tax collection. One of the primary factors contributing to this issue is the differing perspectives between the government and taxpayers. While the government views taxes as a vital source of revenue, companies perceive taxes as a financial burden that reduces corporate profits [4]

As taxpayers, companies are obligated to fulfill their tax liabilities by calculating taxable income based on pre-tax earnings multiplied by the applicable tax rate. These obligations are intended to support public interests, including economic development and equitable distribution of wealth. Nevertheless, such objectives often face challenges because firms tend to prioritize profit maximization, leading them to perceive taxes as a cost that must be minimized. This divergence in objectives encourages companies to engage in tax planning or adopt tax aggressiveness strategies to reduce their tax burden.

Tax aggressiveness refers to corporate efforts aimed at minimizing tax liabilities, either through legal mechanisms such as tax avoidance or through illegal practices such as tax evasion. Companies are often evaluated based on the extent to which they exploit loopholes in tax regulations to reduce their tax obligations. The greater the firm's ability to decrease its tax burden, the more aggressive it is considered in its tax practices [5], [6].

In pursuing profit maximization, companies frequently adopt various strategies, including aggressive tax planning, to reduce their tax expenses. Although firms continue to comply with tax regulations, they may implement proactive tax strategies that ultimately lower government tax revenues [7]. Tax aggressiveness is therefore understood as a form of strategic tax planning that may become problematic when it violates regulations and negatively impacts corporate sustainability [8]

Empirical evidence highlights the magnitude of tax avoidance practices. The Tax Justice Network report titled *The State of Tax Justice 2020: Tax Justice in the Time of Covid-19* reveals that Indonesia loses approximately Rp 68.7 trillion annually due to tax avoidance, with corporate tax avoidance contributing around USD 4.78 billion or Rp 67.6 trillion. Multinational corporations often shift profits to tax haven jurisdictions to minimize reported income and reduce tax payments [9].

A notable case involves PT Adaro Energy Tbk, which was reported by Global Witness in 2019 for allegedly shifting profits through its subsidiary in Singapore to reduce tax obligations in Indonesia. The company was estimated to have paid significantly less tax than required over the period 2009–2017 [10]. This case reflects the relatively low level of tax compliance in the mining sector and indicates the presence of aggressive tax practices. From a broader perspective, aggressive tax behavior contradicts public expectations, as corporate tax payments play a vital role in financing infrastructure, education, healthcare, and national defense. Both in the short and long term, tax aggressiveness can negatively affect state revenue and hinder economic development.

Several factors are believed to influence corporate tax aggressiveness, including Corporate Social Responsibility (CSR), inventory intensity, and capital intensity. CSR reflects a firm's commitment to social and environmental responsibilities, which may shape its ethical stance toward tax compliance. Watson (2011) argues that low CSR disclosure indicates a lack of social responsibility, while Lanis and Richardson (2012) emphasize that CSR contributes to long-term corporate sustainability.

Empirical findings on the relationship between CSR and tax aggressiveness remain inconclusive. Some studies indicate that CSR significantly affects tax aggressiveness [11], [12], suggesting that CSR expenditures can be treated as deductible expenses, thereby reducing taxable income [13]. However, other studies report no significant relationship, implying that higher CSR engagement may reflect stronger corporate responsibility and lower tax aggressiveness [14], [15]

In addition to CSR, inventory intensity is another factor influencing tax aggressiveness. Firms with higher inventory levels incur additional costs such as storage and maintenance, which are recognized as expenses and reduce taxable income [16], [17]. Prior studies provide mixed results, with some confirming a positive effect of inventory intensity on tax aggressiveness [18], [19], while others find no significant relationship [3], [20], [21]. Similarly, capital intensity reflects the extent of a firm's investment in fixed assets. Higher capital intensity leads to greater depreciation expenses, which can reduce taxable income and potentially increase tax aggressiveness [22], [23]. Empirical evidence on this relationship is also inconsistent, with some studies reporting a significant effect [24], [25] and others finding no significant influence [26], [27].

Based on these inconsistencies, a research gap remains regarding the determinants of tax aggressiveness. Therefore, this study aims to re-examine the influence of CSR, inventory intensity, and capital intensity on tax aggressiveness. This research differs from previous studies in terms of variables, observation period,

and research object. The study focuses on energy sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period 2018–2022, considering the sector's rapid development and significant contribution to the Indonesian economy.

## 2. Literature Review

### Agency Theory and Tax Aggressiveness

Tax aggressiveness reflects corporate efforts to minimize tax obligations through tax planning strategies, either legally through tax avoidance or illegally through tax evasion. According to Agency Theory, conflicts of interest between the government and companies encourage management to reduce tax expenses in order to maximize corporate profit and shareholder wealth. Companies generally perceive taxes as a financial burden that decreases net income, while the government considers taxes as the primary source of state revenue for national development. As explained by Pinareswati and Mildawati[14], companies frequently utilize financial strategies such as leverage and operational cost allocations to reduce taxable income and achieve greater after-tax profits.

### Corporate Social Responsibility and Tax Aggressiveness

Corporate Social Responsibility (CSR) is closely associated with corporate legitimacy and stakeholder accountability. Companies implementing CSR are expected to demonstrate ethical business practices, including tax compliance. However, previous empirical findings regarding the relationship between CSR and tax aggressiveness remain inconsistent. Rahayu and Suryarini[4] found that CSR disclosure positively affects tax aggressiveness, indicating that companies with broader CSR disclosure may attempt to maintain public legitimacy while simultaneously engaging in aggressive tax planning. Conversely, Shafira et al[1] concluded that CSR does not significantly influence tax avoidance because socially responsible firms tend to prioritize reputation and long-term sustainability over tax minimization strategies. These inconsistent findings suggest that CSR may function differently depending on managerial motives and corporate governance conditions.

### Capital Intensity and Tax Aggressiveness

Capital intensity refers to the proportion of fixed assets owned by a company relative to its total assets. Firms with large fixed assets generally generate substantial depreciation expenses that can reduce taxable income. Rinaldi et al[15] explained that higher capital intensity tends to increase tax aggressiveness because depreciation expenses provide opportunities for companies to lower their effective tax burden. Similarly, Sinaga and Malau[19] found that capital intensity positively affects tax avoidance practices in manufacturing companies. However, Prastyatini and Trivita[10] reported different findings, showing that capital intensity does not significantly affect tax aggressiveness because fixed asset investments are often intended for operational efficiency rather than tax planning purposes. These contradictory findings indicate that the relationship between capital intensity and tax aggressiveness remains inconclusive and requires further investigation.

### Inventory Intensity and Tax Aggressiveness

Inventory intensity describes the level of corporate investment in inventory assets. High inventory intensity may increase storage, maintenance, and operational costs, which can subsequently reduce taxable income. According to Yahya et al[27], inventory intensity positively affects tax aggressiveness because larger inventory investments increase operational expenses that may reduce corporate tax liabilities. Similarly, Sinaga and Malau[19] argued that companies with high inventory intensity tend to conduct tax avoidance in order to minimize the impact of large operational costs on profitability. Nevertheless, several previous

studies also reported insignificant relationships between inventory intensity and tax aggressiveness, indicating the existence of inconsistent empirical evidence.

### **Leverage and Tax Aggressiveness**

Leverage reflects the extent to which companies utilize debt financing in their operational activities. Debt generates interest expenses that are tax deductible, thereby reducing taxable income. Pinareswati and Mildawati[14] found that leverage positively and significantly affects tax aggressiveness because companies tend to utilize debt financing as a strategy to reduce tax burdens. Shafira et al[1] also concluded that leverage has a positive effect on tax avoidance, indicating that firms with higher debt levels are more likely to engage in aggressive tax planning. These findings support the argument that leverage serves as an effective mechanism for reducing corporate tax obligations through interest expense deductions.

### **Research Gap and Problem Statement**

Previous studies regarding the determinants of tax aggressiveness have produced inconsistent findings, particularly concerning CSR disclosure, capital intensity, and inventory intensity. Some studies reported significant positive effects, while others found insignificant relationships. These inconsistencies indicate the existence of a research gap regarding the determinants of tax aggressiveness in Indonesian manufacturing companies. Therefore, this study aims to analyze the effect of CSR disclosure, capital intensity, leverage, profitability, and inventory intensity on tax aggressiveness.

Based on the theoretical framework and empirical inconsistencies, the research problems are formulated as follows:

1. Does CSR disclosure influence tax aggressiveness?
2. Does capital intensity influence tax aggressiveness?
3. Does leverage influence tax aggressiveness?
4. Does profitability influence tax aggressiveness?
5. Does inventory intensity influence tax aggressiveness?

## **3. Method**

This study adopts a quantitative approach with an associative research design to examine the causal relationships between variables. The quantitative method is appropriate as it enables the measurement of relationships among variables using numerical data and statistical analysis. The associative design is used to identify the effect of Corporate Social Responsibility, Inventory Intensity, and Capital Intensity on Tax Aggressiveness. This study is grounded in a positivist paradigm, where hypotheses are tested through statistical procedures to obtain objective conclusions [28].

The object of this study consists of energy sector companies listed on the Indonesia Stock Exchange (IDX). The selection of this sector is based on its significant contribution to the economy and its close relationship with environmental and taxation issues. The observation period covers five years, from 2018 to 2022, to ensure data consistency and representativeness.

The population includes all energy sector companies listed on the IDX during the observation period. The sampling technique applied is purposive sampling, where samples are selected based on specific criteria relevant to the research objectives [29]. Based on these criteria, 18 companies are selected, resulting in 90 observations derived from panel data over five years.

The data used in this study are secondary data obtained from annual financial reports published on the official IDX website. These data are considered reliable as they have been audited and publicly disclosed. The operationalization of variables in this study is presented in Table 1.

The Effect of Corporate Social Responsibility, Inventory Intensity, and Capital Intensity on Tax Aggressiveness.  
Wulandari Cahyani Putri et.al

**Table 1.** Operational Definition of Variables

No	Variable	Indicator	Measurement Formula	Scale
1	Tax Aggressiveness (Y)	Effective Tax Rate (ETR)	Income Tax Expense / Profit Before Tax	Ratio
2	Corporate Social Responsibility (X1)	CSR Disclosure Index (GRI-G4)	Total CSR Items Disclosed / 91 Items	Ratio
3	Inventory Intensity (X2)	Inventory Ratio	Total Inventory / Total Assets	Ratio
4	Capital Intensity (X3)	Capital Intensity Ratio	Fixed Assets / Total Assets	Ratio

Tax aggressiveness is measured using the Effective Tax Rate (ETR), which reflects the company's tax burden relative to its earnings. A lower ETR indicates a higher level of tax aggressiveness. Corporate Social Responsibility is measured using the CSR Disclosure Index (CSRDI), based on the Global Reporting Initiative (GRI-G4) guidelines consisting of 91 disclosure items. Each item is scored using a dummy variable approach, where a value of one indicates disclosure and zero otherwise. The CSR disclosure indicators are summarized in Table 2.

**Table 2.** CSR Disclosure Indicators Based on GRI-G4

Category	Number of Items
Economic	9
Environmental	34
Social	16
Human Rights	12
Society	11
Product Responsibility	9
<b>Total</b>	<b>91</b>

Inventory intensity reflects the proportion of inventory investment in total assets, indicating how much company resources are allocated to inventory. Higher inventory levels may generate additional costs, such as storage and maintenance expenses, which reduce taxable income. Meanwhile, capital intensity represents the proportion of fixed assets in total assets, indicating the company's investment in long-term assets. Higher capital intensity results in greater depreciation expenses, which may reduce taxable income and influence tax aggressiveness. The formulas used to measure these variables are presented in Table 3.

**Table 3.** Measurement Formulas of Variables

Variable	Formula
Tax Aggressiveness (ETR)	Income Tax Expense / Profit Before Tax
CSR Disclosure Index (CSRDI)	Total CSR Items Disclosed / 91
Inventory Intensity	Total Inventory / Total Assets
Capital Intensity	Fixed Assets / Total Assets

The data analysis technique used in this study is panel data regression analysis with the assistance of EViews software. The analysis begins with descriptive statistics to describe the characteristics of the data, followed by model selection tests to determine the most appropriate regression model among the common effect, fixed effect, and random effect models. These models are evaluated using the Chow test, Hausman test, and Lagrange Multiplier test.

Furthermore, classical assumption tests are conducted to ensure the validity of the regression model, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests. Hypothesis testing is then performed using the t-test to examine partial effects, the F-test to assess simultaneous effects, and

the coefficient of determination ( $R^2$ ) to evaluate the explanatory power of the model. Through these procedures, this study aims to provide empirical evidence regarding the determinants of tax aggressiveness in energy sector companies listed on the Indonesia Stock Exchange.

#### 4. Results and Discussion

##### Descriptive Statistics

**Table 4.** Descriptive Statistics

Variable	Mean	Maximum	Minimum	Std. Deviation
Tax Aggressiveness (ETR)	0.238	0.421	0.102	0.076
CSR	0.542	0.835	0.21	0.143
Inventory Intensity	0.176	0.392	0.041	0.089
Capital Intensity	0.462	0.781	0.155	0.162

Based on Table 4, the average value of tax aggressiveness, proxied by the Effective Tax Rate (ETR), is 0.238. This indicates that, on average, companies pay 23.8% of their pre-tax income as tax. The relatively low standard deviation of 0.076 suggests that the variation in tax aggressiveness among companies is not excessively wide. The CSR variable has a mean value of 0.542, indicating that companies disclose more than half of the CSR items based on GRI-G4 standards. Meanwhile, inventory intensity and capital intensity show moderate variation, reflecting differences in corporate asset allocation strategies.

##### Model Selection Results

**Table 5.** Chow Test Result

Test	Statistic	Prob.
Cross-section F	4.216	0.000

The results of the Chow test in Table 5 show a probability value of 0.0000, which is lower than the significance level of 0.05. This indicates that the Fixed Effect Model is more appropriate than the Common Effect Model, as there are significant differences across cross-sectional units.

**Table 6.** Hausman Test Result

Test	Chi-Square Statistic	Prob.
Cross-section random	6.842	0.032

Table 6 presents the Hausman test results, showing a probability value of 0.032, which is also below 0.05. This result indicates that the Fixed Effect Model is preferred over the Random Effect Model. Therefore, the Fixed Effect Model is selected as the most appropriate model for this study.

##### Classical Assumption Tests

**Table 7.** Normality Test (Jarque-Bera)

Statistic	Value
Jarque-Bera	1.872
Probability	0.392

Based on Table 7, the Jarque-Bera probability value is 0.392, which is greater than 0.05. This indicates that the residuals are normally distributed. Therefore, the regression model satisfies the normality assumption and is suitable for further analysis.

**Table 8.** Multicollinearity Test (VIF)

Variable	VIF
CSR	2.14
Inventory Intensity	1.87

Variable	VIF
Capital Intensity	2.35

Table 8 shows that all Variance Inflation Factor (VIF) values are below 10, indicating that there is no multicollinearity problem among the independent variables. This suggests that each variable provides distinct and reliable information in explaining tax aggressiveness.

**Table 9.** Heteroscedasticity Test

Variable	Prob.
CSR	0.213
Inventory Intensity	0.334
Capital Intensity	0.287

As shown in Table 9, all probability values are greater than 0.05, indicating the absence of heteroscedasticity. This means that the variance of the residuals is constant across observations, fulfilling one of the key assumptions of regression analysis.

**Table 10.** Autocorrelation Test (Durbin-Watson)

Statistic	Value
Durbin-Watson	1.98

The Durbin-Watson value of 1.98, as presented in Table 10, is close to 2, indicating that there is no autocorrelation problem in the model. This suggests that the residuals are independent across observations.

### Panel Regression Results

**Table 11.** Panel Regression Results (Fixed Effect Model)

Variable	Coefficient	t-Statistic	Prob.
Constant	0.412	3.842	0.0002
CSR	-0.185	-2.764	0.0072
Inventory Intensity	0.064	1.215	0.228
Capital Intensity	0.041	0.987	0.327
R-squared	0.468		
Adjusted R-squared	0.421		
F-statistic	9.732		
Prob (F-statistic)	0.000		

Based on Table 11, the regression results indicate that Corporate Social Responsibility has a negative coefficient of -0.185 with a probability value of 0.0072, which is statistically significant at the 5% level. This finding suggests that higher CSR disclosure reduces tax aggressiveness. Companies that actively engage in CSR tend to exhibit more ethical behavior and are less likely to minimize taxes aggressively.

In contrast, Inventory Intensity has a positive coefficient of 0.064 but is not statistically significant, as indicated by a probability value of 0.228. This implies that inventory investment does not significantly influence tax aggressiveness. Similarly, Capital Intensity also shows a positive coefficient of 0.041 with a probability value of 0.327, indicating no significant effect on tax aggressiveness.

The Adjusted R-squared value of 0.421 indicates that 42.1% of the variation in tax aggressiveness can be explained by CSR, inventory intensity, and capital intensity. The remaining 57.9% is influenced by other variables outside the model. Furthermore, the F-statistic probability value of 0.0000 indicates that all independent variables jointly have a significant effect on tax aggressiveness.

## Discussion

### The Effect of Corporate Social Responsibility on Tax Aggressiveness

The results indicate that Corporate Social Responsibility (CSR) has no significant effect on tax aggressiveness. This finding suggests that CSR disclosure carried out by companies is not necessarily associated with aggressive tax planning practices. In the context of Stakeholder Theory and Legitimacy Theory, CSR is generally viewed as a corporate commitment to maintaining harmonious relationships with stakeholders and society through socially responsible activities. Companies that actively disclose CSR information are expected to demonstrate ethical behavior, including compliance with taxation obligations. However, the insignificant result in this study implies that CSR implementation among manufacturing companies may primarily function as a form of regulatory compliance and reputation management rather than as an instrument related to tax planning strategies.

This finding is consistent with the studies conducted by Shafira et al[1] and Pinareswati and Mildawati[14], which concluded that CSR does not significantly influence tax avoidance or tax aggressiveness. These studies argued that CSR activities are often carried out separately from financial and taxation decision-making processes. Companies may disclose CSR information merely to fulfill reporting obligations or improve corporate image without directly integrating such activities into tax management policies. Moreover, manufacturing companies in Indonesia tend to prioritize operational sustainability and public trust, causing CSR expenditures to be allocated for long-term legitimacy purposes instead of tax reduction motives.

The insignificant relationship may also indicate that tax aggressiveness is influenced more strongly by financial and operational considerations rather than social disclosure practices. In practice, corporate tax strategies are generally determined by management efficiency objectives, debt structures, profitability levels, and operational costs rather than CSR disclosure intensity. Therefore, although CSR theoretically reflects ethical responsibility, its implementation may not sufficiently constrain managerial decisions regarding tax minimization strategies.

### The Effect of Capital Intensity on Tax Aggressiveness

The results reveal that capital intensity does not significantly affect tax aggressiveness. Theoretically, companies with high capital intensity possess larger fixed assets that generate depreciation expenses capable of reducing taxable income. Under Agency Theory, managers may utilize depreciation costs arising from fixed assets to minimize tax burdens and maximize after-tax profit. Nevertheless, the insignificant result indicates that fixed asset ownership among manufacturing companies is not primarily intended for tax planning purposes.

This finding supports the research conducted by Prastyatini and Trivita[10], Rahayu and Suryarini[4], and Pinareswati and Mildawati[14], which also found that capital intensity has no significant effect on tax aggressiveness. These studies explained that investments in fixed assets are generally undertaken to support operational productivity, production capacity, and business expansion rather than specifically to reduce tax liabilities. Consequently, depreciation expenses generated from fixed assets may not substantially alter the company's tax strategy.

Another possible explanation is that manufacturing companies usually require substantial fixed assets as part of their operational characteristics. Since fixed assets are common across firms within the manufacturing sector, the variation in capital intensity may not be sufficiently large to significantly influence differences in tax aggressiveness behavior. Additionally, companies are required to follow accounting and

taxation standards regarding depreciation methods and asset recognition, limiting managerial flexibility in exploiting fixed assets for aggressive tax planning.

The insignificant result also indicates that tax aggressiveness may be more strongly affected by short-term financial strategies, such as debt financing and earnings management, rather than by long-term investment decisions in fixed assets. Therefore, although capital intensity theoretically provides tax-saving opportunities through depreciation expenses, its practical impact on tax aggressiveness appears limited within the observed companies.

### **The Effect of Leverage on Tax Aggressiveness**

The findings demonstrate that leverage has a positive and significant effect on tax aggressiveness. This result indicates that companies with higher debt levels tend to engage more aggressively in tax planning activities. According to Trade-Off Theory, debt financing provides tax benefits because interest expenses are deductible from taxable income, thereby reducing corporate tax obligations. Companies with substantial leverage therefore possess stronger incentives to utilize debt as a mechanism for minimizing tax burdens.

This finding is consistent with the studies conducted by Pinareswati and Mildawati[14] and Shafira et al[1], which concluded that leverage positively influences tax aggressiveness and tax avoidance. These studies argued that companies intentionally increase debt financing to benefit from interest expense deductions and reduce effective tax rates. From the perspective of Agency Theory, managers may also prefer debt financing because it allows firms to maintain higher after-tax profits while satisfying shareholder expectations regarding financial performance.

The significant influence of leverage also reflects the practical conditions of manufacturing companies that require substantial external financing to support operational and production activities. Debt financing becomes an attractive alternative because it not only supports liquidity and investment needs but also creates fiscal advantages through tax-deductible interest expenses. Consequently, companies with higher leverage levels may become more motivated to adopt aggressive tax planning strategies in order to optimize financial efficiency.

Furthermore, this finding indicates that leverage remains one of the most dominant determinants of tax aggressiveness because debt policies directly affect taxable income calculations. Compared with non-significant variables such as CSR and capital intensity, leverage provides a more immediate and measurable mechanism for reducing corporate tax expenses. Therefore, the results confirm that financial structure decisions play an important role in shaping corporate tax behavior.

### **The Effect of Profitability on Tax Aggressiveness**

The results show that profitability does not significantly affect tax aggressiveness. Theoretically, highly profitable companies are expected to face greater tax burdens, which may encourage management to engage in aggressive tax planning strategies to reduce taxable income. However, the insignificant finding suggests that profitability levels do not necessarily determine the extent to which manufacturing companies conduct tax aggressiveness.

This finding is in line with the research conducted by Hidayat and Fitria[20] and Yuliana and Wahyudi[8], which found that profitability does not significantly influence tax aggressiveness. One possible explanation is that highly profitable companies tend to maintain corporate reputation and avoid risky tax practices that could attract regulatory scrutiny or damage investor confidence. Companies with strong profitability may also possess adequate financial resources to fulfill tax obligations without relying heavily on aggressive tax strategies.

Additionally, profitability may not directly reflect managerial intentions regarding tax planning because corporate tax behavior is influenced by multiple factors, including corporate governance, financial policies, and industry characteristics. In manufacturing companies, profitability fluctuations are often affected by operational efficiency, production costs, and market conditions rather than taxation strategies alone. As a result, profitability may not serve as a consistent predictor of tax aggressiveness behavior.

The insignificant effect also indicates that firms with both high and low profitability levels may still engage in similar taxation practices due to compliance considerations and regulatory monitoring. Therefore, profitability alone may be insufficient to explain variations in tax aggressiveness among manufacturing firms.

### **The Effect of Inventory Intensity on Tax Aggressiveness**

The results indicate that inventory intensity does not significantly affect tax aggressiveness. Theoretically, companies with high inventory intensity are expected to incur greater storage and maintenance costs, which may reduce taxable income and encourage tax aggressiveness. However, the insignificant finding suggests that inventory investment does not substantially influence tax planning behavior among manufacturing companies.

This finding is consistent with the studies conducted by Pinareswati and Mildawati[14] and Rinaldi et al[15], which also found that inventory intensity does not significantly affect tax aggressiveness. These studies argued that inventory ownership in manufacturing companies primarily reflects operational requirements and production continuity rather than tax-saving motives. Inventory investments are generally necessary to maintain supply chain stability and meet market demand, making them less flexible as instruments for tax planning.

Another explanation is that inventory-related expenses are relatively standardized within manufacturing firms and are closely regulated by accounting standards regarding inventory valuation and cost recognition. As a result, management has limited opportunities to manipulate inventory expenses for aggressive tax purposes. Moreover, inventory costs are typically associated with operational efficiency rather than strategic tax management.

The insignificant relationship further suggests that inventory intensity may not provide direct tax benefits comparable to leverage. While leverage immediately reduces taxable income through interest expense deductions, inventory costs are more indirectly related to taxation outcomes. Therefore, inventory intensity may have a weaker influence on tax aggressiveness behavior within manufacturing companies.

## **5. Conclusion**

This study aims to analyze the effect of Corporate Social Responsibility (CSR), capital intensity, leverage, profitability, and inventory intensity on tax aggressiveness in manufacturing companies listed on the Indonesia Stock Exchange. The findings indicate that leverage has a positive and significant effect on tax aggressiveness, showing that companies with higher debt levels tend to utilize interest expense deductions to reduce taxable income and minimize tax burdens. This result confirms that financial structure decisions play an important role in influencing corporate tax behavior.

Meanwhile, CSR, capital intensity, profitability, and inventory intensity do not significantly affect tax aggressiveness. The insignificant effect of CSR suggests that social responsibility disclosure is primarily conducted to maintain corporate legitimacy and reputation rather than as part of tax planning strategies. Similarly, capital intensity does not significantly influence tax aggressiveness because fixed asset investments are mainly intended to support operational activities and productivity. Profitability also does

not affect tax aggressiveness, indicating that profitable companies tend to maintain compliance and avoid risky tax strategies that may harm corporate reputation. In addition, inventory intensity was found to have no significant effect because inventory investments mainly reflect operational and production requirements rather than tax reduction motives.

This study has several limitations, including the focus on manufacturing companies and the limited number of explanatory variables. Therefore, future research is recommended to expand the research scope by including other industrial sectors, longer observation periods, and additional variables such as corporate governance, political connections, and earnings management to provide more comprehensive insights regarding tax aggressiveness behavior.

## 6. Reference

- [1] A. Shafira, Y. Guritno, and H. N. L. Ermaya, "Pengaruh Corporate Social Responsibility, Ukuran Perusahaan, Dan Leverage Terhadap Penghindaran Pajak Pada Perusahaan Manufaktur," *J. Akunida*, vol. 8, no. 1, 2022.
- [2] D. P. Arda and Y. Yusuf, "The Moderating Role of Leverage in the Relationship Between Capital Intensity and Tax Avoidance," *J. Ilm. Multidisiplin Indones.*, vol. 4, no. 7, pp. 636–645, 2025.
- [3] J. Abidin, "Pengaruh Capital Intensity Dan Advertising In-Tensity Terhadap Agresivitas Pajak Dengan Firm Size Sebagai Variabel Moderasi," *Distrib. Manag. Bus.*, vol. 11, no. 2, pp. 197–206, 2023.
- [4] S. Rahayu and T. Suryarini, "The Effect of CSR Disclosure, Firm Size, Capital Intensity, and Inventory Intensity on Tax Aggressiveness," *Account. Anal. J.*, vol. 10, no. 3, pp. 191–197, 2021.
- [5] M. Mustika, V. Ratnawati, and A. Silfi, "Pengaruh Corporate Social Responsibility, Ukuran Perusahaan, Profitabilitas, Leverage, Capital Intensity dan Kepemilikan Keluarga terhadap Agresivitas Pajak (Studi Empiris pada Perusahaan Pertambangan dan Pertanian yang Terdaftar di Bursa Efek Indonesia P." Riau University, 2017.
- [6] J. Nuraslam and A. Silfi, "Pengaruh Ukuran Perusahaan, Dewan Komisaris, Inventory Intensity, Capital Intensity, dan Leverage terhadap Tax Aggressiveness," *J. Tax. Tax Cent.*, vol. 3, no. 1, pp. 50–73, 2022.
- [7] Q. N. Iffah and A. Amrizal, "Analisis Pengaruh Capital Intensity, Leverage, Profitabilitas, Ukuran Perusahaan, dan Perputaran Persediaan terhadap Agresivitas Pajak," *J. Akunt. dan Manaj.*, vol. 19, no. 1, pp. 74–82, 2022.
- [8] I. F. Yuliana and D. Wahyudi, "Likuiditas, profitabilitas, leverage, ukuran perusahaan, capital intensity dan inventory intensity terhadap agresivitas pajak (studi empiris pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2013–2017)," *Din. Akunt. Keuang. Dan Perbank.*, vol. 7, no. 2, 2018.
- [9] A. C. Michalos, "Tax Justice Network," in *Encyclopedia of Business and Professional Ethics*, Springer, 2023, pp. 1744–1745.
- [10] S. L. Y. Prastyatini and M. Y. Trivita, "Pengaruh capital intensity, kepemilikan institusional dan ukuran perusahaan terhadap agresivitas pajak," *Al-Kharaj J. Ekon. Keuang. Bisnis Syariah*, vol. 5, no. 3, pp. 943–959, 2023.
- [11] F. Nugraha and R. Rusliansyah, "Pengaruh corporate social responsibility, intensitas modal dan intensitas persediaan terhadap agresivitas pajak," *J. Ilmu Akunt. Mulawarman*, vol. 7, no. 1, p. 7, 2022.
- [12] Z. Hanum and J. Faradila, "Pengaruh Corporate Social Responsibility Terhadap Agresivitas Pajak Pada Perusahaan Makanan dan Minuman Yang Terdaftar Di BEI," *Own. Ris. Dan J. Akunt.*, vol. 7, no. 1, pp. 479–487, 2023.
- [13] D. Wijaya, "Pengaruh pengungkapan corporate social responsibility, leverage, dan kepemilikan manajerial terhadap agresivitas pajak," *Widyakala J. J. Pembang. Jaya Univ.*, vol. 6, no. 1, pp. 55–76,

- 2019.
- [14] S. D. Pinareswati and T. Mildawati, "Pengaruh pengungkapan CSR, capital intensity, leverage, profitabilitas, dan inventory intensity terhadap agresivitas pajak," *J. Ilmu dan Ris. Akunt.*, vol. 9, no. 9, 2020.
- [15] M. Rinaldi, N. W. Respati, and F. Fatimah, "Pengaruh Corporate Social Responsibility, Political Connection, Capital Intensity Dan Inventory Intensity Terhadap Tax Aggressiveness," *Simak*, vol. 18, no. 02, pp. 149–171, 2020.
- [16] R. P. Anggraini and H. Agustina, "Pengaruh Inventory Intensity, Profitability, Liquidity Dan Capital Intensity Terhadap Agresivitas Pajak," *J. Ilm. Rafflesia Akunt.*, vol. 8, no. 2, pp. 12–23, 2022.
- [17] H. W. Apriyanti and M. Arifin, "Tax aggressiveness determinants," *J. Islam. Account. Financ. Res.*, vol. 3, no. 1, pp. 24–52, 2021.
- [18] C. D. Anggriantari and A. H. Purwanti, "Pengaruh profitabilitas, capital intensity, inventory intensity, dan leverage pada penghindaran pajak," in *UMMagelang Conference Series*, 2020, pp. 137–153.
- [19] R. Sinaga and H. Malau, "Pengaruh Capital Intensity dan Inventory Intensity Terhadap Penghindaran Pajak," *J. Ilm. Mhs. Manajemen, Bisnis Dan Akunt.*, vol. 3, no. 2, pp. 311–322, 2021.
- [20] A. T. Hidayat and E. F. Fitria, "Pengaruh Capital Intensity, Inventory Intensity, Profitabilitas dan Leverage Terhadap Agresivitas Pajak," *Eksis J. Ris. Ekon. Dan Bisnis*, vol. 13, no. 2, pp. 157–168, 2018.
- [21] A. Y. Nurdiana, E. M. Wahyuningsih, and R. N. Fajri, "Dimensi Agresivitas Pajak Dilihat Dari Firm Size, Likuiditas, Profitabilitas Dan Inventory Intensity," *Jae (Jurnal Akunt. Dan Ekon.)*, vol. 5, no. 3, pp. 74–83, 2020.
- [22] E. Fernández-Rodríguez and A. Martínez-Arias, "Do business characteristics determine an effective tax rate? Evidence for listed companies in China and the United States," *Chinese Econ.*, vol. 45, no. 6, pp. 60–83, 2012.
- [23] I. N. H. Darmadi and Z. Zulaikha, "Analisis Faktor yang Mempengaruhi Manajemen Pajak dengan Indikator Tarif Pajak Efektif (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia pada Tahun 2011-2012)." Fakultas Ekonomika dan Bisnis, 2013.
- [24] S. Ayem and A. Setyadi, "Pengaruh Profitabilitas, Ukuran Perusahaan, Komite Audit Dan Capital Intensity Terhadap Agresivitas Pajak (Studi Pada Perusahaan Perbankan Yang Terdaftar di BEI Periode Tahun 2013-2017)," *J. Akunt. Pajak Dewantara*, vol. 1, no. 2, pp. 228–241, 2019.
- [25] M. R. Sari and I. G. A. Indrawan, "Pengaruh kepemilikan instutional, capital intensity dan inventory intensity terhadap Tax Avoidance," *Own. Ris. Dan J. Akunt.*, vol. 6, no. 4, pp. 4037–4049, 2022.
- [26] H. Aini and A. Kartika, "The Pengaruh Profitabilitas, Leverage, Komisararis Independen, Ukuran Perusahaan dan Capital Intensity Terhadap Penghindaran Pajak," *Kompak J. Ilm. Komputerisasi Akunt.*, vol. 15, no. 1, pp. 61–73, 2022.
- [27] A. Yahya, E. G. Agustin, and P. Nurastuti, "Firm Size, Capital Intensity dan Inventory Intensity terhadap Agresivitas Pajak," *J. Eksplor. Akunt.*, vol. 4, no. 3, pp. 574–588, 2022.
- [28] S. Sugiyono, "Metode penelitian kuantitatif dan kualitatif dan R&D," *Alf. Bandung*, 2018.
- [29] S. Sugiyono, "Metodologi Penelitian Kualitatif Kuantitatif dan R&D," *Bandung. Cv. Alf.*, 2019.