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The Effect of Profitability, Capital Intensity, Firm Size, and Corporate Social Responsibility (CSR) on Tax Aggressiveness

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ABSTRACT (10 PT)

This study aims to re-examine the effect of profitability, capital intensity, firm size, and corporate social responsibility (CSR) on tax aggressiveness. This study was conducted in response to inconsistent findings in previous research and to strengthen the conceptual understanding of the factors influencing aggressive tax reporting behavior. The object of this research is manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX). Out of 35 companies that met the criteria, 25 were selected as the sample over a three-year observation period, resulting in 75 observational data points. Data were collected through documentation studies by accessing financial reports, annual reports, and sustainability reports available on the official IDX website (www.idx.co.id). The variables examined include profitability, firm size, capital intensity, CSR, and tax aggressiveness. The analytical method used in this research is multiple linear regression, preceded by classical assumption tests and followed by hypothesis testing. The results show that profitability has no significant effect on tax aggressiveness. In contrast, capital intensity and firm size have a significant positive effect on tax aggressiveness, while CSR has a significant negative effect on tax aggressiveness. These findings are expected to serve as a reference for company management and policymakers in designing more transparent and ethical tax management strategies.

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INTRODUCTION

Taxes are a source of state revenue, playing a crucial role in supporting national financing. The manufacturing sector is the largest contributor to tax revenue in the country (Alifa et al., 2018; Erlina, 2021; Hidayat & Fitria, 2018; Simamora & Rahayu, 2020; Susanto et al., 2022). However, from 2018 to 2021, tax revenue experienced a decline and failed to meet its targets. This decrease was attributed to fluctuations in the realization of income tax revenue from the manufacturing industry. Such fluctuations may weaken the tax ratio, which could indicate that companies are engaging in tax aggressiveness (Pratama & Aris, 2025; Ramadanti & Seralurin V. P., 2024; Safitri, 2024).

According to Pratiwi et al. (2022), tax aggressiveness refers to actions involving the manipulation of taxable income through tax planning strategies, both legal (tax avoidance) and illegal (tax evasion). Several studies have found that tax aggressiveness is influenced by various factors, one of which is profitability. According to Hanafi & Halim (2012), profitability is a company's ability to generate profit relative to its sales, assets, and equity over a certain period. Profitability consists of several ratios, including Return on Assets

(ROA), which measures how efficiently a company uses its assets to generate profits. The higher the ROA, the better the company's performance. Companies with high profits are assumed not to engage in aggressive tax behavior because they are capable of aligning income with tax payments.

There are documented cases of tax aggressiveness among publicly listed companies on the Indonesia Stock Exchange (IDX). For instance, PT Adaro Energy Tbk was reported to have engaged in tax avoidance by using transfer pricing through its subsidiary in Singapore, Coaltrade Services International. This scheme reportedly took place from 2009 to 2017, allowing Adaro to underpay taxes by around USD 125 million or IDR 1.75 trillion (exchange rate: IDR 14,000), which should have been paid in Indonesia. Another case involves PT Toba Pulp Lestari Tbk (INRU), which committed tax violations by manipulating export documents to conceal export values and avoid taxes, resulting in a tax loss of IDR 19 trillion. These two cases highlight different methods of tax aggressiveness: PT Adaro Energy used transfer pricing through a foreign subsidiary, while PT Toba Pulp Lestari manipulated export documentation. Both cases resulted in significant losses for the government.

According to Ariawan & Setiawan (2017), profitability is the level of profit a company can achieve during its operations. ROA is one key profitability indicator that reflects a company's financial performance. A higher ROA indicates better company performance. When a company earns high profits, it is presumed to be less likely to engage in aggressive tax practices because it can manage its income and tax payments effectively. Consequently, the tendency for tax aggressiveness decreases. This is supported by findings from Hidayat & Fitria (2018), who found a negative relationship between profitability and tax aggressiveness. Nevertheless, other studies have yielded different results. For example, Fitriani & Indrati (2023), found that profitability can have a positive impact on tax aggressiveness.

Capital intensity is theoretically linked to tax avoidance as it indicates the extent to which a company invests in inventory and fixed assets (Anugerah & Herianti, 2022). Capital intensity is the percentage composition of each type of capital (debt and equity) used by a company in its financing policy, aimed at maximizing firm value. This is supported by Fitriani & Indrati (2023), who state that capital intensity has a positive influence on tax aggressiveness. However, other researchers, such as Apriyanti & Arifin (2021), and Indriyani & Trisni (2021), found that capital intensity does not significantly affect tax aggressiveness.

Tax aggressiveness is also influenced by firm size. Firm size refers to the company's scale, which can be measured using total assets, sales, market capitalization, and other indicators. Larger companies typically have higher total assets (Yulia, 2013), which reflect their ability and stability in conducting economic activities. Larger firms are subject to greater government scrutiny, which can result in either compliance or engagement in tax avoidance activities. Research by Tiaras and Henryanto (2015) found that firm size has a positive influence on tax aggressiveness, indicating that larger firms are more likely to engage in aggressive tax strategies. However, other studies such as those by Prawira & Sandria (2021) and Siti Sarpingah (2024) found that firm size does not significantly influence tax aggressiveness.

Corporate Social Responsibility (CSR), particularly CSR related to environmental and social aspects, can also be used to mask tax aggressiveness (Sebastian Soelistione, 2022). According to Article 1(3) of the Indonesian Company Law No. 40 of 2007, CSR is a company's commitment to participate in sustainable economic development, aimed at improving the quality of life and the environment in ways that are beneficial both to the company and society. This implies that companies have an important role in enhancing the quality of life and the environment through CSR disclosures. Laguir et al. (2015) argue that

CSR is a key factor affecting corporate performance and may influence tax aggressiveness. Tax aggressiveness may arise as companies attempt to divert attention from their tax burdens to their positive public image (Sebastian Soelistione, 2022). Therefore, CSR is considered essential to corporate success and long-term survival. This is supported by studies from Sebastian Soelistione (2022), and Arifin & Rahmiati (2020), who found that CSR has a significant impact on tax aggressiveness. However, other researchers such as Pratiwi et al. (2022), Hajawiyah et al. (2022), as well as Pranata et al. (2021), found that CSR does not significantly affect tax aggressiveness.

Therefore, this study is essential for revisiting previous research, driven by changes in company practices, tax regulations, and inconsistencies in earlier findings. These inconsistencies highlight the need for a fresh perspective to deepen and update the understanding of factors influencing tax aggressiveness.

This study is a replication of a previous one conducted by Devi Safitri (2024). The main difference lies in the inclusion of Corporate Social Responsibility as a variable believed to affect tax aggressiveness. The population of this study comprises manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX) from 2021 to 2023. The theoretical framework is based on agency theory, which will be linked to tax aggressiveness. The objective of this study is to re-examine the effects of profitability, capital intensity, firm size, and CSR on tax aggressiveness. This re-examination aims to evaluate the conceptual understanding of the phenomenon and reconsider the varied results of previous studies.

Tax aggressiveness continues to pose a significant challenge in Indonesia's corporate landscape, particularly in the manufacturing sector, which is the largest contributor to national tax revenue. Declining tax contributions and inconsistent tax compliance indicate that many firms employ aggressive strategies to reduce their tax liabilities, often exploiting regulatory gaps. The core issue lies in identifying which internal corporate factors most strongly influence this behavior, especially given conflicting results in previous studies regarding profitability, capital intensity, firm size, and CSR disclosures.

As the Indonesian government increases its reliance on tax revenue to fund national development, addressing corporate tax aggressiveness has become critical. High-profile cases involving tax evasion through transfer pricing and document manipulation among publicly listed companies underscore the urgency of understanding the determinants of such behavior. These incidents result in substantial revenue losses and undermine public trust in corporate governance and tax policy effectiveness.

Moreover, companies today are expected to operate not only for profit but also within ethical, social, and environmental frameworks. The disclosure of CSR practices is increasingly scrutinized, and its potential dual role as both a transparency tool and a reputation buffer in tax planning raises concerns. Therefore, examining how CSR and other financial indicators interact with tax aggressiveness is essential for shaping future tax policy and corporate compliance standards.

Several scholars have linked profitability to tax aggressiveness, with mixed findings. Hidayat & Fitria (2018) reported a negative relationship, suggesting that highly profitable firms are more tax compliant. However, Fitriani & Indrati (2023) and Wibowo et al. (2023) found the opposite—more profitable companies may seek to minimize taxes aggressively, particularly under shareholder pressure to maximize returns.

Capital intensity has also been associated with tax planning strategies. According to Anugerah & Herianti (2022) and Pranata et al. (2021), companies with higher fixed asset investments tend to have more opportunities for tax avoidance due to asset depreciation allowances and complex cost structures. However, other studies such as Apriyanti & Arifin (2021) found no significant correlation, indicating context-dependent outcomes.

Research on firm size has yielded similar contradictions. While Dewi & Yasa (2020) found a positive relationship between firm size and tax aggressiveness—arguing that larger firms have greater resources to exploit tax loopholes—studies by Prawira & Sandria (2021) found no significant effect. Meanwhile, CSR is often framed as a mitigating factor in tax avoidance. Studies by Arifin & Rahmiati (2020) found a negative relationship, suggesting CSR reduces aggressive tax practices. However, others like Pratiwi et al. (2022) found no such effect, leaving the debate unresolved.

While various studies have examined the relationship between individual corporate characteristics and tax aggressiveness, few have assessed the combined influence of profitability, capital intensity, firm size, and CSR within a unified empirical model. Moreover, limited research focuses specifically on the manufacturing sub-sector of food and beverages, despite its prominence in Indonesia's economy and tax base. This study fills that gap by offering updated empirical insights using a comprehensive model tested on IDX-listed food and beverage firms.

The novelty of this research lies in its simultaneous analysis of financial (profitability, capital intensity, firm size) and non-financial (CSR) variables on tax aggressiveness using a robust multiple regression model. By applying the Effective Tax Rate (ETR) as a proxy for tax aggressiveness and focusing on a specific industry sector, the study offers a more targeted and contextual understanding of aggressive tax behavior, bridging theoretical predictions with practical tax policy concerns.

This study aims to re-examine and analyze the effects of profitability, capital intensity, firm size, and corporate social responsibility on tax aggressiveness in manufacturing companies within Indonesia's food and beverage sector, using data from 2021 to 2023 and employing a quantitative approach with multiple regression analysis.

The findings of this study provide strategic insights for corporate leaders, financial auditors, and tax regulators in designing more transparent, ethical, and effective tax strategies. By understanding which internal variables influence aggressive tax behavior, companies can align their financial management with legal and social accountability, while regulators can better target oversight efforts and improve compliance frameworks.

METHOD

This study uses a quantitative approach with a correlational research design aimed at analyzing the influence of profitability, capital intensity, firm size, and corporate social responsibility (CSR) on tax aggressiveness. It examines the relationship between independent variables and tax aggressiveness among manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX).

Population and Sample

The population in this study consists of manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX) from 2021 to 2023.
The sampling technique used is purposive sampling with the following criteria:

a. Companies listed on the Indonesia Stock Exchange (IDX) and publishing complete financial reports during the 2021–2023 period: 35 companies
b. Companies actively operating during the 2021–2023 period: 35 companies
c. Companies publishing complete financial reports and fulfilling tax obligations during the 2021–2023 period: 35 companies
d. Companies that disclosed CSR during the 2021–2023 period: 25 companies

Total companies: 35
Companies not disclosing CSR: (10)

Total sample: 25 × 3 = 75 firm-year observations

Variable Measurement

To measure tax aggressiveness, the following variables are used:

a. Dependent Variable

Tax Aggressiveness (Y): Measured using the Effective Tax Rate (ETR) proxy (Fitriani & Indrati, 2023), with the formula:

$$\text{ETR} = \frac{\text{Income Tax Expense}}{\text{Profit Before Tax}}$$

b. Independent Variables

Profitability (X1): Measured using Return on Assets (ROA) (Prawira & Sandria, 2021), with the formula:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

Capital Intensity (X2): Measured by the ratio showing the proportion of fixed assets to total assets (Sebastian Soelistione, 2022), with the formula:

$$\text{Capital Intensity} = \frac{\text{Fixed Assets}}{\text{Total Assets}}$$

Firm Size (X3): Measured using the natural logarithm of total assets (Pranata et al., 2021):

$$Firm\ Size = Ln\ (total\ aset)$$

Corporate Social Responsibility (CSR) (X4): Measured by the number of CSR items disclosed in the annual or sustainability report (Sebastian Soelistione, 2022), using the formula:

$$\text{CSR Index} = \frac{\text{Number of Disclosed Items}}{\text{Total Standard Items}}$$

Data Collection Technique

Data collection in this study is conducted through a documentation study by gathering data and information from financial statements, annual reports, and sustainability reports available on the official website of the Indonesia Stock Exchange (IDX) (www.idx.co.id). The collected data includes variables of profitability, firm size, capital intensity, corporate social responsibility (CSR), and tax aggressiveness.

Data Analysis Technique

The data analysis technique used in this study is multiple linear regression analysis to examine the effects of profitability, firm size, capital intensity, and corporate social responsibility (CSR) on tax aggressiveness. The purpose of this analysis is to determine the extent to which the independent variables affect the dependent variable, both partially and simultaneously.

Classical assumption tests are first conducted to ensure the regression model meets the assumptions of normality, multicollinearity, heteroscedasticity, and autocorrelation.

Subsequently, hypothesis testing is conducted to examine the influence of independent variables on the dependent variable. The F-test (simultaneous test) is used to assess whether all independent variables collectively influence the dependent variable, while the t-test (partial test) evaluates the influence of each independent variable individually. The coefficient of determination (R^2) is used to measure the strength of the variables after determining the effect of the independent variables; it indicates how much of the variation in the dependent variable can be explained by the independent variables. This analysis is performed using SPSS version 30 to ensure accurate and reliable results.

RESULTS AND DISCUSSION

1. Descriptive Statistical Test

Descriptive statistics is a method of data analysis used to describe, summarize, and present data in a more comprehensible form. The following is the data distribution:

Table 1 Descriptive Statistical Test

Statistics

		ROA	INTENSITAS MODAL	FIRM SIZE	CSR	ETR
N	Valid	75	71	75	75	75
	Missing	0	4	0	0	0
Mean		,0001164	1,6862	,0000000	,5225	-,0008962
Std. Error of Mean		,11388007	,99980	,11390773	,02710	,11367901
Median		,0000000	,3300	,0000000	,5100	,0000000
Mode		-1,04574	,30	-2,39520[a]	,35	1,44129
Std. Deviation		,98623030	8,42451	,98646986	,23471	,98448909
Minimum		-2,39520	,00	-2,39520	,11	-2,39520
Maximum		2,39520	64,30	2,39520	1,15	2,39520
Sum		,00873	119,72	,00000	39,19	-,06722

a. Multiple modes exist. The smallest value is shown

Source: SPSS Output

Based on the descriptive statistical results, the variable ROA (Return on Assets) shows an average (mean) of 0.0001164, with a median of 0 and a mode of -1.04574. The mean being close to zero and a median of zero indicates that, in general, the companies in the sample did not generate significant returns on their assets. The standard deviation of ROA is 0.98623, suggesting substantial variability in ROA among companies. The minimum value of -2.39520 and maximum of 2.39520 indicate the presence of companies with both extremely poor and excellent financial performance, suggesting potential outliers in the data.

For the Capital Intensity variable, the mean is recorded at 1.6862 with a median of 0.33. The difference between the mean and median indicates a right-skewed data distribution, where most companies have low capital intensity, but a few have extremely high intensity. This is further supported by a very large standard deviation of 8.42451 and a maximum value of 64.30, indicating the presence of extreme values.

For the Firm Size variable, both the mean and median are 0, indicating that the data has been normalized, likely using a technique such as z-score. A standard deviation of 0.98647 indicates moderate variation in firm size after normalization. The minimum and maximum values being the same (-2.39520 and 2.39520) further support the notion of standardized data.

The CSR (Corporate Social Responsibility Disclosure) variable shows an average of 0.5225 and a median of 0.51, indicating that, on average, companies in the sample disclose approximately 52% of the total CSR indicators measured. A mode of 0.35 suggests that many companies still disclose CSR minimally. The standard deviation of 0.23471 reflects a relatively low level of variation, while the minimum value of 0.11 and maximum of 1.15 indicate a fairly wide range of CSR disclosures, although the value exceeding 1.0 should be checked for possible data entry errors.

Finally, the ETR (Effective Tax Rate) variable has a mean of -0.0008962 and a median of 0, indicating that, on average, companies paid little to no taxes or even received tax incentives. A standard deviation of 0.98449 implies high variability in tax payments across companies. The range of ETR values from -2.39520 to 2.39520 again suggests the possibility of extreme outliers.

Overall, these descriptive statistics suggest that some variables exhibit non-normal distributions and extreme values (outliers), especially ROA, Capital Intensity, and ETR. Therefore, before proceeding to inferential analysis, it is advisable to conduct normality tests and consider data cleaning or outlier treatment to ensure more accurate results.

2. Normality Test

The normality test is used to determine whether a set of data follows a normal distribution. A normal distribution is important in many statistical tests, as most inferential methods assume the data is normally distributed.

Table 2 Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		71
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	,52421239
Most Extreme Differences	Absolute	,085
	Positive	,071
	Negative	-,085
Test Statistic		,085
Asymp. Sig. (2-tailed)		,200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: SPSS Output

The normality test was conducted on the unstandardized residuals using the Kolmogorov-Smirnov Test to determine if the residuals are normally distributed, which is a key assumption in classical linear regression. According to the output, the number of observations tested is 71, with a mean residual of 0 and a standard deviation of 0.5242. The obtained K-S statistic is 0.085.

The significance value (Asymp. Sig. 2-tailed) is 0.200, which is greater than the common significance level ($\alpha = 0.05$). Thus, there is not enough evidence to reject the null

hypothesis (H_0), which states that the residuals are normally distributed. This means the residuals from the regression model can be considered normally distributed.

This result indicates that the assumption of residual normality is met, allowing the regression model to be analyzed further without the need for data transformation or other robust methods.

3. Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there is unequal variance in the residuals from one observation to another. A good regression model should not exhibit heteroscedasticity. The decision rules are:

a. If there is a clear pattern (e.g., wave, cone), heteroscedasticity is present.
b. If there is no clear pattern and the points are randomly scattered above and below the Y-axis value of 0, heteroscedasticity is not present.

The test used to analyze heteroscedasticity is a scatterplot analysis comparing predicted values of the dependent variable (SRESID) and the residuals (ZPRED).

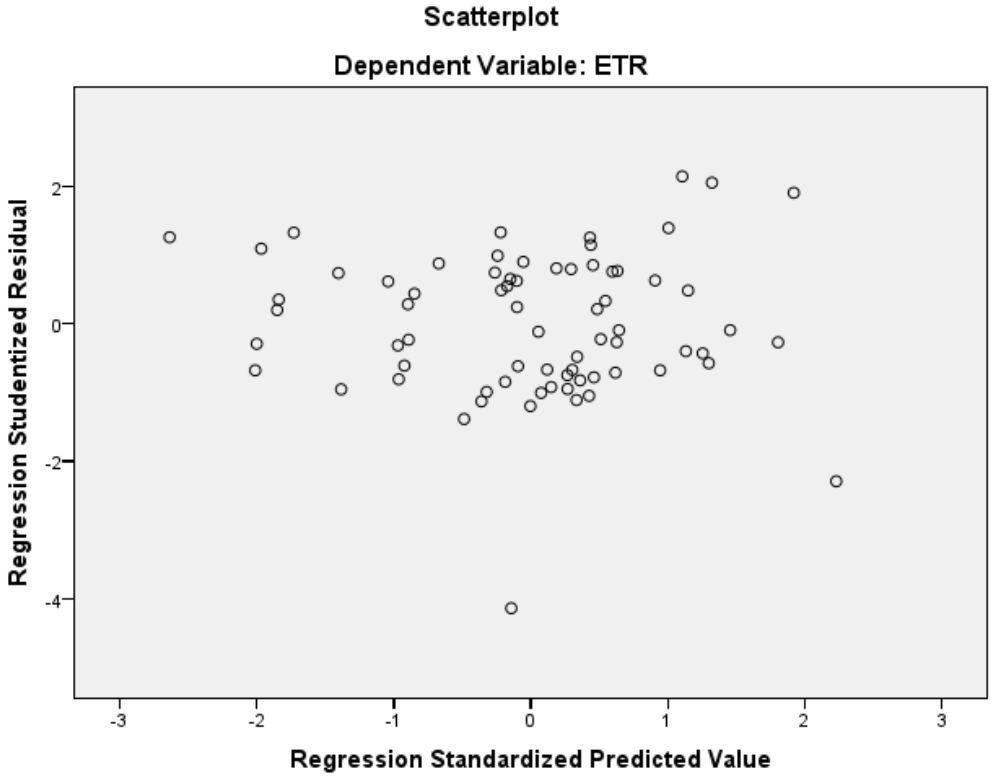


Figure 1 Heteroscedasticity Test Results
Source: SPSS Output

From the scatterplot above, we can observe the standardized predicted values of the regression model plotted against standardized residuals for the dependent variable Tax Aggressiveness (Y). The residuals appear to be randomly dispersed around the horizontal axis (y = 0), indicating that the homoscedasticity assumption is likely met as there is no obvious systematic pattern, such as a cone or arc shape. However, a few data points deviate significantly from the general distribution, especially in the upper part of the plot, indicating potential outliers or high-leverage data points. These should be further examined as they can affect the validity and accuracy of the regression model. Overall, the residual distribution pattern suggests that the regression model is generally appropriate.

4. Autocorrelation Test

The autocorrelation test is used to identify whether the residuals in the regression model are correlated with themselves at different time lags. One of the most commonly used tests for autocorrelation is the Durbin-Watson Test.

a. A value around 2 indicates no autocorrelation.
b. A value below 2 indicates positive autocorrelation.
c. A value above 2 indicates negative autocorrelation.

Table 3 Autocorrelation Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,833[a]	,694	,676	,53986395	1,295

a. Predictors: (Constant), CSR, ROA, FIRM SIZE, INTENSITAS MODAL

b. Dependent Variable: ETR

Source: SPSS Output

The test result shows that autocorrelation is present because the Durbin-Watson value is 1.295, which falls between -2 and +2. Therefore, there may be a positive autocorrelation issue in the model.

Linear Regression (t-Test)

Simple linear regression aims to calculate the quantitative impact of changes in one event (X variable) on another event (Y variable).

Table 4 Simple Linear Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,098	,163		6,752	,000		
	ROA	,004	,071	,005	,062	,950	,864	1,158
	INTENSITAS MODAL	,045	,009	,397	5,241	,000	,808	1,238
	FIRM SIZE	,717	,076	,688	9,459	,000	,877	1,141
	CSR	-2,502	,283	-,621	-8,840	,000	,938	1,066

a. Dependent Variable: ETR

Source: SPSS Output

Based on the regression results, the analysis shows the relationship between the independent variables, moderating variables, and the dependent variable ETR (Y). The key interpretations are:

a. The intercept is 1.098 with a significance of 0.000, meaning the constant is statistically significant. This implies that when all independent variables are zero, the predicted value of the dependent variable is 1.098.
b. The ROA variable has an unstandardized coefficient of 0.004 with a significance value of 0.950. Since the p-value is greater than 0.05, it can be concluded that ROA does not have a significant effect on the dependent variable. The VIF value of 1.158 indicates no multicollinearity issue.

c. The Capital Intensity variable has a regression coefficient of 0.045 and a significance value of 0.000, indicating a positive and significant effect on the dependent variable. Each unit increase in Capital Intensity increases the predicted dependent variable by 0.045. A VIF of 1.238 confirms no multicollinearity.
d. The Firm Size variable has a regression coefficient of 0.717 and a significance value of 0.000, meaning it also has a positive and significant effect on the dependent variable. The size of the coefficient shows that Firm Size has a relatively large influence compared to the other variables. A VIF of 1.141 indicates no multicollinearity.
e. The CSR variable has a regression coefficient of -2.502 with a significance value of 0.000. This means CSR has a negative and significant effect on the dependent variable. Every one-unit increase in CSR reduces the predicted dependent variable by 2.502. The VIF of 1.066 shows no multicollinearity.

Overall, the model shows that Capital Intensity, Firm Size, and CSR significantly influence the dependent variable, while ROA does not. Additionally, the Tolerance and VIF values for all variables confirm that multicollinearity is not an issue in this regression model.

F-Test

The F-test is a statistical test used to determine whether all independent variables in the regression model simultaneously have a significant effect on the dependent variable.

Table 5 F-Test Analysis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43,698	4	10,924	37,483	,000[b]
	Residual	19,236	66	,291		
	Total	62,934	70			

a. Dependent Variable: ETR

b. Predictors: (Constant), CSR, ROA, FIRM SIZE, INTENSITAS MODAL

Source: SPSS Output

Based on the ANOVA or F-test results from the table above, the F-value is 37.483 with a significance level of 0.000. Since the p-value is less than the significance threshold (0.05), the null hypothesis (H_0) is rejected and the alternative hypothesis (Ha) is accepted. This means that ROA, Capital Intensity, Firm Size, and CSR jointly have a significant effect on ETR.

In addition, the Sum of Squares Regression value of 43.698 indicates that the variation in teacher resilience data explained by the regression model (which involves the variables CSR, ROA, Firm Size, and Capital Intensity) is relatively large compared to the Sum of Squares Residual of 19.236. This indicates that the research model has a good capability in explaining the relationships among the examined variables. Overall, the F-test results confirm that CSR, ROA, Firm Size, and Capital Intensity significantly contribute to ETR. Thus, the better the ROA, Capital Intensity, Firm Size, and CSR, the higher the level of ETR will be.

R² Test

The Coefficient of Determination Test is a statistical test used to measure how well the regression model explains the dependent variable.

Table 6 R² Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,833[a]	,694	,676	,53986395

a. Predictors: (Constant), CSR, ROA, FIRM SIZE, INTENSITAS MODAL

Based on the Model Summary above, the R value obtained is 0.833. This indicates a very strong relationship between the independent variables (CSR, ROA, Firm Size, and Capital Intensity) and the ETR variable in the research model. An R value approaching 1 suggests a very close relationship among the variables in this model.

Furthermore, the R Square or coefficient of determination value is 0.694, meaning that 69.4% of the variation in the dependent variable can be jointly explained by the four independent variables. In other words, CSR, ROA, Firm Size, and Capital Intensity can account for nearly 70% of the changes in the dependent variable, while the remaining 30.6% is influenced by other factors outside this model.

Additionally, the Adjusted R Square value of 0.676 takes into account the number of variables in the model, and its consistently high value indicates that the model remains stable and is not overfitted. Adjusted R Square is a more accurate measure for describing the model's explanatory power in the population rather than just the sample.

Lastly, the Standard Error of the Estimate is 0.53986395, indicating the average prediction error of the regression model. The smaller the standard error value, the better the model in predicting the dependent variable. Overall, these results show that the regression model is robust and suitable for explaining the relationship between CSR, ROA, Firm Size, and Capital Intensity on the ETR variable in this study.

Discussion

Profitability Affects Tax Aggressiveness

The regression coefficient for the ROA variable is 0.004 with a significance value of 0.95. Both values are unstandardized because the significance level is greater than 0.05, as shown in Table 4. It can be concluded that ROA does not have a significant effect on ETR. Table 1 shows the descriptive statistics results, where the ROA (Return on Assets) variable has a mean of 0.0001164, with a median of 0 and a mode of -1.04574. The mean value close to zero and the median being zero indicate that, in general, the companies in the sample did not generate significant returns on their assets. This suggests that ROA is not yet a primary focus for investors in the food and beverage manufacturing sub-sector.

This finding is inconsistent with previous research, which found a significant positive relationship between profitability and tax aggressiveness (Fitriani & Indrati, 2023; Indriyani & Trisni, 2021; Wibowo et al., 2023). These studies suggest that when a company's profitability increases, the resulting profit also rises. This situation drives companies to apply certain accounting methods to suppress taxable income, thereby reducing the tax burden payable.

The results of this study contrast with several previous studies that claimed profitability has a positive and significant effect on tax aggressiveness. In this study, profitability does not show a significant influence on tax aggressiveness. Based on agency theory as proposed by Jensen and Meckling (1976), management as the agent is expected to have incentives to minimize tax burdens to maximize firm value, especially when profits increase. However, the insignificance of profitability's effect in this study may indicate that management's decisions regarding tax aggressiveness are not solely influenced by profit levels but also by other factors such as external oversight, company policies, or compliance with tax regulations.

Capital Intensity Affects Tax Aggressiveness

The regression coefficient is 0.045 with a significance value of 0.000, both indicating a positive and significant effect, as shown in Table 4. This finding supports the second hypothesis and concludes that capital intensity has a positive and significant effect on ETR. Table 1 presents the descriptive statistics results: for the Capital Intensity variable, the average value is 1.6862 with a median of 0.33. The difference between the mean and median indicates a right-skewed data distribution, where most companies have low capital intensity, but a few have very high capital intensity. This suggests that production capacity and firm scale play a key role in increasing firm value.

This finding is consistent with previous studies, which show that capital intensity has a positive and significant effect on ETR. The relationship between capital intensity and tax aggressiveness indicates that the higher the capital intensity of a company, the more likely it is to engage in aggressive tax strategies (Ardhi & Lubis, 2023; Fitriani & Indrati, 2023; Pranata et al., 2021). This may be due to the high value of fixed assets owned, which allows the company to take advantage of various tax regulation loopholes to minimize its tax burden.

From the perspective of agency theory, this relationship can be explained by the conflict of interest between managers (agents) and company owners (principals). Managers, who oversee the company's operations, have incentives to maximize company profits, including through aggressive tax avoidance strategies. With high capital intensity, managers have more tools at their disposal to implement such strategies. In this context, tax aggressiveness is seen as a form of managerial efficiency aimed at maximizing firm value, albeit at the risk of fiscal non-compliance.

Thus, capital intensity is a significant internal factor in driving tax aggressiveness, and this finding strengthens the role of agency theory in explaining managerial behavior in managing tax burdens.

Firm Size Affects Tax Aggressiveness

The regression coefficient is 0.717 with a significance value of 0.000, both indicating a positive and significant effect, as shown in Table 4. This finding supports the third hypothesis and concludes that firm size has a positive and significant effect on ETR. The larger the size of a company, the more likely it is to engage in aggressive tax avoidance strategies.

This result aligns with previous research (Ardhi & Lubis, 2023; Dewi & Yasa, 2020; Pranata et al., 2021). Firm size is a significant factor influencing a company's strategy in fulfilling its tax obligations. Large-scale companies are generally involved in more complex business activities, making them more likely to explore gaps in tax regulations. Since the tax base is calculated based on corporate profit, the greater the profit earned, the stronger the incentive for companies to engage in aggressive tax planning as a means of reducing tax expenses.

According to agency theory, managers as agents tend to make decisions that maximize post-tax profits, especially when their compensation depends on the financial performance of the company. Therefore, the larger the scale of the company, the greater the opportunity for aggressive tax practices as part of a tax efficiency strategy. This is consistent with the agency theory perspective on conflicts of interest and information asymmetry between agents and principals.

CSR Affects Tax Aggressiveness

The regression coefficient is -2.502 with a significance value of 0.0000. Both results indicate that CSR has a negative and significant effect on ETR, as shown in Table 4. This study finds that Corporate Social Responsibility (CSR) negatively and significantly affects tax aggressiveness. This contrasts with previous findings by Arifin & Rahmiati (2020) and Prasetyo & Arif (2020), which stated that CSR has a positive and significant effect on tax aggressiveness.

This difference in findings can be explained through the lens of agency theory, where CSR activities function as a mechanism to reduce conflicts of interest between management (agents) and company owners (principals). Through transparent and accountable CSR implementation, companies aim to build a positive reputation and increase stakeholder trust, including with tax authorities. Consequently, companies tend to avoid aggressive tax practices as part of their commitment to social responsibility and good corporate governance.

CONCLUSION

The study concludes that among the four variables examined, only profitability (ROA) does not significantly influence tax aggressiveness, indicating that a company's level of profit is not always the main driver behind aggressive tax strategies, particularly in the food and beverage manufacturing sub-sector. In contrast, capital intensity, firm size, and Corporate Social Responsibility (CSR) all have significant effects. Firms with higher capital intensity and larger operational scale are more likely to engage in aggressive tax planning, leveraging fixed assets and complex structures to minimize tax liabilities. Conversely, companies with strong CSR practices tend to avoid aggressive tax behaviors to protect their public image and build stakeholder trust. These findings suggest that corporate tax behavior is shaped by a blend of internal factors like asset structure and firm size, and external pressures such as public expectations and regulatory oversight, consistent with agency theory. Firms are encouraged to manage their asset growth and business expansion responsibly while reinforcing CSR initiatives to foster compliance and reputational integrity. For future researchers, it is recommended to examine additional variables such as managerial ownership, political ties, and governance quality to gain a more holistic view of the determinants of tax aggressiveness across different industry contexts.

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