

## The Effect of Sales Growth, Capital Intensity, Tunneling Incentive, Firm Size and CSR on Tax Avoidance

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### ABSTRACT

This study aims to examine the influence of sales growth, capital intensity, tunneling incentive, firm size, and corporate social responsibility (CSR) on tax avoidance. The research focuses on energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. This study employs a quantitative approach using a multiple linear regression model. The sampling technique applied is purposive sampling, resulting in 95 data observations that met the established criteria. Data analysis was performed using the SPSS version 25 software. The simultaneous test results indicate that sales growth, capital intensity, tunneling incentive, firm size, and CSR collectively influence tax avoidance. Meanwhile, the partial test results reveal that sales growth and capital intensity have a positive and significant effect on tax avoidance, tunneling incentive and firm size do not have a significant positive effect, and CSR has a negative and significant effect on tax avoidance.

## **INTRODUCTION**

The advancement of a nation is significantly contingent upon its taxation framework, as taxes serve as the primary supply of governmental money utilized to fund development and enhance public welfare. As the largest contributor to the State Budget (APBN), tax becomes the government's main focus in maintaining national economic stability. Thus, taxation is a strategic issue that must be managed effectively and sustainably (Hendayana et al., 2024). Both individual taxpayers and business entities may undertake tax avoidance efforts by leveraging gaps or ambiguities in prevailing tax legislation. This practice is typically employed by corporations to mitigate their tax liabilities, utilizing both legally permissible strategies and those that transgress legal boundaries (Nafhilla, 2022). One of the main motivations for companies to avoid taxes is to obtain greater economic benefits and improve shareholder welfare through increased investment returns (Puspitasari et al., 2021).

The object of this research was chosen from energy sector companies because companies in the energy sector have an important role in increasing state revenue. In 2021, positive performance was seen in tax revenue from the mining sector which reached 60.52%, while in the same period in 2020 it was minus 43.4%. Especially for the fourth quarter of 2021, the revenue grew by 106%, while in the third quarter of 2021 it grew by 306.2% due to the extraordinary recovery period of Covid-19. Then in 2022 tax revenue from the mining sector contributed 8.3 percent, but its growth reached 113.6% or much higher than in 2021 which amounted to 60.5%. Meanwhile, in 2023, the tax deposit grew 28.7%. The growth rate of tax revenue experienced a slowdown compared to the previous year, when it had surged by 114.9%. The slowdown in this sector is estimated to be due to the moderation of commodity prices. Nevertheless, the mining sector still contributes 9.4% to tax revenue in 2023 (Source: <https://news.ddtc.co.id/>).

This sector also encounters challenges such as operational complexities and potential tax avoidance practices, which may impede the optimization of tax revenue. According to a PricewaterhouseCoopers (PwC) report, in 2020, only 30% of the 40 largest companies in the sector had implemented transparent tax reporting. This means that approximately 70% of the remaining companies have not yet adopted a transparent tax reporting system (Source: [www.pwc.com](http://www.pwc.com)).

An example of a tax avoidance case in Indonesia's energy sector is that of PT Adaro Energy Tbk, which has been renamed PT Alamtri Resources Indonesia Tbk since 2024. A report by Global Witness alleges that PT Alamtri Resources Indonesia Tbk. utilized its Singaporean subsidiary, Coaltrade Services International, to engage in tax avoidance by manipulating transfer pricing arrangements within affiliated entities. The activity reportedly occurred from 2009 to 2017. In practice, Alamtri allegedly arranged transactions so that it only paid taxes of around USD 125 million, an amount lower than its actual obligations in Indonesia (Source: <https://apps.detik.com/detik/>). Such behaviors can diminish potential tax revenues that could otherwise be allocated

for development and social services. Therefore, a reassessment of energy sector taxation is important to close the gap and adjust policies to be more effective in optimizing state revenue.

This study refers to the research of Ulfa et al. (2021). Researchers changed and added independent variables which initially influenced CEO tenure, capital intensity and firm size on tax avoidance to sales growth, capital intensity, tunneling incentive, firm size, and CSR on tax avoidance. This study was carried out because the characteristics associated with tax avoidance still showed inconsistent results in earlier research. Therefore, this study replicates previous research to examine the factors influencing tax avoidance practices. The differences lie in the research period, measurement methods, and population used. This study focuses on energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. Considering the background and the issues discussed, this study is undertaken under the title “The Effect of Sales Growth, Capital Intensity, Tunneling Incentive, Firm Size, and Corporate Social Responsibility (CSR) on Tax Avoidance.”

This study aims to examine the extent to which sales growth, capital intensity, tunneling incentive, firm size, and corporate social responsibility (CSR) influence tax avoidance among energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. The object of this research was chosen from energy sector companies because companies in the energy sector have an important role in increasing state revenue. However, this sector also encounters challenges such as operational complexities and potential tax avoidance practices, which may impede the optimization of tax revenue. This research is expected to present empirical data on the effects of sales growth, capital intensity, tunneling incentive, firm size and CSR on tax avoidance. It is anticipated that this study would advance the body of knowledge and theoretical understanding about corporate tax avoidance, especially in the energy industry. Additionally, it is anticipated that the findings will be used as a guide by scholars, investors, and government regulators in the development of efficient laws and plans to stop tax avoidance, which would encourage higher state income.

## **THEORETICAL REVIEW**

### ***Agency Theory***

When managing businesses to accomplish successful Good Corporate Governance standards, the interaction between principals (shareholders) and agents (managers) is explained by agency theory. Jensen and Meckling (1976) describe an agency relationship as a contractual arrangement in which the principal delegates authority to the agent to perform tasks or provide services on the principal's behalf. During this procedure, the principle also gives the agent some decision-making power. However, this relationship has the potential to cause information asymmetry, because agents generally have access and a deeper understanding of the company's condition than the principal (Rohyati & Suropto, 2021).

In the context of tax avoidance, shareholders expect management to maximize the firm's value, whereas management seeks to maximize company profits, often through actions that may serve their personal interests, thereby creating potential conflicts of interest. These opportunistic actions often include tax avoidance, where management seeks to minimize the tax burden in order to have higher reported net income, which in turn can increase their compensation. The main reason companies engage in tax avoidance is to obtain greater economic benefits and improve shareholder welfare through increased investment returns (Puspitasari et al., 2021).

### ***Sales Growth and Tax Avoidance***

Sales growth is a financial ratio used to evaluate whether a company's sales have increased from one year to the next. Therefore, the entity's sales level may increase or decrease. The higher the entity's sales level, the greater its profit and performance (Tanjaya & Nazir, 2021). These conditions can motivate companies to implement tax avoidance practices to reduce tax liabilities arising from this sales growth (Arianata & Handayani, 2025). Based on agency theory, managers tend to try to increase company profits in order to obtain compensation that has been approved by the owner (So et al., 2021). Therefore, managers may engage in tax avoidance practices as a means of fulfilling their personal interests. This hypothesis is supported by the studies of Adriyanti et al. (2021), Stefanie et al. (2022), and Fadhilah et al. (2023) which indicate that sales growth positively affects tax avoidance. Based on the description above, the following hypothesis can be drawn:

**H<sub>1</sub>:** *Sales growth has a positive effect on tax avoidance*

### ***Capital Intensity and Tax Avoidance***

Capital Intensity is a ratio that compares the entire fixed assets of a business, including machinery, equipment, and other tangible assets, to the total assets of the business overall. This ratio demonstrates how much of the company's investment is allocated to fixed assets in order to sustain its operations (Ratnandari et al., 2023). Companies with larger capital tend to have wider opportunities to implement tax planning and other tax avoidance strategies.

Based on agency theory, managers tend to pursue their own interests by maximizing performance-based compensation, reducing the company's tax obligations through tax avoidance, and increasing reported profits. The depreciation of fixed assets, recorded as a deduction from profit, contributes to lowering the tax burden. Therefore, companies with a higher proportion of fixed assets generally exhibit lower effective tax rates (Aryatama & Raharja, 2021). This hypothesis is supported by research by Aryatama & Raharja (2021), Nokiyanti et al. (2023), and Hasna et al. (2023) which indicate that capital intensity positively affects tax avoidance. Based on the description above, the following hypothesis can be drawn:

**H<sub>2</sub>:** *Capital Intensity Has a Positive Effect on Tax Avoidance*

### ***Tunneling Incentive and Tax Avoidance***

Tunneling incentive refers to actions undertaken by majority shareholders to transfer corporate assets or profits for personal gain, with the resulting costs or losses of such actions being borne by minority shareholders (Rohmani & Amin, 2022). According to Senny Wijaya (2023), tunneling incentives can occur when majority shareholders have a 20% or more shareholding in businesses in nations having tax rates lower than Indonesia's.

In line with agency theory, conflicts of interest emerge when managers, acting under the influence of majority shareholders, undertake opportunistic behaviors such as tax avoidance to advance their personal interests at the expense of shareholders' welfare. Consequently, the greater the intensity of tunneling practices, the higher the likelihood that companies will engage in tax avoidance behavior. This hypothesis is supported by research from Suropto & Novitaria (2021), Rohmani & Amin (2022), and Ratnandari et al. (2023) which indicate that tunneling incentive positively affects tax avoidance. Based on the description above, the following hypothesis can be drawn:

**H<sub>3</sub>:** *Tunneling Incentive Has a Positive Effect on Tax Avoidance*

### ***Firm Size and Tax Avoidance***

Firm size is a metric used to categorize companies as large or small based on various indicators, including total assets, market capitalization, average sales, and overall revenue (Oktrivina, 2022). According to Ulfa et al. (2021), small-sized companies generally lack the ability to manage taxes optimally due to limited skilled human resources, whereas large companies tend to possess a more competent and experienced workforce capable of managing taxes more effectively. Based on agency theory, agents in this context tend to optimize the use of available resources by minimizing the tax burden to optimize the company's profitability. This hypothesis is supported by the findings of Aulia and Mahpudin (2020), Srimindarti et al. (2022), and Owena et al. (2023) which indicate that firm size positively affects tax avoidance. Based on the description above, the following hypothesis can be drawn:

**H<sub>4</sub>:** *Firm Size Has a Positive Effect on Tax Avoidance*

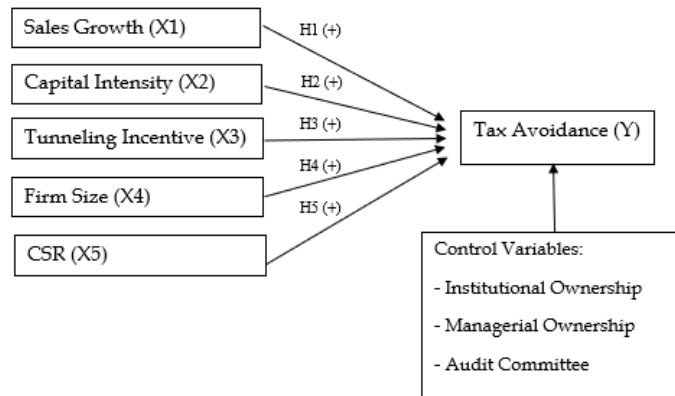
### ***Corporate Social Responsibility (CSR) and Tax Avoidance***

The definition of CSR is contained in Article 1 Paragraph 3 of Law No. 40 of 2007 concerning Limited Liability Companies. It can be inferred that CSR represents a mandatory responsibility that companies must fulfill toward the surrounding community as a consequence of their operational activities. This obligation serves as an effort to ensure the company's long-term sustainability by providing support and sustainable solutions to the surrounding community.

Kovermann & Velte (2021) stated that CSR is more of a way for managers to extract rent for themselves at the expense of shareholders. Avoiding taxes boosts a business's cash flow, which can be utilized for dividends, investments, or corporate social responsibility. Based on agency theory, managers will use those funds for CSR that increases personal utility rather than for investment or dividends. As a result, it is predicted that CSR will incentivize managers to evade taxes in order to raise their CSR spending and reap personal rewards.

This hypothesis is supported by research from Alsaadi (2020), Hidayat & Novita (2023), and Prasetya et al. (2024) which indicate that CSR positively affects tax avoidance. Based on the description above, the following hypothesis can be drawn:

**H5:** *CSR Has a Positive Effect on Tax Avoidance*



**Figure 1. Conceptual Framework**

## METHODOLOGY

This research employs hypothesis testing using a quantitative approach. Financial statements will be used as secondary data. The population used in this study are all energy sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2021-2023. The sampling technique employed in this study is the purposive sampling method. Here are some criteria for determining the sample:

- a. Energy sector companies listed on the IDX that submit annual report information for the 2021-2023 period.
- b. Energy sector companies that are actively listed on the IDX and not delisted in the 2021-2023 period.
- c. Energy sector companies listed on the IDX that submit complete financial reports and sustainability report information for the 2021-2023 period.
- d. Energy sector companies that are listed on the IDX and do not experience losses in the 2021-2023 period.

The energy sector consists of 67 companies, yielding a total of 201 potential samples. However, companies listed on the IDX after 2021 and those that do not meet the research criteria were excluded from the sample. Consequently, the final sample used in this study comprises 95 company observations over a three-year period. The data analysis techniques applied in this study include descriptive statistical analysis, classical assumption tests, goodness of fit tests, multiple linear regression analysis, and hypothesis testing using SPSS version 25.

The operational definitions and indicators of the dependent, independent, and control variables used in this research are shown in the following table:

**Table 1. The Operational Definitions and Indicators**

No	Variable	Definition	Indicator
1.	Tax Avoidance	The practice of minimizing or eliminating taxes that should be owed legally (Hasna et al., 2023).	Cash Effective Tax Rate (CETR) $= \frac{\text{Cash taxes paid}}{\text{Pre-tax income}}$
2.	Sales Growth	Used to predict potential profits that will be obtained in the future (Tanjaya & Nazir, 2021).	$SG = \frac{\text{Total sales}^t - \text{Total sales}^{t-1}}{\text{Total sales}^{t-1}}$
3.	Capital Intensity	The ratio of fixed assets to total assets held by the company (Aryatama & Raharja, 2021).	Capital Intensity = $\frac{\text{Total fixed assets}}{\text{Total assets}}$
4.	Tunneling Incentive	An act carried out by company management or majority shareholders to transfer corporate assets and profits for personal or group interests (Meiryani, 2022).	Tunneling Incentive = $\frac{\text{Total shareholding}}{\text{Total shares outstanding}}$
5.	Firm Size	A metric used to categorize companies based on their scale, whether large or small (Oktrivina, 2022).	Firm Size = $\text{Ln}(\text{Total Assets})$
6.	CSR	CSR is an integrated corporate responsibility that takes into account the legal, ethical, economic, and policy expectations that society expects from organizations (Carol, 1979).	$CSRI_j = \frac{\sum X_{ij}}{N_j}$
7.	Institutional Ownership (Control Variable)	Institutional ownership has a function in terms of monitoring and disciplining managers to avoid opportunistic behavior (Ratnasari et al., 2020).	INST $= \frac{\text{Shares owned by institutions}}{\text{Number of shares issued}} \times 100\%$
8.	Managerial Ownership (Control Variable)	The ownership of company shares by management who meet certain criteria or requirements to be able to own these shares (Trisninik, 2021).	MAN $= \frac{\text{Shares owned by management}}{\text{Number of shares issued}} \times 100\%$
9.	Audit Committee (Control Variable)	A supporting committee responsible for supervising the compilation of the company's financial statements to reduce the potential risk of management fraud (Fachmi, 2022).	Audit committee = Number of meetings in one year

Source: Data Processed by Researchers, 2025.

## RESULTS

### *Descriptive Statistics Test*

Descriptive statistical analysis is conducted to explain the characteristics of the data by employing various statistical measures, including the mean, standard deviation, maximum, minimum, total, range, kurtosis, and skewness, which depict the distribution pattern of each variable examined (Ghozali, 2018: 19). The results of the descriptive statistical analysis are presented in the table below:

**Table 2. Descriptive Statistics Test**

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
TA (Y)	95	-,786	,000	-,24163	,205248
SG (X1)	95	-,998	1,263	,24912	,419442
CI (X2)	95	,001	2,488	,58292	,608950
TI (X3)	95	,318	,981	,64815	,150681
SIZE (X4)	95	24,026	32,377	29,06913	1,831178
CSR (X5)	95	,178	,915	,50865	,187922
INST (Control)	95	,100	1,000	,80726	,200282
MAN (Control)	95	,000	,676	,04962	,140514
KA (Control)	95	,000	46,000	7,58947	6,783105
Valid N (listwise)	95				

### *Normality Test*

In this study, the Kolmogrov-Smirnov (K-S) statistical test was used to test normality. If the K-S test value *Asymp.sig* value shows (2-tailed) > 0.05, it can be concluded that the research data is normally distributed in the regression model (Ghozali, 2018: 163).

**Table 3. Normality Test**

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		95
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	,17035040
Most Extreme Differences	Absolute	,068
	Positive	,053
	Negative	-,068
Test Statistic		,068
Asymp. Sig. (2-tailed)		,200 <sup>c,d</sup>

Based on Table 3, the *Asymp. Sig* (2-tailed) value is 0.200, which exceeds the threshold of 0.05 or 5%. Hence, it can be concluded that the research data are normally distributed.

### *Multicollinearity Test*

The multicollinearity test aims to evaluate the presence of any significant correlation among the independent variables within the regression model. Multicollinearity can be detected through the Tolerance value and the Variance Inflation Factor (VIF) (Ghozali, 2018: 107).

**Table 4. Multicollinearity Test**

Model		Collinearity Statistics	
		Tolerance	VIF
1	SG	,876	1,141
	CI	,825	1,212
	TI	,698	1,433
	SIZE	,758	1,319
	CSR	,746	1,341
	INST (Control)	,557	1,796
	MAN (Control)	,686	1,458
	KA (Control)	,827	1,209

Based on Table 4, it can be observed that the VIF values for all variables in this study are less than 10. Furthermore, the tolerance values for each variable are greater than 0.10, indicating that the model is free from multicollinearity issues.

**Heteroscedasticity Test**

The purpose of the heteroscedasticity test is to identify the presence of differences or inequalities in the residual variance across observations within the regression model (Ghozali, 2018: 137).

**Table 5. Heteroscedasticity Test**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	,003	,178		,018	,986
SG	,032	,027	,131	1,210	,230
CI	,026	,022	,133	1,194	,236
TI	-,076	,095	-,097	-,802	,425
SIZE	,008	,008	,121	1,024	,309
CSR	,037	,066	,065	,556	,580
INST (Control)	-,050	,077	-,086	-,643	,522
MAN (Control)	-,145	,105	-,170	-1,385	,170
KA (Control)	-,001	,002	-,043	-,380	,705

Based on Table 5, the results of the heteroscedasticity test conducted using the Glejser method indicate that all independent variables in this study have significance values exceeding 0.05 or 5%. Hence, it can be concluded that the regression model is free from heteroscedasticity symptoms.

**Autocorrelation Test**

The autocorrelation test seeks to ascertain the existence of a connection between confounding errors at time t and those at the preceding time (t-1) within a linear regression model (Ghozali, 2018: 111). In the first test, it was found that there were symptoms of autocorrelation. According to Ghozali (2018: 124), if the regression model in a study has autocorrelation, it is necessary to treat autocorrelation. This study uses The Cochrane-Orcutt two-step Procedure method to treat autocorrelation problems.

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**Table 6. Autocorrelation Test**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,555 <sup>a</sup>	,308	,243	,17433	1,893

Based on Table 6, the Durbin-Watson value after treatment is 1.893. With a significance level ( $\alpha$ ) of 5%, the Durbin Upper (dU) value is 1.8516 and  $(4 - dU)$  is 2.1484. Since the obtained value meets the criterion  $dU < d < (4 - dU)$ , namely  $1.8516 < 1.893 < 2.1484$ , it can be concluded that the regression model is free from autocorrelation.

#### *Coefficient of Determination (R<sup>2</sup>) Test*

The Coefficient of Determination (R<sup>2</sup>) is used to assess how well the regression model explains the variation in the dependent variable, with values ranging from zero to one (Ghozali, 2018: 97). Based on table 6, it can be seen that the coefficient of determination in this study is 0.243 or 24.3%. Signaling that the independent variables in this study are able to explain their influence on the dependent variable by 24.3%, while the rest can be influenced by other variables not examined by researchers in this study.

#### *Simultaneous Significance Test (F Statistical Test)*

The F-test is employed to assess whether all independent variables in the model simultaneously have an effect on the dependent variable. The decision-making criterion is based on a significance level of 0.05 (Ghozali, 2018: 98).

**Table 7. F Statistical Test**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,148	8	,144	4,722	,000 <sup>b</sup>
	Residual	2,583	85	,030		
	Total	3,731	93			

Based on Table 7, it is observed that the significance value of  $0.000 < \alpha$  0.05, with an F-count value of 4.722 exceeding the F-table value of 2.05, indicates that the independent variables (sales growth, capital intensity, tunneling incentive, firm size, and CSR) collectively have a significant effect on the dependent variable, tax avoidance. These results suggest that the research model falls within the good category and fulfills the criteria of the model feasibility test or goodness of fit test (Ghozali, 2018: 98).

**Multiple Linear Regression Test**

Multiple linear regression analysis is employed to ascertain how much the dependent variable depends on one or more independent factors (Ghozali, 2018: 95). Based on the problem formulation and theoretical framework previously described, the regression model used to analyze the effect of sales growth, capital intensity, tunneling incentive, firm size, and CSR on tax avoidance is as follows:

**Table 8. Multiple Linear Regression Test**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,261	,294		-,890	,376
	SG	,199	,044	,427	4,519	,000
	CI	,120	,036	,319	3,287	,001
	TI	,188	,157	,126	1,201	,233
	SIZE	-,004	,013	-,031	-,304	,762
	CSR	-,277	,110	-,256	-2,526	,013
	INST (Control)	,091	,128	,084	,717	,475
	MAN (Control)	,117	,173	,072	,678	,500
	KA (Control)	,002	,003	,082	,825	,412

Referring to Table 8, the multiple linear regression model can be formulated as follows:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon$$

$$Y = -0,261 + 0,199 SG + 0,120 CI + 0,188 TI - 0,004 SIZE - 0,277 CSR + \epsilon$$

**DISCUSSION**

**The Effect of Sales Growth on Tax Avoidance**

The purpose of this study is to examine how tax avoidance is affected by sales growth. According to the first hypothesis (H1), tax avoidance is positively impacted by sales growth. According to table 8, the hypothesis test findings indicate that the sales growth variable has a significance value that is 0.000 less than the 0.05 (significant) probability level, and the computed t value is greater in the positive direction than the t table (4.519 > 1.991). The cash effective tax rate (CETR), which is used in this study as a proxy for the tax avoidance variable, has a unidirectional relationship because the CETR value is minimized (-); the higher the CETR, the more tax avoidance is practiced. Thus it can be concluded that the sales growth variable has a significant positive effect on tax avoidance so that the first hypothesis (H1) is accepted.

The findings of this study are consistent with studies by Adriyanti et al. (2021), Stefanie et al. (2022), and Fadhilah et al. (2023) which claims that a company's level of tax planning to minimize taxes increases with its sales growth ratio. The company's profit often rises in tandem with an increase in sales. The rise in the amount of tax that the business must pay will be influenced by its increased profit. In order to lower excessive tax loads, this circumstance may incentivize businesses to create the best tax preparation techniques.

### ***The Effect of Capital Intensity on Tax Avoidance***

According to the second hypothesis (H2), tax avoidance is positively impacted by capital intensity. Based on table 8, the hypothesis test findings indicate that the capital intensity variable has a significance value that is 0.001 less than the 0.05 (significant) probability level, and the computed t value is greater in the positive direction than the t table ( $3.287 > 1.991$ ). The cash effective tax rate (CETR), which is used in this study as a proxy for the tax avoidance variable, has a unidirectional relationship because the CETR value is minimized (-); the higher the CETR, the more tax avoidance is practiced. Thus it can be concluded that the capital intensity variable has a significant positive effect on tax avoidance so that the second hypothesis (H2) is accepted.

The findings of this study are consistent with studies by Aryatama & Raharja (2021), Nokiyanti et al. (2023), and Hasna et al. (2023). It asserts that a company's level of tax planning to evade taxes increases with its capital intensity ratio. Investment choices can also have an impact on tax payments because fixed asset depreciation accounts for a significant portion of the business's expenses. Therefore, the company's ownership of fixed assets might lower tax payments because of the depreciation expense associated with these assets (Suciarti, 2020).

### ***The Effect of Tunneling Incentive on Tax Avoidance***

According to the third hypothesis (H3), tax avoidance is positively impacted by tunneling incentives. According to table 8, the hypothesis test findings indicate that the tunneling incentive variable has a significance value that is 0.233 more than the 0.05 (insignificant) probability level, and the computed t value is smaller in the positive direction than the t table ( $1.201 < 1.991$ ). Thus it can be concluded that the tunneling incentive variable has no effect on tax avoidance so that the third hypothesis (H3) is rejected.

The results of this study indicate that companies with a high level of tunneling incentive are not always involved in tax avoidance practices. Similarly, companies with a low level of tunneling incentive are also not automatically free from tax avoidance. The main purpose of tunneling is to shift corporate wealth or resources for the personal advantage of majority or controlling shareholders, irrespective of its implications for taxation. If other incentives such as increased personal benefits (e.g. through high compensation, purchase of overpriced assets) are more dominant, then the secondary impact on taxes becomes less relevant or insignificant. Thus, tax avoidance is not the primary motivation for tunneling incentive activities.

### ***The Effect of Firm Size on Tax Avoidance***

According to the fourth hypothesis (H4), tax avoidance is positively impacted by firm size. According to table 8, the hypothesis test findings indicate that the firm size variable has a significance value that is 0.762 more than the 0.05 (insignificant) probability level, and the computed t value is smaller in the negative direction than the t table ( $1.201 < 1.991$ ). Thus it can be concluded that firm size has no effect on tax avoidance so that the fourth hypothesis (H4) is rejected.

According to the study's findings, companies with large sizes are not always involved in tax avoidance practices. Likewise, companies with small sizes are also not automatically free from tax avoidance. The results support those of studies by Ainiyya (2021), Firmansyah & Bahri (2022), and Rohmani & Amin (2022) that found no correlation between tax avoidance and company size. This is due to the fact that the amount of corporate tax avoidance is unaffected by the size of the business. Every business, regardless of size, is obligated to pay taxes as a taxpayer.

### *The Effect of CSR on Tax Avoidance*

According to the fifth hypothesis (H5), tax avoidance is positively impacted by CSR. According to table 8, the hypothesis test findings indicate that the CSR variable has a significance value that is 0.013 less than the 0.05 (significant) probability level, and the computed t value is greater in the negative direction than the t table ( $2.526 > 1.991$ ). The cash effective tax rate (CETR), which is used in this study as a proxy for the tax avoidance variable, has a unidirectional relationship because the CETR value is minimized (-); the higher the CETR, the more tax avoidance is practiced. Thus, it can be concluded that CSR negatively affects tax avoidance so that the fifth hypothesis (H5) is rejected.

According to the study's findings, tax avoidance decreases as a company's level of CSR disclosure increases. In addition, CSR disclosure also contributes to shaping fiscal compliance behavior because companies that care about social sustainability tend to maintain integrity and transparency, including in tax aspects. The findings of this study are consistent with those of Setyawan (2021), Mkadmia and Ali (2024), and Apriani (2025), who found that CSR has a negative influence on tax avoidance. This suggests that companies with a corporate culture that emphasizes social responsibility tend to be less inclined to engage in tax avoidance practices.

## **CONCLUSIONS AND RECOMMENDATIONS**

Based on the results of data analysis and discussion, several conclusions can be drawn. Sales growth has a positive effect on tax avoidance, indicating that as a company's sales growth rate increases, management becomes more likely to engage in tax avoidance practices. The capital intensity variable also exhibits a positive relationship with tax avoidance, suggesting that a higher level of investment in fixed assets is associated with an increased tendency for tax avoidance. In contrast, tunneling incentive does not have a significant impact on tax avoidance, implying that the magnitude of tunneling practices within a company does not substantially influence its tax avoidance behavior. Similarly, firm size is found to have no significant effect on tax avoidance, indicating that the size of the company does not play a decisive role in determining tax avoidance practices. Meanwhile, CSR shows a negative relationship with tax avoidance, meaning that companies with stronger CSR engagement tend to exhibit a lower inclination toward avoiding taxes.

The research findings and conclusions have led to a number of recommendations that can serve as a guide for future researchers studying related subjects. These recommendations include expanding the scope of various research objects to include sectors other than energy companies and adding, changing, or developing additional variables not tested in this study in order to produce more generalized results. It is expected that the results of this study will assist the government in monitoring and paying more attention to any possible flaws in the current taxation systems, and related parties, including businesses, may find the information helpful in making judgments.

#### **FURTHER STUDY**

This study employed a quantitative approach using multiple linear regression analysis to examine the effect of sales growth, capital intensity, tunneling incentive, firm size, and corporate social responsibility (CSR) on tax avoidance among energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. Although the research successfully identified several significant relationships, its findings are limited to the selected sample, variables, and time period. Future research could enhance the scope and robustness of the findings by incorporating a broader range of industries, such as manufacturing, financial, or consumer goods sectors, to compare the level and determinants of tax avoidance across different business contexts. Further studies may also adopt a panel data or time-series approach to observe the long-term trends of corporate tax avoidance and evaluate the consistency of managerial behavior over time. It is also recommended that subsequent research examine other corporate governance factors including board independence, ownership concentration, audit quality, and management compensation as potential moderating or mediating variables in the relationship between financial performance and tax avoidance. Moreover, exploring macroeconomic and policy-related variables (such as changes in tax regulation, government incentives, or ESG reporting mandates) may provide deeper insights into external influences on corporate tax behavior.

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