

# Impact of Leverage, Capital Intensity, Inventory Intensity, Cash Effective Tax Rate on Tax Avoidance: Assessment for Energy Sector Corporate

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## Abstract

This study looks at how the Cash Effective Tax Rate (CETR) explicitly evaluates the effects of leverage, capital, and inventory intensity on tax avoidance. The present study was undertaken on the energy sector businesses listed on the Indonesia Stock Exchange (IDX) during the period spanning from 2016 to 2019. A purposive sampling strategy was employed to choose 22 companies, comprising a dataset of 88 observations. The data were subjected to analysis and hypothesis testing using the STATA software. A panel data estimation model determination test was conducted, which indicated that the standard effect model was appropriate for this research. The testing steps encompass many statistical procedures: the classical assumption test, panel data regression analysis, coefficient of determination test, and partial test. The study revealed a notable favorable impact of leverage and inventory intensity on CETR. In contrast, the effect of capital intensity on CETR was shown to be statistically insignificant. The results of this study support the positive accounting theory, which says that managers choose assessment methods and measure financial statement elements based on self-interest and opportunistic behavior. Specifically, management may opt for strategies that minimize tax liabilities or align with the company's goals, such as efficient contracting behavior, which aims to mitigate the risk of tax avoidance. Implications for Tax authorities in Indonesia should consider financial indicators, notably leverage, and inventory intensity, as valuable indicators of potential tax avoidance, particularly within the energy industry.

**Keywords:** Leverage, Capital Intensity, Inventory Intensity, Cash Effective Tax Rate, Tax Avoidance, Energy

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## Introduction

Tax is the main revenue of Indonesia, which comes from several taxes payable, calculated, paid, and reported by taxpayers to the state using a self-assessment system (Arianandini & Ramantha, 2018). This system leads to tax avoidance for self-interest (Nugrahadi & Rinaldi, 2021). It is an activity to reduce the value of taxes payable through loopholes in the applicable tax provisions and regulations (Jacob, 2014; Pitaloka & Merkusyawati, 2019). The company took this action by lowering the tax calculation profit (Suciarti et al., 2020). Thus, the company tries to fulfill its tax payments with the lowest possible value (Indrawan et al., 2021). Meanwhile, tax avoidance is an act that the government wants to avoid because taxes are considered the main state revenue to be maximized (Nugrahadi & Rinaldi, 2021).

This difference in motives encourages tax avoidance by companies in various business sectors, including the energy sector. Cases of tax avoidance in Indonesia often occur. One is the case of PT Adaro Energy Tbk, an energy company involved in a tax avoidance case using a transfer pricing scheme. This resulted in this company paying taxes of Rp1.75 trillion, less than the determined amount (Sugianto, 2019). The Ministry of Finance also noted that, in 2015, 4,531 out of 8,003 coal industry taxpayers did not report their tax returns (Amalia, 2019). In addition, in terms of tax ratio data, which compares tax revenue with Indonesia's Gross Domestic Product (GDP), in 2015, the tax ratio in Indonesia was 11.58%, which continued to decline to 10, 66% in 2017. Although it had increased in 2018 to 11.40%, it decreased again in 2019 to 10.70%.

Several cases of tax avoidance in the literature can be measured by the Cash Effective Tax Rate (CETR), which accommodates the tax money paid by the company (Astuti & Aryani, 2016). According to Astuti & Aryani (2016), if the CETR level is low, the level of tax avoidance is high, and vice versa. Tax avoidance activities studied over 10 years as measured using the CETR showed that 25% of 2,077 US companies paid taxes with a value of less than 20%. This value is lower than the average tax to be paid, which is 30% (Wang et al., 2014). Company management can carry out tax avoidance schemes by applying the measurement and assessment method of financial statement elements that can reduce profit value before tax and tax burden (Putra et al., 2019). The elements of the financial statements include leverage, capital, and inventory intensity.

In the literature, there is still a debate regarding the identification of tax avoidance using the leverage method. Increasing leverage can increase the value of corporate tax payments or it can also be interpreted that the tendency of companies to avoid tax is low because debt can provide reciprocity to companies in the form of income so that the value of taxes paid can also increase (Musyarrofah & Amanah, 2017; Tobing, 2018; Yulianty et al., 2021). However, research conducted by Maulana et al., (2021); Putri & Putra (2017) showed that increasing corporate leverage had an impact on the low value of tax

payments. It means that companies tend to do tax avoidance through debt because it can cause interest expenses which can reduce profit before tax so that it can reduce the value of corporate tax payments as well. Suciarti et al. (2020) said that leverage did not significantly affect tax avoidance because the automotive sub-sector companies sampled in their research could pay off all their debts and fund their operational activities using their assets compared to debt.

Another indicator is capital intensity. Based on the research by Dwiyanti & Jati (2019), Indrawan et al. (2021), also Tarmidi (2021), an increase in capital intensity can have an impact on increasing depreciation expense, which then reduces the value of taxes paid by the company, indicating that the company commits tax avoidance through fixed assets. Meanwhile, according to Suciarti et al. (2020) capital intensity increases with the tax borne by the company because fixed assets are used to increase profits, which also increases the tax burden. It means that the tendency of companies to avoid taxes through fixed assets is low. However, different results are shown in the research of Susanti (2018); Tobing (2018), where capital intensity does not significantly affect the taxes paid by the company because fixed assets are used to support the company's operational activities, not specifically to avoid taxes.

Tax avoidance can also be done through inventory intensity. According to the results of research by (Syamsuddin & Suryarini, 2020), increasing inventory intensity can increase corporate tax rates because the company's income subject to tax will not decrease even though there is an additional burden of inventory. Thus, there is no high tendency of companies to avoid taxes by utilizing the inventory. The opposite is evidenced by Putri & Lautania (2016) also Rashid et al. (2015) who explain a decrease in corporate tax rates due to an increase in inventory intensity because the company management can choose inventory valuation methods that can reduce corporate tax rates. Thus, companies tend to use inventory for tax avoidance.

Theoretically, several previous studies still have different views regarding tax avoidance methods. Proving tends to be done in manufacturing sector companies. On the other hand, the evidence for tax avoidance is still very limited to energy sector companies, especially in Indonesia, as we believe that the profit of energy companies is very large, and the opportunity for tax avoidance in these companies is certainly very high. This phenomenon is interesting to discuss further on the motive of energy sector companies in Indonesia to avoid paying taxes from the aspect of leverage, capital intensity, inventory intensity, and cash effective tax rate. Thus, the results of this research are expected to add references on this topic.

This research uses positive accounting theory, which explains that there are two assumptions related to the behavior of company management in choosing accounting policies, namely opportunistic behavior (prioritizing self-interest) and efficient contracting behavior (prioritizing company goals). Humans tend to prioritize themselves

(self-interest) and act opportunistically (Sunardi, 2019), which can be a motivation for management in carrying out tax avoidance. On the other hand, management that prioritizes the company tends to avoid the risk of tax avoidance as stated by (Andhari & Sukartha, 2017) regarding three (3) relationships between principals and agents, one of which is creditors and management (debt covenant hypothesis). In this case, the high level of corporate debt makes the company management more stable in increasing the profits earned. It means that the company management tends to avoid the risk of tax avoidance. This happens because creditors will monitor the company's performance which is assessed through profit. In addition, it aims to prevent violations of the debt agreement between the company and creditors.

Tax avoidance in this research is defined as a tax strategy implemented by taxpayers (individuals or entities that have tax rights and obligations based on the rules and provisions of the tax law) to increase the efficiency of the tax burden and is carried out legally (Pohan, 2015). Tax avoidance is an activity of reducing the number of tax obligations through loopholes in the applicable tax regulations and provisions (Jacob, 2014; Pitaloka & Merkusyawati, 2019). Although tax avoidance is a legal action, it is not desired by the government (Nugrahadi & Rinaldi, 2021) because it can reduce state revenue. There are various schemes applied by taxpayers in doing tax avoidance. According to (Putra et al., 2019), company management can carry out tax avoidance schemes with the measurement and assessment method of financial statement elements. In addition, according to Triyanto & Zulvina (2017), companies, especially foreign investment companies, can avoid taxes with various schemes including transfer pricing, utilization of tax haven country, thin capitalization, treaty shopping, and controlled foreign corporation (CFO) Astuti & Aryani (2016). mention measurements that can be used for tax avoidance are GAAP Effective Tax Rate (GAAP ETR), Current Effective Tax Rate (Current ETR), Cash Effective Tax Rate (CETR), Long-run CETR, ETR Differential, DTAX, Total Book Tax Difference (Total BTM), Abnormal total BTM, Unrecognized Tax Benefits, Tax Shelter Activity, and Marginal Tax Rate.

Tax avoidance can be done by choosing the method of assessing and measuring elements of the company's financial statements that can reduce the value of tax payments (Putra et al., 2019), in which the method chosen by the company's management can influence the value of the elements of the financial statements and the company's financial ratios. Financial ratios that are useful in measuring how much debt is used by the company to fund its operational activities are called leverage (Suciarti et al., 2020). The company's funds are sourced from debt (liabilities) and capital (equity). According to Irdiana (2016), debt funding has advantages and disadvantages compared to capital funding. The advantages are that interest on debt payments can reduce the value of the tax borne while dividends are not tax deductions, and the return on debt is fixed, in contrast to dividends whose nominal amount depends on the amount of profit earned by

the company. There are five leverage ratio measurements that companies can use, namely Debt to Total Asset Ratio (DAR), Debt to Equity Ratio (DER), Time Interested Earned Ratio, Fixed Charge Coverage Ratio, and Debt Service Ratio. Maulana et al. (2021) and V. R. Putri & Putra (2017) confirm that corporate debt can have an impact on increasing interest expense and reduce the value of tax payments, which also means that there is a tendency to use interest expense to avoid taxes. On the other hand, research conducted by Musyarrofah & Amanah (2017), Tobing (2018), and Yulianty et al. (2021) shows that an increase in debt can have an impact on increasing the value of tax payments, meaning that companies have a low tendency to take advantage of interest expenses to avoid taxes. This is because the debt used can provide reciprocity to the company in the form of earning or income so that the value of the tax paid also increases.

*H<sub>1</sub>: Leverage affects the cash effective tax rate*

Assets are part of the elements of financial statements, one of which is fixed assets. According to Paragraph 6 of Statement of Financial Accounting Standards No. 16, an asset can be said to be a fixed asset if it is tangible, can be used for more than one period, and is used by the company to support the continuity of the production process or supply of goods and/or services, for rental or administrative purposes. The ratio that describes the company's investment activities in fixed assets is called capital intensity (Nugrahadi & Rinaldi, 2021). An increase in fixed assets or the capital intensity ratio provides an opportunity for the company to do tax avoidance due to an increase in depreciation expense which is a deductible expense, an expense that is recognized based on applicable tax (fiscal) regulations and can reduce profits and taxes borne and paid by the company as stated Dwiyanti & Jati (2019), Indrawan et al. (2021), and Tarmidi (2021). Meanwhile, according to Suciarti et al. (2020), an increase in capital intensity can increase the tax borne by the company because an increase in profit can be obtained from an increase in the value of fixed assets. This can increase the tax paid as well. It shows that there is a low tendency for companies to avoid taxes using fixed assets.

*H<sub>2</sub>: Capital intensity affects the cash effective tax rate.*

In addition to fixed assets, inventory is also an element of financial statements in the form of assets. Inventory intensity is a ratio that shows the effectiveness and efficiency of inventory management carried out by the company (Indrawan et al., 2021). It is also a measurement of the level of investment made by the company in inventory (Manihuruk et al., 2021). Determining inventory valuation is a method that a company can use to improve the efficiency of payments for corporate income tax or do tax avoidance (Pohan, 2015). Article 10 Paragraph 3 of the Law of the Republic of Indonesia Number 7 of 1983

concerning Income Tax states that inventories can only be valued based on their acquisition cost as measured by the FIFO or the Weighted Average method (Pohan, 2015). Meanwhile, according to Paragraph 9 of Statement of Financial Accounting Standards No. 14, the valuation for inventories is chosen based on whichever is lower between the cost of inventories or net realizable value, and Paragraph 25 states that the FIFO or Weighted Average method can be used for the cost valuation. According to Syamsuddin & Suryarini (2020) in their research, increasing inventory intensity can lead to an increase in corporate tax rates. This is because an expense from inventory is not deductible, so the value of taxable income cannot be reduced. It indicates that the company does not commit high tax avoidance. Meanwhile, Rashid et al., (2015) and Putri & Lautania (2016) mention that increasing inventory intensity impacts decreasing corporate tax rates because company management can choose inventory valuation methods that can reduce corporate tax rates. It means that the company tends to use inventory for tax avoidance.

*H3: Inventory intensity affects the cash effective tax rate.*

## Research Design and Method

The energy companies listed on the Indonesia Stock Exchange (IDX) were the population in this research with the data observation period from 2016 to 2019. The energy companies in question are coal, natural gas, and oil mining companies; companies that provide services to support the industry; companies whose products and services are alternative energy (Kayo, 2021). The sampling technique was purposive sampling where the sample is determined by several criteria (see Table 1). The data were processed using STATA statistical software version 16. For the measurements of variables used in this research, see Table 2.

**Table 1. Sampling by Criteria**

Criteria	Total Companies*
Energy sector companies listed in Indonesia Stock Exchange (IDX) until 2021	69
Energy sector companies which have not been listed in IDX from 2016 – 2019 (exclude)	-16
Energy sector companies which do not consistently publish audited financial statements from 2016 - 2019	0
Energy sector companies which annual financial statements do not ended on December 31 (exclude)	-3
Energy sector companies which do not present data required for this research variables (exclude)	-1
Energy sector companies with CETR less than zero (exclude)	-27
<b>Total Sample</b>	<b>22</b>

**Tabel 2. Operational of Variable**

Variable	Indicator	Scale
Cash Effective Tax Rate (CETR)	$\frac{\text{Cash Tax Paid (i), (t)}}{\text{Pre – tax Income (i), (t)}}$	Ratio
Leverage (LEV)	$\frac{\text{Total Debt}}{\text{Total Asset}}$	Ratio
Capital Intensity (CI)	$\frac{\text{Total Fixed Asset}}{\text{Total Asset}}$	Ratio
Inventory Intensity (INV)	$\frac{\text{Total Inventory}}{\text{Total Asset}}$	Ratio

## Results and Discussion

### Statistical Result

Descriptive statistical analysis in this study will be used to provide an overview of the conditions of the dependent variable (tax avoidance as measured by the cash effective tax rate) and the independent variables (leverage, capital intensity, and inventory intensity) in the companies selected as samples of this research. See Table 3 for descriptive statistical data for each variable used in this research.

**Table 3. Descriptive Statistical Analysis Result**

Variable	Obs	Mean	Std. Dev.	Min	Max
CETR_w	88	0.4009923	0.3370501	0.0008208	1.59126
LEV	88	0.4361271	0.1729905	0.1060811	0.8566562
CI	88	0.3368737	0.1982207	0.0589552	0.8701263
INV	88	0.0506804	0.0492631	0.0007755	0.2170511

Table 3 shows the lowest value (Min) of CETR is 0.0008208 and it is owned by PT Soechi Lines Tbk (SOCI) in 2016 and 2017. The highest value (Max) of CETR is 1.59126 and it is owned by PT Darma Henwa Tbk (DEWA) in 2016 and PT Resource Alam Indonesia Tbk (KKGI) in 2018. The lowest value (Min) of Leverage (LEV) is 0.1060811 and it is owned by PT Harum Energy Tbk (HRUM) in 2019. The highest value (Max) of Leverage (LEV) is 0.8566562 and it is owned by PT Delta Dunia Makmur Tbk (DOID) in 2016. The lowest value (Min) of Capital Intensity (CI) is 0.0589552 which owned by PT TBS Energi Utama Tbk (TOBA) in 2019. The highest value (Max) of Capital Intensity (CI) is 0.8701263 which owned by PT Soechi Lines Tbk (SOCI) in 2016. The lowest value (Min) of Inventory Intensity (INV) is 0.0007755 which owned by PT Rukun Raharja Tbk (RAJA) in 2017. The highest value (Max) of Inventory Intensity (INV) is 0.2170511 which owned by PT AKR Corporindo Tbk (AKRA) in 2017.

Three tests (Chow, Lagrange-Multiplier, and Hausman tests) were carried out to determine the best panel data model used in the research, namely the Common Effect (CE), Fixed Effect (FE), and Random Effect (RE) (Maulana & Muchtar, 2018). Chow test compares the feasibility of CE and FE. Table 4 shows the probability value  $> \alpha$ . This

means that, based on the Chow test, CE is the model chosen for research (Maulana & Muchtar, 2018). After that, the Lagrange Multiplier test was carried out which can compare which is more feasible between CE or RE, and the result shows at Table 4 is the probability value  $> \alpha$ . It can be concluded that, based on the Lagrange Multiplier test, CE is the model chosen for research (Maulana & Muchtar, 2018). Due to the results of the Chow and Lagrange Multiplier tests stating that CE is a feasible model to be applied in this research, the Hausman test is no longer carried out because the test serves to compare which is more feasible between RE or FE.

**Table 4. Panel Data Model Test Results**

Name	Prob	$\alpha$
Chow Test	0.1177	0.05
Lagrange Multiplier Test	0.4477	0.05

**Source:** Results of data processed (2022)

The eligibility of a regression model and data in the research can be known by classic assumption test. The first test is the normality test using the Skewness-Kurtosis test to find out the normality of the data. If the skewness value does not exceed three and the kurtosis value does not exceed ten, it means that the data are normally distributed, and vice versa (Matore & Khairani, 2020). Initially, the tests carried out showed that the data for the dependent variable were not normally distributed. In the STATA application, the data that are not normally distributed are corrected using the winsorize command (Martani, 2018). After a 2% winsorize was carried out, the normality test showed that the regression model and the data used had met the normality requirements as described in Table 5:

**Table 5. Results of Normality Test using Skewness-Kurtosis**

Variable	Skewness	Kurtosis
CETR_w	1.827588	6.701968
LEV	0.3293548	2.637032
CI	1.183789	3.637187
INV	1.57448	5.247666

**Source:** Results of data processed (2022)

The second test, the multicollinearity test, was conducted to find out the correlation between the independent variables in the regression model. The multicollinearity in the regression model can be known by analyzing the value of Tolerance (1/VIF) and Variance Inflation Factor (VIF). The regression model can be free from multicollinearity if the tolerance value is high or exceeds 0.10 and the VIF value is low or not more than 10, and vice versa (Ghozali, 2018). The multicollinearity test showed that the data for each independent variable used did not correlate to each other as shown in Table 6:



**Table 6. Multicollinearity Test Results**

Variable	VIF	1/VIF
CI	1.36	0.732825
LEV	1.24	0.804012
INV	1.18	0.850256
Mean VIF	1.26	

Source: Results of data processed (2022)

The third test, the heteroscedasticity test, is a test to determine the differences in variance and residuals between observations in the regression model (Ghozali, 2018), which was carried out with the White Test. The regression model is declared free from heteroscedasticity if the probability value  $> \alpha$ , and vice versa (Dewi et al., 2018). The fourth test, the autocorrelation test with the Wooldridge test, was used to find out the correlation between the nuisance error in the current period (t) and the past period (t-1) (Ghozali, 2018). The regression model is declared free from autocorrelation if the probability value  $> \alpha$ , and vice versa (Kurniawan & Nuryanah, 2017). The heteroscedasticity and autocorrelation test showed the results that the regression model of this research was free from heteroscedasticity, as described in Table 7:

**Table 7. Results of Heteroscedasticity and Autocorrelation Test**

Name	Prob	$\alpha$
Heteroscedasticity Test	0.4880	0.05
Autocorrelation Test	0.5273	0.05

Source: Results of data processed (2022)

The results of the test using the CE model are described in Table 8:

**Table 8. Hypothesis Test Results**

Variable	Regression Model		
	Common Effect Model		
	Coefficients	t	Prob.
LEV	0.5001466	2.38	0.020 **
CI	-0.3317349	-1.73	0.088 ***
INV	2.600619	3.62	0.000 *
Cons.	0.1628173		
Number of Obs		88	
Adj. R-Squared		0.1854	
Prob (F-Statistic)		0.0001	

Source: Results of data processed (2022)

The data in Table 8 can form the regression equation for this research:

$$CETR_{(i),(t)} = 0,1628173 + 0,5001466 LEV_{(i),(t)} - 0,3317349 CI_{(i),(t)} + 2,600619 INV_{(i),(t)} + e_{(i),(t)}$$

The equation formed explains that the value of the constant-coefficient ( $\alpha$ ) is 0.1628173, which means that, if the value of the independent variables (leverage, capital intensity, and inventory intensity) is 0, the CETR is 0.1628173. The value of the regression coefficient ( $\beta_1$ ) of 0.5001466 means that, if the value of leverage increases by 1 unit and the value of the capital intensity and inventory intensity variables is the same, the CETR increases by 0.5001466. The value of the regression coefficient ( $\beta_2$ ) of - 0.3317349 means that, if the value of the capital intensity variable increases by 1 unit and the value of the leverage and inventory intensity variable is the same, the CETR will decrease by 0.3317349. The regression coefficient ( $\beta_3$ ) value of 2.600619 means that, if the inventory intensity variable increases by 1 unit and the values of the leverage and capital intensity variables are the same, the CETR will increase by 2.600619. A positive regression coefficient means that the independent variable has a positive (unidirectional) effect on the dependent variable, and a negative value means that the independent variable has a negative (inversely proportional) effect on the dependent variable.

The hypothesis was tested using the coefficient of determination test to determine the ability of the regression model to explain variations in the dependent variable. Table 8 shows the value of Adjusted R-Square (Adj. R2) of 0.1854, which means that the independent variables (leverage, capital intensity, and inventory intensity) in this research can provide an explanation of their effect on CETR in the energy sector companies as the research sample, namely 0.1854 or 18.54%, and the rest is explained by other factors. T-test was also carried out to determine the ability of each independent variable to explain variations in the dependent variable. This test was carried out by looking at the comparison of t-table and t, as well as the significance value of t with alpha ( $\alpha$ ) values of 5%. The value of df obtained is 84, meaning that, with  $\alpha = 5\%$ , the t-table value is 1.98861.

With  $\alpha = 5\%$ , the leverage variable t value is 2.38 or  $t > t\text{-table}$  ( $2.38 > 1.98861$ ). In addition, the leverage probability value is 0.020 or lower than 0.05; it means a significant influence is given by leverage to CETR, and the first hypothesis in this research is accepted. With  $\alpha = 5\%$ , the capital intensity variable t value is 1.73 or  $t < t\text{-table}$  ( $1.73 < 1.98861$ ). In addition, the capital intensity value is 0.088 or higher than 0.05; it means that there is no significant influence given by capital intensity to CETR, and the second hypothesis in this research is rejected. With  $\alpha = 5\%$ , the inventory intensity variable t value is 3.62 or  $t > t\text{-table}$  ( $3.62 > 1.98861$ ). In addition, the inventory intensity value is 0.000 or lower than 0.05; it means that there is a significant influence given by inventory intensity to CETR, and the third hypothesis in this research is accepted.

### *Discussion*

The significant positive effect of leverage on CETR means that the increase in debt to fund the company's operational activities can increase the value of the tax paid because the company's income and profits may increase due to debt funding, and this will also have an impact on increasing the tax paid. This is as stated by (Musyarrofah & Amanah, 2017). This research also shows that companies with high debt tend to avoid the risk of tax avoidance, as stated by Yulianty et al. (2021). This is because there is an inverse relationship between CETR and tax avoidance (Astuti & Aryani, 2016; Maulana et al., 2021). The results of this research can also confirm the debt covenant hypothesis in the positive accounting theory proposed, which explains that high levels of corporate debt mean that the company's relationship with creditors is high, and the company's performance is also increasingly monitored by creditors. Thus, the company management tends to maximize profits and avoid the risk of tax avoidance because the creditors can assess the company's performance through the profit earned. The results of this research are contrary to what is stated by (Maulana et al., 2021; Putri & Putra, 2017) in their research that the level of corporate leverage can result in a low value of tax payments or there is a tendency for companies to avoid taxes due to the interest expense from debt used which can reduce profits and the value of taxes paid by the company. This is different from the statement of Suciarti et al. (2020) that leverage does not have a significant effect on tax avoidance because the research sample used is the automotive sub-sector, which is considered to have the ability to pay off all its obligations or debts and fund its operational activities using assets owned compared to debt.

The insignificant effect of capital intensity on CETR means that a decrease or increase in fixed asset value will not affect the tax payments. It is because the company's investment in fixed assets to support the sustainability of operational activities, not specifically to avoid taxes. The same thing was stated by (Susanti, 2018; Tobing, 2018). The results of this research do not follow the statement of (Dwiyanti & Jati, 2019; Indrawan et al. 2021; Tarmidi, 2021) in that a decrease in the value of tax payments can occur with an increase in the company's fixed assets because an increase in fixed assets can lead to an increase in depreciation expense which can reduce the company's fiscal profit (deductible expense). The results of this research cannot confirm the statement of Suciarti et al. (2020) that an increase in capital intensity can increase the tax borne by the company because an increase in profit and tax burden can occur as the company uses fixed assets to achieve this or it means that the company does not use fixed assets too much for tax avoidance.

The significant positive effect of inventory intensity on CETR means that an increase in inventory can increase the value of taxes paid by companies to the state because there is an expense from inventory that is not recognized fiscally so that taxable

income cannot decrease. The inverse relationship between CETR and tax avoidance (Astuti & Aryani, 2016; Maulana et al., 2021) means that this research also shows that the risk of tax avoidance tends to be avoided by companies with high inventory levels, as stated by (Syamsuddin & Suryarini, 2020). The results of this research cannot confirm the statement of (Rashid et al., 2015) and Putri & Lautania (2016) that the company's tax rate was low due to an increase in inventory intensity because management could choose inventory accounting methods to reduce tax rates. The statement of Yulianty et al., (2021) cannot be confirmed by the results of this research. It is stated that there is no significant effect given by inventory intensity on tax avoidance because companies with high inventory levels may use additional costs not specifically to avoid taxes but to determine basic costs for the selling price.

## **Conclusions**

This study has proven that leverage and inventory intensity influence CETR in a positive direction. Meanwhile, capital intensity has no significant effect on CETR. CETR in question is a measurement for tax avoidance. This research also proves that there are significant effects of the financial ratios in the form of leverage and inventory intensity on corporate tax avoidance. This can confirm the management actions related to tax avoidance by selecting valuation or measurement methods on elements of the company's financial statements. The results also confirm the positive accounting theory, where management behavior in choosing a method of assessing or measuring financial statement elements can be based on its interests as opportunistic behavior. The implication is management will tend to avoid tax, because of prioritizes company goals will tend to avoid the tax avoidance risk. It is implied that, in energy sector companies, tax avoidance tends to be carried out through debt funding because it can increase the company's income and profits, which can lead to an impact on increasing the tax paid. It also tends to be carried out through inventory, because an expense from inventory is not recognized fiscally so that taxable income cannot decrease. Tax authorities in Indonesia should consider financial ratios in leverage and inventory intensity as tools to indicate tax avoidance by energy sector companies.

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