



THE EFFECT OF CAPITAL INTENSITY, INSTITUTIONAL OWNERSHIP, AND SALES GROWTH ON TAX AVOIDANCE

(Empirical Study of Energy Sector Companies Listed on the Indonesia Stock Exchange in 2017-2021)

Wieta Chairunesia

Faculty of Economci and Business, Universitas Mercu Buana, Indonesia.

Article DOI: <https://doi.org/10.36713/epra14081>

DOI No: 10.36713/epra14081

ABSTRACT

The purpose of this research is to examine how capital intensity, institutional ownership, and sales growth impact tax avoidance in the energy sector companies listed on the Indonesia Stock Exchange between 2017 and 2021. The independent variables analyzed in this study are capital intensity, institutional ownership, and sales growth, while the dependent variable is tax avoidance. The data used for this study is secondary data, collected from the financial reports of all energy sector companies listed on the Indonesia Stock Exchange during the specified time frame. The sampling method used was purposive sampling, which resulted in a total sample size of 16 energy sector companies. To analyze the data, researchers conducted multiple regression tests using SPSS 22 software. The findings show that all the independent variables in this study- capital intensity, institutional ownership, and sales growth- have a negative effect on tax avoidance.

KEYWORDS: *Tax Avoidance, Liquidity, Company Size, Institutional Ownership, Sales Growth*

INTRODUCTION

Taxes are an important source of revenue for the state, contributing significantly to the State Revenue and Expenditure Budget (APBN) compared to other sectors. However, taxpayers and companies often seek to minimize their tax burden, sometimes resorting to tax avoidance. This is because high taxes can reduce profits, which should be distributed among the parties involved in the company. On the other hand, taxes are

crucial for the state, as they provide the necessary funding for state activities.

Unfortunately, the different interests of companies and the government often lead to disobedience and tax avoidance practices. As a result, tax revenues have not met the targets set in the State Revenue and Expenditure Budget (APBN) over the last five years, as shown in Table 1.

Table 1. Tax Revenue Realization (in trillion Rupiah)

Years	2017	2018	2019	2020	2021
Target	1.283	1.424	1.577,6	1.198,8	1.229,58
Realization	1.147,5	1.315,9	1.545,3	1.019,56	1.227,53
Achievement	89,4%	92%	86,5%	85,65%	103,90%

Source : Kemenkeu RI

According to Table 1, the tax sector has not yet reached its full potential in terms of income. This is because taxpayers have not fulfilled their obligation to pay taxes to the government. Economist Yusuf Rendy Manilet from the Center of Reform on Economics (CORE) Indonesia revealed that Indonesia is estimated to lose \$4.86 billion (or Rp. 68.7 trillion) annually due to tax avoidance practices. Out of this total, \$4.78 billion was lost due to tax avoidance by companies in Indonesia, while the remaining \$78.83 million came from individual tax avoidance (Novika, 2020).

Coaltrade Services International at a lower price and then sold it to other countries at a higher price, taking advantage of a loophole in the system. As a result, the tax imposed on the company's income in Indonesia was lower. This means that the sales and profits reported in Indonesia were lower than they should have been (Sugianto, 2019).

Tax avoidance refers to the legal and safe practice of minimizing the amount of taxes a taxpayer is required to pay, without violating any tax laws or regulations. This is achieved by exploiting the gray areas or weaknesses contained within the tax laws and regulations. (Pohan, 2018: 370).

People engage in tax avoidance to decrease the amount of taxes they must pay to the government. One common strategy is through capital intensity. Capital intensity refers to the ratio of investment activities in fixed assets by a company (Jusman & Nosita, 2020). This term is used to describe the proportion of

There has been a case of tax avoidance by a company in the energy sector in Indonesia. PT Adaro Energy Tbk reportedly paid US \$125 million less taxes than expected to the Indonesian government. According to the Global Witness report, PT Adaro Energy Tbk used transfer pricing through its subsidiary in Singapore from 2009 to 2017. The company sold its coal to



fixed assets owned by a company compared to all its assets (Anindyka S et al., 2018). If a company has a higher proportion of fixed assets, the depreciation expenses will increase, leading to a lower tax burden.

From a management perspective, tax avoidance is often viewed as a strategy to demonstrate good performance. However, it is important to have a mechanism in place to control and reduce instances of tax avoidance. According to Tarmidi et al. (2020) Good Corporate Governance is one such mechanism that can help prevent tax avoidance practices. Institutional Ownership is a key part of Good Corporate Governance, as it allows institutional investors to closely monitor management activities. Institutional ownership refers to the situation where third-party organizations possess stocks in a particular enterprise (Gunawan, 2021:77). This increased oversight encourages management to be more cautious when making decisions, particularly when it comes to tax management and avoidance.

In addition to the two previous variables, namely capital intensity and institutional ownership, the implementation of tax avoidance practices by companies that have large profits is influenced by the amount of sales growth. According to Fauzan et al. (2019) companies can predict how to generate large profits that will be obtained through sales growth rates. Kasmir (2016:107) defines Sales Growth as the measure of how much a company has improved its sales, which can be compared to its overall sales performance. According to Auliya (2021: 32), sales growth refers to a company's capacity to enhance its sales from one year to the next. Increased sales growth will have an impact on increasing profits, thereby enabling companies to practice tax avoidance.

According to research conducted by Nugraha & Mulyani (2019), the level of capital intensity has a positive impact on tax avoidance. However, the studies carried out by Marwa & Wahyudi (2018), Nibras & Hadinata (2020) and Fatimah et al. (2021) contradict this, as they found no significant correlation between capital intensity and tax avoidance. Similarly, Rais et al. (2023) discovered that institutional ownership can affect tax avoidance, but this contradicts Fitria's (2018) research, which found no significant impact of institutional ownership on tax avoidance. Previous studies have also yielded differing results when it comes to the effect of sales growth on tax avoidance. For instance, Maryam et al. (2023) found that sales growth had a significant positive impact on tax avoidance, while Febryanti & Sulistyowati (2023) found no significant correlation between sales growth and tax avoidance.

Based on the background described above, both from the phenomenon and the differences in the results of previous studies, the researcher is interested in conducting another study in differentiating capital intensity, institutional ownership, and sales growth on tax avoidance in Energy Sector Companies listed on the Indonesia Stock Exchange Year 2017-2021.

LITERATURE REVIEW

Agency Theory

In Rifai & Atiningsih's (2019) interpretation of Jensen & Meckling's (1979) agency theory, it refers to a system of agreements between a company's owner (principal) and manager (agent) who oversee its operations and resources in order to maximize profits. The relationship between agency theory and tax avoidance is the connection between a tax collector (principal) and a taxpayer (agent). The tax collector (principal) wants to collect the most tax revenue possible for the state, while the taxpayer (agent) aims to achieve maximum profits with minimal tax burden. As a result, companies exploit loopholes to avoid paying taxes, leading to a conflict of interest between the tax authorities and corporate taxpayers (Yuliawati & Sutrisno, 2021).

CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Effect of Capital Intensity on Tax Avoidance

Managers make financial decisions to increase a company's profits, and one such decision is capital intensity. Capital intensity involves investing in fixed assets to generate income. The ratio of capital intensity is used to determine how much a company needs to invest in fixed assets to make a profit. Investing in fixed assets can reduce the tax burden because of depreciation costs. Managers can use depreciation costs to minimize the amount of tax paid by the company. This creates an opportunity for companies to use idle funds to invest in fixed assets and utilize depreciation costs as a tax deduction, which may lead to tax avoidance. Studies by Nugraha & Mulyani (2019) and Darsani & Sukartha (2021) confirm that capital intensity has a significant positive effect on tax avoidance. Companies with more assets are more likely to engage in tax avoidance. Therefore, the higher the capital intensity ratio, the greater the possibility of tax avoidance.

H1: Capital Intensity has a significant positive effect on tax avoidance.

Effect of Institutional Ownership on Tax Avoidance

The level of institutional ownership in a company has a significant impact on its degree of control. When institutional investors have greater control, there is less likelihood of fraudulent behavior by management, such as evading corporate taxes. Studies by Noviyani & Muid (2019) and Afrika (2021) have found that institutional ownership has a negative impact on tax avoidance.

H2: Institutional ownership has a negative effect on tax avoidance.

Effect of Sales Growth on Tax Avoidance

When a company experiences a significant increase in sales, it can have a direct impact on their profits. As these profits grow larger, it becomes more likely that the company may engage in tax avoidance measures in order to avoid reducing their profits through tax payments (Fauzan et al., 2019). Both Puspita & Febrianti (2017) and Fauzan et al. (2019) have conducted research that demonstrates a correlation between sales growth and tax avoidance.



H3: Sales Growth has a positive effect on tax avoidance.

RESEARCH METHODS

This study is a quantitative analysis that utilizes financial statements of companies listed on the Indonesia Stock Exchange between 2017 and 2021 as secondary data. The method employed in this study is multiple linear analysis

through SPSS 22. The energy sector companies listed on the Indonesia Stock Exchange between 2017 and 2021 form the population of this study. The sampling technique used in this study is purposive sampling, wherein the researcher selects samples with specific characteristics that correspond to research objectives. Based on the selection criteria, the data collected includes a total of 80 data points from 16 companies.

RESULTS AND DISCUSSION

Descriptive Statistics Test

Tabel 2. Descriptive Statistics Test

	N	Minimum	Maximum	Mean	Std. Deviation
Tax_Avoidance	80	.000	1.380	.34900	.283971
Capital_Intensity	80	.031	2.495	.33585	.335954
Institutional_Ownership	80	.100	.970	.67575	.215182
Sales_Growth	80	-.390	1.600	.20488	.397718
Valid N (listwise)	80				

Source: Data is processed using SPSS22

Hypothesis Test

Before testing the hypothesis, a classical assumption test is performed to determine whether the proposed regression model is feasible for hypothesis testing. The classic assumption tests carried out include normality, multicollinearity, autocorrelation, and heteroscedasticity tests. Initially, the normality test results showed that the data were not normally distributed because the sig. of 0.005<0.050. Then the data is treated with the winsorizing method so that the data is normally distributed with sig values. of 0.052> 0.050. The multicollinearity test shows a VIF value <10. Then the autocorrelation test shows a Durbin-Watson value of 2.026 greater than the upper limit (dU) of 1.7153. Meanwhile, in the heteroscedasticity test, the sig. in each independent variable is greater than 0.05 so from the classical assumption test it can be

concluded that in the research data, there are no symptoms of multicollinearity, autocorrelation, and heteroscedasticity.

In addition to the classical assumption test results, the coefficient of determination (adjusted R square) is 0.21. This value indicates that the ability of capital intensity, institutional ownership, and sales growth in explaining tax evasion is 21%. While the remaining 79% can be explained by other variables not used in this study.

Next, a model feasibility test (F test) was carried out which obtained a sig. of 0.000. so it can be concluded that the model used in this study is feasible to be tested. Therefore, further testing can be carried out on research data.

Tabel 3. Hypothesis Test Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.696	.093		7.501	.000
Capital_Intensity	-.204	.102	-.201	-1.999	.049
Institutional_Ownership	-.397	.122	-.329	-3.264	.002
Sales_Growth	-.184	.065	-.287	-2.825	.006

a. Dependent Variable: Tax_Avoidance

Source: Data is processed using SPSS22

Based on the results of hypothesis testing in Table 3 above on the capital intensity variable, the sig value. is 0.049 and the regression coefficient is -0.204 so it can be concluded that hypothesis 1 is rejected, even though capital intensity has a significant effect on tax avoidance, the direction of the relationship between capital intensity and tax avoidance is not in accordance with the hypothesis. The results of this study state that capital intensity has a significant negative effect on tax evasion. Investing through fixed assets can be done as an effort

to avoid taxes. With the high investment value in fixed assets, taxable income can be reduced due to the high depreciation value. If according to the statement, tax evasion should increase. However, the results of this study state the opposite, the higher the investment in fixed assets can reduce the practice of tax avoidance. This shows that the company invests in fixed assets not to avoid taxes but to be used in the company's operational activities. This result is in line with the results of research by Safitri & Rizal (2023), but contrary to the results of



research by Nugraha & Mulyani (2019) and Darsani & Sukartha (2021).

Furthermore, the institutional ownership variable has a sig value of 0.002 and a regression coefficient of -0.397 so it can be concluded that hypothesis 2 is accepted, namely institutional ownership has a negative effect on tax evasion. This shows that the greater the institutional ownership, the lower the possibility of tax evasion. The size of institutional ownership indicates that more and more external agencies are also monitoring the performance of management in managing the company so that they can suppress all forms of fraud, especially in conducting financial reporting, one of which is the practice of tax avoidance. Thus the results of this study are in line with the results of research by Noviyani & Muid (2019) and Africa (2021) which state that institutional ownership has a negative effect on tax avoidance. However, the results of this study are contrary to the results of Fitria's research (2018).

The test results on the sales growth variable have a sig value of 0.006 and a regression coefficient of -0.184 so it can be concluded that hypothesis 3 is rejected. Although the test results show that there is a significant effect of sales growth on tax avoidance, based on the regression coefficient the direction of the relationship between variables is negative. So the test results show that sales growth has a significant negative effect on tax avoidance. This shows that the higher the company's sales growth rate, the possibility of tax avoidance will decrease. Companies that are increasing their sales growth can also indicate a high-profit level. Thus, it is assumed that companies are able to carry out their tax obligations voluntarily so that the level of tax avoidance practices is low. So the results of this study support the research results of Widiastuti, R.N. (2023) and contrary to the results of research by Puspita & Febrianti (2017) and Fauzan et al. (2019) which in fact stated that sales growth had a significant positive effect on tax avoidance and even Febryanti & Sulistyowati (2023) and Anasta (2021) stated that sales growth had no significant effect on tax avoidance. Based on Table 2 above, the regression equation of this study is as follows:

$$TA = 0,696 - 0,204 CI - 0,397 Inst - 0,184SG + e$$

CONCLUSION

Based on the test results, the following are the conclusions of this study:

- Capital Intensity has a significant negative effect on Tax Avoidance.
- Institutional Ownership has a significant negative effect on Tax Avoidance.
- Sales Growth has a significant negative effect on Tax Avoidance.

RESEARCH RECOMMENDATIONS AND LIMITATIONS

The findings of this study can serve as valuable input and reference for researchers and investors. Additionally, it is possible that tax authorities may use the results to assess the

level of corporate tax avoidance and evaluate the level of corporate compliance with tax obligations, including future ones.

It is important to note that this study only utilized data from 16 out of the total 58 companies in the population, with a sample size of only 80. This data may not provide a fully representative picture of the population in question. Therefore, for future research, it may be beneficial to consider a larger number of companies as potential subjects for further study.

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