Keunis
Vol. 13, No. 1, Jan 2025, Page. 44-54

P-ISSN: 2302-9315
E-ISSN: 2714-7274
https://jurnal.polines.ac.id/index.php/keunis

SALES GROWTH, PROFITABILITY, INVENTORY INTENSITY AND CAPITAL STRUCTURE ON TAX AGGRESSIVENESS IN ENERGY SECTOR IN INDONESIA

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Article History:
Received : 2024-07-31
Revised : 2024-10-29
Accepted : 2025-01-12
Published : 2025-01-16

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Cite this article:
Irawati, W., Kurniasih, L. & Barli, H. (2025). Sales Growth, Profitability, Inventory Intensity and Capital Structure on Tax Aggressiveness in Energy Sector in Indonesia. *Keunis*, 13(1), 44-54.

DOI:
10.32497/keunis.v13i1.5790

Abstract**:** *This study examines the effect of Sales Growth, Profitability, Inventory Intensity, and Capital Structure on Tax Aggressiveness. The results indicate that, simultaneously, Sales Growth, Profitability, Inventory Intensity, and Capital Structure have a significant impact on Tax Aggressiveness. However, when analyzed individually, Sales Growth, Profitability, and Inventory Intensity do not significantly affect Tax Aggressiveness. In contrast, Capital Structure has a positive and significant effect on Tax Aggressiveness. The population for this study consists of 74 companies, with a sample size of 105 data points from 21 energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2018-2022 period, using a purposive sampling technique. The data analysis was conducted using descriptive statistics and panel data regression analysis through the EViews application.*

Keywords : *Tax Aggressiveness, Sales Growth, Profitability, Inventory Intensity, Capital Structure*

INTRODUCTION

Taxation is one of the primary sources of revenue for the Indonesian government and contributes significantly to national income. As a vital sector for funding development and public services, Indonesia's taxation system is continually being optimized. However, one major challenge in tax collection is taxpayer noncompliance, particularly among large corporations that view taxes as a burden that reduces their net profits. To minimize tax obligations, these companies tend to exploit legal loopholes and strategies that allow them to reduce their taxes they should rightfully pay. One such strategy is aggressive tax planning, which involves efforts to reduce taxable income through both legal and illegal means, with the ultimate goal of lowering the amount of tax owed (Sabna and Wulandari, 2021).

Aggressive tax planning often involves risky legal and illegal tax avoidance practices, which can lead to transfer pricing or tax evasion. According to Frank et al. (2009), tax aggressiveness can be defined as schemes designed to minimize tax obligations through tax planning, which sometimes involve controversial methods. While these practices enable companies to save on tax payments—funds that can subsequently be used for further investment (Prastiwi, 2022) —they have negative implications for both the companies themselves and the state. Excessive tax avoidance can attract penalties such as fines or a decrease in stock prices; however, it can significantly reduce state revenue, especially when such practices involve legal violations.

A notable example of aggressive tax practices occurred with PT Adaro Energy Tbk. and its subsidiary Coaltrade Services International Pte Ltd., based in Singapore. This case surfaced in 2009, although the initial allegations against the company were unproven. However, in 2019, an international report by Global Witness revealed that PT Adaro allegedly shifted its profits to Coaltrade through a transfer-pricing scheme. In this practice,

PT Adaro sold coal mined in Indonesia to Coaltrade at significantly lower prices, while Coaltrade resold it at much higher prices. Additionally, a bonus of USD 55 million from a third party and other Adaro subsidiaries was recorded by CoalTrade. The purpose of this accounting was to reduce PT Adaro's tax liabilities, as Singapore's lower tax rate of 17% was more favorable than Indonesia's higher tax rates. From 2009 to 2017, PT Adaro, through its overseas subsidiary, avoided paying taxes amounting to USD 125 million (approximately IDR 1.75 trillion) that should have been paid in Indonesia. This practice sparked controversy as unethical companies profiting from Indonesia's natural resources reduced their tax contributions to the country, enabling their profits.

Tax aggressiveness is one strategy employed by companies to reduce their tax obligations using either legal or more controversial methods. Several variables influence companies' level of tax aggressiveness, including sales growth, profitability, inventory intensity, and capital structure. Sales growth is a key indicator of a company's success in increasing its revenue over time. According to Nadya and Purnamasari (2020), sales growth is evaluated using the sales growth ratio, which measures the changes in sales from period to period. The larger a company's sales, the higher is its potential growth, which can lead to greater profits. As profits increase, tax obligations are calculated based on earnings obtained. Therefore, companies with substantial sales growth are likely to face higher tax obligations, which may drive them to seek ways to reduce their payable taxes (Susanti and Satyawan, 2020).

Profitability, often measured using Return on Assets (ROA), reflects how efficiently a company generates profit relative to its assets. Higher ROA values indicate a greater capacity to pay taxes, as they reflect higher income levels. Consequently, companies with high profitability are likely to face larger tax liabilities, potentially motivating them to reduce their tax burdens through aggressive tax planning. Inventory intensity measures the extent to which a company relies on inventory for its operations. High inventory levels can incur maintenance and storage taxes, add to a company's additional costs, and reduce reported income. Effective and efficient inventory management can help companies lower their tax liability. Nadhifah 2023) explains that large inventories can decrease a company's revenue, thereby reducing tax obligations. Consequently, companies with high inventory intensity tend to be more proactive in efficiently managing their tax burdens (Maulana, 2020). Capital structure is a ratio that illustrates the composition of debt and equity in a company's financing. According to Hamdi (2018), a high-capital structure in the form of debt allows companies to leverage interest payments as tax-deductible expenses and reduce taxable income. Hence, companies utilizing debt-based capital structures have opportunities to decrease their taxable income and subsequently lower their tax burdens.

This study differs significantly from previous studies, such as those by Suprihatin and Mahardini (2021), Susanti and Satyawan (2020), and Hamdi (2018), who also identified the influence of inventory intensity, sales growth, and capital structure on tax aggressiveness. While relevant, these studies often do not limit their focus to specific industry sectors. By contrast, this study focuses on energy sector companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022. The energy sector was chosen because of its unique characteristics compared with other sectors, such as dependence on natural resources, energy price fluctuations, and frequently changing tax regulations. In addition, the energy sector is often involved in tax avoidance because of its high profit potential and the complexity of managing costs and revenues.

The primary objective of this research is to examine and provide empirical evidence on how sales growth, profitability, inventory intensity, and capital structure affect tax aggressiveness in energy-sector companies listed on the IDX during the specified period. The focus on the 2018–2022 period also provides unique relevance, as this period encompasses various economic dynamics affecting companies, including changes in national and global tax policies, and the impact of energy price fluctuations on corporate performance.

This research is expected to contribute significantly to the understanding of the factors driving tax avoidance among companies in the energy sector, offering deeper insights into aggressive tax practices in this industry. Given the significant impact of the energy sector on Indonesia's economy and its high potential for tax avoidance, this study's findings are anticipated to provide a comprehensive understanding of the factors contributing to tax avoidance in energy sector companies listed on the IDX. These findings are also expected to offer valuable information for policymakers, companies, and other stakeholders to design more effective strategies for managing and monitoring tax practices in the energy sector.

THEORETICAL FRAMEWORK AND HYPOTHESIS

Agency Theory

Agency theory, first described by Jensen and Meckling (1976), illustrates the relationship between a principal and an agent in performing tasks by delegating decision-making authority to the agent. Agency theory concerns

the agreement between capital owners and managers in operating a company. Managers are largely responsible for the operational success of the company they lead (Rahmawati and Irawati, 2022) in relation to tax aggressiveness, where management often seeks to engage in tax avoidance practices to reduce tax burdens. However, such actions conflict with the principal (the government), who opposes these practices as they harm state revenue. Consequently, this divergence of interests triggers agency conflicts, which can influence aggressive tax behavior (Christina and Wahyudi, 2022).

Signaling Theory

Signaling theory describes how companies communicate information in the form of signals to investors (Sintyana and Artini 2018). This theory explains management's efforts to meet investor expectations. Investors analyze the information conveyed by a company to determine whether it represents a positive or negative signal. Consequently, such information is crucial for investors as it aims to provide insights, records, or an overview of the company's past, present, and future conditions, as well as its impact on sustainability (Cahyo and Napisah, 2023).

Tax Aggressiveness

Tax aggressiveness is a common practice of large corporations worldwide. According to Frank et al. (2009), tax aggressiveness refers to strategies aimed at minimizing tax obligations through tax planning, whether legal or illegal. Consequently, aggressive taxation is beneficial for companies in terms of saving tax payments. However, there are risks associated with tax aggressiveness such as penalties and a decline in stock prices (Lestari et al., 2019). While not all tax planning actions are illegal, many loopholes in tax regulations are often exploited by business executives to reduce their tax burdens (Ramadhani, Triyanto, Kurnia, and Taxation, 2020). Thus, taxpayers may attempt to pay as little tax as possible to minimize their tax obligations to the state by adopting aggressive tax strategies.

Several methods can be used to measure tax aggressiveness, including CETR, ETR, BTDs, discretionary permanent tax benefits, unrecognized tax benefits, tax shelter activities, and marginal tax rates. A common approach to identifying whether a company engages in tax aggressiveness is through the Effective Tax Rate (ETR) proxy, as suggested by Neno and Irawati (2022), which has been widely adopted in previous studies.

$$ETR = \frac{\text{Tax Expense}}{\text{Profit before tax}} \quad (1)$$

Sales Growth

According to Nadya and Purnamasari (Nadya and Purnamasari, 2020) *sales growth is the ratio used to evaluate the growth in sales from one period to another. Because the survival of a company is determined by one of its critical factors, namely sales, the magnitude of sales growth can predict a company's potential profits. In this study, sales growth is measured using the sales growth proxy, as per the research of* (Prastiwi, 2022), Azzahra (2023) and (Susanti and Satyawan, 2020) Sales growth reflects the success of a company in optimizing its available resources and can serve as a benchmark for predicting the company's future performance. The formula for sales growth is

$$Sales\ Growth = \frac{\Sigma \text{Sales}_t - \Sigma \text{Sales}_{t-1}}{\Sigma \text{Sales}_{t-1}} \quad (2)$$

Profitability

Profitability refers to a company's ability to generate profit from its operational activities over a specific period. It is a crucial indicator for evaluating a company's efficiency and performance as it demonstrates how well the company manages revenue and costs to produce profits. One commonly used ratio to measure profitability is Return on Assets (ROA), which gauges a company's ability to generate net income relative to its total assets. A higher ROA indicates that the company is more efficient at utilizing its assets to generate profits. Other profitability ratios, such as Return on Equity (ROE) and Profit Margin, are frequently used to assess a company's ability to generate profits from equity and sales (Brigham and Ehrhardt, 2017). In this study, profitability was measured using the ROA formula:

$$\text{Return on Asset} = \frac{\text{Revenue}}{\text{Total Asset}} \quad (3)$$

Inventory Intensity

Inventory intensity is a component of assets, measured by comparing the total inventory to the total assets owned by the company. It is part of the capital intensity ratio, which represents the company's activities, particularly those related to inventory investment (Kusumaningarti, Selviasari, and Wahyuningsih, 2023). In this study, inventory intensity was measured using the proxy calculation described by Nadhifah 2023) with the following formula:

$$\text{Inventory Intensity (INVINT)} = \frac{\text{Total Assets}}{\text{Total Inventory}} \quad (4)$$

Capital Structure

Capital structure refers to the proportion of external capital that a company uses to run its business activities (Putri, 2019). As not all companies are free from funding issues, the funds received may come from either internal or external sources. In this study, capital structure is measured using the Debt-to-Equity Ratio (DER), as per Hamdi (2018) and Junaidi et. al., (2023). The DER indicates how a company is financed through equity capital and long-term debt. It is often of interest to investors, as it reflects how much external capital is borrowed by the company to generate net profits (Sari and Irawati, 2021)

$$\text{Debt to Equity Ratio (DER)} = \frac{\text{Total Debt}}{\text{Total Equity}} \quad (5)$$

Hypothesis Development

The Influence of Sales Growth on Tax Aggressiveness

Sales growth has a strong influence on the market price of outstanding shares. This is considered to be a key performance indicator for a company. However, sales growth can lead to conflicts of interest between shareholders and company management because of differing priorities. Management may adopt strategies to maximize profit targets, while shareholders may not support such measures, as they could negatively affect a company's reputation (Maulana, 2020). Sales growth is closely related to agency theory, in which management tends to engage in practices that lead to aggressive tax behavior to achieve higher profits (Prastiwi, 2022). When a company's sales increase, profits are also likely to increase. This encourages management to adopt tax aggressiveness because the larger profits generated by the company result in higher tax liabilities. Previous studies (Susanti and Satyawan, 2020) and (Prastiwi, 2022) reveal that sales growth negatively affects tax aggressiveness. Based on the above discussion, the relationship between sales growth and tax aggressiveness can be formulated as the following hypothesis:

H1 : Sales growth significantly influences tax aggressiveness.

The Influence of Profitability on Tax Aggressiveness

Companies with high profitability tend to be more aggressive in tax planning. Companies with higher profits have greater incentives to optimize their tax obligations to reduce their tax burden. They are more likely to explore legal tax-avoidance strategies (Desai and Dharmapala, 2009). Successful and profitable companies usually have better access to tax advisors and resources, enabling them to undertake more complex tax plans. Consequently, they are willing to take greater risks in their tax policies, as they have more assets to protect and can bear higher risks if involved in tax disputes (Lanis, Richardson, and Finance, 2018). Highly profitable companies send positive signals to the market, investors, and other stakeholders regarding their performance and financial stability. Such companies tend to have greater financial and non-financial resources to engage in more aggressive tax planning. Signaling theory implies that companies with high profits and strong financial solidity often provide positive signals regarding their ability to manage risks, including tax-related risks. Therefore, they are more likely to explore legal tax avoidance strategies and take advantage of the opportunities within the tax system.

H2 : Profitability significantly influences tax aggressiveness.

The Influence of Inventory Intensity on Tax Aggressiveness

Inventory intensity impacts tax aggressiveness as it measures the proportion of inventory owned by a company. The greater the company's inventory, the higher the associated maintenance and storage costs (Maulana, 2020). This situation may lead to a conflict of interest between the principal and agent regarding inventory decisions. Agents may have an incentive to maintain higher inventory levels to minimize the risk of inventory shortages that could disrupt operations, while principals tend to prefer inventory management as efficiently as possible to optimize returns on capital. As a result, aggressive tax avoidance practices can become a strategy for managers to offset the negative impact of inefficient inventory decisions by suppressing reported profits (Suprihatin and Mahardini, 2021), Previous studies by (Maulana, 2020) and Isnanto et. al., (2019), support the notion that inventory intensity positively influences tax aggressiveness. Additionally, Nadhifah 2023) and Suprihatin and Mahardini (2021) found that inventory intensity affects tax aggressiveness. Based on this, the hypotheses are as follows:

H3 : Inventory intensity significantly influences tax aggressiveness.

The Influence of Capital Structure on Tax Aggressiveness

Capital structure is the ratio of the amount of debt taken on to fund ongoing operations. Higher debt levels imply higher interest expenses that the company must bear. These interest expenses reduce pre-tax profits, thereby

lowering the amount of tax payable (Putri, 2019). This indicates that capital structure is related to agency theory as it can influence managerial incentives. The primary goal of agency theory is to address potential conflicts of interest between the principal and the agent (Jensen and Meckling, 1976). Managers may have different priorities than owners, as they might prefer equity funding due to the absence of repayment obligations, unlike debt. However, owners may favor debt to leverage financial benefits. Decisions regarding the choice between debt and equity funding reflect the dynamics of the agency relationships within a company. Thus, companies with higher levels of capital structure are better positioned to avoid taxes through financial transactions.

This study is supported by previous research by Hamdi (2018) and Junaidi (2023), who found that capital structure significantly and negatively affects tax aggressiveness. However,Putri (2019) suggests that capital structure does not influence tax aggressiveness, and the hypothesis is formulated as follows:

H4 : Capital structure significantly influences tax aggressiveness.

RESEARCH METHOD

The type of research used in this study was quantitative with a causal associative approach. Associative research aims to determine the relationship between two or more variables, and the results can be used to develop theories that explain, predict, or control a phenomenon (Rahmawati and Irawati, 2022)). This study employs a causal associative approach to understand the cause-and-effect relationship between sales growth, profitability, inventory intensity, and capital structure on tax aggressiveness. The regression equation is as follows:

$$Y = a + \beta 1\ X1 + \beta 2\ X2 + \beta 3\ X3 + \beta 4\ X4\ e \quad (6)$$

annotation:

Y : Tax Aggressiveness (ETR)
X1 : sales growth (SG)
X3 : profitability (ROA)
X4 : inventory intensity (INVINT)
X4 : capital structure (DER)

This study was conducted on the Indonesia Stock Exchange (IDX), with data accessible via the website https://www.idx.co.id. This research focuses on the energy sector companies listed on the IDX, located at Jl. Jend. Sudirman Kav 52-53, South Jakarta 12190, Indonesia, with a contact number of +6221 515 0515. This location was chosen because it is Indonesia's first stock exchange and is considered to have comprehensive and well-organized financial data and company information. The study population includes 74 energy sector companies listed on the IDX from 2018 to 2022. The sample consisted of 105 data points from 21 energy sector companies listed on the IDX over the 2018–2022 period. Purposive sampling was used, with the criteria that companies must have complete financial reports, use the rupiah currency, and report profits during the observation period. The data analysis techniques included descriptive statistics and panel data regression analysis performed using the EViews application software.

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Tax aggressiveness, proxied by the Effective Tax Rate (ETR), has a minimum value of 0.001700 in the Transcoal Pacific Tbk. (TCPI) in 2019. The maximum value was 3.0418, which was recorded in the TBS Energi Utama Tbk. (TOBA), in 2019. The average value of tax aggressiveness is 0.300721, with a standard deviation of 0.370241. Because the standard deviation is larger than the average, it can be concluded that tax aggressiveness in this study varies, fluctuates, or is widely distributed. Sales growth had a minimum value of -0.390200, observed at Harum Energy Tbk. (HRUM) in 2020, and a maximum value of 1.966000, also recorded in Harum Energy Tbk. in 2022. The average value of sales growth was 0.221059, with a standard deviation of 0.395004. Because the standard deviation is larger than the average, it can be concluded that sales growth in this study is quite varied. Profitability had a minimum value of -0.015800, as observed in Energi Mega Persada Tbk. (ENRG) in 2018 and a maximum value of 0.694900, recorded in the Golden Energy Mines Tbk. (GEMS) by 2022. The average value was 0.136373 with a standard deviation of 0.163672. Because the standard deviation is larger than the average, it can be concluded that the profitability in this study is quite varied.

Inventory intensity had a minimum value of 0.000200, as observed in Rukun Raharja Tbk. (RAJA) in 2020 and a maximum value of 0.310500, recorded in Petrosea Tbk. (PTRO), by 2022. The average inventory intensity was 0.043223 with a standard deviation of 0.046748. Because the standard deviation is larger than the average, it

can be concluded that inventory intensity in this study varies or is widely distributed, indicating a fairly varied spread. The capital structure has a minimum value of 0.096500, as observed in the Harum Energy Tbk. (HRUM) in 2020 and a maximum value of 7.526300, recorded in Energi Mega Persada Tbk. (ENRG), in 2018. The average value of capital structure was 0.961748, with a standard deviation of 0.967740. Because the standard deviation is larger than the average, it can be concluded that the capital structure in this study varies or is widely distributed, indicating a fairly varied spread.

Table 1. Descriptive Analysis Results

	ETR	INVINT	SG	DER	ROA
Mean	0.300721	0.043223	0.221059	0.961748	0.136373
Median	0.234600	0.030000	0.120100	0.811800	0.068600
Maximum	3.041800	0.310500	1.966000	7.526300	0.694900
Minimum	0.001700	0.000200	-0.390200	0.096500	-0.015800
Std. Dev.	0.370241	0.046748	0.395004	0.967740	0.163672
Skewness	5.212643	2.507619	1.323001	4.192100	1.936828
Kurtosis	34.64710	12.46247	5.754089	25.77580	6.069834
Observations	105	105	105	105	105

Source: Data processed, 2024

Panel Data Regression Model Selection Test

From the Panel Data Regression Model Selection Test for the Chow Test, which is a model selection test between the Common Effect Model and the Fixed Effect Model, the result is 0.2388, which is greater than 0.05, so the selected model is the Common Effect Model (CEM). The next step is the Lagrange multiplier (LM) test, which is a selection test between the Common Effect Model and the Random Effect Model; the result is 0.4800, which is greater than 0.005, so that the selected sample is also the Common Effect Model. Based on the results of both tests, the Common Effect Model was selected for this study.

Table 2. Results of Panel Data Regression Model Testing

Panel Data Model	Testing	Score	Selected Models
Chow Test	CEM VS FEM	0.2388 > 0.05	CEM
Lagrange Multipliers (LM) Test	CEM VS REM	0.4800> 0.05	CEM

Source: Data processed, 2024

Classical Assumption Test

The classical assumption tests used in this study were multicollinearity, heteroscedasticity, and autocorrelation. The reason for not using the normality test is because it uses the assumption of the central limit theory where the number of observations is more than 30, so there is no need to conduct a normality test and can be ignored (Ajija, Sari, Setianto, and Primanti, 2011)

Table 3. Classical Assumption Test Results

No	Test Name	Result	Information
1	Multicollinearity Test	correlation between independent variables < 0.8	Free from multicollinearity assumption
2	Heteroscedasticity Test	Obs*R-squared Prob. Chi-Square value is greater than the significant value of 0.05	Free from heteroscedasticity assumption
3	Autocorrelation Test	1.7411 < 1.982030 < 2.2589	Free from autocorrelation assumption

Source: Data processed, 2024

The results of the Classical Assumption Test, which consists of the multicollinearity test, heteroscedasticity test, and autocorrelation test, prove that the research data is free from all violations of assumptions and meets the Best Linear Unbiased Estimation (BLUE) criteria.

Data Regression Analysis Test

From the equation, the following points can be explained: (1) The equation's constant value of 0.150060 indicates that if the variables inventory intensity, sales growth, and capital structure are all 0, the tax aggressiveness level will be 0.150060, disregarding the error value; (2) The sales growth coefficient value of -0.003851 means that if the sales growth variable increases by 1 unit, assuming other variables remain constant and disregarding the error value, tax aggressiveness will decrease by 0.003851 units; (3) The profitability coefficient value, proxied by Return on Assets (ROA), is -0.135927, which means that if the ROA variable increases by 1 unit, assuming other

variables remain constant and disregarding the error value, tax aggressiveness will decrease by 0.135927 units; (4) The inventory intensity coefficient value of 0.425106 indicates that if the inventory intensity variable increases by 1 unit, while other variables remain constant and disregarding the error value, tax aggressiveness will increase by 0.425106 units; (5) The capital structure coefficient value of 0.157708 means that if the capital structure variable increases by 1 unit, assuming other variables remain constant and disregarding the error value, tax aggressiveness will increase by 0.157708 units.

Table 4. Results of Panel Data Regression Analysis Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.150060	0.065682	2.284651	0.0244
SG	-0.003851	0.100229	-0.038418	0.9694
ROA	-0.135927	0.255005	-0.533037	0.5952
INVINT	0.425106	0.744334	0.571123	0.5692
DER	0.157708	0.035835	4.400968	0.0000

R-squared	0.183808	Mean dependent var	0.300721
Adjusted R-squared	0.151160	S.D. dependent var	0.370241
S.E. of regression	0.341112	Akaike info criterion	0.733237
Sum squared resid	11.63574	Schwarz criterion	0.859616
Log likelihood	-33.49492	Hannan-Quinn criter.	0.784448
F-statistic	5.630030	Durbin-Watson stat	2.401410
Prob(F-statistic)	0.000396		

Source: Data processed, 2024

From Table 6, the value of the coefficient of determination (Adjusted R-squared) was 0.151160 or 15%. This can be interpreted as the contribution of the independent variable affecting the dependent variable by 15%, while the remaining 85% is explained by other variables not included in this study. Table 6 also shows that the F-statistic value (5.630030) > F-table (2.46), with a probability value of 0.000396 < 0.05. These results indicate that sales growth, profitability, inventory intensity, and capital structure have significant effects on tax aggressiveness.

For the partial significance test (t-test), a significance level of 0.05 and df was used to test the influence. Based on the results of the t-test, comparing the t-table value and the significance value can be described as follows: (1) Sales Growth (SG) has a t-statistic value of (1.931852) < t-table (1.98373) and a probability of 0.0562 > 0.05. Thus, H1 is rejected, meaning that Sales Growth does not have a significant partial effect on tax aggressiveness; (2) profitability (ROA) has a t-statistic value of -0.533037 < t-table (1.98373) and a probability of 0.5952 > 0.05. It can be concluded that H2 is rejected, meaning that Profitability does not have a significant partial effect on tax aggressiveness, (3) Inventory Intensity (INVINT) has a t-Statistic value of (0.571123) < t-table (1.98373) and a probability of 0.5692 > 0.05. Thus, H3 is rejected, meaning that Inventory Intensity does not have a significant partial effect on tax aggressiveness, and (4) Capital Structure (DER) has a t-statistic value of (4.400968) > t-table (1.98373) and a probability of 0.0000 < 0.05. Thus, H4 is accepted, meaning that Capital Structure has a positive and significant partial effect on tax aggressiveness.

Research Discussion

The Effect of Sales Growth on Tax Aggressiveness

Sales growth does not have a significant partial effect on tax aggressiveness for energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2018–2022 period. This indicates that even if a company experiences an increase or decrease in sales growth, this does not directly impact the level of tax aggressiveness employed by the company. This can be explained by considering that, although sales growth is an indicator of a company's performance, tax obligations are based on applicable tax regulations, which are not solely dependent on sales levels. In other words, regardless of whether a company's sales increase or decrease, the obligation to pay taxes remains, and the company must ensure that taxes are paid in accordance with regulations, regardless of sales fluctuations. Additionally, companies in the energy sector may face stricter regulations and greater oversight regarding tax management, making them less likely to engage in tax aggressiveness despite sales changes. In this context, sales growth is not a significant factor in determining a company's aggressiveness in planning or managing its tax obligations.

This finding is inconsistent with agency theory, as research shows that the level of profit earned by a company does not necessarily indicate whether the company will engage in tax aggressiveness. Such actions are

considered highly risky for companies, as they may impact business activities, leading managers to avoid these risks. Conversely, when a company experiences high sales growth, it tends to comply with its tax obligations, as it faces no difficulties in paying taxes (Prastiwi, 2022). These findings align with those of Azzahra (2023), Nisadiyanti and Yuliandhari, (2021), and Irawati, Akbar, Wulandari, and Barli (2020), who also concluded that sales growth does not influence tax aggressiveness.

The Effect of Profitability on Tax Aggressiveness

Although profitability is often associated with tax aggressiveness, in some cases, companies with high profits choose to be more cautious about their tax policies to maintain a good reputation and public trust. One factor that may explain the lack of influence of profitability on tax aggressiveness is the potential variation in corporate strategies for managing tax obligations, even when a company has a high level of profitability. Some companies may opt to comply with tax regulations despite having substantial profits to preserve their reputations and maintain good relationships with the government and investors.

Research conducted by Ardyansah and Zulaikha (2014), Irawati et al. (2020), and Natalya (2018) indicates that profitability does not always have a significant impact on tax aggressiveness. They argue that companies with high profits tend to comply with tax obligations because engaging in tax avoidance practices poses a high risk that could harm the company's image and erode market trust. This finding aligns with signaling theory, which suggests that companies with high profitability send positive signals to the market and investors regarding their financial stability and sustainability. Therefore, while aggressive tax planning has the potential to reduce tax burdens, highly profitable companies may prefer not to take risks that could damage their long-term corporate image.

The Effect of Inventory Intensity on Tax Aggressiveness

Inventory intensity does not have a significant partial effect on tax aggressiveness in the energy sector of the Indonesia Stock Exchange (IDX) during the 2018–2022 period. This indicates that a company's investment in inventory, whether large or small, is not a determining factor for the amount of tax paid by the company (Susanti and Satyawan, 2020). This finding can be explained through the lens of the agency theory, which identifies potential conflicts of interest between agents (company management) and principals (shareholders). In this context, conflicts may arise if management makes decisions detrimental to principals, such as using inventory to increase tax aggressiveness, which could jeopardize a company's stability and stock value. However, since agents often act as shareholders, they are unlikely to take risks that could harm their personal interests. Consequently, management tends to avoid using inventory as a tool for tax aggressiveness, recognizing the long-term risks associated with such actions.

This study aligns with the findings reported by Kusumaningarti et al. (2023), Andhari and Sukartha (2017), and Fitria (2018), who also demonstrate that inventory intensity does not significantly influence tax aggressiveness. These results suggest that, while inventory may be part of a company's asset management strategy, it is not a strong enough factor to affect decisions on tax aggressiveness. In the IDX energy sector, companies are more likely to rely on other variables such as profitability or capital structure to determine their tax strategies.

The Effect of Capital Structure on Tax Aggressiveness

Capital structure has a positive and significant effect on tax aggressiveness in the energy sector of the Indonesia Stock Exchange (IDX) during 2018–2022. This indicates that the greater the debt held by a company, the higher is the likelihood of engaging in aggressive tax planning, particularly by utilizing interest expenses to reduce tax liabilities. Generally, debt in a company's capital structure allows for a reduction in taxable income through interest expense deductions. This aligns with the findings of Putri (2019), who states that companies with higher debt levels tend to have lower tax burdens because they can reduce taxable profits through interest expenses. Consequently, companies are encouraged to engage in more aggressive tax planning by leveraging higher debt to optimize tax benefits. A debt-oriented capital structure provides companies with flexibility in tax planning, ultimately influencing tax aggressiveness in the energy sector.

This result supports the agency theory, highlighting the conflict of interest between agents (managers) and principals (shareholders). Principals prefer equity financing, as they do not entail repayment obligations, such as debt. However, managers may favor debt financing to take advantage of their financial leverage. Thus, decisions regarding the choice between debt and equity may reflect agency dynamics within the company. Companies with higher debt ratios in their capital structures are more likely to engage in tax avoidance through financial transactions. The findings also align with signaling theory, suggesting that companies opting to use debt signals have good prospects and the ability to manage debt obligations, thereby sending positive signals about their financial management and tax-planning capabilities. This reinforces the notion that a higher capital structure (with more

debt) can increase tax aggressiveness as companies aim to minimize tax payments by utilizing interest deductions. This research is consistent with studies by Hamdi (2018) , Junaidi et. al., (2023) which also found that capital structure significantly influences and negatively impacts tax aggressiveness.

CONCLUSION

Based on the analysis and testing results, the following conclusions can be drawn (1) Sales growth, profitability, inventory intensity, and capital structure simultaneously influence tax aggressiveness in the energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2018–2022 period, (2) Sales growth does not have a significant partial effect on tax aggressiveness in the energy sector, indicating that changes in sales do not influence the tax strategies implemented by companies, (3) Profitability does not have a significant partial effect on tax aggressiveness in the energy sector, signifying that a company's profit is not directly related to the level of tax aggressiveness they choose, (4) Inventory intensity does not have a significant partial effect on tax aggressiveness in the energy sector, indicating that the amount of inventory held by a company does not affect their tax policies, and (5) Capital structure has a positive and significant partial effect on tax aggressiveness in the energy sector, suggesting that the higher the use of debt in a company's capital structure, the greater the likelihood of adopting aggressive tax planning measures to reduce tax burdens.

Recommendations

Based on the conclusions outlined, the following recommendations are provided: (1) for future researchers, it is recommended to include additional independent variables in subsequent studies that may influence tax aggressiveness to expand the understanding of factors affecting corporate tax policies; (2) for companies, exercise caution should be exercised when planning tax strategies to avoid engaging in actions that may be categorized as tax evasion, which carries legal risks; and (3) for the government, it is advisable to enhance oversight and enforcement of tax regulations to prevent misuse of tax policies by taxpayers attempting to unlawfully reduce their tax liabilities.

Limitation

This study has several limitations: (1) Data Normality: The test results indicate that the data are not normally distributed. To address this issue, the Central Limit Theorem (CLT) was applied; (2) Limited Independent Variables: This study included only one independent variable that significantly influenced tax aggressiveness, limiting the findings to the factors tested; and (3) the Coefficient of Determination: The results show that only 15% of the variance in tax aggressiveness can be explained by inventory intensity, sales growth, and capital structure. This finding indicates that many other variables that potentially influence tax aggressiveness remain unidentified in this study.

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