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Industrial, managemental, and company-size determinants of tax avoidance in the coal mining sector

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ARTICLE HISTORY	*ABSTRACT*
Received: July, 31st 2024 *Revised: August, 15th 2024* *Accepted : September, 25th 2024* ***Keywords :*** *company size* *institutional ownership* *managerial ownership* *tax avoidance*	*This study aims to determine whether there is an influence of institutional ownership, independent managerial ownership and company size on tax avoidance in coal sub-sector mining companies listed on the Indonesia Stock Exchange for the period 2017-2022. This study uses quantitative descriptives. The sampling technique used is purposive sampling with a total sample obtained of 8 companies within 6 years so that 48 samples were obtained after the criteria data were taken. The analysis used is panel data analysis using Eviews 9 software. The results of the analysis test state that the variables of institutional ownership, independent managerial ownership, and company size have an influence on tax avoidance simultaneously. Partial testing states that the variables of institutional ownership and independent managerial ownership do not have a positive effect on tax avoidance, while company size affects tax avoidance.*

INTRODUCTION

Tax is state revenue derived from mandatory taxes imposed on individuals and enterprises, often enforced through coercion (Latofah & Harjo, 2020). Nonetheless, several taxpayers, including individuals and organizations, engage in legitimate tax evasion by relocating revenues to jurisdictions with lower tax rates, which ultimately detracts from Indonesia's interests. Tax avoidance, as articulated by several scholars, refers to a company's endeavour to mitigate its tax liabilities, so enabling the business to retain a substantial quantity of cash without incurring further tax obligations to the government (Firmansyah et al., 2021).

The effect of tax avoidance on tax collection in Indonesia is evident in the revenue earned from taxes. The government must effectively manage this cash as it is utilized to promote the nation's growth and development (Safuan et al., 2022). Consequently, commercial entities use ambiguities in tax legislation to evade tax obligations. In the 2021-2022 State Budget (APBN), government tax revenues rose; nevertheless, the target realization and percentage established by the government declined in 2019-2020, illustrating the targets and accomplishments of Indonesian tax revenues from 2017 to 2022. Tax realization from investments decreased to 84.44 trillion IDR in 2019, despite the aim of 1,577.56 trillion IDR for that year. In 2017, the tax realization rate was 89.68 per cent, but in 2018 it increased to 92.24 per cent. These achievement figures declined relative to the prior year. The National Awakening Party faction asserts that the tax collection objective has not been achieved. In the last 11 years, a tax collection shortfall has occurred, and tax rates were reduced in 2019. The most significant fall transpired in 2020 due to the deterioration of the taxpayer's economy, prompted by extensive social restrictions (PSBB) in Indonesia aimed at curbing the global spread of the COVID-19 virus.

Additionally, PT Adaro Energy distributes coal at a specific low price to its affiliate, Coaltrade Service International. Subsequently, the coal is marketed to other entities at an elevated price. The profits from this activity will be recorded in Singapore due to its lower tax rate. This is undertaken to reduce the tax liability incurred in Indonesia. The Global Witness financial analysis indicates that Coaltrade Services International found Singapore's average annual tax debt rate to be at 10.7%, far lower than Indonesia's average annual tax rate of 50.8% of the benefits obtained (Ganiarti, 2022).

Institutional ownership is the primary determinant of tax evasion. Institutional ownership refers to the possession of shares by institutions that provide finance, including the company's equity capital (Rizqi & Pratiwi, 2024). As the preceding argument shows, elevated institutional ownership leads to increased management oversight. Institutional ownership can enhance supervisory efficacy within a sector, as it is perceived to effectively oversee and regulate managerial decisions and policies, hence potentially diminishing the likelihood of tax avoidance activities. He concluded that companies with substantial institutional ownership would be more proactive in reducing their tax reporting, indicating that institutional ownership does not effectively mitigate tax avoidance activities (Pratomo & Rana, 2021).

The second factor influencing tax avoidance is managerial ownership, which is assessed by the proportion of shares held by managers, allowing them to engage in company policies. A higher proportion of managerial ownership in a company correlates with increased efforts by managers to optimize performance in pursuit of the company's objectives (Salehi et al., 2022). Managerial ownership can lead to a conflict of interest between owners and management. Interest discrepancies should not arise when management concurrently holds ownership or shareholder status in the company. Management ownership aligns the objectives of management and shareholders, as management is incentivized to undertake actions that enhance benefits for both parties. This alignment may also lead to an increased potential for directors to engage in tax avoidance strategies (Ashari et al., 2020).

Company size is the third factor influencing tax avoidance. Company size serves as a comparative metric for assessing the scale of a business. Large companies often possess intricate business structures, which may attract government scrutiny. The substantial total assets held by the company will enhance its realization performance. As company size increases, the complexity of its transactions also escalates. This enables companies to exploit existing loopholes for tax avoidance in their transactions. This is influenced by the company's capacity to reallocate resources efficiently and effectively, alongside improved and more profitable tax planning. Large corporations typically possess more substantial resources and higher profit margins compared to smaller enterprises.

This results in larger corporations facing an increased tax burden. This leads management to implement tax avoidance strategies to reduce the company's tax liability. A higher level of profit increases the likelihood of management engaging in tax avoidance practices. Study before aims to investigate (1) the impact of institutional ownership on tax avoidance, (2) the influence of managerial ownership on tax avoidance, (3) the effect of company size on tax avoidance, and (4) the simultaneous effects of institutional ownership, managerial ownership, and company size on tax avoidance. This study's results aim to assist companies in optimizing and effectively making decisions regarding institutional ownership,

managerial ownership, and company size (Chandra & Cintya, 2021).

LITERATURE REVIEW

Agency theory

Agency theory posits a relationship between the principal, who grants power, and the agent, who receives it. Agency theory serves as the foundational framework for corporate business practices to date. This theory posits a functional relationship between the power-granting party (the owner or leader) and the power-receiving party (the agent or manager) (Jensen & Meckling, 2019). Agency theory is related to the tax avoidance actions undertaken by companies. This situation arises from differing interests due to information asymmetry between the principal and the agent. The company will seek to enhance corporate governance in response to information asymmetry.

Implementing shared ownership for managers to establish managerial ownership, alongside developing tax policies aimed at maximizing company profits. Variations in interests between company ownership and management can influence organizational performance, particularly in relation to tax policy (Alkurdi & Mardini, 2020). The company will implement various policies to enhance performance, including measures to reduce the tax burden. According to agency theory, the resources possessed by the company may be utilized by the agent to enhance the agent's performance compensation, specifically by minimizing the company's tax liability to improve overall company performance (Aluchna, 2023).

Signaling theory

Signaling Theory highlights the significance of information provided by companies in relation to external investment decisions. Information is a crucial component for investors and business professionals as it offers records and descriptions of past, present, and future circumstances, thereby directly influencing the vitality of the company (Blanchard et al., 2012; Komara et al., 2020).

This hypothesis posits that signaling theory highlights the significance of information provided by companies in influencing the investment decisions of external stakeholders (Huang, 2022). Company-issued announcements serve as signals for investors' decision-making. Typically, managers employ signaling theory to convey positive signals or optimistic expectations to the public. The signal is anticipated to be understood as company managers expressing perspectives that enhance investor welfare. The explanation above indicates that signaling theory serves as a mechanism for companies to convey signals to users of financial reports through information disclosed via institutional ownership. The presence of institutional ownership, particularly from government entities, influences stock prices and offers insights for companies aiming to reduce tax avoidance (Dakhli, 2022). Managerial ownership can lead to a conflict of interest between owners and management. Interest discrepancies should not arise when management simultaneously holds ownership or shareholder status in the company. The relationship between signals and company size serves as a benchmark for categorizing businesses, specifically small businesses, based on criteria such as gross receipts, asset gross receipts, shares, and total sales. Company size is classified into small, medium, and large

categories based on the company's stock market value (Sari et al., 2022).

Tax avoidance

This study calculates tax avoidance using the effective tax rate (CETR) formula. The effective tax rate (CETR) serves as a measure due to its reflection of the consistent disparity between book profit and fiscal profit (Sandy & Lukviarman, 2015). The effective tax rate is determined by dividing the total tax burden of the company by its income tax. Calculation prior to profit realization

Managerial Ownership

Management refers to the proportion of shares held by individuals in leadership roles who are actively involved in the decision-making processes of the company (Nahum & Carmeli, 2020). Management ownership refers to the possession of shares in a company by its management, including directors, commissioners, and employees holding special requirements shares (Ningrum, 2021).

Company Size

A company's size serves as a benchmark for categorizing it as either a large corporation or a small business based on specific criteria such as gross receipts, asset gross receipts, shares, and total sales (Januwito, 2022). Company size denotes the extent to which a company can be segmented (Crouzet & Mehrotra, 2020). Companies are categorized into small, medium, and large groups according to their stock market value. This study measures company scale using the logarithm of total assets, as the total assets amount to tens of trillions. The dependent and independent variables are assessed using ratios. Consequently, company size is quantified by the logarithm of total assets.

METHODS

This study employs a quantitative research methodology, utilizing secondary data from the financial statements of mining companies listed on the Indonesia Stock Exchange for 2017-2022. Data for the research was sourced from the company's annual report accessed via www.idx.co.id. This study utilizes figures from financial statements as data. Quantitative research is a positivist method, focusing on specific populations or samples. It involves data collection through research instruments and employs quantitative or statistical analysis to test established hypotheses (Sugiyono, 2017).

Population refers to a defined group of objects or subjects with specific qualities and characteristics identified by researchers for study, leading to subsequent conclusions. This study focuses on the coal sub-sector mining companies, specifically 43 companies. The population meeting the criteria will serve as the sample. The sample represents a subset of the entire population. The study employs purposive sampling to select coal sub-sector mining companies that have published complete financial reports and possess comprehensive data relevant to the variables under investigation, covering the period from 2017 to 2022. The criteria employed for sample selection are outlined as follows: mining companies in the coal sub-sector listed on the Indonesia Stock Exchange from 2017 to 2022, possessing complete audited annual financial reports for the same period, firms that did not incur losses from 2017 to 2022, companies utilizing foreign currency (dollars) and rupiah consistently from 2017 to

2022, organizations possessing comprehensive data concerning the variables utilized in the research.

This study employs the recording method for data collection, utilizing company records or documents (secondary data) alongside bibliographic research from various literature and other pertinent sources related to tax evasion. Secondary data encompasses data derived from annual reports. This encompasses information regarding mining firms in the coal subsector listed on the Indonesia Stock Exchange (IDX) from 2017 to 2022.

RESEARCH RESULT

Descriptive statistical analysis

Descriptive statistics are used to provide an overview of the research data.

Table 1. Descriptive Test

	TAX	KI	KM	UP
Mean	0.268857	0.678891	0.087993	29.21735
Median	0.208692	0.726045	0.002325	29.45943
Maximum	0.864484	0.907412	0.674040	32.76456
Minimum	0.057993	0.100001	5.700007	23.51703
Std. Dev.	0.203903	0.22408	0.201580	2.444039
Observations	48	48	48	48

This research utilizes descriptive statistical analysis to evaluate the influence of tax planning variables, capital structure, and financial performance on company value (Y). Table 1 displays the findings from the descriptive statistical analysis, including the subsequent information. The mean value of the tax avoidance variable (TAX) is 0.268857. The highest recorded value is 0.864458, with a base value of 0.057993 and a standard deviation of 0.203903, based on 48 data points from 8 mining companies. The mean value of the Institutional Ownership (KI) variable is 0.678891. The dataset comprises 48 entries from eight mining companies, resulting in a standard deviation of 0.224508, a maximum value of 0.90741, and a minimum value of 0.10001. This research comprises 48 observations gathered from 8 mining companies. The Managerial Ownership (KM) variable has an average value of 0.087993, a maximum of 0.674040, a minimum of 5.73E-07, and a standard deviation of 0.201580. The average of the Company Size (UP) variable is 29.21735. The analysis of 48 observations from 8 mining companies indicated a standard deviation of 2.444039, with a maximum value of 32.76456 and a minimum of 23.51703.

t-test

To determine whether the independent variables (Institutional Ownership, Managerial Ownership, and Company Size) have a partial effect or not on the dependent variable (tax avoidance), the individual parameter significance test (t-test) is used. If the level of consistency is carried out with the rule, if the absolute value ≥ 0.05, the H_0 speculation is rejected, which means the relapse coefficient is not important and if the absolute value ≤ 0.05, the H1 speculation is accepted, which means the relapse coefficient is important.

Table 2. t-test result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.737.980	0.484599	5.649.989	0.0000
ETR	-1.118.387	0.893766	-1.251.321	1,486111111

DER	-0.079766	0.087856	-0.907922	2,54375
ROA	4.584.591	1.995.253	2.297.749	0,165972222

A value of 0.1364 or greater than 0.05 indicates that the Institutional Ownership (KI) variable is significant. Then, H1 is accepted. This indicates that Tax Avoidance is not affected by the Institutional Ownership variable. The Managerial Ownership (KM) variable is 0.2834 > 0.05. Therefore, H1 is accepted. This indicates that Tax Avoidance is not significantly affected by the Managerial Ownership variable. The Company Size (UP) factor is 0.0049 < 0.05. Therefore, H1 is rejected. This indicates that Tax Avoidance is significantly affected by the Company Size variable.

F Test

The significance test (F test) decides whether all regression factors used in this review affect the dependent variable. The dependent variable is affected if the significance level is less than 0.05.

Table 3. F test result

R-squared	0.379616	Mean dependent var	0.26887
Adjusted R-squared	0.211944	S.D. dependent var	0.203903
S.E. of regression	0.181010	Sum squared resid	1.212284
F-statistic	2.264043	Durbin-Watson stat	2.251133
Prob(F-statistic)	0.034888		

The F-statistic value obtained is 0.034888 > 0.05, as shown by the F-test results in the table above. This can be interpreted as meaning that H1 is accepted. Tax avoidance is simultaneously influenced by managerial ownership, institutional ownership, and company size.

The Effect of Institutional Ownership on Tax Avoidance

The Impact of Institutional Ownership on Tax Avoidance The research results in Table 3 indicate that the probability value for the Institutional Ownership variable is 0.1364, exceeding the threshold of 0.05. Consequently, it can be concluded that H1 is accepted, indicating that institutional ownership does not influence tax avoidance. The company does not evade taxes due to the significant Institutional Ownership Value, as the research findings indicate. Institutional ownership exerts a negative effect (Pratomo & Rana, 2021). Consequently, institutional ownership within the company does not effectively mitigate tax avoidance.

The Effect of Managerial Ownership on Tax Avoidance

The Institutional Ownership variable has a probability value of 0.2834, greater than 0.05, as shown in Table 2. So it can be concluded that H1 is accepted, which means that Managerial Ownership does not affect tax avoidance. The study results show that the value of Managerial Ownership does not affect the company's ability to avoid paying taxes. This is in contrast to the freedom of managers to participate in making company policies. The greater the managerial responsibility of an organization, the more leaders will try to improve their performance to achieve organizational goals. Research shows that managerial ownership can have a significant effect on tax avoidance.

Leaders' high or low level of share ownership shows the magnitude of managerial

influence on company policy. Of course, when making decisions, the company will consider the positive and negative impacts of previous decisions on the company's running (Guluma, 2021). The strategy implemented contains an obligation to help all parties involved. Management will almost certainly avoid doing things that can harm the business, such as avoiding taxes, because it can damage its reputation. As a result, rather than engaging in activities that threaten the business's reputation, managers usually emphasize improving the company's performance in achieving its vision and mission.

The Effect of Company Size on Tax Avoidance

The Company Size variable exhibits a probability of 0.0049, which is less than the threshold of 0.05, as indicated in Table 2. Consequently, it is concluded that H1 is accepted, indicating that company size influences tax avoidance. Research before indicates that company size positively influences tax avoidance (Chandra & Cintya, 2021). The findings suggest that the size of a company impacts its strategies for minimizing tax liabilities. Larger organizations tend to exhibit greater complexity in their transactions. This enables businesses to exploit existing legal loopholes to evade taxes on each transaction conducted.

The Effect of Institutional Ownership, Managerial Ownership and Company Size on Tax Avoidance

The results in Table 3 indicate that the F-statistic value is greater than or equal to 0.05. This suggests that H1 is accepted and that Institutional Ownership, Managerial Ownership, and Company Size collectively influence tax avoidance. This indicates that increased managerial ownership correlates with a higher tax burden for the company. Managers are encouraged to prioritize economic performance and refrain from self-serving behaviors. Additionally, the size of the company influences its strategies for tax avoidance. Moreover, an increase in managerial ownership correlates with heightened agency conflict, as managers tend to prioritize personal interests over the welfare of the company's owners.

CONCLUSION

Based on the research, the t-value of Institutional Ownership (X1) is significant at 0.1364 > 0.05. So, H1 is accepted. It can be concluded that Institutional Ownership (X1) does not significantly affect Tax Avoidance (Y). The research indicates that the t-value for Managerial Ownership (X2) is significant at 0.2834, exceeding the threshold of 0.05. H1 has been accepted. Managerial Ownership (X2) does not significantly affect Tax Avoidance (Y). The research indicates that the t-value for Company Size (X3) is significant at 0.0049, less than 0.05. H1 has been rejected. Company Size (X3) significantly influences Tax Avoidance (Y). The research findings indicated that the F-statistic value was 0.034888, which exceeds the threshold of 0.05. This may suggest that H1 is accepted. Institutional Ownership, Managerial Ownership, and Company Size collectively influence Tax Avoidance.

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