

Original Article

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The effect of return on assets, company size, and company risk on tax avoidance

Subjects
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ABSTRACT

Purpose: This study aims to determine the effect of Return On Assets, Company Size, and Company Risk on Tax Avoidance in manufacturing companies listed on the Indonesia Stock Exchange from 2017 to 2020.

Methods: This study uses an associative strategy with a causal quantitative approach and analyzes data through descriptive statistics, panel data regression, and hypothesis testing using Eviews 10. The object of research is manufacturing companies listed on the Indonesia Stock Exchange for the 2017-2020 period. The sample was taken purposively, consisting of 10 companies with 40 observations. Secondary data were obtained from the official IDX website (www.idx.co.id), and hypothesis testing was carried out using the t-test.

Findings: The results of this study concluded that (1) return on assets affects tax avoidance, (2) company size has no effect on tax avoidance, and (3) company risk affects tax avoidance.

Practical Implications: The study shows that ROA significantly affects tax avoidance, with well-performing firms being more aggressive in this strategy. Firm size has no effect, and firm risk is also related to tax avoidance, with risky management more likely to adopt this strategy. Firms should consider ROA and risk in their tax policies.

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Abstrak

Tujuan: Penelitian ini bertujuan untuk mengetahui pengaruh Return On Assets, Ukuran Perusahaan dan Risiko Perusahaan terhadap Penghindaran Pajak pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2017-2020.

Metode: Penelitian ini menggunakan strategi asosiatif dengan pendekatan kuantitatif kausal dan menganalisis data melalui statistik deskriptif, regresi data panel, serta uji hipotesis menggunakan Eviews 10. Objek penelitian adalah perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2017–2020. Sampel diambil secara purposive, terdiri dari 10 perusahaan dengan total 40 observasi. Data sekunder diperoleh dari situs resmi BEI (www.idx.co.id), dan pengujian hipotesis dilakukan dengan uji t.

Hasil: Hasil penelitian ini menyimpulkan bahwa (1) return on asset berpengaruh terhadap tax Avoidance (2) ukuran perusahaan tidak berpengaruh terhadap tax Avoidance (3) risiko perusahaan berpengaruh terhadap tax Avoidance.

Implikasi Praktis: Penelitian menunjukkan bahwa return on assets (ROA) berpengaruh signifikan terhadap penghindaran pajak, dengan perusahaan berkinerja baik lebih agresif dalam strategi tersebut. Ukuran perusahaan tidak berpengaruh, dan risiko perusahaan juga terkait dengan penghindaran pajak, di mana manajemen berisiko lebih cenderung mengadopsi strategi ini. Perusahaan sebaiknya mempertimbangkan ROA dan risiko dalam kebijakan pajak mereka.

Kata Kunci: Return On Asset, Ukuran Perusahaan, Risiko Perusahaan, Penghindaran pajak

1. Introduction

Indonesia is a developing country, and one of the factors that make it a developing country is economic factors. Taxes play an essential role in the state's life, where taxes are the largest source of state revenue. Tax obligations are not only the state's responsibility but also a right for every citizen to participate in state financing and national development. With global challenges such as tax evasion, it is essential to understand the dynamics in the tax system to increase the revenue and economic sustainability of the country. One of the pressing issues is tax avoidance, which refers to legally reducing or minimizing tax obligations by exploiting loopholes in tax regulations. Tax avoidance is a concern because it can reduce state revenues, which impacts the government's ability to finance public services. In addition, corporate risk also plays an important role; companies that face high financial risk may be more likely to avoid taxes to reduce expenses and achieve optimal profits.

The results of previous studies, such as those conducted by Damayanti & Susanto (2015), show that Return on Assets (ROA) has a significant positive effect on tax avoidance. However, other research by Cahyono et al. (2016) indicates that ROA does not affect tax avoidance. In addition, Puspita & Meiriska (2017) stated that company size positively affects tax avoidance, while Mahdiana & Amin (2020) showed the opposite. Ultimately, these findings suggest further research to explain the relationship between ROA, firm size, and firm risk on tax avoidance. Although many studies have been conducted, there is a gap in the literature that examines the interaction between these variables in one integrated study. Some studies show conflicting results, while others only focus on one aspect without considering other variables. Therefore, a more holistic approach is needed to understand these dynamics fully. Existing research also often does not accommodate local conditions, especially in the context of Indonesian companies.

This study aims to answer three questions: (1) Does Return on Assets affect tax avoidance? (2) Does company size affect tax avoidance? (3) Does company risk affect tax avoidance? By answering these questions, this study is expected to make a practical contribution to companies, tax regulators, and policymakers by offering insights into how these variables interact in the Indonesian tax context and supporting efforts to improve tax compliance in the country.

2. Theoretical Background & Hypotheses

Agency Theory

The concept of agency theory focuses on the relationship between agents and principals with different interests. In this context, individuals act in their self-interest. Managers, as agents, seek to maximize company profits to earn greater rewards for their performance. However, this action also opens up opportunities for tax avoidance practices undertaken by managers to optimize results.

Tax

according to Law No. 16 of 2009, is a mandatory contribution that must be paid by individuals or entities to the state, which is compelling and used for the benefit of society without direct reward. Despite its importance to state revenue, capital owners are often reluctant to sacrifice some profits for taxes, so taxes become a burden that reduces corporate profits. In response, companies usually develop a Tax Planning strategy to reduce the amount of tax to be paid.

Tax Avoidance

Tax avoidance is a subset of tax planning that aims to legitimately reduce tax payments, although the tax office often views it negatively. Companies use this aggressive strategy to minimize the tax burden without violating tax laws by taking advantage of existing legal loopholes, which can impact state revenue from the tax sector (Damayanti & Susanto, 2015).

Return On Assets

Return on assets (ROA) is the company's ability to generate profits from overall assets. The higher the profit, the higher the tax burden must be paid, resulting in reduced net income. The company's goal is to increase shareholder welfare by maximizing profits, so it tries to keep profits from decreasing. One way to achieve this is to take advantage of weaknesses in the tax system through tax avoidance without breaking the law (Moeljono, 2020).

Company Size

Puspita & Febrianti (2017) state that company size is a scale that shows the company's size, measured by total assets, total sales, average total sales, and total assets. Company size affects capital structure; the larger the company, the higher its sales growth, which encourages companies to issue new shares and increase the use of loans, so large companies tend to have a high level of leverage.

Company Risk

Corporate risk is a condition where the possibility that the performance of a company is lower than expected due to uncertainty in the future (Dewi & Sari, 2015).

Hypotheses

Return on Asset on Tax Avoidance

As one of the ratios, profitability can measure the company's ability to generate profits from the assets used, with one proxy, namely return on assets (ROA). ROA has a relationship between net income and the use of corporate income tax; the higher the ROA value, the better the company's performance, which leads to an increase in profits and taxes payable. This indicates the possibility of the company avoiding taxes. Research by Damayanti & Susanto (2015) revealed that return on assets affects tax avoidance, indicating that the greater the return on assets, the higher the practice of tax avoidance. Based on the theoretical framework and the results of previous studies, the first hypothesis is proposed as follows:

H1: Return on assets affects tax avoidance.

Company Size on Tax Avoidance

Company size is divided into three categories: large, medium, and trim. Large companies have total assets that show strength and positive cash flow, as well as good prospects in the long term, making them more stable and able to generate profits than small companies. Large companies can organize taxation (tax planning) and streamline the tax burden. Research by Puspita & Febrianti (2017) shows that company size affects tax avoidance, meaning that the greater the total assets and company size, the higher the tax avoidance. Based on the theoretical framework and previous research, the second hypothesis is proposed as follows:

H2: Company size affects tax avoidance.

Company Risk on Tax Avoidance

Corporate risk is the volatility of earnings that shows deviations from planned earnings, whether lower (downside risk) or higher (potential upset). The greater the standard deviation of earnings, the greater the company risk (Damayanti & Susanto, 2015). Company risk is related to the board's character, whether they are risk takers or risk averse. Generally, more prominent and riskier companies face more complex problems. If the company's risk increases, the board tends to engage in more dangerous activities, which leads to tax avoidance to minimize the tax burden and achieve optimal profit. Research by Damayanti & Susanto (2015) found that company risk affects tax avoidance. Based on the theoretical framework and previous study, the third hypothesis is proposed as follows:

H3: Company risk affects tax avoidance.

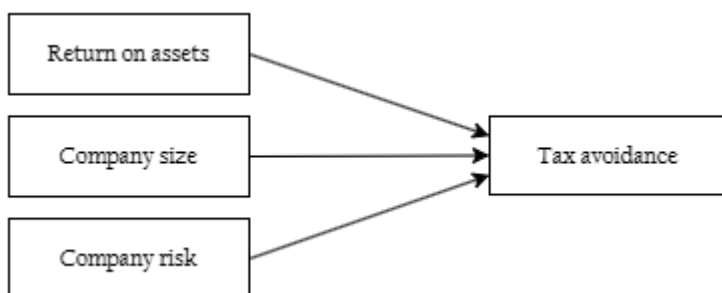


Figure 1. Research model

3. Methods

Sample procedure

The method used in this research is a quantitative method with secondary data. The population in this study includes all industrial sector manufacturing companies listed on the Indonesian stock exchange for the period 2017-2020; the sample selection in this study used purposive sampling with the following criteria: (1) Various industrial sector manufacturing companies listed on the IDX during 2017-2020 with complete data, namely companies that present financial reports ending December 31 and have been audited by independent auditors. (2) Companies that use the Rupiah currency in presenting their financial statements so that the criteria for measuring currency values are the same because the use of different currencies can cause differences in exchange rates even though conversion has been made. (3) Companies that have a positive profit value during the study year so as not to cause the Cash Effective Tax Rate (CETR) value to be biased.

Table 1. *Sample selection results*

No	Sampling Criteria	Number
1	Various industrial sector manufacturing companies listed on the IDX (2017–2020)	51
2	Companies with incomplete financial and annual reports (2017–2020)	(7)
3	Companies using foreign currencies in financial statements (2017–2020)	(5)
4	Companies that experienced losses during the 2017–2020 period	(29)
	Number of companies sampled	10
	Total observations over 4 years	40

Source: Data processed by the author

Analysis technique

Data analysis in this study uses multiple linear regression techniques with the help of Eviews 10 statistical software. The analysis process begins with a descriptive statistical test, followed by a panel data regression model fit test that includes the Chow test, Hausman Test, and LM Test. Next, hypothesis tests were conducted, including the T-test, to evaluate the effect of each variable, namely return on assets, firm size, and firm risk on tax avoidance. The coefficient of determination test was also conducted to measure how much influence the three variables have on tax avoidance compared to other variables not included in this study. The panel regression equation model used in this study is:

$$TA = \alpha + \beta_1 ROA + \beta_2 SIZE + \beta_3 RISK + e$$

4. Results and Discussion

Descriptive statistical test

The descriptive analysis results in Table 2 show data from 40 manufacturing companies listed on the Indonesia Stock Exchange during the period 2017 to 2020. The tax avoidance variable, as measured by CETR, recorded an average value of 0.318178, with minimum and maximum values of 0.00116 and 1.74784, respectively. PT Voksel Electric Tbk recorded the highest tax avoidance in 2020, which reflects good tax compliance, while PT Kabelindo Murni Tbk showed the highest level of non-compliance in 2017.

Tabel 2. Descriptive statistical test

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Observations
Tax Avoidance	0.318178	0.291792	1.74784	0.00116	0.27261	40
Return on Assets	0.105738	0.066803	0.713342	0.000858	0.132514	40
Firm Size	28.41384	28.37098	33.49453	25.86688	1.940955	40
Company Risk	0.117193	0.088101	0.759487	0.005531	0.12708	40

Source: Results of data processing with Eviews version 10.0

In addition, the Return On Assets (ROA) variable has an average value of 0.105738. PT Voksel Electric Tbk recorded the lowest ROA in 2020, which indicates poor profit efficiency, while PT Multi Prima Sejahtera Tbk achieved the highest ROA in 2017, signaling efficient management. Company size varies between 25.86688 to 33.49453, with an average of 28.41384; where PT Gaya Abadi Sempurna Tbk was the smallest company in 2017, while PT Astra International Tbk became the largest in 2019. Finally, the company risk variable shows a varied managerial character. PT Supreme Cable Manufacturing and Commerce Tbk recorded the lowest risk in 2020, reflecting a risk-averse attitude, while PT Multi Prima Sejahtera Tbk had the highest risk in 2017, illustrating a risk-taking managerial character.

Hypotheses testing

Based on the results of the panel data regression analysis described in Table 3, a regression equation can be formulated in the format:

$$\text{CETR} = 0.137122 + 1.406527 \text{ ROA} + 0.100674 \text{ SIZE} + 0.812180 \text{ COMPANY RISK}.$$

The constant of 0.137122 indicates that without the influence of return on assets (ROA), company size, and company risk, tax avoidance is estimated at 0.137122. Specifically, the ROA variable has a coefficient of 1.406527, indicating that any increase in ROA, assuming other variables remain constant, has the potential to increase tax avoidance by 1.406527. Furthermore, company size with a coefficient of 0.100674 indicates that an increase in company size also contributes to tax avoidance by 0.100674, although the effect is not significant. The company risk variable, which has a coefficient of 0.812180, indicates that any increase in company risk will increase tax avoidance by 0.812180.

Tabel 3. Hypotheses testing

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROA	1.406527	0.209790	6.704439	0.0000
COMPANY_SIZE	0.100674	0.215281	0.467639	0.6429
COMPANY_RISK	0.812180	0.257625	3.152566	0.0033
C (Constant)	0.137122	1.154877	0.118733	0.9061
Adjusted R-squared		0.565067		
F-statistics		17.88969		

Source: Results of data processing with Eviews version 10.0

Based on the analysis in Table 3, the results of the hypothesis testing show that ROA and corporate risk have a significant effect on tax avoidance, while company size does not show a significant effect. The coefficient of determination (Adjusted R²) of 56.51% explains that the independent variables are able to explain variations in tax avoidance, while the remaining 43.49% is influenced by other factors not included in this research model. Table 3, the results of the hypothesis testing show interesting findings regarding the influence of several factors on tax avoidance. First, return on assets (ROA) is proven to have a significant effect on tax avoidance, indicated by the t-count value of 6.704439, which is greater than the t-table of 2.028094, and the probability value of 0.0000, which is smaller than the significance level of 0.05, so that the first hypothesis (H1) is accepted. On the other hand, company size does not significantly affect tax avoidance, with a t-count of 0.467639, which is smaller than the t-table and a probability of 0.6429, which exceeds the significance limit, so the second hypothesis (H2) is rejected. Meanwhile, company risk significantly affects tax avoidance, indicated by a t-count of 3.152566, more significant than the t-table, and a probability value of 0.0033, more diminutive than 0.05, so the third hypothesis (H3) is accepted. Thus, ROA and company risk play an essential role in influencing tax avoidance practices, while company size does not show a significant influence.

Discussion

The effect of return on assets on tax avoidance

This study tests the first hypothesis, which states that return on assets (ROA) affects tax avoidance. The results showed that the hypothesis is acceptable, with a t_count greater than the t- t-table and a probability smaller than the significance level. The positive ROA coefficient indicates that any increase in ROA will lead to an increase in tax avoidance. In other words, the higher the ROA, the greater the tax avoidance action taken by the company. This finding is different from previous research by Sulistyono (2018), which states that profitability has a negative effect on tax avoidance. However, the results of this study are in line with research by Damayanti and Susanto (2015), which shows a significant positive effect of profitability on tax avoidance. Increased profitability reflects the company's good performance in utilizing assets to generate profits, which has an impact on the amount of income tax that must be paid. Based on agency theory, this encourages companies to try to reduce taxes payable by utilizing depreciation and amortization as a deduction from taxable income, thus creating opportunities for tax avoidance.

The effect of company size on tax avoidance

The second hypothesis, which states that company size has an effect on tax avoidance, is rejected. This can be seen from the analysis, which shows that company size does not have a significant

impact on tax avoidance. The company size coefficient shows that despite the increase in company size, it has no effect on tax avoidance. The results of this study differ from the research of Puspita and Febrianti (2017), which found that company size has a significant effect on tax avoidance. Conversely, the results of this study are in line with the findings of Mahdiana and Amin (2020), who state that company size has no effect on tax avoidance. Company size, as measured by assets, does not affect the company's decision to avoid taxes because many companies tend to comply with applicable tax provisions. The risk of sanctions and the negative impact on the company's image are also considerations for companies, both large and small, to comply with tax regulations so that business sustainability is maintained.

The effect of company risk on tax avoidance

The third hypothesis, which states that company risk affects tax avoidance, can be accepted. This is supported by the results of the analysis, which shows that the higher the company's risk, the greater the tax avoidance carried out, with a positive coefficient of company risk. This finding contradicts Dewi and Sari's (2015) research, which indicates that company risk has a negative effect on tax avoidance. However, the results of this study are in line with the study of Damayanti and Susanto (2015), which confirms that company risk has a significant positive effect on tax avoidance. This study strengthens agency theory, which explains that agents try to maximize profits, including through tax avoidance. Exploration of company risk fluctuations reflects the character of executives who are more likely to be risk-takers. Executives with this trait will be more willing to make risky decisions, including tax avoidance, to minimize the tax burden and maintain company profitability. In this context, individuals, especially executives who are able to take opportunities and risks, play a key role in high-risk tax avoidance.

5. Conclusion

Based on the interpretation of the research results that have been conducted, it can be concluded that return on assets (ROA) has a positive effect on tax avoidance, where an increase in ROA will be followed by an increase in tax avoidance. On the other hand, firm size has no effect on tax avoidance, indicating that changes in firm size have no impact on the level of tax avoidance. In contrast, firm risk shows a positive influence on tax avoidance, where an increase in risk is associated with an increase in tax avoidance. However, this study faces limitations, mainly related to the time affected by the Large-Scale Social Restriction (PSBB) condition due to the COVID-19 pandemic, which hinders access to guidance and references. In addition, data collection is also a challenge that affects the completeness and accuracy of the research results. Therefore, companies are advised to be more careful in the practice of tax avoidance, given the high risk of compliance with tax regulations in Indonesia. The findings regarding the effect of ROA and company risk on tax avoidance can be used as a reference for tax auditors to conduct a more in-depth analysis. Future research is recommended to consider other factors that may affect tax avoidance and improve data collection methods to broaden research insights.

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Appendix

Attachment 1. Research Sample

No	Stock Code	Company Name
1	ASII	Astra International Tbk
2	INDS	Indospring Tbk
3	LPIN	Multi Prima Sejahtera Tbk
4	SMSM	Happy Perfect Tbk
5	JECC	Jembo Cable Company Tbk
6	KBLM	Kabelindo Murni Tbk
7	SCCO	Supreme Cable Manufacturing and Commerce Tbk
8	VOKS	Voksel Electric Tbk
9	JSKY	Sky Energy Indonesia Tbk
10	SLIS	Perfect Timeless Style Tbk

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