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Research Paper

THE IMPACT OF TAX AVOIDANCE, TAX RISK, PROFITABILITY AND INSTITUTIONAL OWNERSHIP ON COST OF DEBT

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ABSTRACT

Purpose - This study intends to investigate the influence of tax avoidance variables, tax risk, profitability, and institutional ownership on debt costs.
Research Method - This study uses 9 infrastructure firms listed on the Indonesia Stock Exchange (ISE) from 2019 to 2023 were examined using a purposive sampling method. The analysis for this study employed multiple linear regression modeling.
Findings - The study findings indicate that tax avoidance and tax risk positively influence the cost of debt, whereas profitability and institutional ownership have no impact on it.
Implication - Tax avoidance and tax risk affect the cost of debt as creditors view them as indicators of increased risk, leading to higher interest rates and additional monitoring expenses. Conversely, profitability and institutional ownership do not have a significant impact. These findings emphasize the necessity of effective tax risk management and governance to ensure financial stability and lower the cost of debt.

Keywords: Tax Avoidance, Tax Risk, Profitability, Institutional Ownership

JEL code: H26, G32

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INTRODUCTION

Companies have several options in terms of financing, one of which is to take advantage of debt. The way to get funds from an external party, or a creditor, is to make a debt (Wardani & Sari, 2018). To maintain and expand its business, the company needs sources of funding from outside. One form of external financing is through the issuance of a debt that will be held by the lender. If a debtor acquires a bond, the lender will be rewarded in the form of interest. The company that has a debt must pay the interest in the prescribed form. The company's obligation to repay to the creditor, the rate of repayment given by the company is that will be the cost of the debt owed to be paid by the firm

(Situmeang & Hutabarat, 2017).

Before borrowing funds, external creditors should pay attention or consider the risks they face. Therefore, as creditors, they must understand the low level of risk in the company's market. The company will face a high debt cost as a result of this high risk. This debt fee is an investment income given by the creditor to the company, and the company will record it as a debt on capital loan or investment (Nugrahadi, 2020). The company must pay interest and principle periodically with the debt. This can cause managers not to want to use free cash flow to finance things that don't work. Using debt increases risk, so managers will be more cautious than public investors because the risk of debt is greater. In other words, if a company uses debt in its financing and is unable to pay the debt, the company's liquidity will be jeopardized, and management positions will also be threatened. On the other hand, companies benefit from such debt charges because they can reduce corporate taxes and reduce the tax burden that companies have to pay (Anto Manullang et al., 2020).

There are some phenomena happening in the infrastructure company. As happened in 2023 in the case of PKPU Housing Development PT has problems related to debt costs. The total bills of the PKPU housing development PT amounted to Rs 31 trillion. In addition, the Housing Development Department has the opportunity to pay its liabilities to the creditors (Hriani, 2023). In the financial report of PT Wijaya Karya Tbk (WIKA) recorded liabilities amounting to Rs 56.76 trillion. While PT PP (Persero) Tbc (PTPP) Rs 43.43 Trillion and PT Adhi Karya (Persero) (ADHI) Rs 37.68 trillion, PT Waskita Karya (Persero), Tbck (WSKT) became the largest issuer of debt. is Rs 82.4 trillion, where the debt flourished amounted to Rs 64 trillion, or as much as 77.7% of the total debt (Dahlia, 2023).

Some companies, such as WSKT, face additional problems with revenue sources that are mostly derived from non-operational activities such as debt restructuring, which are not the result of the company's core business performance. This suggests that reported profits may not reflect the company's actual operational performance. This situation raises concerns about the company's financial health, especially regarding their ability to meet debt obligations. In addition, high debt costs have the potential to increase the risk of bankruptcy, as many companies fail to meet their financial obligations. This increase in debt burden also has a direct impact on the company's profitability, which has decreased drastically. For example, WSKT's basic earnings per share fell to IDR 0.01 from IDR 12.85 in the previous period, indicating a significant decline in financial performance (Dahlia, 2023).

Table 1. Data on Debt Costs in Infrastructure Companies Listed in the EIB for the Period 2019-2023

Company	2019	2020	2021	2022	2023	Mean
Adhi Karya (Persero) Tbk	0,018	0,024	0,025	0,025	0,025	0,023
Bali Towerindo Sentra Tbk	0,091	0,091	0,085	0,076	0,077	0,084
Bukaka Teknik Utama Tbk	0,034	0,049	0,06	0,025	0,017	0,037
XL Axiata Tbk	0,051	0,054	0,045	0,045	0,047	0,048
Ghion Telekomunikasi Indonesia Tbk	0,023	0,02	0,019	0,006	0,004	0,014
Inti Bangun Sejahtera Tbk	0,074	0,086	0,089	0,073	0,077	0,0798
Paramita Bangun Sarana Tbk	0,003	0,006	0,003	0,006	0,007	0,005
Cikarang Listrindo Tbk	0,04	0,041	0,041	0,041	0,041	0,04
PP Persisi Tbk	0,046	0,048	0,49	0,051	0,059	0,05
PP (Persero)	0,018	0,022	0,032	0,029	0,029	0,026
Tower Bersama Infrastuctur Tbk	0,076	0,071	0,06	0,052	0,049	0,061
Telkom Indonesia Tbk	0,041	0,037	0,033	0,032	0,036	0,035
Total Bangun Persada Tbk	0,014	0,042	0,028	0,044	0,041	0,033
Sarana Menara Nusantara Tbk	0,05	0,049	0,025	0,046	0,055	0,045

Wijaya Karya Bangunan Gedung Tbk	0,005	0,008	0,017	0,019	0,022	0,014

Source: Data Processed by Researcher (2024)

The rise in the cost of debt caused the company to suffer a fall in the value of its shares. Tax avoidance is one part of tax planning, that is, legal tax reduction by violating tax regulations to minimize the tax burden by exploiting the weaknesses of tax laws. It is worth nothing that when a company evades taxes, tax risks arise. If the company's tax position is sued or cancelled by the financial authority, the company may be required to pay taxes, interest, and fines (Kovermann, 2018). The exposure effect of risk refers to the fact that carrying tax evasion can increase the cost of debt (Cen et al., 2017). The greater the rate of tax evasion of the company, the greater is the cost of the debt to be borne. In (Sánchez-Ballesta & Yagüe, 2023; Isin, 2018) that tax avoidance has a positive and significant effect on the cost of debt, while in (Minh Ha et al., 2022; Kovermann, 2018; Cen et al., 2017) that tax avoidance has no effect on debt costs.

Tax risk may refer to the risk arising from a position in the corporate tax report of a company, compared to the overall risk exposure of the company (Kovermann, 2018). Tax risks can lead to increased uncertainty of net cash flows in the future. Such uncertainty can lower creditors' confidence in the company. In the study of (Suparman et al., 2022; Sagala, 2022), tax risks have a positive effect on the cost of debt.

Profitability is defined as the level of a company's ability to profit from available assets. Higher profitability leads to lower corporate debt costs, indicating a stronger position for the company owner (Mulyana & Daito, 2021). However, research by (Shina & Woob, 2017; Soebagyo & Iskandar, 2022) suggests that profitability negatively impacts the cost of debt, whereas studies by (Briel et al., 2023; Mulyana, 2021) indicate that profitability does not influence debt costs.

Institutional ownership has the power to oversee organizations and limit their desire to pursue their own interests. The existence of this control allows management to use a lower debt rate to predict the risk of financial difficulties and financial risks (Novari & Habibah, 2022). According to the agency theory, institutional ownership has a greater incentive to oversee business actions because of the size of shares it holds, institutionalized ownership can affect the relationship between tax avoidance and debt costs (Wardani & Sari, 2018). In (Cahyono et al., 2021; Nisa & Wulandari, 2021; Minh Ha et al., 2022) that institutional ownership has no influence on the cost of debt, whereas in a study (Wardani & Sari, 2018) that institutionally owned property has an influence over debt costs.

This research is a development of the (Kovermann, 2018), so researchers are interested to re-examine it by adding the variables of profitability and institutional ownership. Good supervision will give good results for the company, i.e. can guarantee the welfare of the shareholders so that the risk of the company can be reduced.

The importance of this study is to understand in depth the impact of increasing debt on infrastructure companies and how this affects financial performance and potential bankruptcy. This study can also help identify factors that affect the company's ability to manage debt and find solutions that can be applied to improve the financial stability of these companies.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Agency Theory

The agency theory elucidates the interaction between the principle (owner) and the agent (manager), the owner assigns corporate management responsibility to the manager in the hope that the manager can maximize the company's profits and satisfy the owner's wishes. Basically, every shareholder wants to get the greatest profit from the company they're investing in (Jensen & Meckling, 1976). The theory of agency relations occurs when one or more owners hire another person or agent for service and authorize the agent to make decisions. However, this relationship does not guarantee that the agent acts in the interests of the partial (Kang et al., 2017).

Tax avoidance is affected by agency problems, where the interests of the parties are different, the parties' interests are different to each other, on the one hand managers want to increase compensation, while shareholders want to reduce tax costs, and creditors want greater compensation companies are able to fulfil the debt contract by paying interest and assets on time. When a company has debt, conflict arises between shareholder and creditor, which causes financial difficulties and affects the company's agency cost (Dewi & Ardiyanto, 2020).

Cost of Debt

Cost of debt fee is the rate of return the creditor wants to provide funding to the company (Nisa & Wulandari, 2021). The company's foundation the structure comprises a combination of long-term debt and equity utilized by the company to fund its operations. So, it can be said that the company has several financing options, namely to issue shares to potential investors or to lend to potential creditors (Mulyana & Daito, 2021).

Debt costs are the measure that takes into account the relevant obligations of the company. Debt expenses are the value seen by the creditor in financing, which indicates the level of ability of the firm to pay its obligations (Anissa & Judith, 2022). The company uses loans as a source of funding to increase its return rate. The measurement used in the debt cost variable is the amount of interest to be paid. Comparison of the amount of long-term and short-term loans amortized over a year (Pittman & Fortin, 2004).

Tax Avoidance

Tax avoidance is a legitimate attempt to reduce the amount of tax payable by the taxpayer by seeking legal gaps without violating the rules of taxation. Tax avoidance practices carried out by corporate management are aimed at reducing legitimate tax obligations, so that companies tend to find ways to reduce taxes and increase corporate cash flows (Sari & Kurniato, 2022). Tax avoidance is a practice in which companies use legal rules to reduce tax payments. Payments made, tax reductions are legitimate actions, where provisions in tax regulations are used to reduce the amount of tax payable by turning income from work into investment income in order to take advantage of a lower tax rate (Minh Ha et al., 2022).

The risk in tax avoidance is the emergence of agency problems. Such problems can arise when managers use their positions to direct company resources for personal interests, where managers are also responsible for the extent to which companies avoid taxes (Prastyantini & Safitri, 2022). The impact of tax avoidance can be direct or indirect. The direct impact is a stagnation in the economic growth and circulation of the country's economy. Due to the decline in receipts and income of the state from the tax sector has been a considerable decline. While the indirect consequence is a decrease in funds/subsidies from the government for the poor citizens (Moeljono, 2020).

Tax Risk

Tax risk is a situation in which a company must be able to maintain its tax conditions over an extended time frame. Inconsistencies in tax reporting positions can affect the company's difficulties in achieving its goals in the future due to tax risk (Sagala, 2022). It is argued that companies that seek to reduce their taxes also face high risks must retain that position in the future. Therefore, emphasis on the tax burden also mean high tax risks to keep the situation in future (Zamifa et al., 2022). Tax risk refers to the uncertainty arising from the reduction of tax costs, both from the perspective of corporate purpose, economics, corporate income, as well as legal and regulatory aspects of taxation. Tax risk should also consider the level of compliance of a company with the tax that is formally systematically explained from the identification process to decision making (Putra & Hanandia, 2019).

Profitability

Profitability refers to a company's capacity to produce profits by leveraging resources such as capital, assets, or sales. Companies with a high rate of profitability. Individuals with a higher rate of income are more likely to use debt (Subagiastra et al., 2017). The ratio indicates how efficient the company's activity is in generating profits over a certain period, such as semesters or triples, to assess the company's operational efficiency (Mulyan & Daito, 2021).

Profitability is the net profit obtained by a company while operating. Operating income, net profit and return on investment are key metrics for assessing a company's financial condition performance that can be observed. Profitable companies tend to prefer to use profits to finance needs rather than use debt, because they are able to generate high profits thus minimizing the use of debt (Sari & Setiawan, 2021).

Institutional Ownership

Institutional ownership is when shares are owned by governments, financial institutions, legal entities, foreign institutional, trust funds, and other institutions. These institutions are authorized to oversees management performance. Institutional ownership within the company will encourage more optimal management supervision to improve performance (Soebagyo & Iskandar, 2022).

Institutional ownership can be used as a means of reducing agency conflict. This means that the more institutions hold shares in the company, the more effective the external controls on the company are, so that the agency conflict in the firm will be reduced and the company's value will rise (Jensen & Meckling, 1976). Institutional ownership is the amount of ownership of shares calculated as a percentage of the shares held by an institutional investor in the company (Dewi, 2019).

Hypotesis Development

The Effect Tax Avoidance on Cost of Debt

Tax evasion is an attempt by a company to reduce the amount of tax payable by exploiting debt, and is legally permitted (Nisa & Wulandari, 2021). Tax evasion, which has been proven, increases the cost of debt because creditors see it as risky behaviour with consequences such as fines, criminal sanctions, and a bad reputation for the company. When the company's risk increases, creditors will get a higher reward as compensation so that the debt cost will rise (Wardani et al., 2018).

According to the agency theory, tax avoidance can affect debt costs by increasing agency costs (Novari & Habibah, 2022). Tax avoidance affects the cost of debt. Tax avoidance, which has been proven, increases the cost of debt because creditors see it as risky behavior with consequences such as fines, criminal sanctions, and a detrimental reputation for the company. If the company's risk increases, creditors will receive higher rewards as compensation so that the cost of debt will increase (Wardani et al., 2018). Research conducted by (Sagala, 2022); Prasetyani & Safitri, 2022); Nisa & Wulandari, 2021) states that tax avoidance has a favorable impact on debt expenses. Therefore, the subsequent hypothesis is proposed.

H1: Tax avoidance positively influences the cost of debt.

The Effect Tax Risk on Cost of Debt

Tax risk is the uncertainty faced by a company regarding future tax payments (Guenther et al., 2017). This risk can arise due to uncertainty regarding the interpretation of tax rules, regulatory changes, or potential audits by tax authorities. The greater the tax risk faced by a company, the higher the cost of debt borne, because the company must prepare reserves to anticipate possible future tax liabilities. Uncertainty related to tax risk can affect future cash flows, which makes creditors doubt the company’s competence in addressing its financial obligations, including repayments on debt (Dewi & Ardiyanto, 2020). Research conducted by (Zamifa et al., 2022; Kovermann, 2018); Suparman et al., 2022) supports this relationship, where tax risk is shown to have a positive effect on the cost of debt. In other words, the greater the tax risk faced by a company, the more significant the debt costs that must be handled. Thus, the following hypothesis is formulated.

H2**:** Tax risk has a positive effect on the cost of debt.

The Effect Profitability on Cost of Debt

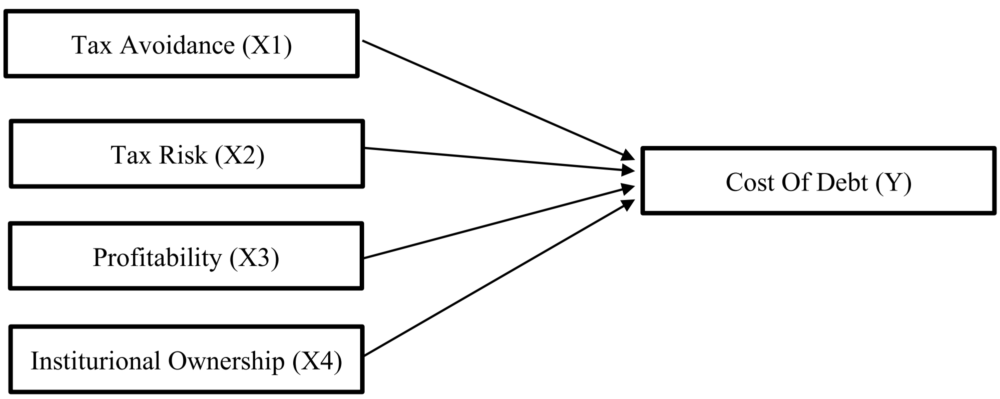
Profitability refers to a company's capacity to produce profits that can be measured in two ways, from sales and investments (Soebagyo & Iskandar, 2022). High profitability allows companies to rely more on internal funds, such as retained earnings, thereby reducing dependence on external financing sources, including debt. Companies with a high level of profitability are likely to use internal capital to finance operations or expansion, because the cost of internal capital is generally lower than external debt that requires interest payments. This reduces the need for companies to borrow from outside parties, which ultimately lowers the cost of debt. High profitability also strengthens creditors' confidence in the company's capacity to fulfill its financial obligations, so creditors tend to provide lower interest rates (Pardosi & Sinabutar, 2020). Research conducted by (Shina & Woob, 2017); Soebagyo & Iskandar, 2022); Sherly & Fitria, 2019) that states that profitability has a negative effect on debt costs, meaning that the higher the company's profitability, the lower the debt costs that the company must bear. Thus, the following hypothesis is formulated.
H3: Profitability has a negative effect on the cost of debt.

The Effect Institutional Ownership on Cost of Debt

Institutional ownership is crucial for monitoring management activities. Shareholders with larger ownership have a high motivation to monitor the performance of the company so that it can be exploited by stakeholders (Nisa & Wulandari, 2021). According to the agency theory, institutional ownership plays an important role in reducing agency conflict. The close relationship between managers and investors. If a company is owned by an agency or institution, then supervision and management control will be very strict (Jensen & Meckling, 1976). If strict surveillance is applied, the creditor will assume that the company's risk is low thus affecting the debt cost as the rate of return requested by the creditors. Research conducted by (Novari & Habibah, 2022; Wardani & Sari, 2018); Soebagyo & Iskandar, 2022) that institutional ownership negatively impacts the cost of debt. Thus, the following hypothesis is formulated.
H4: Institutional ownership has a negative effect on the cost of debt.

Conceptual Framework

Figure 1. Conceptual Framework



Source: Processed Research Data (2024)

RESEARCH METHODOLOGY

This study uses a quantitative method, which is an approach to researching a population or sample based on collected numerical data. The data is then analyzed qualitatively or statistically in order to test the hypothesis that has been proposed.

Data Types and Sources

This study utilizes secondary data as the main information source. Secondary data refers to information collected or accessed from pre-existing sources. In this research, the secondary data consists of financial information found in audited annual reports from 2019 to 2023, which are obtained from the Indonesian Stock Exchange (IDX) website and the official websites of the companies included in the sample.

Population and Sample

Given the number of indicators required to calculate the study variables, this research applies a purposive sampling technique to select the most appropriate samples. Purposive sampling is a method based on specific criteria determined by the researcher. Consequently, the sample used in this study consists of companies that meet these criteria, as detailed in Table 2 below.

Table 2. Sample Selection Criteria

No	Sample Criteria	Number of Samples per Year
1.	Infrastructure companies registered on the Indonesia Stock Exchange (IDX)	(65)
2.	Infrastructure companies registered on the Indonesia Stock Exchange (IDX) during the 2019-2023 period	(11)
3.	Infrastructure Companies that have financial reports for 4 years 2019-2023	(19)
4.	Infrastructure companies that have profits and do not experience losses in 2019-2023	(26)
Number of Samples		9
Research Year		5
Total data used in the study		45

Table 2 shows that the financial reports of infrastructure companies amount to 65 companies. However, there are 11 companies that are not registered on the Indonesia Stock Exchange from 2019 to 2023, there are 19 companies that do not have financial reports for 5 years 2019-2023 and there are 26 companies that experienced losses in 2019-2023. So that the number of samples obtained is 9 companies during 2019-2023 that meet the research criteria, so the number of samples used is 45.

Variable Operational Definition

Cost of Debt (Y)

Cost of debt fee is the rate of return the creditor wants to provide funding to the company**.** The cost of debt is calculated using the following formula (Pittman & Fortin, 2004):

$$\text{COD} = \frac{\text{Intereset expensess}}{\text{Average short} - \text{tream and long} - \text{trem debt}}$$

Tax Avoidance (X1)

Tax avoidance is an attempt to reduce the amount of tax payable carefully by exploiting the uncertainty in tax regulations (Cen et al., 2017). The effective tax rate is determined by dividing the total corporate tax liability by the profits before income tax. Tax avoidance can be calculated by the following formula (Hanlon & Slemrod, 2009):

$$\text{ETR} = \frac{\text{Tax Expense}}{\text{Pretax Income}}$$

Tax Risk (X2)

Tax risk is uncertainty about future corporate tax payments because the company cannot sustain its financial condition over extended periods (Guenther et al., 2017). A tax risk measurement can also be done using only the deviation standard within a three-year period. Companies with a higher VOL

CETR rate will face a greater tax risk. Tax risk can be assessed by calculating the standard deviation of the effective tax ratio of cash from the period t-2 to period t. CETR volatility can be calculated by formula (Kovermann, 2018):

$$\text{Cash ETRit} = \frac{\text{Total Cah Taxes Paid it}}{\text{Pre Tax Income it}}$$

Profitability (X3)

Profitability is a measure of how effectively a company generates profits for its shareholders from the invested capital, and reflects the company's ability to finance the investment. Rentability can be measured using the Return on Assets (ROA). This figure can describe the performance of the company in generating profits from the total value of assets owned by the company (Azara & Fardianti, 2020).

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

Institutional Ownership (X4)

Institutional ownership denotes the proportion of a company's shares held by institutional investors. This ownership percentage can be determined using the following formula (Dewi, 2019):

$$\text{INST} = \frac{\text{Amount of institusional share}}{\text{Number of share in circulation}}$$

Data Collection Technique

The data used in this research comes from secondary sources. The data collection is carried out through documentation method by looking at and obtaining data directly from the yearly financial statements issued by the entrepreneurs of the infrastructure sector listed on the Indonesian Stock Exchange (IDX).

RESULTS AND DISCUSSION

Statistics Descriptive Test

Descriptive statistical analysis is used to provide a comprehensive overview of the independent and dependent variables investigated in this study. The statistical mean value used in this analysis are averages, maximum values, minimum values and standard deviations of each variable.

Table 3. Statistics Descriptive

	Cost of Debt (Y)	Tax Avoidance (X1)	Tax Risk (X2)	Profitability (X3)	Institution al Ownership (X4)
Mean	0.045222	0.120422	0.327000	0.053822	0.602711
Median	0.043000	0.101000	0.301000	0.042000	0.565000
Maximum	0.091000	0.348000	0.661000	0.124000	0.846000
Minimum	0.005000	0.014000	0.046000	0.011000	0.260000
Std. Dev.	0.020620	0.095685	0.138384	0.031441	0.137793
Skewness	0.362210	0.717347	0.504502	0.727032	0.305982
Kurtosis	2.894294	2.414265	2.824760	2.521284	2.672645
Jarque-Bera	1.004922	4.502688	1.966494	4.394005	0.903115
Probability	0.605040	0.105258	0.374094	0.111136	0.636636
Sum	2.035000	5.419000	14.71500	2.422000	27.12200
Sum Sq. Dev.	0.018708	0.402849	0.842610	0.043497	0.835423

Observations	45	45	45	45	45

Scource: Data Processed by Researchers (2024)

Referring to Table 2 above, three variables show a mean value greater than the standard deviation. This suggests a notable difference between the highest and lowest values, suggesting the presence of outliers in the data set.

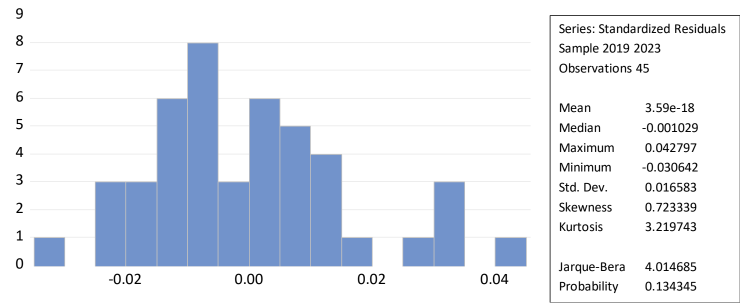
Classic Assumption Test

The use of classical assumption tests in regression analysis is important because it ensures the validity of research results and prevents bias in interpretation. Here are the main reasons for using classical assumption tests:

Normality Test

The normality test is designed to find out if the residuals from the regression equation is distributed normally or not, since normal-distributed data is a prerequisite for performing the regression analysis technique of the panel data.

Figure 2. Normality Test Result



Based on the data processing results using reviews 12, as shown in Figure 2 above, all variables have been distributed normally. This is shown with a probability value of 0.134245 < 0.05. With this result, it is concluded that the data has been normally distributed with the number of observations as high as 45.

Multicollinearity Test

The multicollinearity test is utilized to determine if there is a linear correlation among independent variables. One requirement of the classical assumption tests is that the data must not exhibit any elements of multicollinearity.

Table 4. Multicollinearity Test Result

	X1	X2	X3	X4
Tax Avoidance (X1)	1.000000	-0.321382	-0.297626	0.274290
Tax Risk (X2)	-0.321382	1.000000	-0.424673	0,394116
Profitability (X3)	-0.297626	-0.424673	1.000.000	-0.096736
Institutional Ownership (X4)	0.274290	0.394116	-0.096736	1.000000

Source: Data Analyzed by the Researchers (2024)

Based on the data processing results using reviews 12, as presented in Table 3 above, it shows that among all independent variables (X1, X2, X3, X4) < 0.09, means there is no multicollinearity in this study.

Autocorrelation Test

The autocorrelation test is conducted to examine the relationship between the residuals of one observation and those of another. This test was carried out using the Breusch-Godfrey Serial Correlation LM Test.

Table 5. Autocorrelation Test Result

F-statistic	2,182187	Prob. F (2,37)	0,1271
Obs*R-squared	4,642460	Prob. Chi-Square (2)	0,0982

Source: Data Analyzed by the Researchers (2024)

Based on the results of the data processing shown in Table 4, the probability Chi-Square (2) value is 0.0982, which is greater than 0.05. This indicates that there is no autocorrelation issue in this study.

Heteroscedasticity Test

The heteroscedasticity test was conducted to assess whether there are inequalities among variables in the regression model of the residuals between different observation periods.

Table 6. Heteroscedasticity Test Result

F-statistic	1,656511	Prob. F (14,30)	0,1202
Obs*R-squared	19,61984	Prob. Chi-Square (14)	0,1426
Scaled explained SS	12,88826	Prob. Chi-Square (14)	0,5353

Source: Data Processed by Researchers (2024)

Based on the data processing done as shown in Figure 5 that the Prob Chi-Square (Obs*R-squared) is 0.14 > 0.05 which means there is no heteroscedasticity problem in this study.

Multiple Linear Regression Analysis

Table 7. Multiple Linear Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.018990	0.020852	0.910693	0.3679
Tax Avoidance (X1)	0.116093	0.031628	3.670570	0.0007
Tax Risk (X2)	0.068614	0.027676	2.479167	0.0175
Profitability (X3)	-0.017854	0.113990	-0.156630	0.8763
Institutional Ownership (X4)	-0.015304	0.029933	-0.511256	0.6120

Source: Data Analyzed by the Researchers (2024)

According to Table 6, the following results were obtained from the multiple linear regression analysis:

$$COD = 0.0189899783125 + 0.11609277621ETR + 0.0686138905646CETR - 0.0178543080482ROA - 0.0153036665405INST + e$$

a. A constant value of 0.018990 indicates that the average variable dependent on the cost of debt is 0.018990, when all independent variables of tax avoidance, tax risk, profitability and institutional ownership are equal to 0.
b. The tax avoidance coefficient of 0.116093 indicates that each increase of one unit in tax avoidances will increase the average cost of debt by 0.11693 under the assumption that the other

variables remain constant. This means that the tax evasion variable has a significant positive relationship with the cost variable of the debt.

c. A tax risk coefficient of 0.068614 indicates that each increase of one unit in tax risk will increase the average cost of the debt by 0.068614, assuming other factors remain constant. This means that the tax risk variable has a significant positive relationship with the cost variable of debt.

d. A profitability coefficient of -0.017854 indicates that any increase of one unit in profitability will reduce the average cost of the debt by 0.017854, assuming the other variables are held constant. This implies that the profitability variable has a significant negative correlation with the cost of debt.

e. An institutional ownership coefficient of -0.015304 indicates that any increase of one unit in institutional owning will reduce the average cost of debt by 0.015304, assuming other factors remain constant. This indicates that the institutional ownership variable has a significant negative correlation with the cost of debt variable.

Hypothesis Testing Result

t Test

Table 8. t Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.018990	0.020852	0.910693	0.3679
Tax Avoidance (X1)	0.116093	0.031628	3.670570	0.0007
Tax Risk (X2)	0.068614	0.027676	2.479167	0.0175
Profitability (X3)	-0.017854	0.113990	-0.156630	0.8763
Institutional Ownership (X4)	-0.015304	0.029933	-0.511256	0.6120

Source: Data Analyzed by the Researchers (2024)

According to the regression results presented in Table 7 above, the probability of the Effective Tax Rate (ETR) is 0.0007, which is less than 0.05, and the regression coefficient for the tax avoidance variable (ETR) is 0.116093. Therefore, it can be concluded that the first hypothesis (H1) proposed in this study suggests that tax evasion positively affects the cost of debt.

According to the regression results presented in Table 7 above, the probability of tax risk (CETR) is 0.0175, which is less than 0.05, and the regression coefficient for the tax risk variable (CETA) is 0.068614. This indicates that the tax risk ratio positively impacts the cost of debt, leading to the conclusion that the second hypothesis (H2) is accepted.

According to the regression results shown in Table 7 above, the probability of profitability (ROA) is 0.8763, which is greater than 0.05, and the regression coefficient for the profitability variable (ROA) is -0.017854. Therefore, the third hypothesis proposed in this study (H3) is rejected.

According to the regression results presented in Figure 4.9 above, the probability of institutional ownership (INST) is 0.6120, which is greater than 0.05, and the regression coefficient for the institutional ownership variable is -0.015304. Therefore, it can be concluded that the institutional ownership variable (INST) does not influence the cost of debt, leading to the rejection of the fourth hypothesis (H4) proposed in this study.

Coefficient of Determination

Table 9. Coefficient of Determination Test Result

R-squared	0,318171	Mean dependent var	0,008515
Adjusted R-squared	0,249988	S.D. dependent var	0,009704
S.E. of regression	0,008404	Sum squared resid	0,002825
F-statistic	4.666.426	Durbin-watson stat	2,013740

Prob(F-statistic)	0,003472

Source: Data Processed by Researchers (2024)

In Table 8, the Adjusted R-squared value of 0.249988 shows that the independent variables can explain 24.99% of the variation in the dependent variable, while 75.01% is affected by other factors not considered in this study or model. The variables of tax avoidance, tax risk, profitability, and institutional ownership can predict the cost of debt by 24.99%, with the remaining 75.01% being influenced by factors outside the scope of this research. This Adjusted R-squared value indicates that although the independent variables, such as tax avoidance, tax risk, profitability, and institutional ownership, do have an impact on the cost of debt, their effect is relatively small. The majority of the variation in the cost of debt is attributed to other unexamined or unmeasured factors in this study.

RESULTS AND DISCUSSION

The Effect of Tax Avoidance on Cost of Debt

In this study, tax avoidance has a positive effect on debt costs with a significance level of 0.0007 (0.0007 > 0.05). This suggests that the tax avoidance ratio has a positive effect on the cost of the debt so it is concluded that H1 is accepted. Tax avoidance is a strategy that companies use to reduce the tax burden of income. One of its methods is to increase the amount of debt, which is often seen as an attempt to increase productivity, or to exploit tax reduction spending, thereby reducing tax payments (Ustadza & Firmansyah, 2020). Tax avoidance often involves complex and less transparent financial structures, which can make it difficult for creditors to assess the financial health of companies accurately (Cen et al., 2017).

Uncertainty about cash flows and corporate tax obligations makes creditors view companies as higher-risk entities. To offset this additional risk, creditors set higher interest rates. In addition, companies involved in tax evasion may also face greater monitoring and supervision costs from creditors to ensure compliance and financial stability, which ultimately increases the total cost of debt. The results of this study are consistent with research by (Sánchez-Ballesta & Yagüe, 2023; Cahyono et al., 2021; Suparman et al., 2022) which states that these findings emphasize that although tax avoidance can reduce the tax burden in the short term, this practice can lead to significant increases in the cost of debt in the long term, reducing the expected financial gains. It is understood that tax avoidance has a positive effect on the cost of debt.

According to agency theory, agency problems occur when the parties working together have different purposes and division of work. In the context of agency theory, these additional costs are a consequence of a conflict of interest between managers and owners. Although managers may gain short-term benefits from tax avoidance, higher debt costs burden companies in the long run, to the detriment of company owners. Thus, agency theory helps explain why tax evasion can increase the debt cost. Risk faced by lenders, which in turn increases the cost of corporate financing. It suggests that although managers may act for their personal interests, the result can be detrimental to the owners and increase the company's operating costs through increased debt costs (Prasetyani & Safitri, 2022).

The Effect of Tax Risk on Cost of Debt

In this study, tax risk has a positive effect on debt costs with a significance level of 0.0175 (0.0175 > 0.05). This suggests that the tax risk ratio has a positive effect on the cost of the debt so it is concluded that H2 is accepted. Tax risk refers to uncertainty about a company's future tax position, which arises because a company may not be able to maintain performance that affects its tax position (Saragih & Siagian, 2023).

The results show that if companies facing high tax risk tend to have higher debt costs. When companies have high tax risks, this indicates that companies may face sanctions or fines from the tax authorities in the future. This uncertainty makes creditors concerned about the company's ability to meet its debt obligations, so they set higher interest rates to offset the risk (Kovermann, 2018). The results of this study are consistent with research by (Zamifa et al., 2022; Dewi & Ardiyanto, 2020) states that these findings emphasize that tax risks are an important factor affecting the creditor's perception of the financial stability of the company, and therefore, high tax risk can lead to increased financing costs for the company. It is understood that tax risk has a positive effect on the cost of debt.

The agency theory explains that there is a conflict of interest between the management as an agent and the shareholder as a principal. Management often tends to avoid taxes or take tax risks to boost the company's profits in the short term. These strategies often involve the use of complex and less transparent financial structures, which increase uncertainty and risk in the eyes of creditors. Moreover, companies with high tax risks often face higher costs of monitoring and oversight on the part of the creditors, which also contributes to increased debt costs (Dewi & Ardiyanto, 2020).

The Effect of Profitability on Cost of Debt

In this study, profitability does not impact the cost of debt, with a significance level of 0.8763 (0.8763 > 0.05), leading to the rejection of the third hypothesis (H3) proposed in this research. Profitability refers to the company's ability to generate profits over a specific time frame and is assessed by how effectively the company utilizes its assets. This can be evaluated by comparing the profits earned to the total assets or capital the company possesses during that period (Pardosi & Sinabutar, 2020).

Profitability indirectly affects the cost of debt due to certain factors in the financial dynamics of the company. Profitability reflects the ability of a company to generate profits from its operations, although a high rate of profitability may indicate a strong financial performance, the debt cost is more influenced by the assessment of the risk of the creditor to the company's ability to repay the loan (Mulyana & Daito, 2021). The results of this study are consistent with research by (Saragih & Siagian, 2023; Parang, 2022; Sutanto, 2022) which states that creditors adopt a more comprehensive approach to credit risk assessment, involving factors beyond profitability alone. Thus, although profitability is an important aspect of the corporate financial health, it is not always a lower cost of debt. Understood that profitability does not affect the cost of debt.

According to the theory of agency conflicts of interest between management (agent) and shareholders (principal) in the management of the company. In the context of profitability and debt costs, this theory is relevant because management decisions aimed at maximizing profits may not always be in the interests of creditors. This research found that profitability had no significant influence on the cost of corporate debt. This can be explained by the presence of uncertainty and other risks considered by creditors, who do not just see profitability as the only indicator of the company's financial health (Soebagyo & Iskandar, 2022).

The Effect of Institutional Ownership Cost of Debt

In this study, institutional ownership does not affect debt costs with a significance level of 0.6120 (0.6120 < 0.05) so the fourth hypothesis proposed in this study (H4) is rejected. Institutional ownership plays an important role in monitoring management activities. Large shareholders have a high motivation to oversee the company's performance, in the interests of the various parties involved (Sherly & Fitria, 2019).

Institutional ownership does not directly affect the cost of corporate debt. The cost of debt is more influenced due to factors such as financial risk, corporate capital structure, financial market conditions, and corporate management policies related to debt use. Creditors and financial markets tend to evaluate corporate credit risk based on these factors rather than just on institutional ownership (Minh Ha et al., 2022). The findings of this study align with the research conducted by (Cahyono et al., 2021; Minh Ha et al., 2022) stating that institutional ownership can provide benefits in terms of governance, its influence on the cost of corporate debt remains limited as creditors adopt a more comprehensive approach to risk assessment and consider various aspects that affect the company's capacity to fulfill its financial obligations. Understood that institutional ownership does not influence the cost of debt.

The agency theory studies the conflict of interest between management (agent) and shareholders (principal) in the management of a company. In the context of institutional ownership and debt costs, this theory is relevant because institutional property is often seen as a mechanism to reduce agency conflict by improving corporate supervision and governance. This study found that institutional ownership had no significant influence on the cost of corporate debt. Although the presence of institutional shareholders can improve corporate governance and reduce management opportunistic behaviour, creditors do not seem to associate this directly with a decrease in credit risk (Sherly & Fitria, 2019).

CONCLUSION AND SUGGESTION

The research findings suggest that tax avoidance can increase the cost of corporate debt. This is because tax evasion activities can increase corporate financial risks. Creditors may see companies involved in tax evasion as higher-risk entities, so they raise the loan fee to compensate for the risk. Thus, companies that avoid tax tend to pay higher interest on their debt. Tax risks also have a positive impact on debt costs. Uncertainty associated with potential future tax liabilities can make creditors perceive companies. These risks encourage creditors to demand higher interest rates to cover potential losses related to uncertain tax payments, which ultimately increase the cost of corporate debt.

Profitability has no significant influence on debt costs, suggesting that creditors are more likely to assess other factors in determining the debt cost of the company. For example, stable and sufficient cash flows to meet debt repayment obligations, adequate liquidity to meet short-term needs, and capital structures that describe the ratio between debt and the company's own capital. Institutional ownership has no significant influence on the cost of debt. Although institutional shareholders tend to provide stricter supervision over management, debt costs are more influenced by factors such as capital structure, financial market conditions, and corporate financial risks. Therefore, institutional ownership does not directly influence the creditor's perception of corporate credit risk.

For further research it is anticipated to expand the range of the sample study and include additional years of observation as this research focuses on manufacturing companies in the basic and chemical sectors industries sectors. Adding years of observation can enhance the relevance of the research findings and suitable for present circumstances. Furthermore, new variables like liquidity measured through smooth ratio or fast ratio, are also relevant because more liquid companies are generally considered better able to meet short-term obligations, which can lower debt costs.

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