ARE TAX AVOIDANCE AND EARNINGS MANAGEMENT LINK TO COST OF DEBT?

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**Abstract**

The company's debt cost shows the level of creditor confidence in its ability to repay its loans. Creditors charge a higher rate of return on debt to the company to compensate for the risk of the number of receivables being unable to be recovered by the company. This study examines empirical evidence of the effect of tax avoidance and earnings management on the cost of debt. This study uses data from mining companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2020. The data is obtained from www.idx.co.id and the company's official website. Based on purposive sampling, the number of samples used in the study amounted to 89 observations. Analysis of the data in this study using multiple linear regression tests for cross-section data. The test results suggest that tax avoidance is not associated with cost of debt, while earnings management is positively associated with cost of debt. This research indicates that the Indonesia Financial Services Authority can improve policies on credit applications by companies listed on the Exchange to maintain the company's financial health.

**Keywords:** Cost of debt; Earnings quality; Tax avoidance.

**Abstrak**


**Kata Kunci:** Biaya utang; Kualitas laba; Penghindaran pajak.

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INTRODUCTION

Tighter business competition due to the influence of economic development requires companies to have optimal capital to finance their business operations to maximize profit (Sherly & Fitria, 2019). The number of companies entering the capital market increases yearly due to the high business opportunities. Companies maximize funds to win the competition (Sunarya, 2013). Limited funds often hinder the company's operational activities, so companies do funding. Company funding can come from internal and external funding (Ratnasari et al., 2017). Internal funding is obtained from the company's operational activities in a period that generates profits and is not shared with shareholders (retained earnings). External funding derives from outside the company through debt to prospective creditors, issuance of shares, and issuance of bonds (Brigham & Houston, 2019).

Internal funding sources cannot always meet the company's long-term interests. Thus, external funding in the form of debt is an alternative for companies (Purnianti & Putra, 2016). Debt can be derived from applying for loans to prospective creditors or issuing bonds (Awaloedin & Nugroho, 2019). Currently, the capital market facility in the form of bonds is equivalent to shares as an alternative for companies to expand and strengthen capital in the short or long term. In Indonesia, interest in bonds is relatively low, although, from year to year, bonds have seen an increase in trading in the secondary market and corporate bond issuance (Firmansyah et al., 2020).

Companies deciding on external funding consider the company's financial structure, which can optimize the company's value (Suwardika & Mustanda, 2017). Management calculates the proportion of other costs incurred when funding from outside in the form of the cost of debt (Firmansyah et al., 2021). The rate of return in the condition of a bond coupon (yield) paid by the company from the issuance of bonds and the interest rate paid from creditor loans periodically is referred to as the cost of debt (Sihombing & Rachmawati, 2015). Interest expense determines the company's debt cost in one period divided by the average number of short-term and long-term obligations in the same period (Saputro, 2018). The cost of debt can be divided into the before-tax cost of debt and the after-tax cost of debt (Brigham & Houston, 2019). Companies with high risk tend to have a higher cost of debt, so measuring the cost of debt provides an overview to the company and creditors about the company's risk compared to other companies (Firmansyah et al., 2020). The characteristics of the debt issuer determine the cost of corporate debt because it impacts bankruptcy risk, agency costs, and information asymmetry problems.

The cost of debt is crucial in global companies, and a few companies have gone bankrupt due to failure to pay debts and the number of debt costs incurred. Several Malaysian companies went bankrupt when the 1997 financial crisis began (Azizah, 2016). Malaysia's efforts to contain further devaluations have led to high-interest rates and credit contraction (Kholbadalov, 2012). It resulted in a severe decline in the company's output and profitability which was reflected in a sharp fall in share prices. The real estate market has plummeted due to high-interest rates and the crisis. The Kuala Lumpur Composite Index fell 72 percent from the end of June 1997 to the end of August 1998 (Kholbadalov, 2012). The increase in interest rates was in line with the increase in bond yields. Compensation for the high demand return will cause the cost of debt to be high (Kholbadalov, 2012).
The global financial market was precarious because in 2021, one of the largest property companies in China, Evergrande, experienced a financial crisis due to the risk of default on dollar-denominated bond coupons (Sandria, 2021). Evergrande could finally pay the maturing bond coupons worth US$148.1 million before the grace period ended (Aldila, 2021). Bond coupon payments did not end Evergrande's liquidity crisis (Aldila, 2021). Evergrande bonds are still considered junk bonds because, within a decade, they can reach a yield of 20 percent (Sandria, 2021).

Apart from China, failure to pay bond coupons also occurred in Indonesia. One of the textile companies in Indonesia, namely PT. Delta Merlin Dunia Textile, or Duniatex Group, suffered from a bond coupon default in 2019 (Arief, 2019). Failure to pay the bond coupons prompted the global rating agency, Fitch Ratings, to downgrade three of the company's bond ratings from B- to CCC (Ayuningtyas, 2019). Fitch rating project cash and cash equivalents of PT. Delta Merlin Dunia Textile will not be able to pay amortization costs, debt costs, and principal loans due (Ayuningtyas, 2019). The case of companies with high debt previously occurred in 2008.

PT Suba Indah experienced the delisting of the issuer's shares on the Indonesia Stock Exchange (delisting) (Ashkhabi & Agustina, 2015). In 2007, creditors filed for bankruptcy for PT Suba Indah's default (Detik.com, 2007). PT Suba Suba Indah's debt to Bank Mandiri amounted to Rp773.88 billion. PT Suba Indah has not paid $12 million to Commodity Credit Corporation since 2004 (Ashkhabi & Agustina, 2015). PT Suba Indah was also involved in arrears in paying debts to the United States Department of Agriculture amounting to US$11.89 million-plus interest on outstanding debts of $3.23 million as of December 31, 2006 (Ashkhabi & Agustina, 2015). The cost of debt is an issue that can affect the viability of a company. A good company will consider debt and its cost before committing to new debt because of its risks.

Sihombing & Rachmawati (2015) stated that bonds have a risk of inability to pay debts. If the issuer defaults, the investor will receive less than the previously promised yield on the bond. The higher the risk of default, the higher the bond's yield to maturity. It follows the principles of high-risk high return and low-risk low return. A Jetro study found that Indonesia is a higher-risk country than other countries. Infrastructure risks, labor costs, Indonesian laws, and political risks are the reasons for the high level of risk. Indonesia has a high risk of 36 percent in the infrastructure sector and 27.2 percent in the Indonesian legal system, with the problem of labor costs reaching 21 percent, the third-highest after China and Thailand. The percentage of Indonesia is high because it exceeds 20 percent and causes the cost of debt set by creditors to be high. The funding decision concerns the company's financial structure. Outsiders define an increase in debt regarding the company's ability to meet future obligations (Ratnasari et al., 2017). An increase in debt will automatically increase the cost of debt, which will cause an increase in the company's obligations in the future (Firmansyah et al., 2021). The greater the cost of debt makes the company riskier because the perception of the company's value will be low, leading to agency problems, including agency costs and monitoring by principals caused by agency theory conflicts (Triyuwono, 2018). Agency theory explains the difference in information stored between capital holders as principals and management as agents, thereby creating an imbalance condition called information asymmetry. In agency problems, management will try to fulfill its interests above the interests of the principal, even though the main goal of management is to meet the welfare of the owners of capital.
Managers can beautify financial statements (window dressing) because they have more information about the company's state and use it to their advantage, as happened with Enron, an American energy company (Triyuwono, 2018). Associated with the cost of debt, one of the components in assessing the company can be manipulated by agents to meet the satisfaction of the principal as the owner of capital. The principal intends the company to remain at low risk and have good credit quality (Sugiarto, 2011). Management's funding policies are often against the owners of capital, especially for risky projects. Companies use debt as a source of financing to finance opportunistic actions such as risky projects to generate better returns in the future (Firmansyah et al., 2020). The contract between the principal and agent creates two main problems: moral hazard and adverse selection. A moral hazard refers to an agent breaking an agreed-upon agreement due to negligence.

If the cost of debt does not obtain more attention, the potential loss received by the company will be higher because its obligations will reduce its profit. If the company cannot pay its obligations, the potential for bankruptcy will be high. Managers, as a rational party, often put the company in danger of the set debt policy. Managers with more information than shareholders can use this condition to have debt policies that benefit these managers (Firmansyah et al., 2020). Investors or creditors who cannot carry out proper analysis are more prone to miss-evaluating the company's risk and causing large agency costs to ensure managers makes optimal decisions from the perspective of capital holders. Thus, research on the cost of debt needs to be investigated further.

The factors that influence the cost of debt are important to study because the Trade-off theory states that high debt funding creates high debt costs so that agency costs and bankruptcy costs will increase (Dewi & Ardiyanto, 2020). The bankruptcy problem arises when the company uses a larger proportion of debt in its capital structure, making the accounting expenses high and difficult to retain suppliers, employees, and customers (Dewi & Ardiyanto, 2020). Creditors can sue the company's assets when its inability to pay its obligations results in liquidation and bankruptcy (Dewi & Ardiyanto, 2020).

There have been many studies on the factors that affect the cost of debt. The factors used to test the cost of debt include tax avoidance (Dewi & Ardiyanto, 2020; Heryawati et al., 2018; Manullang et al., 2020; Musaddad & Ervina, 2022; Rahmawati, 2015; Sherly & Fitria, 2019; Utama et al., 2019), firm size (Ashkhabi & Agustina, 2015; Meirasari, 2017; Suryani et al., 2019), corporate governance (Ashkhabi & Agustina, 2015; Juniarti & Andriyani Sentosa, 2009; Meirasari, 2017; Rahmawati, 2015; Ratnasari et al., 2017), tax risk (Dewi & Ardiyanto, 2020), company ownership structure (Ashkhabi & Agustina, 2015), earnings variability (Firmansyah et al., 2020; Suryani et al., 2019), and earnings management (Ayem & Kinait, 2021; Firmansyah et al., 2020; Jasman, 2016; Pernamasari, 2018; Shen & Huang, 2013).

The manager is incentivized to make judgments and estimates related to accounting, creating the potential for behavior that tends to benefit them. Managers have discretion in choosing certain policies, such as tax avoidance. The rapid economic growth resulting from global competition requires companies to conduct business operations efficiently, including cost efficiency, to optimize profits (Saputro, 2018). To minimize expenses, national and multinational companies often minimize the tax expenses arising from the company's operations with the applicable tax provisions. Taxpayers often intend to pay small tax expenses (Rahmawati, 2015) because taxes are the biggest expense for some businesses (Dewi &
Ardiyanto, 2020). Oneway companies minimize accrued taxes through legal tax management in the form of tax avoidance.

Furthermore, financial statements users often ignore the earnings quality when evaluating the financial health of an entity, even though the quality of earnings is important in financial evaluation (Marpaung, 2019). Earnings quality is defined as how good the reported earnings are when compared to company profits and their ability to predict future earnings (Amin & Firmansyah, 2023). The financial statements determine earnings quality by stability, persistence, and minimum earnings variability. Managers have discretion over the numbers in the financial statements. High-quality earnings figures reflect current performance, are good future performance indicators, and adequately explain the company's intrinsic value (Marpaung, 2019). It is important to consider the quality of earnings in financial statements. Poor earnings quality indicates that reported earnings are not following the actual company performance and can mislead decision-makers (Kurniawati, 2016).

The examination of cost of debt on tax avoidance has been widely conducted. Tax avoidance is a policy or activity often conducted by managers to reduce the tax expenses paid but still ethically and legally by taking advantage of loopholes in the tax law (Falbo & Firmansyah, 2018). Tax avoidance activity by increasing debt will increase the cost of debt because taking large debts affects the quality and risk of the company. Furthermore, earnings management is another policy related to the cost of debt. Earnings management is the manager's action in managing the numbers in the financial statements without involving shareholder policies. Earnings management manages cash inflows and outflows to generate a net operating profit usually associated with the income statement. The existence of earnings management indicates that the financial statements do not provide relevant information, so investors or creditors assign a high risk to the company.

Tax avoidance is included in tax management, which is carried out with a system of planning, controlling, and implementing obligations to increase company profits if managed properly (Saputro, 2018). The cost of debt can reduce tax expenses, but companies often use tax avoidance to minimize their expenses because an increase in debt will increase financial slack (Azizah, 2016). Tax avoidance by the company will reduce the debt because the company's expenses are reduced and make the company reduce external funding. Using lower debt will lower the cost of debt, reduce the risk of bankruptcy, and improve credit quality (Heryawati et al., 2018). The cost of debt is appropriate to assess the risks and benefits of tax avoidance because banks often have long-term relationships with companies as borrowers and have access to proprietary information about companies. Sherly & Fitria (2019) concluded that tax avoidance is positively associated with cost of debt. Heryawati et al. (2018) concluded that tax avoidance is negatively associated with cost of debt. Meanwhile, Dewi & Ardiyanto (2020), Manullang et al. (2020), Musaddad & Ervina (2022), Rahmawati (2015), and Utama et al. (2019) found that tax avoidance is not associated with cost of debt. The existence of inconsistencies in previous research has resulted in the testing of tax avoidance on the cost of debt to be carried out.

Earnings management can be one of the causes of the low credibility of financial statements (Putra, 2011). Requirements in granting credit often require debtors to consistently maintain the working capital and equity debt ratio and give shareholders dividends (Setiawati & Na'im, 2000). Applying these requirements creates incentives for managing earnings to meet credit requirements (Febriyanti et al., 2014). Earnings management describes a management's
assessment or decision in influencing financial statements for the company's benefit (Hayati & Husnandini, 2019). Managers can accelerate revenue and delay expense recognition (Shen & Huang, 2013). Credit companies that get a good rating will influence the assessment of the cost of debt. Agency conflict explains that management influences the numbers in the financial statements with superior information (Hayati & Husnandini, 2019). Earnings management makes financial statements less reliable, affects debtholder and stakeholder decisions, and affects the company's risk level (Jasman, 2016).

Earnings management leads to biased information about the company's prospects, increasing the company's risk value (Firmansyah & Suhanda, 2021). Ayem & Kinait (2021), Pernamasari (2018), and Shen & Huang (2013) proved that earnings management is positively associated with the cost of debt. In contrast, Jasman (2016), earnings management is negatively associated with cost of debt. Furthermore, Firmansyah et al. (2020) found that earnings management is not associated with cost of debt. The existence of differences in the results of previous tests encourages a re-examination of the association between earnings management and cost of debt needs to be conducted.

This study examines the effect of tax avoidance and earnings management on cost of debt. Earnings management leads to accounting activities that manipulate financial statements to increase company profits (Sofiya, 2019). On the other hand, managers can use earnings management to project low profits in financial statements to affect corporate tax payments so that the tax expenses are not too high (Sofiya, 2019). It means that earnings management and avoidance are related to each other. Tax avoidance in this study is proxied by the Effective Tax Rate (ETR). Falbo & Firmansyah (2021) stated that earnings management measures are carried out in line with the objectives of tax avoidance measures so that both tests of the cost of debt are relevant to be carried out in one study. Also, testing of both is still rarely carried out in one examination using the company data in Indonesia.

This study also employs profitability, operating cash flow, and firm size as control variables. Operating cash flow is cash inflow and cash outflow. Earnings persistence is determined by accrual and cash flow components. Earnings persistence is a tool in the predictive value used by creditors in making decisions in the form of loans (Asma, 2013). creditors will take risks on companies that have high-profit persistence. Operating cash flow can be used as a profitability control. High profitability indicates that the company can repay its debts and reduce the risk for the company, so high profitability lowers borrowing costs (Azizah, 2016). Firm size is a measure of the size of the wealth of a company. The number of assets owned by the company will increase trust regarding providing loans because creditors believe the company has more asset collateral when the loan matures (Dewi & Ardiyanto, 2020). External funding makes the company further improve its business performance to increase the firm size (Suwardika & Mustanda, 2017). Sherly & Fitria (2019) found that profitability negatively affects the cost of debt. Asma (2013) proved that operating cash flow positively affects earnings persistence. Fitriani (2017) proved that firm size negatively affects the cost of debt.

This study is expected to contribute to the literature in financial accounting regarding the cost of debt through the effect of tax avoidance and earnings management on the cost of debt, especially in the Indonesian context. In addition, the results of this study are expected to provide information to the Indonesian Institute of Accountants (IAI) related to improving the regulation of disclosure of the cost of debt. This study also contributes to Indonesia Financial Services Authority and Indonesia Tax Authority to investigate further companies that tax
avoidance in maximizing corporate profits related to the cost of debt to minimize company risk.

LITERATURE REVIEW

Agency theory explains that the company is considered as a set of contracts between company managers and shareholders. The agent agrees to a contract to provide services to the principal, and the principal agrees to a contract to reward the agent. Agency relationship binds agents to satisfy principals by optimizing existing resources within the company (Jensen & Meckling, 1976). The main purpose of investors investing in the company is to receive a large return on investment through dividend yields or capital gains. Managers are required to generate large profits from shareholders so that dividends get a large proportion, and the rest is to support the good name of the company, one of which is paying off obligations. The demands on managers' performance cause managers to do everything they can to look competent and produce optimal performance. The methods used by managers are not all visible in real terms. They cannot be monitored directly by shareholders because managers can access information that shareholders on the company's prospects cannot reach. Managers can use it without considering shareholder policy to fulfill the utility of shareholders and themselves.

Agency theory shows that the separation of ownership and management functions in publicly traded companies creates an opportunity to sacrifice the principal's interests due to the conflicting relationship between the agent and the principal (Jensen & Meckling, 1976). Agency relationship in financial management background occurs between (1) shareholders and managers and (2) managers and creditors. The principal's limitation in mastering information related to the company's capacity now and in the future will open opportunities for opportunistic behavior for managers. The manager's self-satisfying behavior is not found by the principal, if only by relying on the financial statements without further evaluation.

Maximizing profits can be avoided by avoiding taxation influencing accounting profits and managers' efforts to increase compensation they do not get from the principal. Managers' tax avoidance is to take advantage of factors that become tax deductions, one of which is to increase the debt that is still within limits stipulated in tax law (Utama et al., 2019). The cost of debt arising from debt can be deducted from income tax. Even so, tax avoidance received an unfavorable view from the tax office because it was assumed to have negative suggestions (Rahmawati, 2015). Suppose shareholders detect the act of tax avoidance by increasing debt. In that case, shareholders strongly oppose the manager's actions because they can strengthen the value of the company's risk in the future. Managers are sued for a debt that is still within reasonable limits because the impact of the debt will be detrimental to shareholders. Fund providers will charge high returns as compensation for companies with high risk so that tax avoidance by increasing debt will positively affect the cost of debt.

Sherly & Fitria (2019) found that tax avoidance can increase cost of debt. Low tax avoidance shows that the company minimizes the debt, resulting in low debt costs. The lower the management tax avoidance, the less the company claims debt in low amounts. Utama et al. (2019) stated that the imposition of income tax means using debt will strengthen the company's value because debt interest becomes a tax-deductible expense. Thus, companies with high debt payments can take advantage of compensation by financing debt as a tax incentive to ease tax payments.

H₁: Tax avoidance is positively associated with cost of debt.
The agency problem suggests that the principal has limited information in evaluating the entity's financial health (Marpaung, 2019). The limited knowledge of the principal is a deliberate tactic of managers as internal parties of the company (Setiawati & Na'im, 2000). Managers choose to provide maximum profit and want a commensurate return from the performance to meet the principal's utility. Therefore, the way that can be used to maximize profits is earnings management. This study uses the accrual earnings management approach to measure the possibility of earnings management, carried out by engineering accrual activities such as determining accounting methods.

In essence, managers always face trade-offs in disclosing numbers in financial statements. To provide stimulus to external parties, managers intervene in financial statement figures. In general, the intervention is in the form of profit engineering. The intervention relates to the quality of company earnings, which refers to stability, persistence, and lack of variability in reported earnings (Marpaung, 2019). Earnings quality in financial statements is considered to reflect the quality of the company's performance, and low earnings quality means that the company is not reliable and transparent in the delivery of financial statements, which can mislead stakeholders (Kurniawati, 2016).

Managers perform earnings management in the view of creditors as an action that contains risk. Based on this, earnings management is believed to lead to high-interest rates on debt set by creditors. Simply put, earnings management positively correlates to the cost of debt. It is in line with Ayem & Kinait (2021), Pernamasari (2018), and Shen & Huang (2013), concluding that earnings management responds positively to the cost of debt. Earnings reported to have a high value will get a positive response from the fund provider. Conversely, suppose the fund provider knows that the high-profit results from the manager's intervention. In that case, the fund provider will view the company's performance badly because it does not provide reliable quality financial reports. Poor quality of financial information strengthens the company's risk so that providers of funds will be more stringent in credit agreements. The company's risk will increase the expenses of debt costs as a form of protection for providers of funds. 

H₂: Earnings management is positively associated with cost of debt.

**RESEARCH METHOD**

This study employs a quantitative approach. The data is derived from the annual financial statements of mining sub-sector companies listed on the Indonesia Stock Exchange (IDX), sourced from www.idx.co.id and www.idnfinancials.com from 2018 to 2020. The mining sector generally has high risk and diverse productivity (Rumerung & Alexander, 2018). The COVID-19 pandemic has certainly impacted financial risks in the mining sector, which is one industry that is very sensitive to global turmoil and uncertainty. In recent years, the global economy has fluctuated high, impacting funding problems, which are the main issues in the mining sector throughout the year (Fadillah & Basyith, 2019). The years 2018 to 2020 are believed to be the most critical years for the mining sector to gather funding providers due to the nature and characteristics of the mining industry, which requires large, long-term capital funding, has a high risk of uncertainty, becomes difficult to fund and bears higher financial risks. The research sample based on purposive sampling is as follows:
The cost of debt is the dependent variable in this study, while tax avoidance and earnings management are the independent variables. Also, this study places the control variable as profitability, operating cash flow, and firm size. The proxy for cost of debt (kd) follows Awaloedin & Nugroho (2019), Juwita & Julia (2021), and Sherly & Fitria (2019).

\[
KD = \frac{\text{Interest Expenses}}{\text{Average short – term and long – term debt}}
\]

The proxy for tax avoidance in this study uses the Effective Tax Rate (ETR) as Dewi & Cynthia (2018), Kusumawardani & Suardana (2018), and Wijayanti & Merkusiwati (2017). A larger ETR indicates less tax avoidance because ETR is tax compliance. Therefore, the principle established in the later analysis is that ETR is inversely related to tax avoidance. The calculation of ETR as Dyreng et al. (2008) is as follows:

\[
\text{Effective Tax Rate} = \frac{\text{Tax Expense}}{\text{Pretax Income}}
\]

Where:
- ETR : Effective Tax Rate
- Tax Expense : corporate income tax expense
- Pretax Income : income before tax

The earnings management proxy employed in this study is discretionary accruals utilizing the model of Kothari et al. (2005) as used by Falbo & Firmansyah (2021) and Wijoyo & Firmansyah (2021). Discretionary accrual is calculated by using the absolute value of the residual value of the regression results with the following regression equation:

\[
\frac{TACC_{it}}{TA_{it-1}} = \beta_1 \left( \frac{1}{TA_{it-1}} \right) + \beta_2 \left( \frac{\Delta RE_{it}}{TA_{it-1}} \right) + \beta_3 \left( \frac{PPE_{it}}{TA_{it-1}} \right) + \beta_4 (ROA_{it-1} - 1) + \varepsilon_{it}
\]

Where:
- TACC_{it} : Net income minus operating cash flow
- \(\Delta RE_{it}\) : Revenue year t - revenue year t-1
- \(PPE_{it}\) : Fixed assets of the company i in year t
- \(TA_{it-1}\) : Total assets of the company i year t-1
- ROA_{it-1} : Return on assets of the company i in the previous year
- \(\varepsilon_{it}\) : residual equation.
Profitability is proxied by using Return On Assets (ROA) as Permatasari et al. (2021), Sutama & Lisa (2018), and Suwardika & Mustanda (2017). 

\[ \text{ROA} = \frac{\text{Net income}}{\text{Total assets}} \]

Operating cash flow proxy follows Purwanti (2016), Solihin et al. (2021), and Utama et al. (2019), in the comparison of operating cash flow to total assets.

\[ \text{OCF} = \frac{\text{Operating Cash Flow}}{\text{Total Assets}} \]

Furthermore, firm size is calculated using the natural logarithm of total assets as the proxy used by Heryawati et al. (2018) and Manullang et al. (2020). This study's data analysis used a linear regression method with an OLS (Ordinary Least Square) regression model approach for cross-section data. OLS has the advantage of minimizing the residual square because OLS estimates the regression coefficient value as no exception. To produce the best linear unbiased estimator model, OLS testing is also carried out with the classic assumption test, including the normality test, heteroscedasticity test, and multicollinearity test (Ghozali, 2016). The multiple linear regression model in this study is as follows:

\[ \text{KD}_i = \beta_0 + \beta_1 \text{ETR}_i + \beta_2 \text{DA}_i + \beta_3 \text{ROA}_i + \beta_4 \text{OCF}_i + \beta_5 \text{SIZE}_i + \epsilon_i \]

Where:
- KD<sub>i</sub>: Cost of debt of company i
- ETR<sub>i</sub>: Tax avoidance of the company i
- DA<sub>i</sub>: Discretionary accruals of the company i
- ROA<sub>i</sub>: Profitability of company i
- OCF<sub>i</sub>: Operating cash flow of company i
- SIZE<sub>i</sub>: Natural logarithm of the company i's total assets

RESULTS AND DISCUSSION

The summary of descriptive statistical analysis is presented in Table 2. Descriptive statistics aims to display a more informative description of the data processed to make it easier to analyze research. A measure of concentration and data distribution shreds of evidence descriptive statistical analysis describing clarity and trend. The size of the center is a value that indicates the center of various data sets. In this case, the study uses the mean and median measures. The mean, or the so-called average, is the ratio of the sum of all the values in the data set divided by the number of data sets. Meanwhile, the median or the middle value is the value of the data set located in the middle when the data set has been arranged from the smallest to the largest order. Furthermore, a measure of the spread of the data shows how far the data is spread from the average, but it also shows a variation in the observations which in this study use maximum, minimum, and standard deviation measurements.

<table>
<thead>
<tr>
<th>Var</th>
<th>Mean</th>
<th>Median</th>
<th>Max.</th>
<th>Min.</th>
<th>Std.Dev</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>KD</td>
<td>0.0541</td>
<td>0.0521</td>
<td>0.1599</td>
<td>7.17E-05</td>
<td>0.0351</td>
<td>89</td>
</tr>
<tr>
<td>ETR</td>
<td>0.3939</td>
<td>0.2836</td>
<td>3.5503</td>
<td>0.0463</td>
<td>0.4230</td>
<td>89</td>
</tr>
<tr>
<td>DA</td>
<td>0.0559</td>
<td>0.0417</td>
<td>0.3265</td>
<td>0.0004</td>
<td>0.0574</td>
<td>89</td>
</tr>
<tr>
<td>ROA</td>
<td>0.0711</td>
<td>0.0410</td>
<td>0.4481</td>
<td>-0.0597</td>
<td>0.0809</td>
<td>89</td>
</tr>
<tr>
<td>OCF</td>
<td>0.1025</td>
<td>0.0846</td>
<td>0.4888</td>
<td>-0.2038</td>
<td>0.1091</td>
<td>89</td>
</tr>
</tbody>
</table>
The mean value of KD of 0.0541 is greater than the median value of 0.0521, which means that companies that bear the cost of debt with low levels are fewer because the distribution of the data shows the data is skewed to the right or has a positive bias so that a large number of data values occur on the left side. The standard deviation of 0.0351, the minimum value of 0.00007 by PT BRMS in 2020, and the maximum value of 0.1599 by BIPI in 2018. The average value of the ETR of 0.3936 shows that, on average, the company avoids tax evasion by paying its tax obligations according to the tax rate. PT DSSA occupies the minimum value of ETR in 2019 of 0.0463, and FIRE occupies the maximum value in 2018 of 3.5505, with a standard deviation of 0.4228. A low TA value, such as PT DSSA in 2019, indicates that the company is practicing tax avoidance.

In contrast, the 2019 DSSA will not be taxed. The standard deviation of 0.4230, greater than the average, means the data distribution is large. The mean value of DA is 0.0559, which indicates that the average sample is indicated to practice earnings management by increasing profit (income maximization) by 5.59% with a standard deviation of 0.0574.

The maximum value of 0.3265 is owned by TOBA in 2019, while the minimum value of 0.0463 is PT PTRO in 2019. The maximum value of ROA was owned by PBYAN in 2018, with a value of 0.4481, while CTTH held the minimum value of ROA in 2020, with a value of -0.05979. The standard deviation of 0.0809, the mean value of 0.0711, and the median of 0.0410 illustrate that the company is at an efficient point in asset utilization. OCF produces a mean value of 0.1025 and a median value of 0.0846. The data distribution shows that BYAN occupies the maximum value in 2018 of 0.4888, and TOBA occupies the minimum value in 2019 of -0.2038. The standard deviation value of 0.1091 exceeds the mean value, reflecting the large-valued variable's standard error. The mean size value is 29.6868, the median is 29.9486, and the standard deviation is 1.4176, reflecting that the overall company size has the same value.

Regarding the maximum and minimum value data distribution size, ADRO in 2018 occupied the first position as a company with a high company size of 32.2584 with total assets of Rp. 102.246 T. Meanwhile, PKPK in 2020 occupies the lowest position for the value of firm size, which is only equal to 24.9523 with total assets of Rp 68.65 B. Furthermore, after performing the classic assumption test, which includes the normality test, heteroscedasticity test, and multicollinearity test, the summary of the results of hypothesis testing is as follows:

### Table 3. The Result of Hypothesis Testing

<table>
<thead>
<tr>
<th>Var</th>
<th>Coeff.</th>
<th>t-Stat</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.1177</td>
<td>1.6295</td>
<td>0.0535</td>
</tr>
<tr>
<td>ETR</td>
<td>-0.0006</td>
<td>-0.0720</td>
<td>0.4714</td>
</tr>
<tr>
<td>DA</td>
<td>0.1326</td>
<td>2.1803</td>
<td>0.0160 **</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.2001</td>
<td>-3.4831</td>
<td>0.0004 ***</td>
</tr>
<tr>
<td>OCF</td>
<td>0.0052</td>
<td>0.1249</td>
<td>0.4504</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.0019</td>
<td>-0.7960</td>
<td>0.2141</td>
</tr>
</tbody>
</table>

**Source:** Processed ***) Affects at 1% significance level **) Affects at 5% significance level.
Discussion of the association of tax avoidance with cost of debt

The result of the first hypothesis test suggests that tax avoidance does not affect the cost of debt. This study is in line with Dewi & Ardiyanto (2020), Manullang et al. (2020), Musaddad & Ervina (2022), Rahmawati (2015), and Utama et al. (2019) but not in line with Heryawati et al. (2018) and Sherly & Fitria (2019). This finding reflects that creditors do not assess tax avoidance as an action that strengthens risk in influencing credit terms. Several factors can trigger the differences in this study, among others, the different proxies used to measure tax avoidance, differences in data analysis methods, differences in characteristics for the sample, differences in the research period, and the final number of observations.

Cost of debt is a routine expense incurred by companies whose management is involved in debt. Mining companies have operational characteristics with large and long-term capital funding, so to meet these needs, they are carried out utilizing foreign funding. Foreign capital aims to increase productivity to ensure survival. The increase in economic value is expected to be realized by the presence of foreign capital, which is realized properly and on target. Mining companies are the most stringent industries in health, safety, and the environment, so economic fluctuations are a problem for mining companies. Efforts to maintain the continuity of mining companies' operations have resulted in the need for cash funds for mining companies to continue to increase. In addition to meeting operational needs, the company must pay off liquidity obligations and fulfill shareholder utility. The profit obtained from using assets is insufficient for the company's operations and liabilities, so the company reduces the expenses to be incurred so that profits are not reduced in large numbers.

The practice of tax avoidance is a way for companies to reduce income tax expenses. The practice of tax avoidance is carried out by increasing the company's debt. Companies that increase their debt in a high capacity are considered to be boosting their productivity, carrying out refinancing plans, or utilizing tax-deductible expenses resulting in small profits paid for taxes. Shareholders are reactive and critical of the capacity to use debt. Shareholders intend a low quantity of liabilities on the balance sheet, so a large debt value obtains shareholders' disagreement because it will burden the company in the future. Creditors consider that an increase in debt will only increase the company's risk and the value of the cost of debt itself. The high cost of debt directly affects the company's economic value in maximizing future revenue. However, these conditions are different from the test results in this study.

From the debtor's point of view, the debtor does not assess the income tax that the company levies to determine the cost of debt. Tax avoidance does not carry the risk of increasing or decreasing the rate of debt cost. Meanwhile, the interest expense increased due to increased financing activities in the form of debt. Agency theory explains that management information asymmetry can cause contra on principals and agents because agents create corporate risk by taking large debt policies to meet utility (Jensen & Meckling, 1976). In reality, agency theory does not support explaining the company's risk of tax avoidance by utilizing the cost of debt.

Descriptive statistical analysis shows that the average ETR value is 0.3939, the median is 0.2836, and the data distribution is small. It shows that the average company does not avoid tax, so it does not pose a risk because it complies with its tax obligations. However, most mining companies have not been transparent about taxes. Only 30% of the 40 companies adopted tax transparency reporting in 2020 (Suwiknyo, 2021). The existence of inequality in tax disclosure causes the data not to meet the qualifications fully and are accurate, so this study
has not been able to prove the relationship between taxes the company bears and the cost of debt.

On the other hand, many mining companies are multinational companies with various business strategies (Yanti & Pratiwi, 2021). Tax avoidance by the company does not take advantage of debt because it will provide a big expense in the future. Mining companies with overseas subsidiaries have large tax obligations and differences in rates that apply between countries, so it is believed that mining companies do tax avoidance more in terms of transfer pricing. In addition, the risk of default threatens some companies. The company's liquidity difficulties in negative cash flows will affect financial performance. In difficult times, seeking foreign funding is difficult, so companies operate cautiously to stay profitable. Companies cannot increase their debt to reduce taxes because it is difficult to find outside funding and adds a large risk of default in an unstable economy.

Tax avoidance by the company is immediately for efficiency, not as an opportunistic act. Creditors assume that tax avoidance is carried out to support the company's economic activities. The higher the profit earned, the higher the opportunity for the company to increase its size so that there is creditor confidence to invest in debt financing. In addition, debt is used to pay maturity and avoid default risk, resulting in impairment.

**Discussion of the association between earnings management and cost of debt**

This study finds that earnings management is positively associated with cost of debt. Discretionary accruals on the presentation of earnings can increase the value of the company's risk because the actual value is not transparent, so the second hypothesis is accepted. This finding is in line with Ayem & Kinait (2021), Pernamasari (2018), and Shen & Huang (2013) but not in line with Firmansyah et al. (2020) and Jasman (2016).

Descriptive statistical analysis shows that the value of discretionary accruals is 0.0559, with a median of 0.04177. The average sample is indicated to practice earnings management by increasing profit (income maximization) by 5.59% to attract investors. In addition, descriptive statistics show that, on average, mining companies bear high debt costs. It is indicated by the distribution of the data skewed to the right. The average cost of debt is 5.4%, with an average earnings management of 5.59%. These values are almost equivalent, which strengthens that the cost of debt follows earnings management.

Mining companies have the characteristics of large capital funding for mining exploitation needs. Capital from dominant mining companies comes from debt financing (Rumerung & Alexander, 2018). Debt financing is beneficial for companies to maintain internal control because they are free from external party interference (Utami, 2000). Manager utilizes earnings management to display a high economic value in the financial statements to attract capital providers. Accrual activities carry out earnings management to increase profits. Modified financial statement figures based on the manager's accrual policy can pose a risk because the financial statements are considered irrelevant in providing information, resulting in distrust.

The result of this study is expected that the fund provider not only considers the results of the financial statements presented but also evaluates how the company discloses information as a management action. A high accrual ratio risks fund providers because the company cannot provide transparent and relevant financial reports. A large risk will affect the increase in the cost of capital because the provider of funds requires a high-interest rate.
Managers with greater company financial information are incentivized to influence the numbers in the financial statements (Scott, 2015). The manager carries out this activity to ensure that the company's condition is stable so that creditors have confidence that the company can return the loan and the interest given (Firmansyah et al., 2020). Companies with a high cost of debt indicate that these companies have greater loan risk. However, this condition can be carried out by companies even though there is information asymmetry between managers and shareholders. Thus, shareholder control over the activities of managers in making loans is lower.

Companies with financial statements that have low-quality information cannot be used as a benchmark for the return of loaned funds. Companies that manage earnings management well intend to mislead investors and not create more value for investors. Although the company bears rational decisions in its growth stage, the provider of funds is competent in protecting its wealth. Fund providers are more reactive to the actual profit that is recognized when the financial statements are presented, so when there is an indication of earnings management, the fund provider will obtain a negative response in diversifying investments. The level of earnings management determines the level of funding and the decision of the fund provider to protect its credit. Regarding the right to guarantee the certainty of the fund provider, the fund provider sets a high rate of return for companies that practice high earnings management.

CONCLUSIONS

This study concludes that tax avoidance is not associated with cost of debt. It proves that the management's tax avoidance is not because of its interest in achieving utility so that it does not pose a new risk assessed by the fund provider. Meanwhile, earnings management is positively associated with cost of debt. The accrual policy implemented by the manager is considered to weaken the quality of the information presented. Fund providers consider that the low quality of accruals is a risk in providing credit to companies. This study has limitations, including the number of samples in the study is still small because the reduction of certain criteria resulted in a reduced number of samples used. In addition, this study uses cross-sectional data with a limited level of accuracy in clause analysis due to unclear time sequences, so the measurement of data is biased.

Future research can utilize company data from the non-financial and financial sectors with a longer time horizon to obtain more complete test results. This study indicates that the Indonesia Financial Services Authority will improve credit implementation policies and corporate financial misdirection measures for companies listed on the Indonesia Stock Exchange. This policy aligns with efforts to protect investors in the Indonesian capital market.

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