

# TAX AVOIDANCE, AUDIT FIRM AND COST OF DEBT: DOES INTEGRATED REPORT HAVE A PROMINENT ROLE?

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**Abstract**— This research aims to investigate the influence of tax avoidance, audit firm to cost of debt with integrated report as moderating variable in mining listed company in Indonesia Stock Exchange (IDX). Mining companies was selected due to the high rate of the borrowing cost of mining company from domestic and foreign bank. The sample was obtained using purposive sampling method with observation periods for 4 consecutive years (2019-2022). Moderated Regression Analysis (MRA) is used as an analytical model in this study. The empirical results showed that tax avoidance will increasing cost of debt, while audit firm is reducing it. Integrated report reveals two different results, where it is able to moderate the relationship between tax avoidance and cost of debt but unable to moderate audit firm and cost of debt. This result shed the light of the importance for company which has tax avoidance policy for doing voluntarily integrated report since it able to reduce the cost of debt. Besides, if the company has assigned big for auditor, the integrated reported does not provide either advantage or disadvantage impact.

**Keywords:** Tax Avoidance; Audit Firm; Cost of Debt; Integrated Report

## 1. INTRODUCTION

### 1.1 Research Background

Tax compliance issues in Indonesia have become a major concern for the government and other stakeholders, which leads to lesser tax liability paid by companies by taking advantage of tax loopholes. Based on ActionAid's (2020) research results, the lost income from the tax gap reached USD 2.8 billion, or the equivalent of IDR 41 trillion per year.

Tax avoidance does reduce the burden on companies, but this policy is still being debated. It creates the question of whether tax avoidance would positively impact companies. Based on existing research the results of implementing tax avoidance are divided into two categories: risk exposure effects (Hasan, 2014), and tax saving effects (Kovermann, 2018). These effects arising became a concern for debt holders because tax avoidance could increase future cash flows and lead debt holders to believe the company can reduce financial risk, resulting in lower debt costs (Medhioub & Boujelbene, 2023). However, this result contradicts the findings of Beladi (2018), who discovered that tax avoidance increases the risk of damaging company value and leads to larger bank loans and higher borrowing costs. The two competing research trends on tax avoidance and the cost of debt relationship have resulted in an apparent inconsistency in prior literature.

Previous research found that auditor size can be a possible factor to explain the cost of debt. According to Gul et al (2013), creditors evaluate management behavior through financial reports; hence audit quality has a significant role in reducing information asymmetry, which may prevent the increase of debt cost. Specifically, Orazalin & Akhmetzhanov (2019) and Karjalainen (2011) found that high audit quality results in lowering debt costs. They claimed that compared to other companies, Big Four audited companies had lower cost of debt.

Lin & Hwang (2010) stated that clients of a Big Four audit firm gain more trust from debt holders and can lower their debt costs because they exhibit better trading history patterns, excellent communication, and greater transparency. Further, when a company switches to a Big Four audit firm, the capital market reacts positively. Compared to clients of other audit firms, clients of Big Four audit firms have a higher earning response coefficient (Ado et al., 2020). The Big Four public accounting firms are considered to be able to carry out their audits more efficiently and effectively than small public accounting firms since they have tremendous resources in the form of number of employees, which provides them more flexible time to complete the audit (Reskika & Wahyudi, 2021). At the end, it will affect the audit quality, as seen from the audited report. In line with those arguments, Nurmala et al. (2021) stated that big accounting firms are favorable with a good public reputation. Therefore, the integrity of the company's audited financial statements is considerably higher if it was audited by Big Four audit firm. Many researchers (Medhioub & Boujelbene, 2023; Kovermann, 2018; Beladi, 2018; Shin&Woo, 2017) have studied the relationship between tax avoidance and the cost of debt, but the findings still unclear because of the wide range of variables and influencing factors. Therefore, it is necessary to conduct further examination by using another variable such as integrated reports.

The integrated report was initially published in 2013 and aim to provide comprehensive information about how companies respond to the environmental changes and creates value for shareholders (IIRC, 2021). According to IAPI (2021), there are no specific regulations from the government requiring public companies to present integrated reports, hence the implementation of integrated reports in Indonesia remains voluntary. Indonesia is a member of the G20 and being part of the B20, of course, highly enforced to maximize its participation in the process of achieving the Sustainable Development Goals (SDGs). It will be an advantage for company where voluntary integrated reports are expected to gain the good impression. Muttakin (2020) found that bankers can take benefit from the detail in integrated report information, especially for lending decisions. The researchers stated that the integrated report provides bankers with incremental information that is much more beneficial compared to conventional financial disclosure. In addition, Medhioub & Boujelbene (2023) argued that integrated reports can potentially have contradictory effects on the relationship between tax avoidance and the cost of debt also implementation integrated report make it easier for debt holders to assess the potential impact (positive or negative) of their loan debtors' tax avoidance practices. Besides, Gerwanski (2020) shows the voluntary implementation of integrated reports sends positive signals to debt holders, allowing them to overcome penalizing interests caused by increased risk of payment default.

Therefore, based on the loopholes in the existing literature, it require further research by adding variables related to the relationship between tax avoidance and the cost of debt. The number of similar findings with disparate outcomes leaves this topic unresolved. However, little is known about how the debt market reacts to tax avoidance in developing nations where tax revenues are vital. One of the most reversible actions with tax avoidance is the integrated report, which is a form of corporate responsibility toward the external environment. As a result, more

research is needed to explain the relationship between tax avoidance, audit firms, debt cost, and integrated reporting.

Specifically, this study examines mining sector due to rising demand for nickel and tin, the mining industry has tremendous growth significantly. Nature and coal have prompted many requests. Mining businesses have high borrowing rates despite rapid development. Mining companies borrow extensively from domestic and foreign banks. Bank loans to mining are among the highest proportion. The inclusion of mining firms as a subject of inquiry in this instance is a noteworthy aspect.

## 1.2 Research Problem

Based the background discussed, we can formulize several research problem as follow:

1. Does tax avoidance influence cost of debt?
2. Does audit firm influence cost of debt?
3. Does integrated report influence the relationship between tax avoidance and cost of debt?
4. Does integrated report influence the relationship between tax avoidance and cost of debt?

## 1.3 Literature Review

### 1.3.1 Cost of Debt

The cost of debt refers to the current rate of interest that a company incurs on its outstanding debts, including bonds and loans. The cost of debt refers to the proportion of an investment that must be allocated to creditors to achieve a minimum level of return. If the company uses bonds to obtain cash from long-term debt, the cost of debt is equal to the level of profit earned by the bondholder or buyer. According to Guidara et al. (2014), the cost of debt is calculate using the reported interest expense of the firm. The calculation of the cost of debt involved determining the proportion of a company's interest expense in relation to its overall debts

### 1.3.2 Tax Avoidance

Tax is considered as a component of expenses that can reduce the value of the company's equity. As a result, in order to reduce tax costs, businesses engage in tax planning by avoiding existing tax objects by utilizing tax law loopholes to minimize tax payments, this method is known as tax avoidance. Lim (2011) defines tax avoidance as tax savings resulting from the use of legal tax provisions to reduce tax obligations. Tax avoidance is a type of tax planning that aims to minimize tax payments. In the broadest sense, tax avoidance can be defined as "any factor that diminishes the tax liability of a company in relation to its pre-tax accounting income." (Utami, n.d., 2010). According to research conducted by Sutrisno et al. (2023), tax avoidance is activities that increase a company's internal cash flows due to tax savings and are thus relevant for debt pricing.

### 1.3.3 Audit Firm

According to Arens, Elder, and Beasley (2017:16), public accounting firms can be categorized into three types, namely: (1) "Big Four" International Public Accounting Firms; (2) National/Regional Public Accounting Firms; (3) Local Public Accounting Firm. An accounting firm with a well-known reputation and high audit quality in Indonesia and even abroad is The Big Four Public Accounting Firm. The big four still leading in all countries are PricewaterhouseCoopers (PwC), Ernst & Young (EY), Deloitte Touche Tohmatsu, and KPMG International Limited. Nurmalita et al. (2021) stated big accounting firms enjoy a better reputation with the general public. Therefore, the integrity of the company's audited financial statements is also higher if the public accounting firm is more prominent. Puspaningsih (2021)

found that large public accounting firms are thought to have sufficient resources that prevent them from relying on clients, allowing them to work independently and without the influence of any party. Large public accounting firms with high reputations reflect the auditor's higher level of independence in providing audit services.

### 1.3.4 Integrated Report

An integrated report is "Active consideration by the organization of the relationship between its various operating and functional units and the capital used or affected by the organization"(IIRC, 2021). The level of integrated report application is obtained from the availability of integrated report elements in the company's annual report. According to the IIRC framework, there are eight integrated report elements, consisting of Organizational overview and external environment, Governance, Business Model, Risk and Opportunities, Strategy and resource allocation, Performance, Outlook, Basis of preparation, and presentation. The publication of integrated reports emphasizes greater transparency about the company by providing stakeholders with the information they need to assess long-term prospects clearly and concisely (García-Sánchez et al., 2013). Further, this statement provides a comprehensive overview of the company's strategy, corporate governance, performance, and prospects, by considering the commercial, social, and environmental context in which it becomes the main concern of company purpose. In addition, Obeng et al. (2020) asserted that companies that produce integrated reports should enhance their disclosure practices by offering more comprehensive information that enhances the quality of accounting data. An integrated report offers a more comprehensive understanding by incorporating non-financial information and conducting an in-depth examination of data.

### 1.3.5 Hypothesis Development

#### **The relationship between tax avoidance and the cost of debt**

The trade-off theory assumes that the use of debt results in tax advantages. Companies will utilize debt to a certain extent in order to maximize their value. Additionally, the trade-off theory explains that the optimal capital structure is based on a balance between the benefits and costs of financing with loans. The most significant advantage of financing with a loan is the tax reduction obtained on loan interest which can reduce income in calculating taxable income.

Creditor ratings greatly influence companies in paying debts. If the risk owned by a company is high, creditors tend to require high interest. Interest is a return for creditors that is borne by the company, which the company considers as a cost of debt, and it can be interpreted that the cost of debt carried by the company is influenced by the creditor's assessment of the company's risk.

According to Guedrib & Marouani (2023), tax avoidance is a strategy to reduce the explicit tax burden. This means taking advantage of loopholes and tax law variations to reduce the amount of tax owed. Researchers use agency theory to investigate the relationship between tax avoidance and the cost of debt. The cost of this debt is used by managers to reduce the income tax that must be paid by the company, this method is called tax avoidance. The company's encouragement in avoiding taxes is increasing because the cost of debt arising from using debt in the form of interest expenses can be deducted from the company's profits, resulting in small profits and low taxes paid. However, the implementation of this tax avoidance affects the creditor's assessment of the company. Creditors consider tax avoidance to be included in risky actions that charge higher interest.

Previous studies have shown that corporate tax avoidance is associated with the cost of debt to produce two conflicting effects: the "risk exposure effect" and the "tax saving effect."

These results reveal two significant and unexplored gaps. Sugiyanto et al. (2020) has been discovered that tax avoidance has significant impact on the cost of debt. In line with this Yuliarti et al. (2021) also found tax avoidance have a positive and insignificant effect on the cost of debt. Based on this explanation, it can be argued that the greater the tax avoidance may lead the increase of company's risk, hence the greater the cost of debt will be borne by the company. Thus, our first hypothesis can be stated as follows:

*H<sub>1</sub>. Tax avoidance has a positive impact on the cost of debt.*

### **The relationship between the audit firm and the cost of debt**

Auditor monitoring can reduce agency issues because audit results represent the transparency of company management performance. The high quality of the audit produced by the auditor is obtained from several actors, such as the auditor's resources, prudence in conducting audit activities, and the public accounting firm's reputation in the capital market. The audit results from the public accounting firm big-four are qualified because they meet these criteria. Companies' risk of information asymmetry will undoubtedly be reduced, which may result in lower debt costs.

Several studies have found that the presence of a qualified auditor reduces agency issues between agents and principals. According to Lin & Hwang (2010), clients of a big four audit firm gain more trust from debt holders. Compared to non-big four public accounting firms, company can lower their debt costs by exhibiting better trading history patterns, excellent communication, greater transparency, and producing credible financial reports. Orazalin & Akhmetzhanov (2019) discovered that high audit quality results in low debt costs, which is consistent with the findings of Karjalainen (2011). He claimed that firms audited by the big four accounting firms had lower interest rate than other firms. From the preceding discussion, it can be argued that companies audited by the Big Four can obtain a lower cost of debt. Based on this, the second hypothesis is stated as follows:

*H<sub>2</sub>. The audit firm has a negative impact on the cost of debt.*

### **The moderating effect of integrated report on the relationship between tax avoidance and the cost of debt**

Companies will try to reduce burden of their income taxes. This purpose can be achieved by using the cost of debt arising from the use of debt in the form of interest expense which deducted from the company's profits resulting in small profits and low taxes paid. However, this tax avoidance creates a lot of risks for the company, and if the company suffering for high risk, it becomes an issue for the company especially creditors' point of view. It also lead to a high cost of debt.

If we consider the goal of creating an integrated report, which is to "provide a structured company to tell their story about how it manages its responses to the external environment and creates value for shareholders," it is hoped that implementing integrated reports can make it easier for debt holders to assess the impact arising from tax avoidance by companies on their loans. At the end, it is expected to lessen the cost of debt.

Gerwanski (2020) has found that companies that apply integrated reports can receive lower debt costs. He concluded that the voluntary implementation of integrated reports reduces information asymmetries and makes it easier for creditors to determine the risk of default for a firm and positively impact the reputation and brand image of a company. In addition, implementing an integrated report can provide positive value to the company by enhancing transparency, stakeholder engagement, and reputation. It enables businesses to communicate their long-term strategies, sustainability initiatives, and financial and non-financial performance

more effectively, improving decision-making, risk management, and creating long-term value. Therefore, it can be argued that implementing integrated reporting can weaken the relationship between tax avoidance and the cost of debt. On that basis, we can formulate the following third hypothesis:

*H<sub>3</sub>. The integrated report weakens the relationship between tax avoidance and the cost of debt.*

**The moderating effect of integrated report on the relationship between the audit firm and the cost of debt**

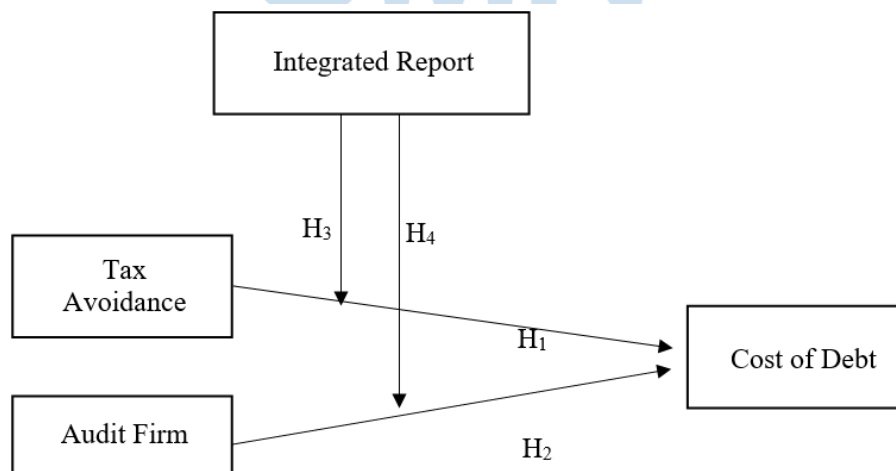
Auditor resources, prudence in conducting audit activities, and the reputation of public accounting firms in the capital market result in high audit quality. The big four public accounting firms meet this criterion. High-quality audit results can reduce agency problems because audit results represent transparency of the company management performance. It reduces the company risk. At the end, it can lower the cost of debt.

Implementing integrated report voluntary reports sends positive signals to debt holders. This is possible because it allows them to overcome penalizing interests caused by increased payment default risk. The publication of integrated reports also shows greater transparency about the company by providing stakeholders with the information they need to assess. With increased transparency and reputation, naturally integrated reports increase positive value for the company.

The effects of integrated reports are consistent with market reactions to companies that use the big four audit firms. The stock market reacts positively when a company is audited by one of the Big Four audit firms. They gain debt holders’ trust by demonstrating better trading history patterns, excellent communication, and increased transparency.

In addition, Hichri (2023) also shows that audit quality has a positive and significant effect on integrated reporting. Velte (2018) also found that the big four have positively influenced the readability of integrated reporting, which can increase credibility and reduce the manipulation of financial and non-financial information. Based on the above theoretical analysis, it can be argued that companies audited by the big four, accompanied by the application of integrated reporting can make the company’s image better and the company’s risk reduced. Therefore, the following hypotheses is proposed:

*H<sub>4</sub>. The integrated report strengthens the relationship between the audit firm and the cost of debt*



**Figure 1. Research Framework**

## 2. RESEARCH METHODOLOGY

This study uses a quantitative approach. The data used manufacturing companies which are exist on the Indonesia Stock Exchange for the period 2019-2022 using method of purposive sampling. Purposive sampling was used to choose the research sample, where the method uses certain criteria in sample selection:

1. Manufacturing companies on mining sector listed on the IDX 2019-2022
2. Manufacturing companies on mining sector which not suffer any losses for the period 2019-2022
3. Manufacturing companies on mining sector that has completed data to be analyzed further
4. Manufacturing companies on mining sector that present financial statements in foreign currency (USD)

### 2.1 Variable and Measurement

This research using Cost of Debt (Y) as the dependent variable and Tax Avoidance (X1) and Audit Firm (X2) as independent variable. In this research also included Integrated Report (Z) as moderating variable. For dependent variable referring to Guidara et al. (2014; Medhioub & Boujelbene (2023) to measure Cost of Debt:

$$\text{Cost of Debt} = \frac{\text{Interest Expense}}{\text{Total Financial Debt}}$$

For the Independent variable, there's two which is Tax Avoidance and Audit Firm:

#### 1. Tax Avoidance

A growing body of research has demonstrated that because this is an accrual-based measure, earnings management practices can have an impact, and to overcome it (Medhioub & Boujelbene, 2023) using the CETR (effective cash tax rate) as a more accurate indicator of tax avoidance. To calculate the CETR, pre-tax income must be positive.

$$\text{CETR} = \frac{\text{Cash tax paid}}{\text{Pre-tax income}}$$

#### 2. Audit Firm

The audit firm in this study was examined using a dummy variable. Audit firms are divided into 2 Big four categories and Public Accounting Firms that are not affiliated with the Big four (Non big four). If the company is audited by one of the Big Four Public Accounting Firms, it will earn a score of 1. The company will receive a score of 0 if it is audited by a public accounting firm other than one of the "big four." (Karjalainen, 2011).

The last one is the moderating variable. Moderating variable in this research was Integrated Report. In line with prior literature, in this research following Kustiani (2017) to measure integrated report. The level of IR application is obtained from the availability of IR elements in the company's annual report obtained from the official website of each company. According to the IIRC framework, there are 8 integrated report elements, consisting of Organizational overview and external environment, Governance, Business Model, Risk and Opportunities, Strategy and resource allocation, Performance, Outlook, Basis of preparation and presentation. Every element that available in company annual report will be given score 1, otherwise will give 0 if the element unavailable in the company annual report and then averaged over the years.

### 2.2 Data Analysis Technique

This study uses Moderated Regression Analysis (MRA) to determine the relationship between tax avoidance and audit firms with the cost of debt of debt with integrated reporting as a moderating variable. Moderated Regression Analysis (MRA), often known as an interaction test, uses multivariate linear regression with an interaction term that multiplies two or more independent variables. Evaluation will be based on intrinsic likelihood. The independent variables' aggregate influence on the dependent variable is statistically significant when the probability value is below 0.05 or 5%.

### 3. RESULTS AND DISCUSSIONS

Table 1. present the descriptive statistics. It shows the number of total samples, mean and standard deviation. The cost of debt has a minimum value of 0.0016 and a maximum value of 0.501. The mean is 0.14017, or 14%, while the standard deviation is 0.012899, or 1%. Since the debt cost mean exceeds the standard deviation, the data is normally distributed. This demonstrates that IDX mining enterprises from 2019 to 2022 average 14% loan cost of total liabilities. Vale Indonesia Tbk has the lowest debt cost and Merdeka Copper Gold Tbk the highest.

Tax avoidance ranges from 0.0590 (6%) to 0.8640 (86%). Tax avoidance averages 0.316925, or 32%, and standard deviation is 0.2187431, or 22%. Due to its lower worth than 0.86040, the average sample company has poor tax avoidance. Tax avoidance was lowest by Harum Energy Tbk and highest by Indo Tambangraya Megah Tbk.

**Table 1. Descriptive Statistics**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Cost of Debt	40	0.0016	0.0501	0.01402	0.0128999
Tax Avoidance	40	0.059	0.864	0.31693	0.2187431
Audit Firm	40	0	1	0.8	0.405
Integrated Report	40	0.625	1	0.8625	0.1088989
Valid N (listwise)	40				

Source: Data Processing by Author (2023)

Audit firm was a dummy variable with 1 for corporations that utilize major four public accounting firms and 0 for others. The audit firm's mean is 0.80 and its standard deviation is 0.405, or 40%. On average, 80 percent of IDX mining enterprises from 2019 to 2022 use large four public accounting firms as auditors.

The integrated report ranges from 0.6250 (62%) to 1.00 (100%). These findings show mining businesses use integrated reporting in 62% to 100%. Based on the mean value, 0.862500, 86 percent of IDX mining enterprises from 2019 to 2022 presented their annual report in line with integrated report standards.

#### 3.1 Normality Test

**Table 1. Normality Test**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		40
	Mean	0
Normal Parameters	Std. Deviation	0.010686964



	Absolute	0.117
Most Extreme	Positive	0.117
Differences	Negative	-0.086
Test Statistic		0.117
Asymp. Sig. (2-tailed)		0.18

Source: Data Processing by Author (2023)

Table 2. reveals that this research's data are normally distributed with a significant value of  $0.180 > 0.05$ . When carrying out the normality test, there are some data with outlier symptoms. There are 8 data exposed to outliers, therefore, the data is taken out of the sample and the final result has presented on Table 4.2.

### 3.2 Multicollinearity Test

**Table 2 Multicollinearity Test**

Coefficient			
Model	Collinearity Statistics		
	Tolerance	VIF	
(Constant)			
Tax Avoidance	0.98	1.02	
Audit Firm	0.797	1.255	
Integrated Report	0.786	1.272	

Source: Data Processing by Author (2023)

Table 3 indicates no multicollinearity in the dependent (cost of debt), independent (tax avoidance, audit firm), and moderating (integrated report) factors, as tolerance  $> 0.100$  and VIF  $< 10.00$ .

### 3.3 Autocorrelation Test

**Table 3. Autocorrelation Test**

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	0.388	0.151	0.018	0.01045527	

Source: Data Processing by Author (2023)

The table above shows that the Chi-square count is  $6.04 < \text{Chi Table } 7,8147$ . The result shows that all variables have no signs of autocorrelation.

### 3.4 Heteroscedasticity Test

The result of the heteroscedasticity test from Table 5 stated that the significant value for tax avoidance is  $0.842 > 0.05$ , the significance for audit firms is  $0.765 > 0.05$ , and the significant value for integrated reports is  $0.753 > 0.05$ . All significant result exceeds 0.05, which means there's no heteroscedasticity.

**Table 4 Heteroscedasticity Test**

Correlations						
			X1	X2	Z	Unstandardize d Residual
Spearmen's Rho	Tax Avoidance	Correlation	1	-0.103	-0.094	0.033
		Sig. (2-tailed)	.	0.528	0.562	0.842
		N	40	40	40	40
	Audit Firm	Correlation	-0.103	1		0.049

				0.404*	
	Coefficient			*	
	Sig. (2-tailed)	0.528	.	0.01	0.765
	N	40	40	40	40
	Correlation		0.404*		
Integrated Report	Coefficient	-0.094	*	1	0.051
	Sig. (2-tailed)	0.562	0.01	.	0.753
	N	40	40	40	40
Unstandardized Residual	Correlation	0.033	0.049	0.051	1
	Sig. (2-tailed)	0.842	0.765	0.753	.
	N	40	40	40	40

Source: Data Processing by Author (2023)

### 3.5 F-Test

**Table 5 F-test Result**

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.003	5	0.001	5.744	0.001
1 Residual	0.004	34	0		
Total	0.006	39			

Source: Data Processing by Author (2023)

From Table 6, it can be seen that the significance value  $F = 0.001 < 0.05$ . This means all variables (tax avoidance, audit firm, integrated report) simultaneously significantly affect cost of debt.

### 3.6 T-Test

**Table 6. Model 1 Result**

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
	(Constant)	0.008	0.003		
Tax Avoidance	0.019	0.009	0.325	2.12	0.041

The first hypothesis is that increased tax avoidance lowers the company's value and increases risk, which boosts interest rates and the company's debt cost due to debt holders' distrust. Model 1's regression equation shows that tax avoidance increases debt cost by 0.19. Important relationship between tax avoidance and debt expense. The significant link between tax avoidance and debt cost is  $0.041 < 0.05$ , indicating that its impact is considerable (**H<sub>1</sub> Accepted**).

**Table 7. Model 2 Result**

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
	1 (Constant)	0.024	0.004		
Audit Firm	-0.012	0.005	-0.378	-2.518	0.016

Source: Data Processing by Author (2023)

The second hypothesis is that using a big four public accounting firm reduces loan costs. Debtors trust big four audited companies. The audit firm reduces loan cost by 0.012, according

to the regression equation. Similar to the previous model, the second model explained the considerable impact of independent and dependent factors on audit firms. A significant link exists between the audit firm and debt cost ( $0.016 < 0.05$ ), indicating a significant impact (**H<sub>2</sub> Accepted**).

**Table 8. Model 3 Result**

Model	Coefficients		Standardized Coefficient	t	Sig.
	Unstandardized Coefficients				
	B	Std. Error			
(Constant)	0.008	0.003		2.672	0.012
Tax Avoidance	0.116	0.033	1.962	3.526	0.001
Tax Avoidance*Integrated Report	-0.114	0.038	-1.69	-3.038	0.004

Source: Data Processing by Author (2023)

The third hypothesis discusses how integrated reports affect tax avoidance and debt cost. The findings show it. Tax avoidance and debt cost are negatively affected by integrated reporting. When paired with tax avoidance, integrated reports lower debt price. Integrating reports moderates the relationship between tax avoidance and debt cost ( $p\text{-value} < 0.05$ ). It can be concluded that an integrated report moderates tax evasion and debt expense. Finally, integrated reports weaken the tax avoidance–debt cost link (**H<sub>3</sub> Accepted**).

**Table 9. Model 4 Result**

Model	Coefficients		Standardized Coefficient	t	Sig.
	Unstandardized Coefficients				
	B	Std. Error			
(Constant)	0.024	0.004		5.462	0
Audit Firm	-0.006	0.022	-0.189	-0.275	0.784
Audit Firm*Integrated Report	-0.007	0.024	-0.104	-0.284	0.778

Source: Data Processing by Author (2023)

Fourth hypothesis explains how implementing integrated reports affects the relationship between audit firms and debt cost. When paired with the audit firm, the integrated report does not affect loan costs. Integrated report is  $-0.007$ . Compared to the third model, the integrated report as a moderating variable between tax evasion and loan cost is  $0.778 > 0.05$ . For audit firms' impact on debt cost, integrated reports have no substantial effect. Our findings show that integrated reports do not moderate the link between audit firms and debt costs (**H<sub>4</sub> Rejected**).

### 3.7 Discussion

The first hypothesis examines whether higher tax avoidance will also increase debt costs. Based on result Tax avoidance increases debt expense. This shows that tax avoidance affects debt costs, causing the "risk exposure effect". A corporation that implies tax avoidance increases risk, lowers debtor trust, and raises interest, and the debtor is all about important information. According to agency theory, tax avoidance prevents debtors from accessing important information. Tax avoidance can also lower financial reporting quality, which impacts debt holders' decisions. (Dhawan et al., 2020). Therefore, companies that engage in tax avoidance should consider lowering the aggressiveness of their tax policies in order to reduce the risk perception of creditors and lower the cost of debt. This result was supported by Beladi et al. (2018), but contradict with Medhioub & Boujelbene (2023), Sanchez-Ballesta & Yague (2023), & Kobermann (2018) which argued that tax avoidance lead for lowering cost of debt.

The second hypothesis is the negative impact of audit firms on cost of debt. Based on result H2 accepted. Chen et al. (2023) reveals that Big4 accounting firm leads for higher audit quality, compared to non Big Four. Hence, it can be implied that, the higher audit quality will be able to decrease the cost of debt. Assigning Big4 accounting firm signalling stakeholders that company has a credible and trustworthy financial report, since it improving the transparency and quality of financial reporting. At the end, by selecting more credible auditors such as the Big Four can significantly lower the cost of debt. This finding is supported by previous research (Bacha et al., 2021; Fortin et al., n.d.; Karjalainen, 2011; Robiansyah, 2019).

The third and fourth hypotheses want to know if integrated report was implemented and see the impact on each relationship. According to the results, integrated report implementation affects tax avoidance and debt cost. Integrated reports give debt holders interested in business sustainability strategic and forward-looking information to make correct predictions. Guaranteed integrated reports can restore debt holders' confidence and reduce tax evasion uncertainty, lowering loan costs. Stakeholder theory supports this research because integrated reporting reversed the favorable association between tax evasion and debt expense. This finding also aligns with previous research conducted by Medhioub & Boujelbene (2023) and Raimo et al. (2021).

The fourth hypothesis differs from the third in outcomes. The fourth hypothesis tests whether integrated report as a moderating variable strengthens audit firm-debt cost link. According to H2, audit company affects debt cost negatively. A company using a big four public accounting firm has a reduced debt cost. A corporation that engages one of the Big Four public accounting firms will get high-quality financial reports. If a corporation has good financials, debt holders will lessen their assessments. Consequently, integrated report will not be considered as a prominent evaluation factor. Thus, integrated reports do not moderate the audit firm-debt cost relationship.

#### **4. CONCLUSION AND SUGGESTION**

Based on the data analysis findings and the preceding discussion, it can be concluded that this research determines to disclose the influence of tax avoidance and audit firm towards cost of debt with integrated report as moderates the relationship. The mining company listed on IDX is selected as the sample of this research, there are several conclusions obtained. First, tax avoidance contributes significantly to lower loan costs. Higher tax avoidance means higher debt costs. Company tax avoidance raises risk and lowers loan holder trust, raising debt costs. Second, audit firms significantly diminish debt costs. Companies using the big four auditors have lower financing costs. The Big Four provide high-quality financial statements and lower interest rates. Third, the integrated report reduces the impact of tax avoidance on loan costs. It indicates that integrated research shows that high-tax avoidance companies have lower loan costs. Implied integrated reports decrease information asymmetries, make it easier for creditors to assess a firm's default risk, and improve a company's reputation and brand image. Lastly, integrated report does unable to moderate the between audit firm and debt cost. Integrated reports moderate the audit firm-debt cost relationship, but high-quality financial statements cause debt holders to prioritize them over other reasons.

The observation time in this study is only four years (2019-2022), which is short compared to other studies. This may alter the study's outcome. This analysis also only included IDX-listed mining businesses. Thus, this study's conclusions are subjectively limited to the mining industry. Only USD-presenting companies are included in this research to avoid bias. IDR-presenting companies' financial reports can expand the sample in future studies.

Some contributions are able to generated where this study compares competing research streams. First, this research is able to clarify the gap between the two competing streams of research findings. It is proven that tax avoidance has a "risk exposure effect". This suggests that debt holders consider tax avoidance a risk and tend to charge higher interest rates. This study also discovered that integrated reports can moderate this relationship. Applying integrated reports can potentially mitigate the adverse effects of tax avoidance on the cost of debt. Debt holders believe this provides them with more information about the company's sustainability, allowing them to make more accurate predictions. With these findings, it would be reasonable to advise all company not doing aggressive tax avoidance, because it will reduce its value. The implementation of integrated reports is highly encouraged to be carried out. Apart from making it easier for debt holders to obtain the required data, implementing it can increase company value and make easier for companies to have a clearer understanding of cause and effect and make better decisions. At the other hand, companies with tax avoidance policies should be more proactive in preparing integrated reporting to improve the reputation and trust of creditors, as well as reduce the cost of debt.

Second, big four auditors play a role in reducing the cost of corporate debt. Debt holders have a higher level of trust in companies that the big four public accounting firms have audited. This explains why hiring one of the big four auditors is highly advised. It will be the alternative policy for them for reducing cost of debt even without performing their social or environment voluntary report.

For the following study, there is still many other scopes waiting for further examination. Further research can consider a boarder sample not only focused on mining companies but can involve other sectors of company listed in IDX, which could enrich the understanding of the effects of tax avoidance, audit firms, and integrated reporting on debt costs. Besides, future research could extend the observation period to capture long-term fluctuations in debt costs and changes in tax regulations. Future research is able to enrich the study by adding companies reporting in IDR and USD, where this study is limited to companies reporting in USD. The result may offer additional relevant insights. For companies, this study emphasizes the necessity of tax compliance over tax minimization decisions, which might damage corporate value. As a result, the cost-benefit analysis of disobeying tax rules is unfavorable. Furthermore, this study offers distinct viewpoints. If a company is unable to retain a large accounting firm, it is recommended that an integrated report be prepared as a substitute. Eventually, it sought to preserve the cost of debt.

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