

THE INFLUENCE OF ESG DISCLOSURE SCORE ON THE COST OF CAPITAL IN THE MANUFACTURING COMPANY

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Abstract: This study examines the relationship of ESG disclosure score to the cost of capital. ESG disclosure score is proxied individually, namely environmental disclosure score, social disclosure score and governance disclosure score taken from Refinitiv. The cost of capital in this study is proxied by the cost of debt and equity. The population of this study is manufacturing companies listed on the Indonesia Stock Exchange from 2014 to 2021. Data collection using secondary data comes from annual reports and ESG disclosure scores from Refinitiv and data analysis using multiple linear regression with the help of Stata software version 17. The results state that the environmental and social disclosure score has no significant effect on the cost of equity. The governance disclosure score has a significant negative effect on equity costs. The environmental and governance disclosure score has no significant effect on the cost of debt. Social disclosure score has a significant negative effect on the cost of debt.

Keywords: environmental disclosure score, social disclosure score, governance disclosure score, cost of debt, cost of equity

INTRODUCTION

Currently, companies are required to carry out sustainable finance. Sustainable finance is the commitment of business actors to behave ethically, protect the environment and improve the quality of life of labour, communities and society while building the country's economy (Houque et al., 2020). Sustainable finance is regulated in several regulations such as the Financial Services Authority Regulation Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services institutions, Issuers, and Public Compa-

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nies. One form of sustainable finance implementation is the Environmental, Social, and Governance (ESG) concept based on mutual fund investment.

Indonesians are showing interest in resolving sustainability issues. This is reflected in the investors' enthusiasm for ESG-based mutual funds. Figure 1 shows the increase in ESG-based mutual funds. The Chief Executive of Capital Market Supervision and Member of the Board of Commissioners of the Financial Services Authority (OJK), Hoesen, in a seminar held by the Indonesia Institute for Corporate Directorship (IICD) in 2022 mentioned that the increase in the number of mutual fund management funds was due to Indonesian investors starting to pay attention to ESG issues (Ramadhansari, 2022). This statement is also supported by data from the Katadata Insight Center (KIC) in 2022 on 595 investor respondents in Indonesia, showing that 66.1% of Indonesian investors invest in shares of companies with good ESG disclosures (Rahman, 2022).

ESG consists of three components. The first component is environmental, which relates to utilizing natural resources and their environmental impact. The second component is social, which relates to how the company deals with employees, the surrounding community, the government, consumers, suppliers and other parties involved directly or indirectly. The third component is governance, which relates to the company's internal management, such as managerial and organizational structures as well as CSR activities (Sarnisa et al., 2022).

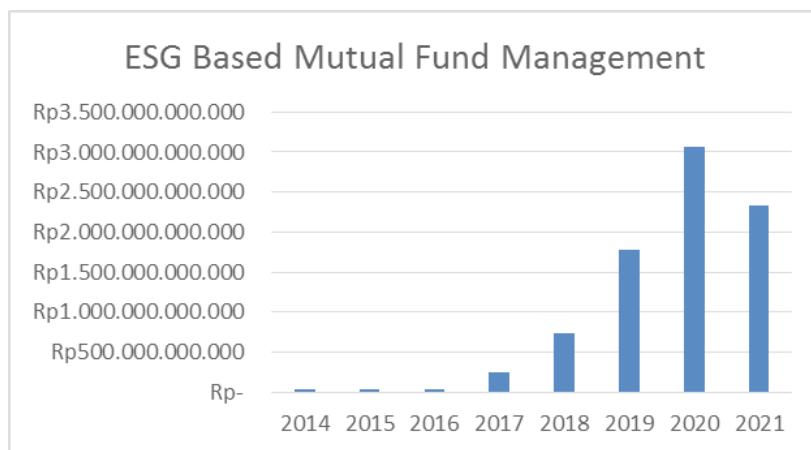


Figure 1 Graph of ESG-based Mutual Funds
Source: Processed Data (2023)

Nowadays, investors prefer low-risk companies that pay attention to environmental, social and governance issues (Triyani et al., 2021). Stakeholders use ESG performance to assess the quality of company management. ESG disclosure reflects the company's transparency and risk opportunities, especially related to environmental, social, and governance issues (Raimo et al., 2021).

Indonesia produces 60 tons of hazardous and toxic inorganic waste, commonly known as B3 waste. The manufacturing industry is the most significant contributor to B3 waste, with 2,897 manufacturing industries, and the industry's compliance is still low. Several companies in Indonesia have been involved in land disputes with surrounding communities. PT Krakatau Steel (KS) and PT Lotte Chemical Titan Nusantara (LCTN) were sued by heirs of 17,400 hectares of land in the Cilegon area. Another social phenomenon that often occurs is worker demonstrations.

The implementation of ESG concept-based performance requires costs sourced from corporate funding. Funding can come from debt and equity. Funding also incurs costs, often called the cost of capital. The cost of capital can be influenced by factors such as the company's financial and non-financial performance, company risk, corporate image, and corporate governance (Liberty et al., 2021). In addition, shareholders pay attention to the risks that can arise from environmental and social factors. Creditors also value companies with good ESG performance (Raimo et al., 2021).

This study aims to see the effect of ESG disclosure score by looking at each component, namely environmental, social, and governance disclosure score on the cost of capital proxied by the cost of debt and equity. This research is supported by agency theory. Agency theory studies the relationship between agents (managers) and principals (shareholders) who are bound by agreements. Principals give responsibility and delegate authority in decision-making to agents, in this case, company managers (Jensen & Meckling, 1976). In this case, the principal expects the agent to run the company to increase the value of the principal. One way to run a company is by paying attention to the risks that can arise from the environment and society. This can be done by implementing good corporate governance. Agents can access more information than the principal as they are the parties in the company and manage the company. This can lead to

information asymmetry. One way to reduce the problem of information asymmetry is by disclosing information such as ESG disclosure score.

This research was conducted in the manufacturing industry sector listed on the Indonesia Stock Exchange during 2014-2021. The environmental, social, and governance disclosure score is 0-100 on the Refinitiv platform. This study has six hypotheses, as follows:

H1: Environmental Disclosure Score negatively affects Cost of Equity

H2: Social Disclosure Score negatively affects Cost of Equity

H3: Governance Disclosure Score negatively affects Cost of Equity

H4: Environmental Disclosure Score negatively affects Cost of Debt

H5: Social Disclosure Score negatively affects Cost of Debt

H6: Governance Disclosure Score negatively affects Cost of Debt

METHOD

This is quantitative research. The data used in this study are secondary data, taken from the annual reports of manufacturing companies listed on the IDX during 2014-2021 and ESG disclosure score data from the Refinitiv platform.

Population and Sample

Table 1 Sample Size Description

Description	2014	2015	2016	2017	2018	2019	2020	2021	Total
Manufacturing companies listed on the IDX in 2014-2021	133	133	133	133	133	133	133	133	1064
Manufacturing companies that do not have a complete Refinitiv ESG disclosure score from 2014-2021	-124	-123	-123	-121	-120	-120	-120	-114	-965
Manufacturing companies that do not publish complete annual reports from 2014-2021	0	0	0	0	0	0	0	0	0
Total final sample	9	10	10	12	13	13	13	19	99

The population of this study are manufacturing sector companies listed on the IDX and have ESG disclosure scores on Refinitiv from 2014 to 2021. The sample group was determined using a non-probability method, namely purposive sampling. The following are the sample selection criteria and a description of the number of samples taken in the Table 1.

Operational Definition and Measurement of Variables

This study uses two types of variables, namely, independent and dependent variables. The independent variable is the ESG disclosure score, which is proxied to the environmental disclosure score, social disclosure score, and governance disclosure score. The dependent variable is proxied to the cost of equity and debt.

Table 2 Operational Definition of Variables

No.	Variable	Conceptual Definition	Indicator	Source
1	Environmental Disclosure Score	Environmental performance scores cover carbon emissions, climate change effects, renewable energy pollution, water use, and energy consumption innovation.	The environmental disclosure score is denoted by EDS. The environmental disclosure score from the Refinitiv website ranges from 0-100. Score criteria: 0-25 (poor), >25-50 (satisfactory), >50-75 (good), >75-100 (excellent).	(Ellili, 2020); (Refinitiv, 2023)
2	Social Disclosure Score	Social performance score covering community relations, human rights, employee turnover, and women in management.	The social disclosure score is denoted by SDS. The social disclosure score from the Refinitiv website ranges from 0-100. Score criteria: 0-25 (poor), >25-50 (satisfactory), >50-75 (good), >75-100 (excellent).	(Ellili, 2020); (Liberty et al., 2021); (Refinitiv, 2023)
3	Governance Disclosure Score	Governance performance scores include board size, board quality, independent directors, shareholders and the company's CSR strategy.	The governance disclosure score is denoted by GDS. The governance disclosure score from the Refinitiv website ranges from 0-100. Score criteria: 0-25 (poor), >25-50 (satisfactory), >50-75 (good), >75-100 (excellent).	(Ellili, 2020); (Liberty et al., 2021); (Refinitiv, 2023)
4	Cost of Equity	Cost of Equity is the rate of return that investors expect when providing funding.	Cost of equity denoted by CoE. $CoE = \frac{B_t \cdot X_{t+1} + P_t}{P_t}$	(Wardani & Putriane, 2020); (Utami (2006))
5	Cost of Debt	Cost of Debt is the rate of return creditors expect when providing funding.	Cost of debt denoted by CoD $CoD = \frac{\text{Interest Expense}}{\text{Short & Long Debt}}$	(Andriani, 2020); (Raimo et al., 2021)

RESULTS

The data obtained for this study was originally 99 but several outliers were eliminated after processing, causing the processing data for model 1 to be 94 data and model 2 to be 98 data.

Table 3 Descriptive Analysis Results for Model 1

Variable	Obs	Mean	Std. Dev	Min	Max
COE	94	-0,5866559	0,3266328	-1	0,5387103
EDS	94	37,52443	23,74531	0	87,66
SDS	94	44,21255	21,73149	4,55	86,56
GDS	94	43,55636	19,6129	2,98	89,29

Based on Table 3, it is known that the minimum value of cost of equity is -1 and the maximum value is 0.5387103. The mean value is -0.5866559 and the standard deviation is 0.3266328. The minimum value of -1 comes from the companies Chandra Asri Petrochemical Tbk and Japfa Comfeed Indonesia Tbk. The maximum value of 0.5387103 comes from PT Astra Internasional Tbk. The mean value of -0.5866559 indicates that, on average, manufacturing companies in Indonesia have a cost of equity of -0.5866559.

Based on Table 3, it is known that the minimum environmental disclosure score is 0 and the maximum value is 87.66. The mean value is 37.5244 and the standard deviation is 23.74531. The minimum value of 0 comes from PT Gudang Garam Tbk. The maximum value of 87.66 comes from PT Unilever Indonesia Tbk. The mean value of 37.5244 indicates that the average manufacturing company in Indonesia has an environmental disclosure score of 37.52%. The standard deviation is smaller than the average, meaning that the characteristics of this research sample do not deviate much so that it is evenly distributed in manufacturing companies.

Based on Table 3, it is known that the minimum social disclosure score is 4.55 and the maximum value is 86.56. The mean value is 44.21 and the standard deviation is 21.73149. The minimum value of 4.55 comes from PT Gudang Garam Tbk. The maximum value of 86.56 comes from PT Indocement Tunggal Prakarsa Tbk. The mean value of 44.2126 indicates that the average manufacturing company in Indonesia has a social disclosure score of 44.21%. The standard deviation is smaller than the average, meaning that the characteristics of this

research sample do not deviate much so that it is evenly distributed in manufacturing companies.

Based on Table 3, it is known that the minimum governance disclosure score is 2.98 and the maximum value is 89.29. The mean value is 43.5564 and the standard deviation is 19.6129. The minimum value of 2.98 comes from Charoen Pokphand Indonesia Tbk. The maximum value of 89.29 comes from PT Unilever Indonesia Tbk. The mean value of 43.5564 indicates that the average manufacturing company in Indonesia has a social disclosure score of 43.56%. The standard deviation is smaller than the average, meaning that the characteristics of this research sample do not deviate much so that it is evenly distributed in manufacturing companies.

Table 4 Descriptive Analysis Results for Model 2

Variable	Obs	Mean	Std. Dev	Min	Max
COD	98	0,0561455	0,0356389	0	0,1405731
EDS	98	37,38991	23,16259	0	87,66
SDS	98	43,70038	21,67766	4,55	86,56
GDS	98	42,77282	19,57499	2,98	89,29

Based on Table 4, it is known that the minimum value of the cost of debt is 0 and the maximum value is 0.1405731. The mean value is 0.0561455 and the standard deviation is 0.0356389. The minimum value of 0 comes from PT Indo cement Tunggal Prakarsa Tbk. The capital structure of PT Indo cement Tunggal Prakarsa Tbk does not use interest-based debt because it has substantial equity and strong cash flow. PT Indo cement Tunggal Prakarsa Tbk also has a policy to reduce the cost of capital, especially those arising from debt. The maximum value of 0.1405731 comes from PT Japfa Comfeed Indonesia, indicating that the company's total debt interest expense is significant. The mean value of 0.0561455 indicates that the average manufacturing company in Indonesia has a cost of debt of 5.6%. The standard deviation is smaller than the average, meaning that the characteristics of this research sample do not deviate much so that it is evenly distributed in manufacturing companies.

Based on Table 4, it is known that the minimum environmental disclosure score is 0 and the maximum value is 87.66. The mean value is 37.389991 and the standard deviation is 23.16259. The minimum value of 0 comes from PT Gudang

Garam Tbk. This is because from 2014 to 2017, the company did not publish its environmental performance. The maximum value of 87.66 comes from PT Unilever Indonesia TBK in 2021. The mean value of 37.389991 indicates that the average manufacturing company in Indonesia has an environmental performance disclosure score of 37.39%. The standard deviation is smaller than the average, meaning that the characteristics of this research sample do not deviate far so that they are evenly distributed in manufacturing companies.

Based on Table 4, it is known that the minimum social disclosure score is 4.55 and the maximum value is 86.56. The mean value is 43.70038 and the standard deviation is 21.67766. The minimum value of 4.55 comes from PT Gudang Garam Tbk. The maximum value of 86.56 comes from PT Indocement Tunggal Prakarsa Tbk. The mean value of 43.70038 indicates that the average manufacturing company in Indonesia has a social performance disclosure score of 43.7%. The standard deviation is smaller than the average, meaning that the characteristics of this research sample do not deviate much so that it is evenly distributed in manufacturing companies.

Based on Table 4, it is known that the minimum governance disclosure score is 2.98 and the maximum value is 89.29. The mean value is 42.77282 and the standard deviation is 19.57499. The minimum value of 2.98 comes from PT Charoen Pokphand Indonesia Tbk. The maximum value of 89.29 comes from PT Unilever Indonesia Tbk. The mean value of 42.77282 indicates that the average manufacturing company in Indonesia has a social performance disclosure score of 42.77%. The standard deviation is smaller than the average, meaning that the characteristics of this research sample do not deviate much so that it is evenly distributed in manufacturing companies.

Normality Test

The normality test for model 1 and model 2 in this study uses the skewness/kurtosis test with the following results:

Table 5 Normality Test Results for Model 1

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	Prob>chi2
res	94	0,1519	0,7457	0,3298

Based on Table 5, the skewness value is 0.1519 and the prob>chi2 value is 0.3298. This value is greater than 0.05, meaning that the residual data of model 1 is normally distributed. Data that has been normally distributed can continue to the next stage of the classical assumption test.

Table 6 Normality Test Results for Model 2

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi(2)	Prob>chi2
res	98	0,6834	0,0418	4,41	0,11

Based on Table 6, the skewness value is 0.06834 and the prob>chi2 value is 0.11. This value is greater than 0.05, meaning that the residual data of model 2 is normally distributed. Data that has been normally distributed can continue to the next stage of the classical assumption test.

Multicollinearity Test

The multicollinearity test for model 1 and model 2 in this study uses the VIF value with the following results:

Table 7 Multicollinearity Test Results for Model 1

Variable	VIF	1/VIF
EDS	3,19	0,3134
SDS	2,59	0,39
GDS	1,8	0,55
Mean VIF	2,53	

Table 7 shows that the VIF value of the environmental disclosure score, social disclosure score, and governance disclosure score variables for model 1 is below 10. These results indicate that there is no multicollinearity between the independent variables.

Table 8 Multicollinearity Test Results for Model 2

Variable	VIF	1/VIF
EDS	3,14	0,318536
SDS	2,43	0,412174
GDS	1,82	0,550123
Mean VIF	2,46	

Table 8 shows that the VIF value of the environmental disclosure score, social disclosure score, and governance disclosure score variables for model 2 is below 10. These results indicate that there is no multicollinearity between the independent variables.

Heteroscedasticity Test

The heteroscedasticity test for model 1 and model 2 in this study uses the Breusch-Pagan/Cook-Weisberg method with the following results:

Table 9 Heteroscedasticity Test Results for Model 1

Description	Results
Chi2(1)	6,48
Prob>chi2	0,0109

Based on Table 9, it can be seen that the prob>chi2 value is 0.0109, which is <0.05 . Based on these results, the regression model has heteroscedasticity symptoms for model 1. Therefore, this research regression uses the robust standard error test (Kohardinata et al., 2020).

Table 10 Heteroscedasticity Test Results for Model 2

Description	Results
Chi2(1)	0
Prob>chi2	0,9888

Based on Table 10, it can be seen that the prob>chi2 value is 0.99 which is > 0.05 . Based on these results, the regression model does not show symptoms of heteroscedasticity for model 2.

Autocorrelation Test

This study's autocorrelation test for model 1 and model 2 uses the Durbin-Watson test with the criteria $dU < dW < 4-dU$, meaning the data is free from autocorrelation. The following are the results of the autocorrelation test:

Table 11 Autocorrelation Test Results for Model 1

Description	Coefficient
Durbin-Watson	1,075335

Based on Table 11, it can be seen that the dW value is 1.075335. The dU value obtained is 1.7306. Based on these results, the value does not meet the criteria $dU < dW < 4 - dU$, meaning that there is an autocorrelation problem for model 1. Therefore, this research regression uses the robust standard error test (Kohardinata et al., 2020).

Table 12 Autocorrelation Test Results for Model 2

Description	Coefficient
Durbin-Watson	0,9001992

Based on Table 12, it can be seen that the dW value is 0.9001992. The dU value obtained is 1.7345. Based on these results, the value does not meet the criteria $dU < dW < 4 - dU$, meaning that there is an autocorrelation problem for model 2. Therefore, this research regression uses the robust standard error test (Kohardinata et al., 2020).

Multiple Linear Regression Analysis

Table 13 Multiple Linear Regression Test Results for Model 1

Description	Coef
Constant	-0,3474283
EDS	-0,0000606
SDS	-0,0000582
GDS	-0,0054072

Based on Table 13, the multiple regression equation for model 1 is obtained as follows:

$$CoE = -0,3474283 - 0,0000606EDS - 0,0000582SDS - 0,0054072GDS + \varepsilon_i$$

The constant value of -0.3474283 is the state of the cost of equity that has not been influenced by other variables, namely environmental disclosure score, social disclosure score, and governance disclosure score. If the environmental disclosure score, social disclosure score, and governance disclosure score are 0, then the cost of equity is -0.347428. The coefficient value of the environmental disclosure score is -0.0000606, the social disclosure score is -0.0000582, and the

governance disclosure score is -0.0054072. This table shows the negative direction of these variables on the cost of equity.

Table 14 Multiple Linear Regression Test Results for Model 2

Description	Coef
Constant	0,071405
EDS	0,0004207
SDS	-0,0007891
GDS	0,0000817

Based on Table 14, the multiple regression equation for model 2 is obtained as follows:

$$\text{CoD} = 0,071405 + 0,0004207\text{EDS} - 0,0007891\text{SDS} + 0,0000817\text{GDS} + \varepsilon_i$$

The constant value of 0.071405 is the state of the cost of debt that has not been influenced by other variables, namely environmental disclosure score, social disclosure score, and governance disclosure score. If the environmental disclosure score, social disclosure score, and governance disclosure score are 0, then the cost of debt is 0.071405. The coefficient value of the environmental disclosure score is 0.0004207, and the governance disclosure score is 0.0000817. This table shows the positive direction of these variables on the cost of debt. The social disclosure score coefficient value of - 0.0007891 indicates a negative direction of the SDS variable on the cost of debt.

F Statistical Test (Goodness of Fit)

Table 15 F Statistical Test Results for Model 1

Description	Results
F Count / F(3,90)	3,98
F table	2,70583805
Prob > F	0,0104

Table 15 shows that the calculated F value is 3.98, the F table value is 2.71, and the Prob>F value is 0.0104. The calculated F value > F table and the Prob>F value are greater than 0.05 so it can be said that model 1 in this study is feasible to use.

Table 16 F Statistical Test Results for Model 2

Description	Results
F Count / F(3,94)	3,11
F table	2,7014476
Prob > F	0,03

Table 16 shows that the calculated F value is 3.11, the F table value is 2.70, and the Prob>F value is 0.03. The value of F count > f table and the Prob>F value are greater than 0.05 so it can be said that model 2 in this study is feasible to use.

Partial T-test

Table 17 Partial T-test Results for Model 1

COE	Coefficient	t count	t-table	Significance	Description
EDS	-0,0000606	-0,03	1,98667454	0,977	Insignificant
SDS	-0,0000582	-0,02	1,98667454	0,983	Insignificant
GDS	-0,0054072	-2,47	1,98667454	0,016	Significant

Table 17 shows that the t-value of the environmental disclosure score variable is 0.03 and the t-table value is 1.99 with a significance value of 0.977. The calculated t-value < t-table and the significance value is greater than 0.05 so it can be said that the environmental disclosure score (EDS) does not affect the cost of equity. The EDS coefficient value of -0.0000606 means that EDS has a negative direction. Based on this explanation, it can be said that H1 in this study is rejected.

Table 17 shows that the t-value of the social disclosure score variable is 0.02 and the t-table value is 1.99 with a significance value of 0.983. The calculated t-value < t-table and the significance value is greater than 0.05 so it can be said that the social disclosure score (SDS) does not affect the cost of equity. The SDS coefficient value of -0.0000582 means that SDS has a negative direction. Based on this explanation, it can be said that H2 in this study is rejected.

Table 17 shows that the t-value of the governance disclosure score variable is 2.47. and the t-table value is 1.99 with a significance value of 0.016. The calculated t-value> t-table and the significance value are smaller than 0.05 so it can be said that the governance disclosure score (GDS) affects the cost of equity. The GDS coefficient value of -0.0054072 means that GDS has a negative direction. Based on this explanation, it can be said that H3 in this study is accepted.

Table 18 Partial T-test Results for Model 2

Variable	Coefficient	t count	t-table	P> t	Description
EDS	0,0004207	1,6	1,9855234	0,113	Insignificant
SDS	-0,0007891	-2,73	1,9855234	0,008	Significant
GDS	0,0000817	0,33	1,9855234	0,739	Insignificant

Table 18 shows that the t-value of the environmental disclosure score variable is 1.6, and the t-table value is 1.99 with a significance value of 0.113. The calculated t-value < t-table and the significance value is greater than 0.05 so it can be said that the environmental disclosure score (EDS) does not affect the cost of debt. The EDS coefficient value of 0.0004207 means that EDS has a positive direction. Based on this explanation, it can be said that H4 in this study is rejected.

Table 18 shows that the t-value of the social disclosure score variable is 2.73, and the t-table value is 1.99 with a significance value of 0.008. The calculated t-value > t-table and the significance value are smaller than 0.05 so it can be said that the social disclosure score (SDS) affects the cost of debt. The SDS coefficient value of -0.0007891 means that SDS has a negative direction. Based on this explanation, it can be said that H5 in this study is accepted.

Table 18 shows that the t-value of the governance disclosure score variable is 0.33 and the t-table value is 1.99 with a significance value of 0.739. The calculated t-value < t-table and the significance value is greater than 0.05 so it can be said that the governance disclosure score (GDS) does not affect the cost of debt. The GDS coefficient-value of 0.0000817 means that GDS has a positive direction. Based on this explanation, it can be said that H6 in this study was rejected.

Adjusted R-Squared (R²)

Table 19 Adjusted R-Squared (R²) Result for Model 1

Description	R-squared
Cost of Equity	0,1114

Table 19 shows that the R-squared value is 0.1114 or 11.14%. This shows that the components of the independent variable, environmental disclosure score,

social disclosure score, and governance disclosure score, can explain the dependent variable, namely the cost of equity by 11.14%.

Table 20 Adjusted R-Squared (R²) Result for Model 2

Description	R-squared
Cost of Debt	0,0903

Table 20 shows that the R-squared value is 0.0903 or 9.03%. This shows that the components of the independent variable environmental disclosure score, social disclosure score, and governance disclosure score can explain the dependent variable, namely the cost of debt, by 9.03%.

DISCUSSION

Effect of Environmental Disclosure Score on Cost of Equity

The results of statistical testing of hypothesis 1 show that the calculated t-value of 0.03 is smaller than the t-table value of 1.99 and the significance value of $0.977 > 0.05$. These results mean that the environmental disclosure score has no effect on the cost of equity, so H1 in this study is rejected. The research results are in line with the results of Ramirez et al. (2022), who state that environmental disclosure score has no effect on the cost of equity.

The environmental disclosure score does not affect the cost of equity, because the principal, in this case shareholders, considers the company to be less efficient in spending money on social environmental activities (Ramirez et al., 2022). A high environmental disclosure score also requires high costs so management must consider the risk of high costs to increase the environmental disclosure score (Aditama, 2022). According to research by Triyani et al. (2021), environmental information does not affect the total company or company systematic risk. This makes the results of this study not in line with agency theory. Agents are expected to improve the principal's welfare to reduce company costs, by not sacrificing assets or costs to increase environmental disclosure scores.

Effect of Social Disclosure Score on Cost of Equity

The results of statistical testing of hypothesis 2 state that the calculated t-value of 0.02 is smaller than the t-table value of 1.99 and the significance value is $0.983 > 0.05$. This means that the social disclosure score has no effect on the cost of equity, so H2 in this study is rejected. This study's results align with those of research by Ramirez et al. (2022), which states that the social disclosure score has no effect on the cost of equity.

The social disclosure score does not affect the cost of equity because of the high cost required to implement a high environmental disclosure score (Aditama, 2022). This makes the results of this study not in line with agency theory. Principals expect agents to improve principal welfare by suppressing company costs, one of which is by not sacrificing assets or costs to increase social disclosure scores. Another reason the social disclosure score does not affect the cost of equity is that shareholders are more focused on conditions directly related to the company's revenue and sales, thus overlooking non-financial performance due to the dynamic investment market situation (Aditama, 2022).

The Effect of Governance Disclosure Score on Cost of Equity

The results of statistical testing of hypothesis 3, the t-value of 2.47 is greater than the t-table value of 1.99, and the significance value is $0.016 < 0.05$. This means that the governance disclosure score has a significant negative effect on the cost of equity, so H3 in this study is accepted. The results of this study are in line with the research of Ellili (2020) and Yilmaz (2022), who state that the governance disclosure score has a significant negative effect on the cost of equity.

A company that has a high governance disclosure score means that the company has good governance and high transparency. Good corporate governance aims to increase stakeholder value in the long term (Andriani & Syafitri, 2020). High transparency can also reduce asymmetric information between agents and principals. This is in line with agency theory.

Good governance disclosure also reflects good company management, which can reduce risk for shareholders (Andriani & Syafitri, 2020). Shareholders tend to filter out companies that are sustainable in the long term and those that

are not (Ramirez et al., 2022). One characteristic of a sustainable company in the long term is good governance.

Effect of Environmental Disclosure Score on Cost of Debt

The results of statistical testing of hypothesis 4 state that the t-value of the environmental disclosure score variable of 1.60 is smaller than the t-table value of 1.99 with a significance value of $0.113 > 0.05$. This means that the environmental disclosure score does not affect the cost of debt, so H4 in this study is rejected. The study's results align with the research by Arora and Sharma (2022), which states that the environmental disclosure score has no effect on the cost of debt.

Environmental disclosure score does not affect the cost of debt because companies need significant funds to implement good environmental management (Arora & Sharma, 2022; Aditama, 2022). Examples of necessary expenses are creating good waste management, and investing in renewable energy technology. The company needs significant funds, but it is not guaranteed that the company will also get a profit equivalent to the costs incurred. Creditors will think that the company may be unable to pay its interest and debt to the bank because the capital provided is not used for company operations but for improving environmental performance. The results of this study are also not in line with agency theory where companies increase the risk of companies that come from corporate debt. The company's debt increases but is not used to improve the company's operations or performance. The increase in debt the company owns can increase the risk the agent owns.

Effect of Social Disclosure Score on Cost of Debt

The results of testing hypothesis 5 state that the t-value of 2.73 is greater than the t-table value of 1.99 with a significance value of $0.008 < 0.05$. This means that the social disclosure score has a significant negative effect on the cost of debt, so H5 in this study is accepted. The results of this study are consistent with the research of Ellili (2020) and Raimo (2021), which state that the social disclosure score has a significant negative effect on the cost of debt.

Companies with a high social disclosure score have good relationships with communities such as employees, suppliers and customers, have high product responsibility, and uphold human rights and high information transparency. This illustrates good business management and gives a good image to the company. Creditors will appreciate and consider this to reduce company risk, so creditors provide lower debt costs (Raimo et al., 2021). High transparency will reduce the occurrence of information asymmetry. Creditors also consider the slight possibility of information asymmetry (Ellili, 2020). High transparency can minimize the actions of companies trying to cover up detrimental information and damage company value (Raimo, 2021). This is in line with agency theory.

Effect of Governance Disclosure Score on Cost of Debt

The results of testing hypothesis 6 state that the t-value of 0.33 is smaller than the t-table value of 1.99 with a significance value of $0.739 > 0.05$. The statistical results mean that the governance disclosure score does not affect the cost of debt, so H6 in this study is rejected. The study's results align with research by Arora & Sharma (2022) and Gigante & Manglaviti (2022), which state that governance disclosure score does not affect the cost of debt.

The governance disclosure score does not affect the cost of debt because good governance has not been able to reduce the company's default risk. This statement is supported by research by Malik et al. (2020), which states that creditors see good corporate governance as unable to become a company free from the risk of default, therefore, even though the high governance disclosure score does not affect the increase or decrease in the cost of debt.

Good governance disclosure also does not guarantee the company has good governance because unscrupulous management can manipulate it (Arora & Sharma, 2022). These actions can affect the company's value and image, harming the principal. This is not in line with agency theory.

Implication

This research adds to the wealth of knowledge regarding the governance disclosure score (GDS) negatively affecting CoE and social disclosure score (SDS) negatively affecting CoD. This research can also be a reference for government

consideration in making sustainable economic implementation policies, primarily related to ESG, as seen from the results of low ESG average values below 50 with 37.52, 44.21, and 43.56 respectively. Model 2 also shows that the average value is low, with 37.39, 43.70, and 42.77, respectively.

Further impact for other stakeholders. Shareholders can see the governance disclosure score in providing a rate of return on investments made in the form of cost of equity. Creditors can see the social disclosure score in providing a level of return in providing funding to the company.

Limitation

The study's limitation is its limited generalization due to the limited number of samples. The limited number of samples is due to the incomplete information on the ESG disclosure score of manufacturing companies in Refinitiv. Future researchers can use other platforms besides Refinitiv or other calculations to determine the ESG disclosure score. Future researchers can also expand the scope of the research object sector used.

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