

Analysis of Factors Influencing the Quality of Sustainability Reports in Mining Companies Listed on the IDX in 2020–2024

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ABSTRACT

The Sustainable Development Goals (TPBs/SDGs) are sustainable development agreements based on human rights and equality. TPB/SDGs have Universal, Integration and Inclusive principles, to ensure that no one is left behind or is called No One Left Behind. Disclosure of financial reports is support from economic entities in achieving SDGs goals. Sustainability reports are one of the media as a means of communicating an entity's responsibility towards economic, social and environmental aspects. This research aims to analyze what factors influence the quality of disclosure in sustainability reports in order to support the SDGs agenda. The data used are annual financial reports and sustainability reports which have been published through the Indonesia Stock Exchange for the 2020-2024 period in Mining and Energy Companies. The research results show that Leverage has no effect on the sustainable report, female directors have no effect on the sustainable report and company size has an effect on the sustainable report. From the model test results, an R Square value of 0.628% was obtained. This research model is quite good because it is able to test more than 50%, while 37.25 is a variable outside this research

Keywords: Leverage, Female Directors, Company Size, Sustainability Reporting

INTRODUCTION

Indonesia is a country rich in natural resources. The government regulates the utilization of natural resources in Indonesia, particularly those that impact the livelihoods of the wider community. In managing natural resource utilization, the government also adheres to the Sustainable Development Goals (SDGs), specifically the Sustainable Development Goals (SDGs), specifically the agreement on sustainable development based on human rights and equality. The SDGs are based on universal, integrated, and inclusive principles to ensure that no one is left behind. The publication of financial reports supports economic organizations in achieving the SDG agenda. Sustainable development reporting is one means of disclosing a unit's responsibility in economic, social, and environmental aspects. Sustainability reporting can serve as a benchmark for a company's sustainability performance (Arifianti & Widianingsih, 2022).

Sustainability reports are also regulated in the Financial Services Authority Regulation (PJOK) Number 51/PJOK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. The PJOK explains that the Sustainability Report is seen as a medium for issuers and companies to present information on contributions and achievements related to the SDGs. According to the PJOK guidelines, sustainability reports have internal benefits for the company, such as sharpening visions and strategies related to sustainability aspects, increasing transparency and accountability in sustainability governance, and strengthening company management in maintaining

sustainability. In addition, external benefits for the company include increasing competitiveness, improving relations with stakeholders, enhancing the company's image, enhancing the issuer's reputation, and increasing public trust.

A sustainability report is a report published by an entity to plan, communicate, and disclose information related to the company's commitment, implementation, measurement, disclosure, and accountability for its performance in relation to environmental, social, and economic aspects (Sururi & Gantowati, 2023). A sustainability report can also provide a range of information related to the company's past, present, and future environmental and social issues. This information can also provide information on the past, present, and future financial impacts of the company's environmental management decisions and actions (Chai, 2022).

Mining companies are a vital industry in Indonesia. Their primary operational activities involve managing natural resources and processing them to produce minerals, such as rocks, oil, gas, and other minerals (Irfan & Sarumpaet, 2023). Mining companies in Indonesia produce a wide variety of minerals, including rocks, gas, oil, and other minerals. Because their operations involve mining minerals found naturally in Indonesia, mining companies often become the focus of public attention, particularly regarding their financial condition and the negative environmental impacts resulting from mining activities. Mining companies consistently attract public attention. In 2021, approximately 60 million tons of hazardous toxic waste were produced by mining companies (Puspitasari, Purwohedi, Sismi, et al., 2023). Based on these conditions, mining companies are required to maintain their corporate values, implement corporate social responsibility, and maintain their business continuity.

The relationship between leverage and sustainability reporting is evident in companies with high leverage, meaning they have higher agency costs and monitoring costs. Therefore, companies with high leverage will voluntarily disclose more information to satisfy creditors' information needs. This is an effort to reduce stakeholder uncertainty and avoid potential pressure from regulatory bodies (Rufinga, 2022). Previous research conducted by Afifah et al. (2022) stated that leverage influences sustainability reporting disclosure. Meanwhile, research by Apriliyani (2022) concluded that leverage has no effect on sustainability reporting. A factor that can influence sustainability report disclosure is the presence of female directors.

Female directors represent gender diversity within the board of directors, illustrated by the presence of female directors in its membership. Gender roles on the board of directors are an important component of management. Board diversity can improve management performance. Women on the board of directors are more likely to fulfill social responsibility needs related to stakeholder interests (Chai, 2022). Research conducted by (Sururi & Gantowati, 2023) states that gender diversity of female directors influences sustainability report disclosure. However, research results from (Puspitasari, Purwohedi, & Sismi, 2023) indicate that gender diversity of female directors does not affect sustainability report disclosure. A factor that can influence sustainability report disclosure is company size. Company size, to determine the size of a company, can be measured by total assets, sales volume, and other factors. Large companies typically have a better reputation than small companies. Therefore, managers of large companies will strive to maintain their company's reputation by increasing environmental and social activities rather than solely focusing on economic ones. The larger the company size, the greater the efforts made by managers to

improve the company's reputation by increasing sustainability report disclosure (V. Gunawan, 2022).

LITERATURE REVIEW

Stakeholder Theory

According to Deegan (2024), stakeholder theory states that stakeholders have the right to be provided with information about how an organization's activities can affect them (for example, through pollution, sponsorship, safety initiatives, etc.). Stakeholders also have the right not to use this information and not to play a direct role in a company (Deegan in Ulum, 2022). Stakeholder theory states that the success and survival of a company depends heavily on its ability to balance the interests of various stakeholders. If a company is able to do this, it will receive continued support and enjoy growth in market share, sales, and profits. In this stakeholder theory, society and the environment are core stakeholders in a company that must be considered (Lako, 2021).

Legitimacy Theory

Ghozali & Chariri (2024) stated that legitimacy is crucial for organizations. The constraints imposed by social norms and values, and the reactions to these constraints, drive the importance of analyzing organizational behavior with environmental considerations. This further explains that legitimacy theory is very useful in analyzing organizational behavior. Organizations strive to create harmony between the social values inherent in their activities and the behavioral norms existing within the social system. As long as these two value systems are aligned, this can be seen as the company's legitimacy. Legitimacy theory focuses on the interaction between the company and society (Ghozali & Chariri, 2024).

Sustainability Report

According to the GRI Exposure Sustainability Report, a Sustainability Report is the practice of measuring, disclosing, and accounting for an organization's performance to achieve sustainable development goals for internal and external stakeholders (Irfan, 2023). According to (Sinaga & Teddyani, 2020), a sustainability report is a report prepared by a company or organization. A sustainability report details the economic, environmental, and social impacts caused by the company's activities. A sustainability report demonstrates the organization's values and corporate governance to demonstrate the relationship between its strategy and commitment to a sustainable global economy. Therefore, a report that covers all company activities related to social, economic, and environmental responsibility is called a Sustainability Report.

Leverage

The leverage ratio reflects a company's ability to meet its long-term obligations. A higher leverage ratio indicates a company's high dependence on liabilities (V. Gunawan, 2022). A high leverage ratio impacts the disclosure and production of social information. Disclosure and production of social information can be costly, so a high leverage ratio tends to reduce the cost of reporting disclosures (Apriliyani, 2022).

Female Directors

Women serving on a company's board of directors is nothing new. Gender diversity has been shown to provide overall benefits to the company (Ni Putu Frischa A, Lindrawati, 2022). The presence of women on the board is believed to improve decision-making quality. Furthermore, the presence of women on the board of directors contributes to higher-quality

discussions, as women generally have a more diverse demographic, reflecting the socioeconomic environment (Irfan, 2023).

Company Size

Company size is the size of a company, measured by its assets. Large companies have a greater influence on society and are oriented towards capital markets. Large companies encourage greater transparency in disclosing information, while companies with fewer assets attract less public attention (Apriliyani, 2022). Company size is measured by total assets, total sales, and profit. The greater the total assets, the greater the company's wealth (Rufinga, 2022).

RESEARCH METHODS

Research Design

This study employed a quantitative design. The research data used were secondary data. The data used in this study were the annual financial reports of mining and energy companies listed on the Indonesia Stock Exchange (IDX) for the years 2020-2024.

Population, Sample and Sampling Method

The research data population used in this study was 89 mining and energy companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2024, totaling 50 companies. The research data sampling process was based on judgment.

Research Variables

Table 1.Research Variables

No	Variables	Measuring instrument
1	Sustainability Report	SRDI = n/k Note: SRDI : Sustainability Report Disclosure Index n : Number of items disclosed by the company k : Number of items expected to be disclosed
2	Leverage	$\frac{\text{Total Liabilitas}}{\text{Total Ekuitas}}$
3	Female Directors	$\frac{\text{Direksi Perempuan}}{\text{Total Direksi}}$
4	Company Size	Ln(Total Assets)

RESEARCH DATA RESULTS AND DISCUSSION

The research data used comes from the Annual Financial Reports and sustainability reports of mining and energy companies for 2020-2024. The data used is for companies whose shares are publicly owned (going public) and are listed on the Indonesian Stock Exchange (IDX).www.idx.co.id2020-2024. A total of 89 companies were listed. Based on the criteria, a sample of 10 companies was obtained. The following data is obtained:

Table 2. Determination of Research

Samples	
Criteria	Sample
Publishing Annual Financial Reports	63
Incomplete data on the Sustainability Report, Leverage, Female Directors, Company Size, Commissioners	16
Number of Sample Data Used	10

Results and Discussion

The results of data processing in this study can be explained as follows:

Descriptive Statistics

Table 3. Descriptive Statistics

	N Statistics	Minimum Statistics	Maximum Statistics	Mean Statistics	Standard Deviation Statistics
Y	50	1.00	9393939394.0	2425430236.329	3002835358.6427
X1	50	7.20	9875083533.0	2478577338.353	2601255770.8160
X2	50	.00	3333333333.0	219811954.0330	831797208.55154
X3	50	268233.0	3654116348.0	1191998466.263	1388128694.2083
Valid N (listwise)	50	0	0	7	8

Based on the data above, the sustainable report variable has a minimum value of 1.00 and a maximum value of 9,393,939,394.00 and an average value of 2425430236.3297. This is greater than the standard deviation value of 3002835358.64272. This means that the data deviation in this study is low and the answers from respondents are evenly distributed not much different for the sustainable report variable. The leverage variable has a minimum value of 7.20 and a maximum value of 9393939394.00. The average value of 2478577338.3538 is greater than the standard deviation value of 2601255770.8160. This means that the data deviation in this study is low and the answers from respondents are evenly distributed not much different for the leverage variable. The gender variable for female directors has a minimum value of 0.00 and a maximum value of 3333333333.00. The average value is 219811954.0330 which is greater than the value The standard deviation is 831797208.55154. This means that the data deviation in this study is low and the answers from respondents are evenly distributed and not much different for the director gender variable. The company size variable has a minimum value of 268233.0 and a maximum value of 3654116348.00. The mean value is 1191998466.2637 which is greater than the standard deviation value of 1388128694.20838. This means that the data deviation in this study is low and the answers from respondents are evenly distributed and not much different for the company size variable.

Normality Test

The normality test is used to determine whether the residual distribution in the regression model follows a normal distribution. In this study, the normality test was conducted using the Kolmogorov-Smirnov statistical test. If the significance value exceeds 0.05, the data can be considered normally distributed.

Table 4.Normality

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		50
Normal Parameters ^{a,b}	Mean	.0000000
	Standard Deviation	1.24996462
Most Extreme Differences	Absolute	.047
	Positive	.047
	Negative	-.041
Test Statistics		.047
Asymp. Sig. (1-tailed)		.200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Heteroscedasticity Test

Table 5. Multicollinearity Test Results

The presence or absence of multicollinearity can be identified by examining the tolerance value and variance inflation factor (VIF). When the tolerance value is >0.1 and the VIF value does not exceed 4 or 5, it can be concluded that there is no multicollinearity (Juliandi et al., 2018).

Coefficients^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	leverage	.992	1,008
	Female Directors	.999	1,001
	Company Size	.991	1,009
a. Dependent Variable: fintech ewallet			

Based on the results of the multicollinearity test listed in the table above, it shows that financial literacy, digital literacy, and financial self-efficacy have a tolerance value above 0.1 and the VIF value does not exceed 4 or 5. Thus, it can be concluded that there is no multicollinearity problem in the regression model in this study.

Heteroscedasticity Test Results

Table 6. Heteroscedasticity Test Results

The heteroscedasticity test aims to determine whether there is inequality in the residual variances found in the regression model. In this study, heteroscedasticity was tested in multiple linear regression using the Glejser method. The criterion used for this test is if the significance value (sig.) > 0.05, then it can be concluded that heteroscedasticity does not occur.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,600	.736		2,172	.032
	leverage	.050	.041	.123	1,216	.227
	Female Directors	-.027	.034	-.083	-.790	.431
	Company Size	-.048	.031	-.164	-1,551	.124

a. Dependent Variable: ABS_RES

Source: Processed data 2025

AUTOCORRELATION TEST RESULTS

Table 7. Autocorrelation

Model Summary					
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	.408a	.167	.154	1.19647	1,367

a. Predictors: (Constant), LEVERAGE, FEMALE DIRECTORS, COMPANY SIZE

b. Dependent Variable: SUSTANBILITY_REPORT

R Test Results

Table 8. Results of the Coefficient of Determination (R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.661a	.437	.419	1.26935

a. Predictors: (Constant), leverage, female directors, company size

Source: Processed data 2025

The R-squared calculation yielded a value of 0.437, or 43.7%. This indicates that the independent variables—leverage, female directors, and company size—can explain 43.7% of the dependent variable, fintech e-wallet adoption. Meanwhile, the remaining 57.3% is influenced by other factors not considered in this study.

F test

Table 9. F test

		ANOVA				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	109,324	3	36,441	13,786	.004b
	Residual	2131.656	47	46,340		
	Total	2240.980	50			

a. Dependent Variable: SUSTANBILITY_REPORT

b. Predictors: (Constant), COMPANY SIZE, FEMALE DIRECTORS, LEVERAGE

Hypothesis Testing

The test is used to determine the influence of the independent variables on the dependent variable, namely between variations in the independent variables, namely leverage (X1), female directors (X2), and company size (X3) on the dependent variable, sustainability report (Y). The following are the SPSS output results for the partial test in this study.

Table 10. Partial T Coefficient Test

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
1 (Constant)	487526253.598	289142623.301		1,686
X1	-.082	.083	-.361	-.853
X2	.295	.242	.282	1,221
X3	1,718	.158	.794	10,900

Leverage

From the table above, the calculated t-value is -853. This value is smaller than the specified t-table of 1,662. The sig value for the leverage variable is 0.396 > 0.05, meaning the study successfully accepts Ho and rejects Ha. Then, the direction of the influence of the leverage variable is negative, with a beta coefficient (β) value of -0.071. These results indicate that leverage does not have a significant effect on sustainability reporting.

Female Directors

From the table above, the calculated t is 1.221. This value is smaller than the specified t table of 1.662. The sig value for the gender variable is 0.226 > 0.05, meaning that the study successfully accepts Ho and rejects Ha. Then, the direction of the influence of the gender variable has a positive direction, the beta coefficient (β) value is 0.295. These results indicate that gender does not have a significant effect on sustainability reports.

Company Size

Based on the table above, the calculated t is 10,900. This value is greater than the specified t table of 1,662. The sig value for the company size variable is 0.000 < 0.05, meaning the study successfully rejects Ho and accepts Ha. Then, the direction of the influence of the company size variable has a positive direction, the beta coefficient (β) value is 1.718. These results indicate that company size has a significant effect on sustainability reports.

Discussion

The Effect of Leverage on Sustainability Reports

The first hypothesis states that leverage influences sustainability reporting. The research results provide evidence of a significant difference of $0.396 > 0.05$, indicating that leverage has no effect on sustainability reporting. Therefore, the hypothesis is rejected. High corporate leverage increases the likelihood of the company reneging on credit agreements. Companies can report higher profits and minimize costs by not disclosing sustainability reports. This can be achieved by reducing the cost of disclosing high sustainability reports so that they can be consistently presented each period. Investors and companies have not yet considered leverage in sustainability reporting disclosures.

For mining companies, it can be seen that several companies do not disclose sustainability reports. The research results are similar to those conducted by Hermawan and Sutarti (2021), Fitri and Yuliandari (2018), and (Sinaga & Teddyani, 2020) that leverage has no effect on sustainability report disclosure.

The Influence of Female Directors on Sustainability Reports

The second hypothesis states that female directors influence sustainability reporting. The results of the study show a significant difference of $0.226 > 0.05$, which means that the gender of directors does not influence sustainability reporting. Therefore, the hypothesis is rejected. This means that the presence of women on the board of directors in a company does not influence sustainability reporting. Disclosure of a company's sustainability report does not depend on the number of female directors. This study provides evidence that in mining companies, disclosing sustainability reports does not depend on female gender in decision-making. The proportion of directors on the company's board of directors is still small because the paternalistic system in Indonesia is the main decision-making (Setiawan & Ridaryanto, 2022). Therefore, the company does not reflect gender diversity, and female directors cannot dominate decision-making, especially regarding sustainability report disclosure. The results of this study are in line with research conducted by Justin & Hadiprajitno (2019), (Aprilya, 2023), and Farida (2020), which shows that gender diversity on the board of directors does not have a significant influence on sustainability report disclosure. The Influence of Company Size on Sustainability Reports

The third hypothesis is that company size influences sustainability reporting. The results of the study show a significance level of $0.000 < 0.05$, meaning company size influences sustainability reporting. Therefore, the hypothesis is accepted. Company size is a scale used to determine the size of a company. Company assessment is carried out by looking at the total number of assets, sales volume, index ranking, and number of employees. Based on the results of the study, it can be interpreted that a large company size will encourage companies to disclose sustainability reports as a form of economic, environmental, and social responsibility. A large company size will increase the company's need to disclose sustainability reporting. The results of the study are in accordance with stakeholder theory, where all company activities can influence stakeholder decision-making. Therefore, larger and more complex companies have a need to disclose sustainability reports. The results of the study are similar to those conducted by (Suryanti, 2022), (Apriliyani, 2022), (S. Saputri, Y. Syafitri, 2022), shows that company size influences sustainability reports.

CONCLUSION

The conclusion of this study is that leverage has no effect on sustainability reporting. This means that high or low leverage does not affect sustainability reporting. Female directors have no effect on sustainability reporting, proving that gender of directors in mining companies is not a factor influencing sustainability reporting. Company size does influence sustainability reporting, indicating that larger companies increase sustainability reporting. Higher company size leads to more sustainability disclosures, aimed at gaining legitimacy from financial statement users.

BIBLIOGRAPHY

- Afifah, N., Fujianti, L., Rizky, Y., & Mandagie, O. (2022). The Effect of Profitability, Leverage, and Company Size on Sustainable Reporting Disclosure (An Empirical Study of Companies Receiving the Indonesia Sustainability Reporting Award Listed on the IDX in 2015-2019). 2(1), 19–34.
- Apriliyani, F. (2022). The Influence of Size Company, Productivity and Leverage on Sustainability Report Disclosure. 2(4).
- Arifianti, NP, & Widianingsih, LP (2022). Quality of Sustainable Development Goals (SDGs) Disclosure and Financial Performance: Empirical Evidence on Mining Companies in Indonesia. *Dewantara Accounting*, 6(3), 68–78.
- Chai, E. (2022). The Impact of Board of Directors Structure on Sustainability Report Index. 10(2). <https://doi.org/10.37641/jiakes.v10i1.1290>
- Irfan, S. (2023). The Influence of Good Corporate Governance and Gender Diversity on Sustainability Report Disclosure (Empirical Study of Mining Companies Listed on the Indonesia Stock Exchange 2019-2021). 2(4).
- Irfan, S., & Sarumpaet, S. (2023). The Influence of Good Corporate Governance and Gender Diversity on Sustainability Report Disclosure (Empirical Study of Mining Companies Listed on the Indonesia Stock Exchange 2019-2021). 2(4), 334–355. <https://doi.org/10.30640/inisiatif.v2i4.1441>
- Ni Putu Frischa A, Lindrawati, AS (2022). The Influence of Good Corporate Governance Mechanisms on Sustainability Report Disclosure in Companies Listed on the IDX. 8(1), 78–90.
- P. Hendy Isa, et al. (2022). The Influence of Sustainability Reports, Board of Directors Size, Company Size, and Leverage on the Financial Performance of Banking Companies Listed on the IDX in 2018-2020. 2(2), 1517–1528.
- Puspitasari, A., Purwohedi, U., & Sasmi, AA (2023). The Influence of Commissioner Board Size, Board Gender Diversity, and Educational Background of the Board on Disclosure of Sustainability Reports. 4(2004), 249–266.
- Puspitasari, A., Purwohedi, U., Sasmi, AA, Accounting, PS, Jakarta, UN, Board, C., & Diversity, BG (2023). The Influence of Commissioner Board Size, Board Gender Diversity, and Educational Background of the Board. 4(2004), 249–266.
- Rufinga, S. (2022). The Effect of Liquidity, Leverage, Profitability, and Company Size on Sustainability Reporting. 9, 211–222.

- S. Saputri, Y. Syafitri, YA (2022). The Influence of Audit Committee and Company Size on Sustainability Reporting. 4(1), 239–252.
- Sinaga, I., & Teddyani, S. (2020). Sustainability Report Disclosure Factors. 2(2). Sururi, RY, & Gantowati, E. (2023). The Effect of Director Diversity on Quality Sustainability Report on LQ45 Indexed Companies. 487–494.
- V. Gunawan, JS (2022). Analysis of the Influence of Profitability, Leverage, and Company Size on Sustainability Report Disclosure. 19(1), 22–41