The Impact of ESG Disclosure on Financial Performance with Leverage as an Intervening Variable in Mining Companies Listed on the Indonesia Stock Exchange

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Abstract---The purpose of this study is to obtain empirical evidence of ESG on the Mining firm's performance listed on the Indonesia Stock Exchange with leverage as a mediating variable. The sampling technique used purposive sampling, the research samples obtained totalled 9 companies with a research period from 2019-2022 so there were 36 units of analysis. The research design was quantitative descriptive. The analysis technique in this research is the path analysis method. The results showed that ESG has a significant positive effect on a firm's performance and no effect on leverage. Leverage has no direct effect or mediating effect on a firm's performance. This research implies that companies must pay attention to ESG and those that can affect profitability so that company performance can increase.

Keywords---environment, governance (ESG), leverage, ROA, social.

Introduction

The main goal of the company is to generate maximum profit, in addition to prospering the shareholders or owners of the company being another goal of the company, a goal that is also important for the company is the achievement of a high share price to increase the value of the company (Zahroh & Hersugondo, 2021). Environmental, Social, and Governance are some of the factors that can affect company value. Environmental, Social, and Governance or ESG is a new concept that can be applied in various industries including the financial industry. This concept approaches environmental, social, and good corporate governance (Brouwer, 2000; Melnyk et al., 2003).

According to Melinda & Wardhani (2020), good corporate ESG performance has an impact on increasing company value and vice versa. ESG performance disclosure has an important role in fulfilling stakeholders' needs regarding non-financial performance information. When a company discloses non-financial performance information, stakeholders will view that the company complies with non-financial performance disclosure practices (Ellili, 2022). According to Shaikh (2022), stakeholders and fund managers believe that companies with high ESG performance disclosure produce better operating performance, higher returns and lower company-specific risks. A
company will get an ESG score when the company discloses ESG performance in four sustainability reports. This ESG score is a combined score of Environmental, Social, and Governance assessments (Ningwati et al., 2022). In today’s modern times, all businesses must do more than just seek strong profit margins for success, social responsibility is part of business and corporate survival in today’s economy. The development of science and technology characterized by increasingly advanced industries has an impact on the increasing complexity of operational activities and corporate social responsibility (Chow & Chan, 2008; Ståhl et al., 2001).

The company should take a stand on social issues that are important to build a brand that is trusted and favored by consumers. Therefore, company management should have a deep understanding of corporate social responsibility or ESG so that the company can develop a sustainable business (Sudaryanti & Riana, 2017). CSR activities can have a positive impact on the company, which can increase public trust in the company’s products so that the company’s reputation increases in the eyes of the public. People will want to buy the company’s products. The more the company’s products sell in the market, the more profit the company can generate (De Andrés et al., 2009; Magni, 2015; Inrico et al., 2023).

Previous research examining the impact of ESG disclosure on financial performance shows inconsistent results. Based on the research results found by Naeem et al. (2022); Itoya et al., (2022); Sari & Widiatmoko (2023); ESG has a positive and significant effect on Financial Performance. However, Trisnowati et al. (2022); Putri & Puspawati (2023) found that ESG has a negative and significant effect on Financial Performance. Nugroho & Hersugondo (2022); Rizgi (2023), found that ESG has no effect on Financial Performance. Research by Putri (2014), states that ESG has a positive effect on leverage while research conducted by Saluy et al. (2020), found that ESG does not affect Financial Performance. Saluy et al. (2020), argue that ESG has a negative effect on leverage. Research conducted by Oktaviyana & Prayogo (2022), states that ESG has a positive effect on leverage while research by Trisnowati et al. (2022), argues that ESG has a negative effect on leverage. Based on research results Itoya et al. (2022); Putri & Puspawati (2023), found that Leverage has a positive and significant effect on Financial Performance. However, Trisnowati et al. (2022); Sari & Widiatmoko (2023), found that Leverage has a negative and significant effect on Financial Performance. Oktaviyana et al. (2023); Maharani & Setyaningsih (2023), found that Leverage does not affect Financial Performance.

Research by Almeyda & Darmansya (2019) states that leverage is able to mediate ESG on financial performance. While research by Putri & Puspawati (2023), argues that leverage is not able to mediate ESG on financial performance. Research by Kusumayanti & Astika (2016), states that leverage is able to mediate ESG on financial performance while research by Hendrawaty et al. (2020), argues that leverage is not able to mediate ESG on financial performance. The research gap in this study is based on the inconsistency of the impact of ESG disclosure on financial performance through leverage as a mediating variable conducted by previous researchers. Therefore, this study tries to find out and review whether there is a significant or insignificant effect (Tsang et al., 2023; Alkaraan et al., 2022).

This research was conducted on Mining companies listed on the Indonesia Stock Exchange (IDX). The theories used to see the influence between variables in this study are legitimacy theory, stakeholder theory, and trade off theory. The dependent variable is Financial Performance proxied by Return on Asset, the independent variable is ESG and the intervening variable uses leverage. Based on the background and research gap above, the author is interested in taking the title in writing this research, namely “The Impact of ESG Disclosure on Financial Performance with Leverage as an Intervening Variable in Mining Companies Listed on the Indonesia Stock Exchange”.

**Research Methods**

The object of research was conducted at Mining Companies listed on the Indonesia Stock Exchange in the 2019-2022 period. Data collection using purposive sampling technique which obtained a research sample of 9 companies. The research method used is a descriptive method with a quantitative approach using path analysis. The classic assumption test is carried out before hypothesis testing so that the test results meet the BLUE (Best Linear Unbiased Estimated) criteria. After that, hypothesis testing is carried out with the t-statistical test, F test, and coefficient of determination analysis. The model used in this study can be formulated as follows:

\[ Z = \alpha + \beta_1X_1 + \varepsilon \ldots \text{(equation 1)} \]
\[ Y = \alpha + \beta_1X_1 + \beta_2Z + \varepsilon \ldots \text{(equation 2)} \]
Table 1
Operational definition and measurement of variables

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>Definition</th>
<th>Formula</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Environment, Social, Governance (ESG) (X)</td>
<td>The company benchmarks in investment practices that include three criteria Environmental Social and Governance ESG Implementation (Whitelock, 2015).</td>
<td>$ESG = \frac{ESG\ Disclosure\ Value}{Total\ Maximum\ Disclosure}$</td>
<td>Ratio</td>
</tr>
<tr>
<td>2.</td>
<td>Leverage (DER) (Z)</td>
<td>Measures how much the company's ability to fulfill all obligations with all capital. (Weston &amp; Copeland, 2008)</td>
<td>$DER = \frac{Total\ Liabilities}{Total\ Equity}$</td>
<td>Ratio</td>
</tr>
<tr>
<td>3.</td>
<td>Financial Performance (ROA)  (Y)</td>
<td>Measures the company's ability to generate net profit after tax by utilizing all assets owned. (Bustani, 2020).</td>
<td>$\frac{Net\ Profit}{Total\ assets} \times 100%$</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

Source: data processed by the author from selected books

Result and Discussion

Descriptive statistical analysis results

Table 2
Descriptive statistics results

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG</td>
<td>36</td>
<td>.37</td>
<td>.99</td>
<td>.5918</td>
<td>.16612</td>
</tr>
<tr>
<td>DER</td>
<td>36</td>
<td>.11</td>
<td>5.40</td>
<td>1.0492</td>
<td>1.10016</td>
</tr>
<tr>
<td>ROA</td>
<td>36</td>
<td>.0001</td>
<td>.0560</td>
<td>.002900</td>
<td>.0096773</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS 25.0 Data Processing Results

Hypothesis Testing

Coefficient of Determination (Adjusted R)$^2$

The coefficient of determination of this study shows a number which means that the independent variable is only able to explain the dependent variable with 0.168 or 16.8%. The ROA variable can be explained by 16.8% by the ESG and DER variables while the remaining 83.2% can be influenced by other factors not examined.

Partial Test (T-Test)

The t-value test is used to measure how far the influence of one independent variable individually in explaining the variation in the dependent variable (Ghozali, 2018). The results of the t-value test underlie the preparation of the research model which can be formulated as follows:

$$DER = 0.575ESG \ldots \text{(model 1)}$$
$$ROA = 0.818ESG + 0.232LEV \ldots \text{(model 2)}$$
However, there are several ESG factors that can affect the. The high disclosure in some mining
phones are in line with
However, (2021); (2022). These results indicate that the ESG variable has a negative and insignificant effect on Leverage. The results of this study state that ESG has a positive and significant effect on Leverage is rejected (H1 is not supported). The lack of effect of ESG on Leverage is possible because ESG disclosure is not used as a determination for company managers to determine company funding. However, there are several ESG factors that can affect the funding or capital structure of the company. Vijaya (2023), found that good ESG can lower the cost of capital, companies with high ESG scores tend to have access to cheaper funding, such as loans with lower interest rates and issuing shares at higher prices. This is because investors are more confident in the long-term prospects of companies that implement good ESG practices. Saluy et al. (2020); Bella & Murwaningsari (2023) found that ESG has a negative effect on leverage. The results of this study are in line with Oktaviyana & Prayogo (2022); Vijaya (2023) ESG has a positive effect on leverage. Putu & Devi (2024), found ESG has no effect on leverage.

ESG on financial performance

ESG has a regression coefficient value of 0.489 with a positive or unidirectional value and a significance of 0.005<α 0.05. These results indicate that the ESG variable is proven to have an effect on Financial Performance (ROA). The results of this study state that ESG has a positive and significant effect on Return on Asset is rejected (H2 is supported). These results prove the stakeholder theory by Freeman (1984), which states that high ESG disclosure can improve company performance and value. Based on stakeholder theory, companies will be more successful if they manage their relationships with all stakeholders well. Companies with a stronger ESG profile can realize higher growth than companies with relatively weaker ESG (Yu & Xiao, 2022). The high disclosure in some mining companies can lead to positive results for the company's performance, especially in the company's profitability.

The results of this study are in line with the findings of previous research by Triyani et al. (2020); Ahmad et al. (2021); Hwang et al. (2021); Naeem et al. (2022); Itoya et al., (2022); Sari & Widiatmoko, (2023); However, Hakimah et al. (2019); Amanta et al. (2022); Seker & Gungör (2022); Trisnowati et al. (2022); Putri & Puspawati (2023); found that ESG has a negative and significant effect on Financial Performance. Nugroho & Hersugondo (2022); Rizqi (2023), found that ESG has no effect on Financial Performance.

Leverage on financial performance

Leverage has a regression coefficient value of 0.153 with a positive and unidirectional value and a significance of 0.325> α 0.05. These results indicate that the Leverage variable is proven to have a positive and significant effect on Return on Asset is rejected (H3 is not supported). The lack of effect of leverage on financial performance can be caused by changes in debt ratios that do not significantly result in a smaller and more significant fraction affecting the company's profitability. This result is not in line with the trade-off theory, according to Sari & Dwirandri (2019), the deduction of debt interest on taxable income reduces the proportion of tax expense so that net profit after tax becomes greater and profitability also increases. The results of this study are in line with the results of research from Anggara & Andhaniwati (2023); Oktaviyana et al. (2023); Maharani & Setyaningsih (2023), found that Leverage has

<table>
<thead>
<tr>
<th>Variables</th>
<th>Standardized Beta Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG - DER (H )₁</td>
<td>0.314</td>
</tr>
<tr>
<td>ESG - ROA (H )₂</td>
<td>0.489</td>
</tr>
<tr>
<td>DER - ROA (H )₃</td>
<td>0.153</td>
</tr>
<tr>
<td>ESG- DER-ROA (H )₄</td>
<td>0.489</td>
</tr>
<tr>
<td>Direct Influence</td>
<td>0.62</td>
</tr>
<tr>
<td>Indirect influence</td>
<td>0.005</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.325</td>
</tr>
<tr>
<td>Hypothesis</td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS 25.0 output (Data processed by the author)

Discussion of Research Results

ESG on leverage

ESG has a regression coefficient value of -0.314 with a negative value and opposite direction with a significance of 0.062> α 0.05. These results indicate that the ESG variable has a negative and insignificant effect on Leverage. The results of this study state that ESG has a positive and significant effect on Leverage is rejected (H₁ is not supported). The lack of effect of ESG on Leverage is possible because ESG disclosure is not used as a determination for company managers to determine company funding. However, there are several ESG factors that can affect the funding or capital structure of the company. Vijaya (2023), found that good ESG can lower the cost of capital, companies with high ESG scores tend to have access to cheaper funding, such as loans with lower interest rates and issuing shares at higher prices. This is because investors are more confident in the long-term prospects of companies that implement good ESG practices. Saluy et al. (2020); Bella & Murwaningsari (2023) found that ESG has a negative effect on leverage. The results of this study are in line with Oktaviyana & Prayogo (2022); Vijaya (2023) ESG has a positive effect on leverage. Putu & Devi (2024), found ESG has no effect on leverage.

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no effect on Financial Performance. Triyani et al. (2020); Itoya et al. (2022); Putri & Puspawati (2023), found that Leverage has a positive and significant effect on Financial Performance. However, Sari (2020); Purwanti (2021); Trisnowati et al. (2022); Sari & Widiatmoko (2023), found that Leverage has a negative and significant effect on Financial Performance.

ESG on financial performance through leverage

The direct influence of ESG has a regression coefficient value of 0.489. The indirect effect of ESG has a coefficient value of -0.048, which is derived from -0.314 x 0.153 = -0.048. 0.153 is the value of the effect of DER on ROA. If the value of the indirect effect > the value of the direct effect, the intervening effect is significant. 0.048 < 0.489. These results indicate that the DER variable is not able to mediate the effect of ESG on ROA significantly (H4 is not supported). This assumes that the leverage variable cannot mediate the effect of ESG on firm value. ESG disclosure does not increase or affect the leverage or debt level of the company. The lack of effect of ESG on leverage is possible because ESG disclosure is not used as a determination for company managers to determine company funding. This is contrary to the findings of Vijaya (2023), who found that good ESG can lower the cost of capital, companies with high ESG scores tend to have access to cheaper funding, such as loans with lower interest rates and issuing shares at higher prices. Higher external funding can increase profitability through tax reduction, which is in line with trade off theory. According to Sari & Dwirandra (2019), The deduction of debt interest on taxable income reduces the proportion of tax expense so that net profit after tax becomes greater and profitability also increases. However, the results prove that ESG has no effect on leverage, where ESG does not determine funding through debt. So this results in leverage that is not influenced by ESG, not affecting profitability (Ahn et al., 2006; Halling et al., 2016).

Conclusion

This study aims to test the independent variables consisting of ESG Disclosure on Company Performance with Leverage as intervening. The coefficient of determination of this study shows a number which means that the independent variable is only able to explain the dependent variable with 0.168 or 16.8%. The ROA variable can be explained by 16.8% by the ESG and DER variables while the remaining 83.2% can be influenced by other factors not examined.

Acknowledgments

Thank you for helping this manuscript so that it can also be accepted and published in international journals.

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