

¹ Irma Sari Permata² Gunawan Baharuddin³ Nuruddin Subhan

Implementation of Green Financial Management and Its Impact on The Financial Performance of SRI-KEHATI Indexed Companies



Abstract: - This study examines the impact of Corporate Social Responsibility (CSR) and environmental performance, as measured by the PROPER rating, on the financial performance of companies listed in the Sri Kehati Index. The research employs a quantitative approach with Structural Equation Modeling (SEM) using Partial Least Square (PLS) to analyze data from 25 companies over the period from 2018 to 2023. The results indicate that both CSR and environmental performance have significant positive effects on financial performance, measured by Return on Assets (ROA). However, when firm size is introduced as an intervening variable, CSR does not significantly influence ROA, while environmental performance continues to have a significant impact. This suggests that environmental initiatives are more strongly linked to financial outcomes, potentially due to their influence on firm size, which, in turn, affects profitability. The study highlights the importance of integrating environmental management into corporate strategies to enhance financial performance and suggests that larger firms with better environmental performance may experience better financial results, despite potential challenges related to asset management during economic downturns.

Keywords: PROPER Rating, Firm Size, Sri Kehati Index, Green Financial Management.

I. INTRODUCTION

Indonesia's continuously developing economy is driven by the increasing number of companies across various sectors. However, this growth does not come without consequences. Intensive exploitation of natural resources often results in significant environmental damage, impacting human health and quality of life. Companies, as integral parts of the ecosystem, are not only expected to maximize profits but also to consider the environmental impacts of their operations (Setiawan & Hadi, 2021).

In this context, Green Financial Management (GFM) emerges as an important approach that integrates environmental considerations into corporate management. GFM encompasses the search for environmentally friendly funding sources (green financing) and the equitable distribution of business results (green distribution/green dividend) (Suteja, 2018). The application of these principles aims to ensure that companies focus not only on profit but also on the social and environmental impacts of their activities.

As public awareness of the social and environmental impacts of corporate activities increases, the demand for corporate social responsibility (CSR) also rises. The public demands that companies proactively address issues such as pollution, waste management, and other environmental impacts (Fauzi, 2020). The Republic of Indonesia Law No. 23 of 1997 on Environmental Management affirms the public's right to a good and healthy environment and access to information on environmental management (Ministry of Environment, 1997).

Since 1995, the Ministry of Environment has launched PROPER (Program for Pollution Control, Evaluation, and Rating) to assess corporate environmental performance and encourage improvements through a color rating system (PROPER, 2020). These ratings help the public and investors evaluate a company's commitment to environmental management based on colors that reflect compliance levels.

According to research by Lako (2018), improved environmental performance is measured by the reduction of negative impacts caused by corporate activities. Higher PROPER ratings, such as blue or green, indicate better environmental performance. However, some companies still receive red ratings, indicating deficiencies in their environmental management efforts.

^{1,2} Pancasila University, Indonesia

³ Pancasila University, Indonesia. nuruddin.subhan@univpancasila.ac.id

Color Indicator	Description	Score
Gold	For business activities that have consistently demonstrated the superiority of their environment in carrying out production processes or services, which have been responsible and ethical to the Society	5
Green	For business activities that have carried out environmental management beyond what has been required in the regulations	4
Blue	For business activities that carry out environmental management efforts in accordance with the applicable terms and conditions	3
Red	Efforts undertaken in environmental management have not been completed with what has been required in the legislation regulated as appropriate, as well as in the stage of the establishment of administrative sanctions	2
Black	For activities or undertakings that commit negligence or acts that have caused environmental damage or pollution intentionally and failure to impose administrative sanctions	1

Source: Ministry of Environment, 2021

Recent data from 25 companies indexed by Sri-Kehati from 2018 to 2023 shows that 98.7% of companies have achieved good environmental performance. However, one company received a red rating in both 2018 and 2023, highlighting gaps in the implementation of environmental management principles (Sri-Kehati Report, 2023). This underscores the importance of applying GFM to prevent further environmental damage and ensure a mutually beneficial relationship between companies and society.

The implementation of GFM is expected to enhance corporate financial performance through better environmental management, which in turn can increase public loyalty and corporate profitability.

II. LITERATURE REVIEW

The relevant theories in this research include Signalling Theory, Legitimacy Theory, and Stakeholder Theory. Signalling Theory emphasizes the importance of companies disclosing information to external parties to reduce information asymmetry, particularly information related to corporate social responsibility (CSR) (Retno & Priantinah, 2012). This theory suggests that transparent communication of CSR activities can serve as a signal to stakeholders, enhancing the company's reputation and trustworthiness.

On the other hand, Legitimacy Theory posits that companies must operate in alignment with societal expectations to gain social support and legitimacy (Retno & Priantinah, 2012). This theory highlights the social contract between a company and society, where businesses are expected to act in ways that are socially responsible and acceptable. Failure to meet these societal expectations can result in a loss of legitimacy, which may negatively impact a company's survival and success.

Furthermore, Stakeholder Theory, as proposed by Freeman (1985) and discussed by Stacia & Juniarti (2015), underscores the need for organizations to consider the interests of all groups that can influence or be influenced by the achievement of organizational goals. This theory extends the focus beyond shareholders to include a wide range of stakeholders, such as employees, customers, suppliers, and the broader community. In the context of corporate social responsibility and environmental performance, Stakeholder Theory suggests that companies should engage with and address the concerns of all relevant stakeholders to ensure sustainable and ethical business practices.

In the context of research variables, profitability indicates a company's ability to generate profit from all its resources within a certain period (Sahputra et al., 2021). High profitability, measured by ratios such as Return on Assets (ROA), reflects the company's sustainability and positive future prospects (Arefa, 2017). Corporate Social Responsibility (CSR), which involves a company's responsibility towards society and the environment, can enhance the company's image and consumer loyalty, ultimately having a positive impact on profitability (Ernawan, 2011; Susanto, 2009; Angela & Yudianti, 2014; Rahmawati & Achmad, 2012). Environmental performance, measured

through the PROPER report by the Ministry of Environment, indicates how well a company preserves the environment and contributes to social responsibility (Niasari, 2019).

Firm size, measured by total assets, reflects the scale of a company's operations and its ability to manage various activities (Kusumo & Darmawan, 2016). Larger companies with substantial assets tend to be more stable and capable of generating better profits compared to smaller companies with fewer assets (Utami, 2020).

Based on these theories and variables, several key hypotheses have been developed as follow:

H1 - Proposes that CSR has a positive impact on financial performance, as CSR can enhance the company's image and consumer loyalty, thereby affecting profitability (Pustikaningsih, 2011; Angela & Yudianti, 2014; Rahmawati & Achmad, 2012).

H2 - Asserts that environmental performance also positively influences financial performance, as companies that are environmentally conscious can attract greater public and investor interest (Niasari, 2019).

H3 and H4 suggest that firm size serves as an intervening variable in the relationship between CSR and financial performance (H3) as well as between environmental performance and financial performance (H4). Larger companies have more resources to implement CSR initiatives and manage environmental performance, which, in turn, can impact profitability (Noor & Srimindarti, 2022; Utami, 2020).

H5 and H6 explore the impact of CSR and environmental performance on firm size. CSR can enhance firm size by improving the company's image and customer loyalty, while strong environmental performance is often associated with larger companies, as they typically have greater capacity for environmental investments (ISO 26000, 2012).

H7 - Proposes that firm size influences ROA, with larger companies generally possessing a better ability to generate profits (Utami, 2020).

III. RESEARCH METHODOLOGY

The research method used in this study is a quantitative method with an explanatory approach. Quantitative research focuses on assessing research variables through numerical data and conducting data analysis based on statistical procedures (Wati, et al., 2021). This approach emphasizes numerical data that is processed and analysed to draw conclusions. This study aims to clearly explain the facts and show the influence of each independent variable (CSR, environmental performance) on the dependent variable (financial performance), with company size as an intervening variable.

Following are the independent and dependent variables employed in this study:

1. Independent Variables:

- Corporate Social Responsibility (CSR): Measured using the CSR disclosure index based on the Global Reporting Initiative (GRI) standards.
- Environmental Performance: Assessed using the PROPER rating issued by the Ministry of Environment, which rates companies on a scale from red to gold.

2. Dependent Variable:

- Financial Performance: Measured using key financial ratios such as Return on Assets (ROA), Return on Equity (ROE), and Earnings Per Share (EPS) obtained from the companies' financial statements.

3. Intervening Variable:

- Company Size: Represented by the natural logarithm of total assets (Ln Total Assets) to account for the scale of the companies.

The population in this study consists of all companies indexed by Sri Kehati and listed on the Indonesia Stock Exchange (IDX) during the period from 2018 to 2023, totaling 25 companies.

The sample will be selected using purposive sampling method based on the following criteria:

1. Companies that have been consistently listed in the Sri Kehati index during the period from 2018 to 2023.

2. Companies that have complete financial and CSR data available for the period under study.

Data will be collected from the annual reports, sustainability reports, and financial statements of the companies. CSR disclosure and environmental performance data will be obtained from publicly available reports and the Ministry of Environment's PROPER ratings. The data will be analyzed using multiple regression analysis to determine the impact of CSR and environmental performance on financial performance, with company size as an intervening variable. Statistical software will be used to perform the analysis and test the hypotheses.

IV. DATA ANALYSIS

Use Descriptive statistical analysis is used to describe or explain the characteristics of the research object through data from the sample or population as it is. This descriptive statistic provides an overview or description of the data by looking at the mean, minimum value, maximum value, and standard deviation. The results of the descriptive statistics in this study are as follows:

Tabel 2: Descriptive Statistics

	Mean	Med	Min	Max	SD
CSR	0.179	0.21	0.04	0.28	0.05
PROP	3.527	3	2	5	0.64
ROA	7.857	6.1	-5	34.8	6.722
SIZE	31.84	31.71	19.67	35.32	1.924

Source: Output of analyzed data by SmartPLS (2024)

Based on the table above, the results can be explained as follows:

1. For the CSR variable with a data count (n) of 150, the minimum value is 0.04, and the maximum value is 0.28. The standard deviation is 0.05, which is lower than the mean value of 0.179, indicating that the CSR variable has a homogeneous variation.
2. For the PROPER variable with a data count (n) of 150, the minimum value is 2.0, and the maximum value is 5.0. The standard deviation is 0.64, which is lower than the mean value of 3.527, indicating that the PROPER variable has a homogeneous variation.
3. The ROA variable, with a data count (n) of 150, has a minimum value of -5.0 and a maximum value of 34.8. The standard deviation is 6.722, which is lower than the mean value of 7.857, indicating that the ROA variable has a homogeneous variation.
4. The SIZE variable, with a data count (n) of 150, has a minimum value of 19.67 and a maximum value of 35.32. The standard deviation is 1.924, which is lower than the mean value of 31.84, indicating that the SIZE variable has a homogeneous variation.

V. RESULT

5.1 Structural Equation Model Analysys

This study aims to analyze the partial direct effects of CSR, PROPER, and Size on ROA, as well as the partial indirect effects of CSR and PROPER on ROA through Size. The data analysis technique used is Structural Equation Modeling (SEM) with the Partial Least Square (PLS) statistical software version 3.0. According to Ghazali, PLS is utilized to assist in obtaining latent variable values for prediction purposes. Latent variables are linear aggregates of indicators. One of the advantages of PLS analysis is that it does not rely on many assumptions; the data does not need to follow a multivariate normal distribution, it can be applied to the same model, and the sample size does not need to be large.

5.2 Measurement Model Testing (Outer Model)

An instrument can be considered valid if it accurately measures what it is intended to measure (Cooper and Schindler, 2014). In this study, validity testing uses the methods of convergent validity and discriminant validity with the help of SmartPLS 3.0. The following figure presents the results of the research model.

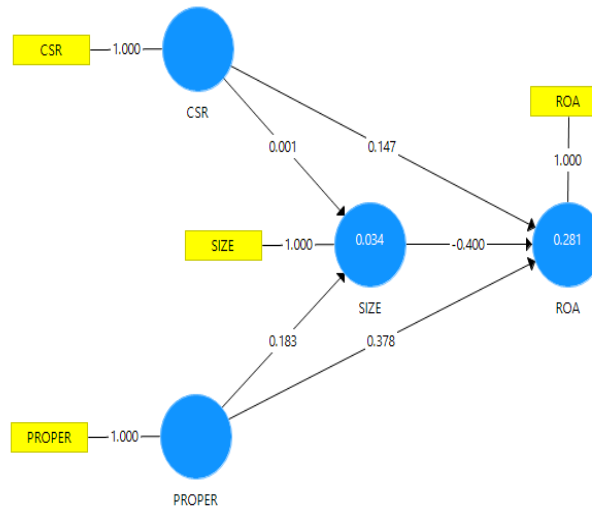


Figure1. Full Structural Model Results (Standardized Output)

Source:Data Processed with SmartPLS (2024)

Before conducting data analysis, the first step is to perform instrument quality tests, which include validity testing and reliability testing.

1) *Validity Test*

a) *Convergent Validity*

Convergent validity is related to the principle that the manifest variables of a construct should have a high correlation. Convergent validity can be assessed by examining the loading factor values for each construct indicator. To evaluate convergent validity, the loading factor values should ideally be greater than 0.70. Based on the testing results using SmartPLS software, the following results were obtained:

Table 3: Outer Loading

Variable	Loading Factor	Remark
CSR	1.000	Valid
PROPER	1.000	Valid
ROA	1.000	Valid
SIZE	1.000	Valid

Source: Output of analyzed data by SmartPLS (2024)

The results of the convergent validity test show that all loading factor values are greater than 0.70. With the indicators of the variables meeting this criterion, they are considered valid and sufficient to fulfill the requirements for convergent validity.

b) *Discriminant Validity*

In this section, the results of the discriminant validity test will be explained. Discriminant validity is assessed using cross-loading values. An indicator is considered to meet discriminant validity if its cross-loading value on its respective variable is the highest compared to its cross-loading values on other variables. Below are the cross-loading values for each indicator:

Table 4: Cross Loading

	CSR	PROPER	ROA	SIZE
CSR	1.000	0.128	0.186	0.024
PROPER	0.128	1.000	0.324	0.183
ROA	0.186	0.324	1.000	-0.327
SIZE	0.024	0.183	-0.327	1.000

Source: Output of analyzed data by SmartPLS (2024)

The cross-loading results in the table above show that the correlation values between constructs and their respective indicators are higher than the correlation values with other constructs. This indicates that all constructs or latent variables have good discriminant validity, where the indicators within each construct’s block are stronger than indicators from other blocks.

Discriminant validity is assessed by examining the cross-loading values of the construct measurements. Cross-loading values indicate the strength of the correlation between each construct and its indicators compared to indicators from other constructs. A measurement model has good discriminant validity when the correlation between a construct and its indicators is higher than the correlation with indicators from other constructs.

To further evaluate discriminant validity, the method of average variance extracted (AVE) can also be used for each construct or latent variable. A model demonstrates better discriminant validity when the square root of the AVE for each construct is greater than the correlation between any two constructs in the model. In this study, the AVE values and the square roots of the AVE for each construct are presented in the AVE table below:

Table 5: Value of Average Variance Extracted (AVE)

Variabel	AVE
CSR	1.000
PROPER	1.000
ROA	1.000
SIZE	1.000

Source: Output of analyzed data by SmartPLS (2024)

From the AVE table, it is evident that the AVE values for each construct are above 0.5. Therefore, there are no issues with convergent validity in the tested model, and the constructs in this research model can be said to have good discriminant validity.

2) *Reliability Test*

In addition to the validity test, the measurement model (outer model) also includes a reliability test of the constructs. The purpose of this test is to demonstrate the accuracy, consistency, and precision of the instruments in measuring the constructs. In PLS, the reliability of a construct with reflective indicators can be measured using composite reliability. The criteria for this test are that if a construct has a composite reliability value and Cronbach's alpha greater than 0.7, it can be concluded that the manifest variables have good accuracy, consistency, and precision in measuring the construct. The test results using SmartPLS software are presented in the following table:

Table 6: Composite Reliability

Variable	Composite Reliability	Cronbachs Alpha	Result
CSR	1.000	1.000	Rely
PROPER	1.000	1.000	Rely

ROA	1.000	1.000	Rely
SIZE	1.000	1.000	Rely

Source: Output of analyzed data by SmartPLS (2024)

Based on the table above, it is evident that the composite reliability values for all constructs are very good, being above 0.7. Therefore, it can be concluded that the construct indicators are reliable, meaning that all manifest variables of the latent variables have been proven to possess good accuracy, consistency, and precision in measuring the constructs.

a) *Structural Model (Inner Model)*

The measurement of the structural/inner model is used to assess the relationships between variables through the bootstrapping process. The t-statistic parameter is obtained to predict the relationships between variables. Subsequently, the structural model is evaluated by examining the percentage of variance explained by the model, which is indicated by the R-squared (R²) value for the dependent variables. This value helps determine how well the independent variables explain the variability in the dependent variables, providing insight into the model's overall predictive power and effectiveness:

1) *R Square Results*

The Coefficient of Determination (R-Square) is used to measure how much the endogenous variable is influenced by other variables. According to Chin, an R² result of 0.67 or higher for the endogenous latent variable in the structural model indicates that the influence of exogenous variables (the influencing variables) on the endogenous variable (the influenced variable) falls into the strong category. If the result is between 0.33 and 0.67, it is considered moderate, and if the result is between 0.19 and 0.33, it is considered weak (Chin, 1998 in Ghazali and Latan, 2015:81). Based on the testing results using SmartPLS 3.0, the following results were obtained:

Table 7: R-Square Results

Variable	R-Square
ROA	0.281
SIZE	0.034

Source: Output of analyzed data by SmartPLS (2024)

Based on the data presented in the table above, it can be observed that the R-Square value for the ROA variable is 0.281, indicating a weak influence. This value explains that 28.1% of the variability in ROA can be accounted for by CSR, PROPER, and Size, while the remaining 71.9% is attributed to other factors outside the scope of this study.

Meanwhile, the R-Square value for the Size variable is 0.034, indicating a very weak influence. This value suggests that only 3.4% of the variability in Size can be explained by CSR and PROPER, while the remaining 96.6% is influenced by other factors outside the scope of this study.

2) *Predictif – Relevance (Q²)*

The change in the R² value is used to determine whether the measurement of exogenous latent variables on endogenous latent variables has a substantive impact. This can be measured using the effect size f².

The formula for effect size f² is as follows:

$$Effect\ Size\ f^2 = \frac{R^2_{Included} - R^2_{excluded}}{1 - R^2_{Included}}$$

A model is considered to have relevant predictive value if the Q-square value is greater than 0 (>0). The predictive relevance value (Q²) is obtained using the following formula:

$$Q^2 = 1 - (1 - R_1^2) (1 - R_2^2) \dots (1 - R_n^2) \quad 3,4\%$$

$$Q^2 = 1 - (1 - 0.281) (1 - 0.034)$$

$Q^2 = 0.305$

The calculation result of Q-Square in this study is 0.305, which is greater than 0. This indicates that the variables CSR, PROPER, and Size have a good level of predictive relevance for ROA.

1) *Statistical Hypothesis Testing*

Hypothesis testing in this study is based on the values obtained from the SEM analysis, with specific thresholds for hypothesis testing. The results of the complete model testing and the research hypotheses are as follows:

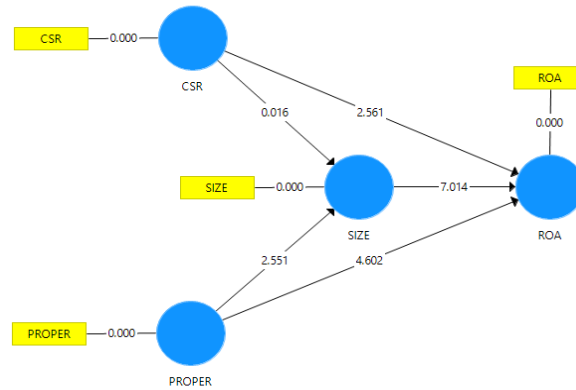


Figure 2. Result of Structural Model (Standardized) – Bootstrapping

(Source: Output of analyzed data by SmartPLS (2024))

The t-test, also known as a partial test, is used to examine how each independent variable individually affects the dependent variable. This test is conducted by comparing the calculated t-value (t-count) with the critical t-value (t-table). The basis for decision-making is as follows:

1. If $t\text{-count} > t\text{-table}$: The null hypothesis (H_0) is rejected, indicating that the independent variable has a significant effect on the dependent variable.
2. If $t\text{-count} \leq t\text{-table}$: The null hypothesis (H_0) is accepted, indicating that the independent variable does not have a significant effect on the dependent variable.

Alternatively, decisions can also be made based on the p-value:

1. If $p\text{-value} < \alpha$ (significance level, typically 0.05): Reject H_0 , indicating a significant effect.
2. If $p\text{-value} \geq \alpha$: Fail to reject H_0 , indicating no significant effect.

These criteria help determine whether each independent variable significantly influences the dependent variable in the model.

The t-table value for a significance level of 0.05 or 5% is 1.96 (Ghozali & Latan, 2016). The t-count values are obtained through data processing using SmartPLS 3.0 and can be summarized as follows:

1. If $t\text{-count} > 1.96$: The null hypothesis (H_0) is rejected, indicating that the independent variable has a significant effect on the dependent variable.
2. If $t\text{-count} \leq 1.96$: The null hypothesis (H_0) is accepted, indicating that the independent variable does not have a significant effect on the dependent variable.

Table 8: Statistic Hypothesis

Hypo Thesis	Relation between Variable	Path	Tcount	P-Value	Results
H1	CSR -> ROA	0,147	2.561	0.011	Sign
H2	PROPER -> ROA	0,378	4.602	0.000	Sign

H3	CSR -> SIZE -> ROA	0,000	0.015	0.988	Not Sign
H4	PROPER -> SIZE -> ROA	-0,073	2.327	0.020	Sign
H5	CSR -> SIZE	0,001	0.016	0.988	Not Sign
H6	PROPER -> SIZE	0,183	2.551	0.011	Sign
H7	SIZE -> ROA	-0,400	7.014	0.000	Sign

H1: The influence of Corporate Social Responsibility (CSR) as a proxy for the implementation of Green Financial Management on financial performance

Hypothesis 1 explains the impact of CSR on ROA. The data processing results reveal a path coefficient value of 0.103 and a t-count value of 2.561, which is greater than the t-table value of 1.96, with a p-value of 0.011, which is less than 0.05. Therefore, Ho.1 is rejected, and Ha.1 is accepted, indicating that the CSR variable has a significant effect on ROA.

The results of the partial hypothesis testing on the CSR variable show that it has a significant impact on company performance (ROA). The regression results indicate a positive t-count value, meaning that if a company's level of CSR increases, its performance is likely to improve.

The implementation of Corporate Social Responsibility (CSR) has a positive effect on the Return on Assets (ROA) achieved by companies listed in the Sri Kehati Index.

Corporate Social Responsibility (CSR) is a concept where companies commit to operating ethically, contributing to economic development, and improving the quality of life for employees, the local community, and society at large. While many studies show that CSR can provide various benefits to companies, there are also studies indicating that CSR does not always have a positive impact on financial performance, particularly Return on Assets (ROA).

H2: The influence of environmental performance as a proxy for the implementation of Green Financial Management on financial performance

Hypothesis 2 explains the impact of Environmental Performance (PROPER) on Financial Performance (ROA). The data processing results show a path coefficient value of 0.378 and a t-count value of 4.602, which is greater than the t-table value of 1.96, with a p-value of 0.000, which is less than 0.05. Therefore, Ho.2 is rejected, and Ha.2 is accepted, indicating that the PROPER variable has a significant effect on ROA.

The results of the partial hypothesis testing on the Environmental Performance (PROPER) variable indicate that it has a significant impact on company performance (ROA). Environmental Performance is one of the critical factors that can influence a company's financial performance, including Return on Assets (ROA). In Indonesia, one of the programs that assess a company's environmental performance is PROPER (Program for Pollution Control, Evaluation, and Rating), managed by the Ministry of Environment and Forestry.

Companies listed in the Sri Kehati Index have been selected based on their sustainability performance, which includes environmental, social, and governance (ESG) aspects. Here are some reasons why environmental performance, as measured by PROPER, can affect a company's financial performance (ROA):
Operational Cost Reduction: Companies with a good PROPER rating tend to manage their resources and waste more efficiently, which can reduce operational costs. Reducing energy, water, and raw material usage, as well as effective waste management, can lower costs and improve operational efficiency, ultimately increasing ROA.
Risk Management: Good environmental performance can reduce legal and regulatory risks. Companies that comply with environmental regulations and have sound environmental management practices are less likely to face fines or sanctions from the government. This risk reduction can provide better financial stability and improve ROA.
Company Reputation and Image: Companies with a good PROPER rating typically have a more positive reputation and image in the eyes of consumers, investors, and the public. A good reputation can attract more customers and investors and enhance customer loyalty, which can eventually increase revenue and ROA.
Access to Capital: Companies with strong environmental performance often have better access to capital. Investors and financial institutions are increasingly considering ESG factors in their investment decisions. Companies with good

environmental performance may receive more favourable financing conditions, which can boost ROA. Innovation and Competitive Advantage: Companies that focus on environmental performance are often more innovative in creating more sustainable products and processes. This innovation can create a competitive advantage that helps companies gain a larger market share and increase profitability, which is reflected in an improved ROA. Compliance with International Regulations: In the context of globalization, companies operating in international markets need to comply with international environmental standards. Good environmental performance ensures compliance with international regulations, thereby avoiding trade barriers and opening up broader market opportunities.

Therefore, Sri Kehati Index-listed companies with good environmental performance, as measured by PROPER, tend to show better financial performance. However, this relationship is not always linear and can be influenced by various other factors, such as market conditions, company management, and overall business strategy.

H3: The indirect impact of corporate social responsibility on financial performance with the size of the company as its intervention variable

Hypothesis 3 examines the impact of CSR on Financial Performance (ROA) with Firm Size as an intervening variable. The data processing results show a path coefficient value of 0.000 and a t-count value of 0.015, which is less than the t-table value of 1.96, with a p-value of 0.988, which is greater than 0.05. Therefore, $H_{0.3}$ is accepted, and $H_{a.3}$ is rejected, indicating that the CSR variable does not have a significant effect on ROA with Firm Size as an intervening variable. Thus, in this study, Firm Size cannot serve as an intervening variable between CSR and ROA.

The hypothesis testing results for the indirect effect of the CSR variable on company performance (ROA) with firm size as an intervening variable show that this relationship is not significant, indicating that firm size cannot be considered an effective mediator between CSR and ROA in the context of this research. This suggests the need to consider other factors that might play a more significant role and to reevaluate the approach to analyzing the relationship between CSR and financial performance.

The implementation of CSR in a company may not be strong or relevant enough to influence firm size or financial performance. CSR activities carried out primarily for reputation management or regulatory compliance without genuine commitment may not have a significant impact on firm size or ROA.

It is possible that other factors, such as management strategy, market conditions, innovation, or operational efficiency, have a more substantial influence on ROA than CSR and firm size. In this case, the effects of CSR and firm size may be overshadowed by the influence of these more dominant factors.

H4: The Indirect Effect of Environmental Performance on Financial Performance with Firm Size as an Intervening Variable

Hypothesis 4 explores the indirect effect of Environmental Performance (PROPER) on ROA with Firm Size as an intervening variable. The data processing results show a path coefficient value of -0.073 and a t-count value of 2.327, which is greater than the t-table value of 1.96, with a p-value of 0.020, which is less than 0.05. Therefore, $H_{0.4}$ is rejected, and $H_{a.4}$ is accepted, indicating that the PROPER variable significantly influences ROA with Firm Size as an intervening variable. Thus, Firm Size successfully acts as an intervening variable between PROPER and ROA in this study.

The hypothesis testing results for the indirect effect of the Environmental Performance variable on company performance (ROA) with firm size as an intervening variable show that this relationship is significant.

Since good environmental performance enhances firm size, and firm size has a positive impact on ROA, good environmental performance (PROPER) indirectly increases ROA through the growth in firm size. In other words, good environmental performance drives company growth, and larger companies tend to have better financial performance, as measured by ROA.

This study demonstrates that good environmental performance (PROPER) has a significant indirect effect on ROA through the increase in firm size. This indicates that a company's efforts to improve its environmental performance

not only have a direct positive impact but also help the company grow and expand, which ultimately enhances its financial performance.

The study also highlights the importance of considering intervening or mediating variables in understanding the complex relationship between environmental performance and financial performance. Implementing sound environmental policies and practices can be an effective strategy for companies to achieve long-term growth and profitability.

H5: The Effect of Corporate Social Responsibility on Firm Size

Hypothesis 5 examines the effect of CSR on Firm Size. The data processing results show a path coefficient value of 0.001 and a t-count value of 0.016, which is less than the t-table value of 1.96, with a p-value of 0.988, which is greater than 0.05. Therefore, Ho.5 is accepted, and Ha.5 is rejected, indicating that the CSR variable does not have a significant effect on Firm Size.

H6: The Effect of Environmental Performance on Firm Size

Hypothesis 6 examines the effect of Environmental Performance on Firm Size. The data processing results show a path coefficient value of 0.183 and a t-count value of 2.551, which is greater than the t-table value of 1.96, with a p-value of 0.011, which is less than 0.05. Therefore, Ho.6 is rejected, and Ha.6 is accepted, indicating that the Environmental Performance variable has a significant effect on Firm Size.

H7: The Effect of Firm Size on Company Performance (ROA)

Hypothesis 7 examines the effect of Firm Size on ROA. The data processing results show a path coefficient value of -0.400 and a t-count value of 7.014, which is greater than the t-table value of 1.96, with a p-value of 0.000, which is less than 0.05. Therefore, Ho.7 is rejected, and Ha.7 is accepted, indicating that the Firm Size variable has a significant impact on ROA.

The results of this study demonstrate that Firm Size has a significant and negative effect on company performance (ROA). The significant impact suggests that the total assets owned by a company can be used to predict or explain its financial performance. In other words, a company's financial performance, as a measure of its effectiveness in generating profit, can be directly influenced by the total assets it owns.

This study contributes to the understanding that higher total assets in manufacturing companies can actually lead to a decline in financial performance. According to the research data, this occurs because the increase in a company's total assets over the years is not matched by an increase in net profit, which has been relatively declining. The high total assets owned by the company are not being maximized in sales, resulting in lower profit achievement. The net profits of each manufacturing company tend to fluctuate, with some even showing losses (negative results).

This indicates that having large total assets can become a burden if the company is unable to utilize them effectively, while the costs associated with maintaining these assets must still be met. Particularly, fixed assets owned by a company require expenditures to meet the company's needs, such as maintenance, replacement, improvement, addition, and rearrangement due to the depreciation of production routes.

The size of a company can be gauged by the total assets it possesses. If a company has substantial total assets, it indicates that the company is large. Large companies are generally perceived as relatively stable and capable of generating significant profits. However, during adverse economic conditions, the opposite effect on the company's performance may occur. A weak economic environment can lead to poor financial performance because the high level of assets is not matched by profitability, thus negatively impacting the company's profitability (Wufron, 2017).

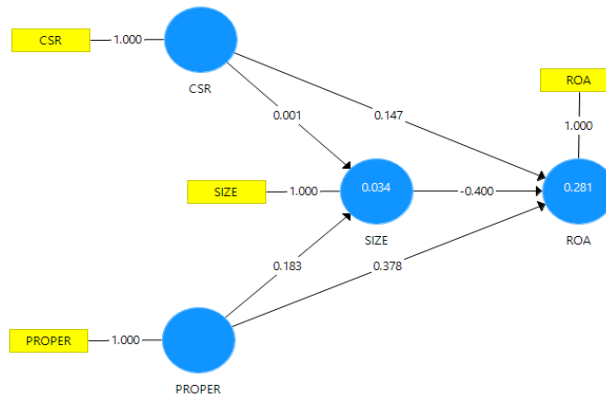


Fig. 3. Regression Equation: Financial Performance (ROA) = 0.147CSR + 0.378PROPER - 0.400 Size

- a) If CSR is increased by one unit, Financial Performance (ROA) will increase by 0.147 units.
- b) If Environmental Performance (PROPER) is increased by one unit, Financial Performance (ROA) will increase by 0.378 units.
- c) If Firm Size is increased by 1 unit, Financial Performance (ROA) will decrease by 0.400 units.

REFERENCES

- [1] Suteja J. Green Financial Management. Unpas Press. 2018;
- [2] Lako.A. Akuntansi Hijau:Isu, Teori, dan Aplikasi. Jakarta: Salemba Empat; 2018.
- [3] Retno, R. D., & Priantinah D. Pengaruh Good Corporate Governance Dan Pengungkapan Corporate Social Responsibility Terhadap Nilai Perusahaan (STUDI EMPIRIS PADA PERUSAHAAN YANG TERDAFTAR DI BURSA EFEK INDONESIA PERIODE 2007-2010). J Nominal. 2012;1((1)):84–103.
- [4] Stacia, E. & J. Pengaruh Pengungkapan Corporate Social Responsibility terhadap Nilai Perusahaan di Sektor Pertambangan. Bus Account Rev. 2015;3(2):81–90.
- [5] Pustikaningsih A. Analisis Hubungan Corporate Social Responsibility (CSR) Terhadap Kinerja Keuangan Pada Perusahaan Jasa (Studi Kasus Perusahaan Jasa di D.I.Yogyakarta). J Pendidik Akunt Indones. 2011;
- [6] Angela, & Yudianti FN. Pengaruh kinerja lingkungan terhadap kinerja finansial dengan pengungkapan corporate social responsibility sebagai variabel intervening. J Ekon Univ Sanata Dharma. 2014;
- [7] Rahmawati, A., & ACHMAD T. Pengaruh Kinerja Lingkungan Terhadap Corporate Financial Performance Dengan Corporate Social Responsibility Disclosure Sebagai Variabel Intervening (Studi Empiris pada Perusahaan Manufaktur di BEI Periode Tahun 2009-2011). 2012;
- [8] Noor, A. I., & Srimindarti C. Dampak Implementasi CSR dan Ukuran Perusahaan Terhadap Kinerja Keuangan Perusahaan Sektor Infrastruktur. AKTSAR J Akunt Syariah. 2022;5((1)):88–102.
- [9] Wufron. Pengaruh Ukuran Perusahaan Terhadap Kinerja Keuangan Serta Implikasinya Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia. J Wacana Ekon. 2017;16(No.03):140–54.