

The Impact of Corporate Social Responsibility Disclosure Between the Implementation of Green Accounting and Sustainable Development

Dwi Indriyani¹, Dewita Puspawati²

¹Faculty of Economics and Business, Muhammadiyah University of Surakarta, Surakarta, Indonesia

²Faculty of Economics and Business, Muhammadiyah University Surakarta, Surakarta, Indonesia

Email address: b200190004@student.ums.ac.id, dp123@ums.ac.id*

Abstract— This study aims to analyze the impact of Corporate Social Responsibility (CSR) between the application of green accounting and Sustainable Development. This study uses quantitative methods with secondary data. The population in this study are mining sector companies listed on the IDX in 2019-2021. The number of companies used in this study were 18 companies and the samples used were 54 financial statements. The sampling technique used was purposive sampling. The data analysis method used is inverting linear regression analysis using the smart-pls application. The results of the analysis show that green accounting has no effect on sustainable development, corporate social responsibility disclosure (CSR) has an effect on sustainable development, green accounting has an effect on CSR, and CSR is able to mediate the influence between green accounting and sustainable development.

Keywords— Green Accounting, Corporate Social Responsibility (CSR), and Sustainable Development.

I. INTRODUCTION

The development of increasingly sophisticated technology makes the industrial world also progress. However, the progress of the industry raises various problems related to environmental damage. Environmental pollution is an important issue that needs attention. One of the biggest causes of environmental pollution in Indonesia is caused by company activities in the process of production and use of natural resources (Wijayanti and Dondoan, 2022).

Industrial developments and technologies used are expected to provide greater benefits. According to Dita & Ervina (2021) the triple bottom line consists of profit, people and planet, which must be a reference in running a company well. Not only refers to profit or profit but also must pay attention to problems in humans and the environment.

The advancement of the industry is expected to increase profits for companies, but companies must also pay attention to problems in humans and the environment. Companies in doing business must implement environmental and social responsibility (Vuong et al., 2019). Environmentally friendly industrial practices are implemented through the application of eco-efficiency in management practices or green accounting in accounting practices. However, currently the application of green accounting in Indonesia has not been running effectively and there are still many companies that ignore the environmental impacts that can be caused by their company's activities (Hamidi, 2019).

The accounting sector plays a role in efforts to preserve the environment, namely through voluntary disclosure in its financial reports related to environmental costs. The purpose of implementing environmental accounting is to increase the efficiency of environmental management by carrying out environmental activities from a cost and benefit or effect perspective (Santi, 2016).

The company's corporate social responsibility disclosure (CSR) as a concept whereby companies combine product, labor, social and environment with their business operations and interact with their stakeholders on a voluntary basis. The company's CSR is in addition to a financial information system to provide information about business strategy, economic performance, the environment and society. Corporate social responsibility information responds to inquiries from various stakeholders, such as workers, shareholders, investors, clients and authorities. This information reflects broader societal predictions about the role of business in society (Vuong et al., 2019). The existence of CSR and the application of green accounting are expected to increase sustainable development in Indonesia. Sustainable development focuses on efforts to maintain or maintain sustainable development activities. The thing that can guarantee the maintenance of development activities is the availability of resources on an ongoing basis to carry out development.

The mining sector is a type of business that has great potential to cause environmental damage (Dita and Ervina, 2021). The mining sector in carrying out its daily industrial activities involves direct contact with nature. In an effort to prevent or mitigate environmental damage resulting from exploitation, mining, quarrying and the resulting waste, issuers will consciously bear additional costs. Sustainability development requires companies to consider their performance goals from three perspectives, namely financial, environmental and social (Dhar et al., 2021). This research is a replication of research that has been conducted by (Dhar et al. (2021) entitled "Impact of social responsibility disclosure between the implementation of green accounting and sustainable development: A study on heavily polluting companies in Bangladesh". Based on the background above, the researcher created a research plan entitled "Impact of Corporate Social Responsibility Disclosure and

Implementation of Green Accounting on Sustainable Development" (Case Study of Mining Sector Companies Registered in Indonesia Stock Exchange Year 2019-2021)

II. LITERATURE REVIEWS

Stakeholder Theory

Stakeholder theory aims to maintain stakeholder relationships with investors, governments, creditors, employees, suppliers, customers, communities and the environment. In stakeholder theory it states that stakeholders have the right to be provided with information about company activities on the environment (Angelina & Nursasi, 2021). Stakeholder theory in this study is to assess the effect of CSR and green accounting on sustainable development.

Legitimacy Theory

Legitimacy theory is a theory that provides motivation for companies to submit their sustainability reports. According to Angelina & Nursasi (2021) legitimacy theory has the benefit of being able to assess the behavior of the company's organization through its concern for the environment to develop strategies to improve the company. Legitimacy theory in this study is to assess the effect of CSR and green accounting on sustainable development (Anggraeni & Dewi, 2022).

Sustainability Development

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs . The term sustainability within the company relates to sustainability measures within the company which include all elements such as CSR and corporate responsibility towards the environment, economy and social (Vuong et al., 2019). In sustainable development there must be complementarity and interdependence between social, economic and environmental goals in the development process.

Corporate Social Responsibility Disclosure (CSDR)

Corporate social responsibility is a company's ongoing business commitment to behave ethically and contribute to economic development (Soundarya, 2016). Corporate social responsibility is proven by disclosure of corporate sustainability reporting. Disclosure of socially responsible information builds and enhances the image of socially responsible companies, which also fulfill their interests with stakeholders (Nguyen, 2021).

Green Accounting

Green accounting is a process of measurement, recognition, recording, summaries, reports that are disclosed with high integration (Amaliyah and Puspawati, 2022). Green accounting is the company's way of harmonizing development by prioritizing the efficiency and effectiveness of the use of environmental resources. Green accounting does not only focus on financial accounting, but also on social accounting and environmental accounting. Green accounting is accounting in which it identifies, measures, assesses, and

discloses costs related to company activities related to the environment (Angelina & Nursasi, 2021). The application of green accounting is disclosed at environmental costs. Environmental costs are costs incurred by companies to manage the environment .

III. METHODOLOGY

This research is a quantitative research, using descriptive method. The population used in this study are mining sector companies listed on the Indonesia Stock Exchange (IDX) in 2019-2021. The data in this study were obtained from financial reports via www.idx.co.id. The sample selection method used in this study was carried out by means of *purposive sampling* . The criteria for determining the sample used are as follows:

TABLE 1. Sampling Criteria

Information	Amount
Mining sector companies listed on the Indonesia StockExchange in 2019-2021.	78
Mining sector companies that publish complete financialreports for the 2019-2021 period	(25)
Sector companies for the 2019-2021 period that use therupiah currency	(35)
Number of companies that meet the criteria	18
Total sample for 3 years of research	54
Total Samples used in the study	54

Based on the sample criteria that have been determined in this study, a sample of 18 companies was obtained. So that the total sample used in the study was 54 .This research will be proven by testing the hypothesis using statistical analysis methods with intervening linear regression analysis assisted by the SMART-FLS application.

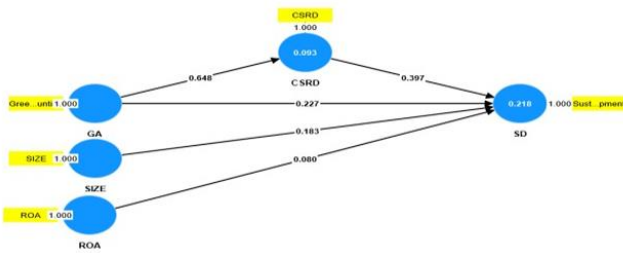
The following measurements are used for each variable in this study:

TABLE 2. Operational Measurements

Variable	Indicator	Source
<i>Sustainable Development</i>	1. Economy, consisting of sales, net income, and investment 2. Technology, consisting of supply costs, development costs, and research costs 3. Social, consisting of salary costs, benefits costs, and pension costs 4. Environmental, consisting of waste maintenance costs, K3, and other equipment costs	Leon (2018)
<i>Green Accounting</i>	1. Environmental costs 2. environmental operational costs, 3. Product recycling costs 4. Environmental research development costs	Angelina and Nursasi (2021)
<i>Corporate social responsibility disclosure</i>	CSR= Number of items disclosed / 91	Eddie (2020)
Company Size	SIZE = Ln (Total aset)	Dita and Ervina (2021)
ROA	ROA = Profit After Tax / Total Assets	Eddie (2020)

IV. RESULTS AND DISCUSSION

Outer Model Analysis



Source: processed data, 2023

Inner Model Analysis

Inner model testing is used to see the magnitude of the relationship between latent variables based on substantive theory. Inner model analysis was carried out by looking at the significant value of R^2 from the research model. The coefficient of determination (R^2) is used to see the ability of exogenous variables to explain endogenous variables in research. The results of the R^2 test can be seen in table 3

TABLE 3. Value R^2

Variable	R^2
CSR	0.093
SD	0.218

Source: processed data, 2023

Based on table IV.3 it shows that green accounting is able to explain the CSR variable by 9.3% and the remaining 90.7% is explained by other constructs outside this study. While green accounting and CSR are able to explain the SD construct variable by 21.8% and the remaining 78.2% is explained by other constructs outside this study

Hypothesis test

Testing the hypothesis in this study uses the bootstrapping output results. The results of hypothesis testing can be seen from the value of the t-statistic and the probability value. If the t-statistic value is > 1.96 and the P-value is < 0.05 then H_a is accepted and H_0 is rejected. The bootstrapping output results can be seen in table 4.

TABLE 4. Hypothesis Test Results

Variable	Original Sample	Sample Means	Standard Deviations	T-Statistics	P-Value	Information
GA -> SD	0.227	0.223	0.284	0.799	0.424	Not significant
CSR -> SD	0.397	0.390	0.126	3,152	0.002	Significant
GA -> CSR	0.648	0.647	0.228	2,843	0.004	Significant
GA -> CSR -> SD	0.258	0.254	0.129	1,991	0.047	Significant
ROA -> SD	0,080	0,085	0,074	1,075	0,282	Not significant

Based on the equation the regression can interpreted as following:

a. Hypothesis testing 1

In testing the first hypothesis in this study there is no effect between green accounting on sustainable development. With a

P-value of $0.424 > 0.05$ and a t- statistic value of $0.799 < 1.96$, so hypothesis 1 is rejected.

b. Hypothesis testing 2

In testing the second hypothesis in this study there is an influence between corporate social responsibility disclosure on sustainable development. The P-value is $0.002 < 0.05$ and the t-statistic value is $3.152 > 1.96$, so hypothesis 2 is accepted.

c. Hypothesis testing 3

In testing the third hypothesis in this study there is an influence between green accounting on corporate social responsibility disclosure. The P-value is $0.004 < 0.05$ and the t-statistic value is $2.843 > 1.96$, so hypothesis 3 is accepted.

d. Hypothesis testing 4

In testing the fourth hypothesis in this study, namely the effect of green accounting on sustainable development, green accounting can be mediated by Corporate social responsibility. The P-value is $0.047 < 0.05$ and the t-statistic value is $1.991 > 1.96$, so hypothesis 4 is accepted.

Control Variable

1. Return on assets has a significance value of 0.282 and P-value is 0,282, so return on assets does not affect sustainable development.
2. Company size has a significance value of 0.120 P-value is 0,120, so that company size has no effect on sustainable development.

Discussion

a. The influence of green accounting on sustainable development.

Companies that apply green accounting or do not apply green accounting will not affect sustainable development. This is possible due to many factors that can affect the sustainability of the company including economic and social factors. The results of this study indicate that the disclosure of environmental costs indicates that the company cannot be responsible for the management of the resources used. In line with research conducted by Ningtyas (2013) which revealed that the company's financial reports have not been able to provide reporting information relating to activities related to the environment (green accounting). This is because there are still many companies that include their environmental costs in other costs, so it will be difficult to know. Green accounting cannot improve the company's sustainable development capabilities. This research is in accordance with research conducted by Damayanti and Yanti (2023), that green accounting has no effect on sustainable development

b. The influence of corporate social responsibility disclosure on sustainable development

The main objective of implementing CSR is to achieve sustainable development (Putranto and Kewal, 2014). Companies that implement CSR well have a target to be able to develop the company well and achieve the highest possible profit so as to be able to prosper the parties concerned. Good social responsibility performance can enable companies to obtain strategic development resources, thereby increasing consumer confidence and attracting investor attention. This

study is in accordance with research conducted by Dhar et al. (2021) and Anggraeni & Dewi (2022), that corporate social responsibility disclosure has an influence on sustainable development.

c. The influence of green accounting on corporate social responsibility disclosure

The application of green accounting every year remains stable and tends to increase every year (Mustofa et al., 2020). This can be seen from the increasing reporting of CSRD information by companies. Companies need to report on activities carried out, especially with regard to information on policies and programs that are being carried out. The goal is to be able to prepare for risks related to the environment that will occur, this is a manifestation of CSRD disclosure in financial reports. Thus, if the company provides information that includes environmental performance in its annual report, the company is proven to have high social awareness. This research is in accordance with research conducted by Mustofa et al., (2020) and Edy (2020) that green accounting has an effect on CSRD.

d. The influence of green accounting on sustainable development mediated by corporate social responsibility disclosure

Green accounting is one way to increase company CSRD. The existence of CSRD is a concrete manifestation of community responsibility to stakeholders. The more criteria disclosed in CSRD, the better the company's performance towards the environment and society. Disclosure of high corporate social responsibility disclosure indicates an increase in the disclosure of green accounting information. So that it will increase sustainable development. This study is in accordance with research conducted by Dhar et al. (2021) that corporate social responsibility disclosure can mediate the effect of green accounting on sustainable development.

V. CONCLUSION AND SUGGESTIONS

Based on the results of the analysis that has been done, the following conclusions can be drawn:

1. *Green accounting for sustainable development* has a significance value of 0.424 so that H1 is rejected and *green accounting* has no effect on *sustainable development*.
2. *Corporate social responsibility disclosure (CSRD) on sustainable development* has a significance of 0.002 so that H2 and *Corporate social responsibility disclosure (CSRD)* have an effect on *sustainable development*.
3. *Green accounting for Corporate social responsibility disclosure (CSRD)* has a significance value of 0.004 so that H3 is accepted and *green accounting* has an effect on *Corporate social responsibility disclosure (CSRD)*.
4. *Corporate social responsibility disclosure (CSRD)* mediates the effect of *green accounting on sustainable development* has a significance value of 0.047 so that H4 is accepted and *Corporate social responsibility disclosure (CSRD)* can mediate the effect of *green accounting on sustainable development*.

Based on the research conclusions, the suggestions that can be given by the author as input are as follows:

1. Future research is expected to broaden the sample and not

be limited to banking companies in order to get a different picture of research results.

2. Further research is expected to add independent variables that can potentially affect *bonds ratings*.

REFERENCES

- [1] Amaliyah, ER, & Puspawati, D. (2022, June). Application of Green Accounting on Environmental Performance (Case Study of Mining and Energy Sector Companies Listed on the Indonesian Stock Exchange in 2014-2020). In *Proceedings of the University Research Colloquium* (pp. 191-200).
- [2] Angelina, M., & Nursasi, E. (2021). Effect of Green Accounting Implementation and Environmental Performance on Company Financial Performance. *Journal of Aerospace Management*, 14 (2), 211-224.
- [3] Anggraeni, AA, & Dewi, HP (2022). Green Accounting and Corporate Social Responsibility Disclosure: Financial Performance of Mining Companies in Indonesia. *Journal of Auditing, Finance, and Forensic Accounting*, 10 (1), 61-74.
- [4] Arrive, JT, & Feng, M. (2018). *Corporate social responsibility disclosure: Evidence from BRICS nations*. *Corporate Social Responsibility and Environmental Management*, 25(2), 920-927
- [5] Bakar, A. (2020). Relationship of Natural Resources and Economic Growth and Islamic Views on the Utilization of Natural Resources. *Islamic Law*, 20 (1), 41-58.
- [6] Belal, AR (2016). *Corporate social responsibility reporting in developing countries: The case of Bangladesh*. Routledge.
- [7] Burhany, DI (2014). The effect of implementing environmental accounting on environmental performance and disclosure of environmental information (Study of general mining companies following the proper period 2008-2009). *Indonesian Journal of Economics and Business*, 1 (2), 257-270.
- [8] Chamorro Gonzalez, C., & Herrera Mendoza, K. (2021). Green accounting in Colombia: a case study of the mining sector. *Environment, Development and Sustainability*, 23 (4), 6453-6465.
- [9] Dewi, SR (2016). Understanding and Concern for the Implementation of Green Accounting: A Case Study of UKM Tahu in Sidoarjo.
- [10] Dhar, BK, Sarkar, SM, & Ayithey, FK (2022). Impact of social responsibility disclosure between implementation of green accounting and sustainable development: A study on heavily polluting companies in Bangladesh. *Corporate Social Responsibility and Environmental Management*, 29 (1), 71-78.
- [11] Dita, EMA, & Ervina, D. (2021). The Effect of Green Accounting, Environmental Performance and Company Size on Financial Performance (Case Study of Mining Sector Companies Listed on the Indonesia Stock Exchange in 2017-2018). *JFAS: Journal of Finance and Accounting Studies*, 3 (2), 72-84.
- [12] Ghozali, Imam. 2011. "Application of Multivariate Analysis with the SPSS Program". Semarang: Diponegoro University Publishing Agency.
- [13] Hamidi, H. (2019). Analysis of Green Accounting Implementation on Company Financial Performance. *EQUILIBRIA*, 6 (2).
- [14] Itsnaini, HM, & Subardjo, A. (2017). The effect of profitability and solvency on firm value moderated by corporate social responsibility. *Journal of Accounting Science and Research (JIRA)*, 6 (6).
- [15] Loen, M. (2018). Application of green accounting and material flow cost accounting (MFCA) to sustainable development. *Krisnadwipayana Journal of Accounting and Business*, 5 (1).
- [16] Marco -Fondevila, M., Moneva Abadía, JM, & Scarpellini, S. (2018). CSR and green economy: Determinants and correlations of firms ' sustainable development. *Corporate Social Responsibility and Environmental Management*, 25 (5), 756-771.
- [17] Nguyen, TH, Vu, QT, Nguyen, DM, & Le, HL (2021). Factors influencing corporate social responsibility disclosure and its impact on financial performance: The case of Vietnam. *Sustainability*, 13 (15), 8197.
- [18] Permatasari, MP, & Setyastri, N. (2019). Corporate CSR Viewed From Legitimacy Theory and Stakeholder Theory. *Journal of accounting and taxation*, 5 (1), 1-03.
- [19] Soundarya, S. (2016). Corporate Social Responsibility: Approach Contemporary Towards Sustainable Development. *IOSR Journal of Business and Management (IOSR-JBM)*, 40- 43.
- [20] Sugiyono, D. (2013). Educational research methods with quantitative,

- qualitative and R&D approaches. Bandung: Alfabeta
- [21] Sugiyono, D. (2017). *Quantitative Research Methods, Qualitative, and R&D*. Bandung: Alfabeta
- [22] Vuong, QH, La, VP, Nguyen, HKT, Ho, MT, Vuong, TT, & Ho, MT (2021). Identifying the moral-practical gaps in corporate social responsibility missions of Vietnamese firms: An event-based analysis of sustainability feasibility. *Corporate Social Responsibility and Environmental Management*, 28 (1), 30-41.
- [23] Wijayanti, A., & Dondoan, GA (2022). The Effect of Applying Green Accounting and Corporate Social Responsibility on Firm Value with Company Performance as an Intervening Variable. *Systems*, 59, 20-3.