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IMPLEMENTATION OF GREEN ACCOUNTING AND ENVIRONMENTAL PERFORMANCE ON PROFITABILITY

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ABSTRACT

Mining companies are related to the environment in carrying out their operational activities. The sustainability of mining activities causes environmental problems and companies must be held accountable for this and accounting begins to play a role in overcoming and preventing problems and green accounting is formed. This study aims to determine the implementation of green accounting and environmental performance on profitability with the ROA (Return On Assets). Profitability is an important instrument for companies and investors in assessing the company's development ability to make a profit. Quantitative research samples were selected through purposive sampling and 20 samples were obtained. The population of this study is mining companies listed on the IDX for the 2019-2021 period and obtained a PROPER rating given by the Ministry of Environment and Forestry. The analysis model used is a multiple regression analysis using SPSS 26. The results of this study indicate that green accounting has a significant effect also with the environmental performance.

KEYWORDS: Green Accounting, Environmental Performance, Profitability, Mining

Introduction

The existence of industrial companies in Indonesia, whose numbers are increasing day by day, cannot be counted on the fingers, especially the mining sector, until now, strengthens the assumption that the Indonesian state is really rich in the abundance of its natural resources. The mining company contributes as a driver of the Indonesian economy in export and import production activities. These companies simultaneously utilize the natural resources of mining, processing by applying such a strategy that is nothing but to obtain maximum income and improve their financial performance, even this opportunity also opens up jobs for the community in general. Fierce competition between companies so that companies are demanded to be effective in managing company resources that are useful in supporting the company's goals, namely to increase profits (Nuryaningrum & Andhaniwati, 2021).

A good indicator of the financial performance of an enterprise is profitability. Profitability is one of the important pieces of information for investors because investors can analyze the development of the company's profit gains. profitability is also an important factor in the survival of the company, the goal of every company is to increase the amount of profitability. The higher the company's profit, it will give a positive signal for investors that they will benefit from their investment (Shofia & Anisah, 2020). The company has the space to carry out operations in the midst of society, the greater its activities, the greater the opportunity for the company to have an impact along with the consequences on the surroundings. The impacts that often have on the surrounding community are environmental impacts such as waste and pollution on water, soil and air. To overcome this problem, management is needed where the accounting field can take a role in efforts to strive for costs for the environment that can be incurred by the company.

Continuous exploration of natural resources can also cause social and environmental problems, therefore mining sector companies are expected to develop sustainable and environmentally friendly businesses to minimize the increasingly severe damage to nature considering the prediction of The Limits To Grow (1972) about global destruction in 2040 which is starting to run according to track (Muhammad, 2021). In addition, the presence of mining companies in the midst of the community is considered quite often or even arguably always has an impact on the environment. From Sumatra, Java, Kalimantan, Sulawesi, Maluku, to Papua, there are traces of social conflict and environmental damage in the mining ring area. Merah said the environment was "undermined" and people were forcibly "silenced" for the sake of implementing priority commodities that are the backbone of the country's income. One of the most worrying concerns communities is the construction of sewage dams close to their residential land, farms, and water sources. Based on JATAM's 2020-year-end records, there were 45 mining conflicts, namely 22 cases of pollution and environmental destruction, 13 cases of land grabs, eight cases of criminalization of residents who refused to mine (victims of criminalization 69 people), and two cases of termination of employment. That number is an increase compared to 2019 with 11 conflicts. Thus, the total mining conflicts that have arisen in the era of President Joko Widodo's leadership since 2014 are 116 cases (Lumbanrau, 2021).

Suka (2016) in (Chasbiandani et al., 2019) has an opinion that the application of environmental accounting or what is often called good green accounting by the company, is a positive thing that the company has in the eyes of stakeholders, because with the application of good environmental accounting, the company has paid attention to the environmental impact of the surrounding company and the company is considered not only focused on increasing the company's profits.

Green accounting factors that can affect the level of profitability of a company are environmental performance, environmental costs and environmental disclosure. The company's environmental performance can be seen from its participation in preserving the environment. In Indonesia itself, the Ministry of Environment created the Company Performance Rating Assessment Program (PROPER) (Wangi & Lestari, 2020). The government through the Ministry of Environment has initiated a program since 2002 to assess the company's performance in environmental management, namely PROPER (Company Performance Rating Assessment Program in Environmental Management).

The increase in participants between the company and the community will establish a symbiotic relationship of mutualism, meaning that if the company pays attention to the company's environment is always good (green) and can overcome environmental impacts that occur due to its company's activities, the community will be loyal to the company's products and this will have a positive impact on profitability. Therefore, environmental accounting is present as one of the solutions to encourage accountability for environmental sustainability problems (Sari et al., 2022).

This research was conducted to test the effect of the implementation of green accounting on the profitability of mining companies listed on the IDX. Mining companies are companies whose operational activities produce waste and have an impact on the environment of the surrounding community which if not considered and immediately followed up will cause pollution and damage to the environment. Meanwhile, the purpose of this study is to prove whether green accounting and environmental performance have an influence or not on profitability.

The Effect of Green Accounting on Profitability

*T*he existence of good environmental accounting will have an impact on the disclosure of the company's performance and bring a great influence in attracting the attention of investors and consumers of the company. The allocation of costs for environmental management provides consistency of environmental concerns carried out by the company so that it can build public trust in corporate social responsibility. Continuous signal theory suggests that it will be a good outcome for the company if the company gives a satisfactory feed (signal) to external parties. The surrounding community also supports the company's operational activities, for its concern with environmental processing management in addition to focusing on business only. Based on (Asjuwita & Agustin, 2020), the first step that can be taken related to environmental costs is to categorize the types of costs related to paying attention to several aspects such as the location of the waste site, types of hazardous waste, disposal methods, and others. Environment costs contain explicit and implicit costs. Implicit costs such as costs incurred as a result of potential liabilities that arise. This will make the company's image increase, so that automatically profitability will also increase. Thus, green accounting has an influence on profitability supported by research conducted by Putri et al. (2019), Sari et al. (2022), Sulistiawati & Dirgantari (2016), Risal et al. (2020) and Nisa et al., (2020).

H_1 : Green Accounting has a significant effect on profitability.

Effect of Environmental Performance on Profitability

Based on the theory of legitimacy, the community has a role in assessing the company. The Company must disclose environmental information and provide good environmental performance to get recognition from outside parties (legitimized) that all company activities have run in accordance with existing norms in the environment and society. When the company succeeds in minimizing damage and environmental pollution caused by operational activities, it will show that the company's environmental performance is good. The following with the disclosure of company activities related to the environment to the public gives a positive signal so that it can improve financial performance and generate profitability that reflects the success of the company so that the company's image is also better in the eyes of the public. The assessment of the PROPER level of each company makes comparisons and corrections for those companies. The increase in the company's image will affect the level of trust of stakeholders to increase sales and profit revenue. Based on research conducted by Sari et al. (2022), Putri et al. (2019), and Wangi & Lestari (2020) shows the results of an influence between environmental performance and improving company profitability but there are different results from research conducted by Sahputra et al., (2020) and Murniati & Sovita (2021) which show negative results with financial performance results that have no effect on profitability.

H^2 : Environmental Performance has a significant effect on profitability.

Method

Types and Sources of Research

Data of this research uses a type of quantitative data, namely data in the form of numbers (Bahri, 2018). The data source is in the form of secondary data obtained through the intermediary of the official website of the Ministry of Environment (PROPER - Kementerian Lingkungan Hidup Dan Perhutanan, 2022), the official website of the Indonesia Stock Exchange

(PT Bursa Efek Indonesia, 2022) and the websites of companies included in the research sample.

Population and Sample

The population in this study is all mining companies listed on the Indonesia Stock Exchange (IDX) for a three-year period, 2019-2021. Determination of samples in this study using purposive sampling through the following considerations:

a. Mining companies listed on the IDX for the period 2019-2021 and issue annual financial statements
b. Mining companies that implement green accounting during the period 2019-2021
c. Mining companies that received the PROPER award for the period 2019-2021
d. Mining companies that have a profit during the period 2019-2021

So that a sample of 20 companies that met the criteria was obtained. The dependent variable of the study is profitability as measured using ROA with a comparison of net profit after tax and total assets. The independent variable is green accounting which is measured by environmental performance in the PROPER ranking with five scores, namely gold 5, green 4, blue 3, red 2 and black 1. Data analysis techniques used to prove hypotheses formulated by using SPSS version 26 to determine the degree of correctness and approximate error. The testing of the data is carried out by the method of analyzing the normality test, the classical assumption test, and the hypothesis test.

Result

The results of the descriptive statistical test in this study can be seen in Table 1.

Table 1. Descriptive Statistical Test Results

		Green Accounting	Environmental Performance	Profitabilitas
N	Valid	60	60	60
	Missing	0	0	0
Mean		1,000	3,817	8,0122
Std. Deviation		,0000	,8334	12,09435
Minimum		1,0	2,0	-14,71
Maximum		1,0	5,0	52,02

The results of the descriptive statistical test in table 1 of mining companies for the 2019-2021 period show that the number of data (n) as many as 60 data samples with the amount of profitability as a dependent variable has a standard deviation value of 12.09435, a means value of 8.0122 with a minimum value of -14.71 and a maximum value of 52.02. Furthermore, the independent variable green accounting with the number of data (n) as much as 60, has a standard deviation value of 0.000, while the means value of 1,000 with a minimum value of 1 is equal to the maximum value of 1. For the second independent variable, namely environmental performance with a total of data (n) of 60, it has a standar deviation value of

0.8334, along with a means value of 3.817 greater than the standard deviation value with a minimum value of 2 and a maximum value of 5.

The test results of the classical assumption test have met the results of the normality test using the One-Sample kolmogrov- Smirnov Test showed the significance value of Asymp. Sig. (2-tailed) 0.121. In the table, the significance value of 0.121 is greater than 0.05, so it can be concluded that the data tested meet the assumption of normality. Coefficients show that the VIF value of the green accounting variable (X1) is 1.036 and the environmental performance variable (X2) has a VIP value of 1.036, of which both < 10. Then, the tolerance value of the green accounting variable (X1) is 0.966 > 0.10 and is the same as the environmental performance variable (X2) of 0.966 > 0.10.

This result concluded that there was no occurrence of multicollinearity between free variables in the regression mode used. The Durbin-Watson value in the autocorrelation test showed a result of 1.903. The number of samples (n = 60), the number of variables (k = 2) based on the DW table, then the values of dL = 1.5144 and du = 1.6518, then the equation dU<d<4-dU = the value is in the area free from autocorrelation. As well as the results of the heteroskedasticity test on both variables showed the value of the Significance of the two variables greater than 0.05, green accounting (X1) of 0.248 and environmental performance (X2) of 0.507 concluded that the absence of symptoms of heteroskedasticity. This makes it possible to use the data.

The results of hypothesis testing in this study are shown in Table 2.

Table 2. Hypothesis Test Results

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-4,365	10,504		-,416	,679
	Green Accounting	9,851	8,439	,155	1,167	,248
	Environmental Performance	,873	1,307	,089	,668	,507

Multiple linear regression tests are used to test the overall data picture to determine the effect of green accounting and environmental performance on profitability in this research sample, namely mining companies listed on the Indonesia Stock Exchange and are PROPER participants for the 2019 – 2021 period. The t test is used to test whether an independent variable exerts an influence on the dependent variable (Bahri, 2018). The green accounting variable of the calculated t value is 1.167 with a significance level of 0.248 and the environmental performance of the calculated t value is 0.668 with a significance level of 0.507. Environmental performance variable: t count of 0.668 with a significance value of 0.507 > 0.05, then H_2

rejected. Means that environmental performance variables have a significant influence on profitability.

Discussion

The Effect of Green Accounting on Company Profitability

The first hypothesis (H_1) states that green accounting has a significant effect on the profitability of Mining Companies that obtain PROPER ratings and Listings on the Indonesia Stock Exchange for the period 2019 - 2021. The results of the first hypothesis test which had a calculated t value of 1.167 < t count 2.018 with a significance value of 0.248 which means a significant value greater than 0.05 (0.248 > 0.05), it can be concluded that the first hypothesis is accepted or in other words the green accounting variable has a significant but negative influence on profitability. Negative results are expected to increase environmental costs can cause the value of profitability to decrease.

The notion that environmental costs are additional costs resulting in reduced profitability value. The consistent application of green accounting can add a positive image value to the company. for a longer period of time, the implementation of green accounting will be very beneficial for all parties, both entrepreneurs, consumers and other stakeholders (investors, the public) (Sunarmin, 2020). The public and other external parties including investors will provide added value because the company also shows its concern for environmental aspects, this will help improve the company's financial performance in obtaining company profits. Companies that have a budget for activities in the implementation of green accounting and are charged as environmental responsibility costs in the form of environmental recovery, environmental management, and environmental rehabilitation get a value of 1.

The implementation of green accounting identifies that companies reduce costs to reduce the incidence of environmental damage, so that it will affect the increase in company profits because consumers are proven to prefer environmentally friendly products and companies that focus on the production process and intensively produce environmentally friendly products are proven to have good environmental performance (Sunarmin, 2020). This research is in line with research Sulistiawati & Dirgantari (2016), which shows the results that the application of green accounting has a positive impact on environmental performance. Where the company is willing to comply with policies and regulations as well as consumer demand to produce environmentally friendly products.

The Effect of Environmental Performance on Company Profitability

Environmental performance variable: t count of 0.668 with a significance value of 0.507 > 0.05, then H_2 is accepted. Testing the second hypothesis with environmental performance variables showed a significant influence on the profitability of Mining Companies that obtained PROPER ratings and Listings on the Indonesia Stock Exchange for the period 2019 - 2021 because the significance value was greater than 0.05. Obtaining a PROPER rating is an achievement that can make the company superior to other companies so that the company becomes more competitive to create innovations in its productivity activities. The award received by mining companies from the Ministry of Environment and Forestry can increase profitability, especially for mining companies that will always have an impact on the surrounding environment. The better the company's environmental performance, the more it can reduce costs related to negative environmental impacts so that with an increase in revenue and a reduction in costs that should not be incurred, it can increase company profits (Sari et al., 2022). The decrease in environmental pollution and good waste treatment can make the company's operational activities more effective and efficient in using resources so that it will support the creation of products that have added value for consumers.

The higher the level of appreciation obtained presented in gold, green and blue, the higher the trust of the public and other external parties including investors in the company's operational activities. The results of this study are different from the research conducted by Olivia et al. (2022) which states that environmental performance variables have no effect on the company's profitability. The discussion suggests results interpretation, argument development by linking the results, theories, and opinions, including the comparison with previous research results. It is also important to raise the possibility of their research results contributing to the development of science. This section does not rewrite the data on the research results.

Conclusion

Profitability shows the company's ability to make a profit from sales activities and investment income which is important because it has an influence on the sustainability of the company. This research was conducted to determine whether there is an influence of green accounting and environmental performance on the profitability of mining which obtained a PROPER rating and listing on the Indonesia Stock Exchange for the period 2019 - 2020. The results of tests using multiple linear tests show that the two variables have a significant influence on the company's profit generation. Broadly speaking, the company's profitability from 2019 – 2021, 17 out of 20 companies experienced an increase in profitability by implementing green accounting along with the proper award given by the Ministry of Environment and Forestry. Some companies experienced a decline in profits but were still able to allocate costs for environmental management.

There are still many mining companies that have not implemented green accounting so they have not been able to get the PROPER award. This limitation led to the lack of company samples in this study. For further research, researchers can add indicators for green accounting, increase the amount of data and maximize the results of data distribution. The conclusion answers the objectives of research or study based on a more comprehensive meaning of results and discussion of research. Suggestions are addressed for practical action (to the participating institution), for the development of new theories, and further research.

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