

## The Effect of Environmental Performance on Financial Performance with Good Corporate Governance as a Moderating Variable in Mining Companies Listed on the Indonesia Stock Exchange Period 2017-2020

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### Abstract

**Research aim :** *This study aims to prove that good corporate governance can strengthen the influence of environmental performance on the financial performance of mining companies.*

**Design/Method/Approach :** *This research is an explanatory research to test a theory or hypothesis to strengthen or even reject the theory or hypothesis of existing research results and the approach used is a quantitative approach. The population in this study is mining companies listed on the Indonesia Stock Exchange (IDX) in 2017-2020. This research sample used the purposive sampling method and obtained 13 companies in (one period) that met the criteria. The data analysis method used in this study was processed using SPSS software version 25.*

**Research Finding :** *The results showed that good corporate governance can strengthen the influence of environmental performance on the financial performance of mining companies listed on the Indonesia Stock Exchange for the 2017-2020 period.*

**Theoretical contribution/Originality :** -

**Practitioner/Policy implication :** -

**Research limitation :** -

**Keywords:** *Good Corporate Governance, Financial Performance, Corporate Finance*

## 1. Introduction

Indonesia is famous as a country rich in abundant natural resources, one of which is the mining sector. The company uses these natural resources to be exploited in order to get the maximum profit. Business activities carried out by mining companies in exploiting natural resources have positive and negative impacts. The positive impacts include creating jobs for the community, providing goods needed by the community for consumption, increasing

income, and others. Meanwhile, the negative impacts caused include pollution and waste produced by the company in the form of soil, water and air pollution [1]. Therefore, to minimize the negative impact of the business being run, the company must have programs that are useful for its environment.

The activities of mining companies in large skilases sometimes do not pay attention to environmental sustainability and cause pollution. One of the cases that occurred on Kodingareng Island, Makasar, East South Sulawesi, the sand mining project carried out by Pelindo IV Makasar resulted in the destruction of coral reefs where fishermen took fish. Based on data from the South Sulawesi Environmental Forum (Walhi), a 230-meter sand mining vessel since February 2020 has carried tens of thousands of cubic feet of sand a day for the reclamation of Makassar New Port (MNP). Based on Walhi Sulsel's research at the end of 2020, communities on Kodingareng Island suffered losses of up to IDR 80 billion due to this sand mining activity and caused abrasion that damaged 27 houses and public facilities on the coastline [2].

The case of Perindo VI Makasar proves that the application of Law No. 32 of 2009 concerning Environmental Management and Protection (PPLH) is still not optimal. Existing policies and regulations have caused companies in Indonesia not to necessarily carry out social and environmental responsibilities, so the government issued policies aimed at improving the company's performance in good environmental management, especially in the field of waste management. This policy is called the Company Performance Rating Assessment Program (PROPER). The basic principle of proper implementation is that it is expected that companies will be able to organize environmental management through reputation/image incentive instruments for companies that have good environmental management performance and reputation/image disincentive instruments for companies that have poor environmental management performance [3].

Legitimacy Theory was used in this study. The theory of legitimacy states that there is a social contract relationship between the company and society. Legitimacy theory focuses companies on interaction with society so that they are able to create harmony value, companies not only advance the company but must be responsible to society, one of which is in terms of the environment around the company [4]. Companies that are obedient to the environment so that environmental performance increases causing the company's financial performance to also increase. This has been proven by research by Supadi and Sudana (2018) showing that Environmental Performance has a positive influence on the company's Financial Performance where environmental performance is able to raise the company's image through improving the company's financial performance [5].

Companies that pay attention to the surrounding environment so that environmental performance increases cause the company's financial performance to also increase. This has been proven by the research of Khairiyani, et al. (2019) showing that environmental performance reflected by PROPER affects the financial performance reflected by ROA and ROE [6]. In contrast to the results of research conducted by Vivianita and Nafasati (2018) stated that environmental performance does not have a significant effect on financial performance [7]. This shows that there are still many companies that do not care about the environment around the company, let alone participate in managing and processing their waste so as not to harm the surrounding community, but the company's financial performance is still increasing, which is supported by factors other than the environment.

Based on agency theory, it explains the relationship between the owner (principle) and

management (agent). A corporate governance mechanism called Good Corporate Governance will be useful in regulating and controlling the company to minimize agency conflicts so as to create positive value for all stakeholders. Institutional ownership is one of the corporate governance that is the largest shareholder so that it can be a means to monitor management performance (Kristiani & Werastuti, 2020). Management performance will be monitored as a whole, including in terms of improving environmental performance, so as to strengthen its influence on the company's financial performance. This has been proven by Christian research & Werastuti (2020) states that Good Corporate Governance strengthens the influence of environmental performance on financial performance. Meanwhile, Miladasari and Agriyanto (2020) stated that good corporate governance does not moderate the influence of environmental performance on financial performance.

### **1.1 Statement of Problem**

Based on the background described above, the formulation of the problem that will be raised in this study is Can good corporate governance strengthen the influence of environmental performance on the financial performance of mining companies listed on the Indonesia Stock Exchange for the 2017-2020 period?

### **1.2 Research Objectives**

In accordance with the formulation of the research problem above, the purpose of this study is to prove that good corporate governance can strengthen the influence of environmental performance on the financial performance of mining companies listed on the Indonesia Stock Exchange for the 2017-2020 period.

## **2. Method**

This type of research is explanatory research. Explanatory research is research that aims to test a theory or hypothesis in order to strengthen or even reject the theory or hypothesis of existing research results. This study aims to examine the effect of environmental performance on financial performance by applying good corporate governance as a coding variable. The quantitative research method is referred to as the positivistic method because it is based on the philosophy of positivism used to examine certain populations or samples, data collection using research instruments, data analysis is quantitative / statistical, with the aim of testing predetermined hypotheses.

The population of this study used mining companies listed on the Indonesia Stock Exchange for the period 2017-2020. Sampling in this study used the purposive sampling method, where the technique of determining samples with certain considerations. researchers choose purposive sampling techniques by establishing certain criteria that must be met to obtain a representative sample.

## **3. Result and Discussion**

### **3.1 Result**

#### **Descriptive Analysis**

Deskriptive analysis is used to describe or describe the conditions of the data used in the study. The description of the research variables is shown by table 1 as follows :

**Table 1. Descriptive Statistical Test Results**

<b>Variabel</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Environmental Performance	3,00	5,00	3,75	0,74
<i>Good Corporate Governance</i>	0,12	0,91	0,60	0,21
Company Performance	0,00	0,46	0,12	0,11

Source : Output SPSS (2021)

The results of descriptive statistical analysis of environmental performance are proxied using PROPER which is an environmental compliance supervision program for industry in Indonesia (Vivianita & Nafasati, 2018). A minimum value of 3 indicates that the company complies with environmental management with a blue rating. The maximum value of descriptive statistical analysis of 5 indicates the company's level of concern for more than being obedient to the environment with a gold color rating. The mean value of environmental performance of 3.75 and the standard deviation of 0.74 indicate that the standard deviation is smaller than the average value, meaning that the deviation of the environmental performance variable data during the observation period is low and is not expected to produce biased research results.

The results of the descriptive statistical analysis of good corporate governance are proxied by institutional ownership which is the percentage of company shares owned by institutional investors to the total shares issued by the company [8]. A minimum value of 0.12 indicates a low share of institutional ownership in the company, a mean value of 0.60 and a standard deviation of 0.21 indicate that the standard deviation is smaller than the average value, meaning that the deviation of the environmental performance variable data during the observation period is low and is not expected to produce biased research results.

The results of the descriptive statistical analysis of the company's performance are proxied with ROA which is the profitability ratio to show the company's success in generating Cashmere profits [8]. A minimum value of 0.00 indicates the company's success rate in making a fairly low profit and a maximum value of 0.46 indicates the company's success rate in making a fairly high profit. A mean value of 0.12 and a standard deviation of 0.11 indicate that the standard deviation is smaller than the average value, meaning that the deviation of the environmental performance variable data during the observation period is low and is not expected to produce biased research results.

### **Tes Classical Assumptions**

The Normality Test in this test aims to test whether in regression models, disruptive or residual variables have a normal distribution. The following is a table of Kolmogorov-Smirnov (K-S) tests presented in the study:

**Table 2. Normality Test Results with Kolmogorov-Smirnov Test**

<b>Unstandardized Residual</b>	
Asymp. Sig. (2-tailed)	0,152

Source : Output SPSS (2021)

Based on the table above, Kolmogorov Smirnov's test on Asymp. Sig. (2-tailed) gets a value of 0.152 which means that the value is greater than 0.05. Therefore, it can be concluded that the data used in this study are normally distributed.

The heteroskedasticity test aims to test whether in the regression model there is a variance inequality from the residual of one observation to another. Here's a table showing the results of the heteroskedasticity test:

**Tabel 3. Heteroskedasticity Test Results**

<b>Variable</b>	<b>Sig. (2 tailed)</b>	<b>Conclusion</b>
Environmental Performance	0,861	No heteroskedasticity occurs
<i>Good corporate governance</i>	0,520	No heteroskedasticity occurs

Source: Output SPSS (2021)

Based on the table above, it can be seen that the signification value (2 tailed) using the Spearman Rank correlation coefficient test is greater (>) than 0.05, which means that the research model used does not occur heteroskedasticity which shows the regression model is good for further testing.

The Autocorrelation Test aims to test whether in the regression model there is a correlation between the disruptor error (problem auto correlation). Here's Table 4 showing the results of the autocorrelation test:

**Tabel 4. Autocorrelation Test Results**

<b>Positive Autocorrelation</b>	<b>Inconclusive</b>	<b>No Autocorrelation</b>	<b>Inconclusive</b>	<b>Negative Autocorrelation</b>
1,4339	1,6769	2,195	2,3231	2,5661
dL	dU	Nilai DW stat.	4 – dU	4 – dL

Source : Output SPSS (2021)

Based on the table above, it can be seen that the results of the autocorrelation test using Durbin-Watson (DW test) show a value of 2.195 and are between the dU value and the 4 – dU value. So that the regression model used does not contain autocorrelation symptoms.

### **Hypothesis Test**

Hypothesis testing is carried out to answer the formulation of research problems. The hypothesis that was built states that good corporate governance can strengthen the influence of environmental performance on the company's financial performance. Thus, hypothesis testing using Moderated regression analysis (MRA). The results of testing the hypothesis are described as follows:

### **Moderated regression analysis (MRA)**

Hypothesis testing to analyze the influence of Environmental Performance as an independent variable, Financial Performance as a dependent variable, Good corporate governance as a moderation variable, using the Moderated Regression Analysis equation. The MRA results in this study are as follows:

**Table 5. Moderated Regression Analysis (MRA) Result**

<b>Variable</b>	<b>Coefficient</b>	<b>T</b>	<b>Sig.</b>
Constant	1,200	4,803	0,000
Environmental Performance	-0,305	-4,448	0,000
<i>Good corporate governance</i>	-1,848	-4,549	0,000

Variable	Coefficient	T	Sig.
GCG* Environmental Performance	0,522	4,665	0,000

Source : Output SPSS (2021)

From table 5 of the results of the Moderated Regression Analysis (MRA) obtained the following equation:

$$Y = 1,200 - 0,305X1 - 1,848Z1 + 0,522Z1*X1 + e$$

The value of the constant of 1.200 means that if all independent variables are constant, then the company's financial performance (Y) increases by 1,200. The value of the environmental performance regression coefficient (X1) is -0.305, meaning that if environmental performance increases by 1 unit, then financial performance (Y) will decrease by 0.305 assuming other independent variables are constant. The value of the regression coefficient of Good corporate governance (Z) of -1.848 means that if good corporate governance increases by 1 unit, then financial performance (Y) will decrease by 1.848 assuming other independent variables are constant. The value of the regression coefficient of environmental performance interaction (X1) and good corporate governance (Z) is 0.522, meaning that if the interaction of environmental performance with good corporate governance increases by 1 unit, then financial performance (Y) will increase by 0.522 assuming other independent variables are constant.

The results of the moderation variable test obtained influential environmental performance results with signification of 0.000 smaller than 0.05. The results of the good corporate governance test have an effect with a signification value of 0.000 smaller than 0.05. The results of environmental performance testing with good corporate governance have an effect with a signification value of 0.000 smaller than 0.05. So it can be concluded that good corporate governance is a moderation variable of environmental performance to the company's financial performance, because the environmental performance variable (X1) has a significant effect and the good corporate governance (Z) variable as a moderating variable has a significant effect on the financial performance variable (Y).

#### Partial Significance Test (t-test)

A partial test used to determine the effect of independent variables on dependent variables. Based on table 5, the results of the partial significance test (t-test) were obtained as follows:

1. Based on table 5 that the results of the interaction of independent variables of environmental performance (X1) obtained a calculated value of -4.448 with a significant level of 0.000, which is less than 0.05, so environmental performance negatively affects the company's financial performance.
2. Based on table 5 that the interaction results of the moderation variable good corporate governance (Z) obtained a calculated value of -4.549 with a significant level of 0.000, which is less than 0.05, so good corporate governance negatively affects the company's financial performance.
3. Based on table 5 that the results of the interaction of the environmental performance variable (X1) with the good corporate governance (Z) variable obtained a calculated t value of 4.665 with a significant level of 0.000, which is less than 0.05, good corporate governance can strengthen the influence of environmental performance on the company's



financial performance, meaning that H1 is accepted.

### **Coefficient of Determination (Adjusted R2)**

The coefficient of determination (Adjusted R2) essentially measures how far the model is capable of explaining the variation of dependent variables. Here are the results of the coefficient of determination in this study:

**Table 6. Coefficient of Determination Results**

<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
0,314	0,271	0,09191

*Dependent Variable* : ROA (Company Performance)

Source : Output SPSS (2021)

In the table of results of the coefficient of determination above, the coefficient value used is the Adjusted value of R2 because the predictors of the dependent variables are more than one, namely the variables of environmental performance and good corporate governance. The test results showed Adjusted R2 of 0.271 or 27%. So it can be said that 27% of financial performance is explained by environmental performance and good corporate governance. Meanwhile, 73% of the amount of financial performance was explained by other variables that were not studied in this study.

### **3.2 Discussion**

The first hypothesis (H1) of this study states that good corporate governance can strengthen the influence of environmental performance on the financial performance of mining companies listed on the Indonesia Stock Exchange for the 2017-2020 period. This is explained based on the results of hypothesis testing, for the results of the interaction of environmental performance variables with good corporate governance variables, a calculated t value of 4.665 with a significant level of 0.000 is less than 0.05, so good corporate governance can strengthen the influence of environmental performance on the company's financial performance. Thus H1 is accepted.

The results of this study are supported by the results of research by Kristiani and Werastuti (2020) which states that Good Corporate Governance strengthens the influence of environmental performance on financial performance. Meanwhile, the results of this study do not support Miladiasari and Agriyanto (2020) who state that good corporate governance does not moderate the influence of environmental performance on financial performance. The results of this study also support the objectives of the agency theory of good corporate governance to be used as a means to avoid agency conflicts between the owner (principle) and management (agent) of the company. Institutional ownership as one of the elements of good corporate governance that has the largest shares plays an important role in monitoring management performance (Kristiani & Werastuti, 2020). Management performance in mining companies listed on the Indonesia Stock Exchange for the 2017-2020 period has been monitored as a whole, including in terms of improving environmental performance, as well as evidenced by the results of this study which states that good corporate governance can strengthen the influence of environmental performance on the company's financial performance.

Management performance is also reviewed from environmental performance. The

results of the descriptive statistical analysis show that all research samples of mining companies listed on the Indonesia Stock Exchange for the 2017-2020 period have complied with regulations to protect the surrounding environment, as evidenced by the PROPER rating obtained ranging from blue to gold (obey – more than obedient). This result is in line with the theory of legitimacy which states that every company must always ensure that its operating activities are in accordance with community norms, so the company needs to ensure that its activities are accepted by all parties [9]. The results of this study also state that environmental performance negatively affects financial performance.

The results of this study are in line with previous studies such as Supadi and Sudana (2018); Evita and Syafruddin (2019); Khairiyani, et al. (2019); and Tahu (2019) which states that environmental performance can affect a company's financial performance [5-6,10]. However, the results of this study are not in line with Vivianita and Nafasati (2018) which states that environmental performance does not have a significant effect on financial performance [7].

#### **4. Conclusion**

This study aims to prove that good corporate governance can strengthen the influence of environmental performance on the financial performance of mining companies listed on the Indonesia Stock Exchange for the 2017-2020 period. Based on the results of the analysis that has been put forward by researchers, it can be concluded that good corporate governance can strengthen the influence of environmental performance on the financial performance of mining companies listed on the Indonesia Stock Exchange for the 2017-2020 period.

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