

# **The Role of CSR Disclosure as Moderation on the Relationship Between Environmental Performance and Corporate Financial Performance**

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## **Abstract**

This paper presents an analysis of the literature concerning whether environmental performance can improve financial performance of Manufacturing Companies in the Miscellaneous Industry Participating in Performance Rating Program in Environmental Management PROPER. Then look at the extent to which the role of corporate social responsibility (CSR) can strengthen the relationship between environmental performance and financial performance of companies in the manufacturing sector and various industries. The sample we use in this study are manufacturing companies in the Miscellaneous Industry listed in the Indonesia Stock Exchange (IDX) and participating in PROPER for the 2016-2019 period with 16 observations. In conducting data analysis, we applied WarpPLS version 7.0 software which will evaluate the outer model and inner model. The company's financial performance variables are measured using the return on equity (ROE) and net profit margin (NPM) ratios, while the environmental performance variable is measured using the PROPER rating and CSR is measured by the CSR index. The provisional assumption of this study shows that (1) environmental performance cannot improve the financial performance of companies in the manufacturing sector and various industries, (2) CSR disclosure is not able to strengthen the relationship between environmental performance and the financial performance of companies in the manufacturing sector and various industries.

## **Keywords**

Environmental performance, financial performance, CSR, PROPER

## **1.Introduction**

Financial performance has become the main thing in conducting an appraisal of a company. From a financial perspective, financial performance based on profit is an indicator of measuring success. With these indicators the company can review and evaluate the results obtained, so that the company knows the prospects of the company in the coming period and as an effort to maintain the sustainability of the company. Thus, financial performance is also a determinant of the company's life. Developing business strategies to do "well" by doing "good" and transforming corporations into responsible organizations that care about the environment, as well as the social component, is increasingly becoming a must rather than an option to lead in future markets. Companies must not just seek financial gain, but also consider the ecological and social context. To put it another way, the corporation should be focused on the triple bottom line notion, which incorporates financial (profit), social (people), and environmental considerations (planet) (UY and Hendrawati 2020). Corporate sustainability is transforming a company's financial bottom line into a triple bottom line that includes environmental and social factors (Albertini 2013). The ability of a corporation to design a solid business strategy is becoming increasingly dependant on how well it places itself in terms of long-term development that balances financial, environmental, and human development (Shank and Shockey 2016). Through the adoption of corporate social responsibility, a firm not only acts for the benefit of shareholders, but also for the interests of stakeholders in business processes (CSR). CSR activity is based on the legitimacy theory, which states that the company will continue to work to ensure that it has operated in accordance with the rules and norms prevailing in the society or environment in which it is located, and that its operational activities will be accepted as "legitimate"

(Deegan 2002). Since 2002, the Indonesian Ministry of Environment has run the Company Performance Rating Rating Program in Environmental Management (PROPER). This program is part of the Ministry of Environment's endeavor to promote corporate governance in environmental management by using information tools. The company's environmental performance is graded on a five-color scale, from best to worst: gold, green, blue, red, and black. However, because PROPER has not been fully applied for the past 18 years, the results achieved are as expected (Table 1).

Table 1. 2016-2017 Proper Results of Miscellaneous Industry Companies

No	List of Companies	Ranking
1	PT Argo Pantes, Tbk	Blue
2	PT Tifico Fiber Indonesia, Tbk	Blue
3	PT Kabelindo Murni, Tbk	Blue
4	PT Garuda Metalindo, Tbk	Blue
5	PT Indorama Synthetic, Tbk	Blue
6	PT Panorama Indo Recouces, Tbk	Blue
7	PT Trisula Tekstil, Tbk	Blue
8	PT Indospring, Tbk	Blue
9	PT Sat Nusapersada, Tbk	Blue
10	PT Voksel Elektrik, Tbk	Blue
11	PT Sumi Indokabel, Tbk	Red
12	PT KMI Wire and Cable, Tbk	Red
13	PT Sri Rejeki Isman, Tbk	Red

A summary of empirical studies found show varying results, such as the results of Rafianto's (2015) study on mining industry companies which simultaneously show that there is an effect between environmental performance and disclosure of Corporate social responsibility on financial performance. The results of the study both from Rafianto (2015) and Angela (2015), Meiyana and Aisyah (2019) partially show that environmental performance has no significant effect on financial performance, however study from Camilia (2016) showed that environmental performance has an influence on financial performance. Studies from developed countries in financial industry found that banks that consider environmental factors while making lending decisions will be able to choose borrowers that are less risky and more innovative (Gangi et al. 2019). Green building certification is another option for environmentally concerned banks, as it allows them to leverage on public demand for corporate environmental sensitivity (Chang and Devine, 2019). The link between business environmental management quality and financial performance appears to be beneficial (Albertini 2013; Dixon-Fowler et al. 2013).

Then, the disclosure of CSR creates positive outcomes on financial performance (Rafianto 2015), is also supported by Meiyana and Aisyah (2019) and UY and Hendrawati (2020) that CSR activities affect the value of company. Like the results of the investigation of 33 Manufacturing Companies by Camilia (2016) showed that there is no influence between environmental costs on financial performance. Angela's 2015 research results show environmental performance affects the disclosure of Corporate Social Responsibility (CSR). Disclosure of Corporate Social Responsibility (CSR) has no effect on financial performance. Disclosure of Corporate Social Responsibility (CSR) is

proven not to be an intervening variable between the relationship between environmental performance and financial performance.

Then the results of the Meiyana and Aisyah (2019) study show that CSR has a positive effect on financial performance, CSR is able to mediate the effect of environmental performance on financial performance. This notion is also supported by UY and Hendrawati (2020) that corporate social responsibility partially affects the value of the company, while environmental performance does not affect the value of the company. The results of the study simultaneously showed that corporate social responsibility and environmental performance influence the value of the company.

## **1.1 Objectives**

This paper contributes into some aspect first to examine and predict the relationship of environmental performance and financial performance into two indicators and to prove whether environmental performance can improve the financial performance of the Miscellaneous Industry Companies that Participate in PROPER. Then we present the extent to which the role of CSR can strengthen the relationship between environmental performance and financial performance of companies in the manufacturing companies in the Miscellaneous Industry Participating in PROPER. To give proposition to investors who will invest in miscellaneous industry, to take into account firms environmental performance and their CSR impact to creates more values for them.

## **2.Literature Review**

### **2.1Legitimacy Theory**

Legitimacy theory states that an entity in carrying out its business in a sustainable manner must ensure that it has complied with the norms that apply in society and its activities can be accepted by outsiders (legitimized), so the entity seeks to obtain approval to avoid sanctions (UY and Hendrawati 2020). Companies that can be said to have been legitimized, the image or good name of the company will be good in the eyes of the community, and in the future, it can increase stakeholder trust in the company. In the midst of an increasingly advanced society, legitimacy can also be used as a vehicle for self-construction (Hadi 2011).

### **2.2 Signaling Theory**

Brigham and Houston (2019) stated that a signal is a actions a company takes to provide investors with clues about how management views the company's prospects. In relation to agency, information asymmetry occurs between managers and external parties such as investors and creditors (Husnan 2013). Signal theory shows that there is information asymmetry between company management and interested parties with the information. This signal is in the form of information about what management has done to realize the owner's wishes. If the management signal includes useful information, stock prices may rise. On the other hand, if the management signal provides incorrect information, stock prices may fall. If a corporation shares favorable environmental information, it can lessen the chance of future financial difficulties (Nezz et al. 2005 ; Ghozali and Chariri 2007). So, the Company needs to disclose related information environmental performance and CSR because stakeholders judge the company not only from the resulting financial performance but also its contribution to society and the environment.

### **2.3. Stakeholder Theory**

Stakeholder theory describes how a company's management responds to or handles stakeholder expectations. More than simply economic success, organizational accountability is emphasized in stakeholder theory. This hypothesis says that, in addition to statutory demands, firms will choose to voluntarily reveal information about their environmental, social, and intellectual performance. Stakeholders need companies, as well as companies that also need stakeholders. Stakeholders need the company to fulfill their interests, while the company also needs stakeholders to achieve success and maintain the continuity of the company.

### **2.4Environmental Performance**

Environmental performance is the ability of a corporation to generate a decent environment is measured by its environmental performance (Suratno et al. 2007). Corporate social responsibility is viewed as a form of environmental performance. Furthermore, stakeholders are involved in this social obligation. The company's environmental performance will show how concerned it is about the environment. If the environment and resources surrounding the company are well-maintained, the company's environmental performance will almost certainly be strong as well.

#### 2.4.1 PROPER as instrument to measure environmental performance.

The Company Performance Rating Program in Environmental Management (PROPER) is an instrument used by the Ministry of Environment to carry out assessment and rating of the company's compliance in carrying out its environmental performance. PROPER is held to increase the company's role in environmental conservation programs. The PROPER rating is reliable and reliable enough to measure the company's environmental performance, due to its compliance with ISO 14001 (Sarumpaet 2005). Therefore, the indicator for measuring the environmental performance of companies in Indonesia uses PROPER (Sulistiawati and Dirgantari 2016; Sawitri 2017; Siregar et al. 2018; Putri et al. 2019) (table 2).

Table 2. PROPER Environmental Performance Assessment

PROPER Color Performance	Passing Grade	Score
Gold	Very good	5
Green	Good	4
Blue	Already Obedient	3
Red	Not Obedient	2
Black	No Effort	1

#### 2.5 Corporate Social Responsibility

According to The World Business Council for Sustainable Development (WBCSD), Corporate Social Responsibility is defined as a business commitment to contribute to sustainable economic development, through collaboration with employees and their representatives, their families, certain communities in achieving the company's social goals. Corporate Social Responsibility (CSR) can also be interpreted as a responsibility issued by the company in maintaining social sustainability and the surrounding environment. The determination of CSR as an obligation can change the views and behavior of business actors, so that CSR is no longer interpreted as merely a moral requirement. But it is believed to be a company obligation that must be implemented. According to Law no. 40 of 2007 concerning Limited Liability Companies Social and Environmental Responsibility is the Company's commitment to participate in sustainable economic development in order to improve the quality of life and the environment that is beneficial, both for the Company itself, the local community, and society in general.

This study uses measurement indicators from the Global Reporting Initiative (GRI) version 4.0 with a total of 91 disclosures. The Global Reporting Initiative is a reporting framework for creating sustainability reports consisting of reporting principles, reporting guidelines and disclosure standards (including performance indicators). These elements are considered with equal importance and weight for the assessment (GRI Report 2006). GRI version 4.0 consists of economic categories, environmental categories, and social categories consisting of aspects of labor practices and work comfort, aspects of Human Rights, aspects of society, and aspects of product responsibility.

$$CSR = \frac{\sum V}{M}$$

V = The number of items disclosed by the company

M = The number of items that should have been disclosed

#### 2.6 Financial Performance

The company's financial (financial) performance can be measured from the financial statements issued by the company periodically which provide an overview of the company's financial position. Measurement of financial performance can be done by assessing financial ratio analysis as a basis for assessing and analyzing the company's operating achievements or company performance. The information contained in the financial statements is used by investors to obtain estimates of future profits and dividends and the risk of that assessment (Sudaryanto 2011). In this study, the proxies used to assess the profitability of financial performance are ROE (Return on Equity) and NPM (Net Profit Margin).

1) Return on Equity (ROE)

ROE or profitability of own capital is a ratio to measure net profit after tax with own capital. This ratio shows the efficiency of the use of own capital. The higher this ratio the better. This means that the position of the owner of the company is getting stronger, and vice versa.

## 2) Net Profit Margin (NPM)

NPM is a ratio that measures the company's ability to generate net profit from sales made by the company. This ratio reflects the efficiency of all parts, namely production, personnel, marketing, and finance in the company.

### 3. Hypothesis Development

The Effect of Environmental Performance on Financial Performance (ROE and NPM).

Financial reports that include environmental disclosure information will have an impact on the company's financial performance as measured by ROE and NPM, with investors reacting positively to rising stock market prices and negatively to falling stock market prices. This is also in line with Fitriyani's (2012) belief that disclosing financial information related to the environment will be more appealing to financial statement consumers, resulting in an increase in the company's economic success. Now, when making investment decisions, investors consider various variables that, in his opinion, might add value to the firm and make it worthy of being an investment target. Therefore, good environmental performance can be good news for investors. Companies that have good news will increase the disclosure of their performance in the annual report, which is expected to be responded positively by investors which will have a positive impact on the company's financial performance (Pujiasih 2013).

Hypothesis 1a: Environmental performance has a significant effect on ROE financial performance in manufacturing companies in miscellaneous industrial sectors for the 2016-2019 period.

Hypothesis 1b: Environmental performance has a significant effect on the financial performance of NPM in manufacturing companies in miscellaneous industrial sectors for the 2016-2019.

## 2. Effect of Environmental Performance on ROE with CSR as a Moderating Variable.

Corporate Social Responsibility has a close relationship with financial performance as measured by using profitability. This relationship can be seen through companies that carry out CSR activities or social activities, if these activities are carried out or run as well as possible then the company will have a good reputation (Wijayanti et al. 2011). In addition, the company is also protected from demands or protests from the general public so that the company's profitability will increase. The results of previous studies according to Wijayanti et al. (2011) stated that CSR has a significant positive effect on ROE. Rhou et al. (2016) posit that positive CSR activities add financial value to restaurant companies only if the companies effectively publicize their CSR involvement. Even with positive CSR activities if the companies fail to communicate with stakeholders, financial benefits do not occur. Regarding negative CSR awareness, we find that the effect of negative CSR on CFP becomes negative as negative CSR awareness increases. That means negative CSR activities significantly and adversely affect firm performance as the media expose restaurant companies' socially- irresponsible activities to the public

Wider disclosure will provide positive signals to stakeholders and shareholders, increasing their confidence in the company's products and so increasing earnings and ROE (Husnan 2013).

Hypothesis 2a: CSR can moderate the effect of environmental performance on financial performance of ROE in manufacturing companies in miscellaneous industry 2016-2019 period.

## The Effect of Environmental Performance on NPM with CSR as Moderating Variable

the increase in earnings performance from the NPM ratio indicates the amount of net profit earned by the company in a certain period of time. The greater the NPM, the more efficient the company is in issuing costs related to its operations. If it is associated with CSR, it can be seen whether the CSR disclosed by the company is able to increase the company's profit or even decrease the profit earned. Corporate social responsibility disclosure can strengthen the effect of financial leverage on stock returns. Corporate social responsibility disclosure in the company's annual report causes investors to be more interested in investing their capital in the company (Ramadhanty and Budiasih, 2020).

Hypothesis 2b: CSR can moderate the effect of environmental performance on the financial performance of NPM in manufacturing companies in miscellaneous industry in 2016-2019 period (Figure 1).

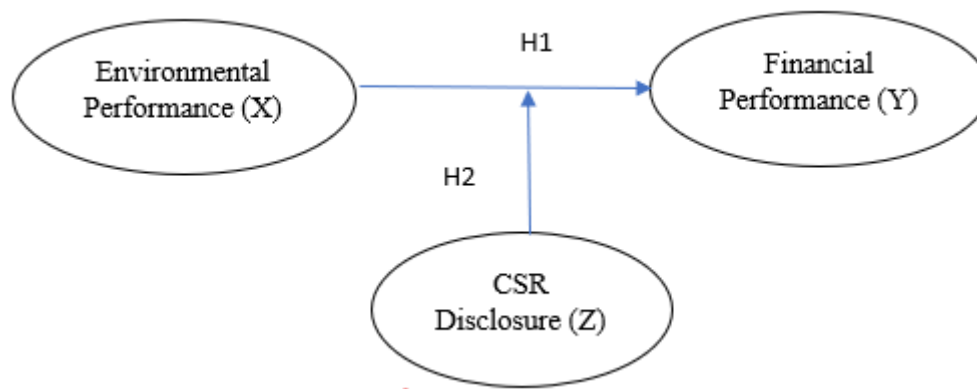


Figure 1. Proposed research model

#### 4. Methodology

In this study, using exogenous and endogenous variables, also moderating variable. Exogenous variables are variables that are often referred to as stimulus, predictor, and antecedent variables. Exogenous variable in this study is environmental performance. While endogenous variables are often referred to as output variables, criteria, and consequences. Endogenous variables in this study are ROE and NPM. And moderating variable is a variable that influences (strengthens or weakens) between the dependent variable and the independent variable. The moderating variable is also called the second independent variable. In this study the moderating variable is Corporate Social Responsibility (CSR). The data analysis technique in this research is analyzing the data and testing the hypothesis using descriptive statistics, testing the hypothesis using moderated regression analysis with the help of WarpPLS software version 7.0. PLS analysis is carried out by evaluating the outer model and inner models.

##### a. Measurement Model (Outer Model)

Outer Model Evaluation is used to determine the specification of the relationship between latent variables and their indicators.

##### b. Structural Model (Inner Model)

The structural model in PLS is evaluated by using  $R^2$  for the dependent construct, path coefficient values or t-values for each path to test the significance between constructs in the structural model.

##### c. Hypothesis testing

Hypothesis testing was conducted to explain the meaning of the relationship between exogenous and endogenous variables. The results of the correlation between constructs are measured by looking at the path coefficient and the level of significance which is then compared with the research hypotheses that have been compiled. The following is used as a basis for decision making, namely:

p-value 0.05 then  $H_0$  is accepted

p-value < 0.05 then  $H_0$  is rejected, and  $H_a$  is accepted

#### 5. Data Collection

The purposive sampling approach was employed in this study to pick samples, which is a sampling methodology that takes into account certain characteristics (Anshori and Iswati 2009: 105). The following are the sampling criteria utilized in this study:

- Miscellaneous Industry Companies listed on the IDX for 2016 - 2019.
- Miscellaneous Industry Companies that publish and publish annual reports for the 2016 - 2019 period.
- Miscellaneous Industry Companies that disclose CSR in their annual reports for 2016 - 2019.
- Miscellaneous Industry Companies listed on the IDX and have participated in the Company Performance Rating Program in Environmental Management (PROPER) 2016 – 2019.

## 5. Results and Discussion

### 5.1 Numerical Results

In general descriptive statistics only provide a description or descriptive of the actual data state of the data. The analytical tool used in this study is the mean (mean) and standard deviation. (table 3)

Table 3. Descriptive Statistic

Variable	Indicator	N	Min	Max	Mean	Std. Deviation
Environmental Performance	PROPER	64	2	4	2,906	0,387
Financial Performance	ROE	64	-2,53	0,24	-0,03	0,423
	NPM	64	-8,21	1,25	-0,12	1,052
CSR	CSRi	64	0,011	0,57	0,159	0,109

Environmental Performance variable as a variable (X) with PROPER indicator shows the average sample is at a score of 2,906 or if converted based on the PROPER category it is in the "blue" criteria. The lowest score is 2, which means that there are sample companies that are in the "red" criteria in environmental issues, which means they are not paying attention to the environment.

Financial Performance variable as a variable (Y) has 2 indicators, namely, Return on Equity (ROE) and Net Profit Margin (NPM). The ROE indicator shows an average of -0.03. This means that on average the sample companies with a negative ROE (-) tend to have poor financial performance. The NPM indicator shows an average of -0.12. This means that on average the sample companies with a negative NPM (-) tend to have poor financial performance in generating profits. Disclosure of Corporate Social Responsibility (CSR) which is carried out shows an average of 0.109. This means that the average sample company has disclosed 10.9% of the total disclosure of 91 items (Table 4).

Table 4. Result of Output Combined Loadings and Cross Loadings

	EP	FP - ROE	FP - NPM	CSR	CSR*EP	SE	P-VALUE
EP	(1.000)	0.000	0.000	0.000	0.000	0.089	<0.001
FP - ROE	0.000	(1.000)	0.000	0.000	0.000	0.089	<0.001
FP - NPM	0.000	0.000	(1.000)	-0.011	0.000	0.089	<0.001
CSRi	0.000	0.000	(1.000)	(1.000)	0.000	0.089	<0.001
CSRi*EP	0.000	0.000	0.000	0.000	(1.000)	0.089	<0.001

the results of data processing for all indicators have a Loading value of 1,000> 0.70, which means they have met the criteria, p-value also meets the criteria, which has a value of 0.001 <0.05. And the standard error values below 0.5 or 0.4 and do not have a negative value (table 5).

Table 5. result of AVE value

<i>Average Variances Extracted (AVE)</i>			
Latent Variable	AVE	Criteria	Description
<b>EP</b>	1.000	>0.50	Meets <i>convergent validity</i>
<b>FP - ROE</b>	1.000	>0.50	Meets <i>convergent validity</i>
<b>FP -NPM</b>	1.000	>0.50	Meets <i>convergent validity</i>
<b>CSR</b>	1.000	>0.50	Meets <i>convergent validity</i>
<b>CSR*EP</b>	1.000	>0.50	Meets <i>convergent validity</i>

The results of the AVE in table 6 are greater than 0.50 which means that 50% or more of the variance of the indicator can be explained.

Table 6. Discriminant Validity

Indicator	Loading	Value of Loading to other constructs					Description
		EP	FP- ROE	FP- NPM	CSR	CSR*EP	
<b>EP - PROPER</b>	1.000		0.000	0.000	0.000	0.000	Meets <i>discriminant validity</i>
<b>FP - ROE</b>	1.000	0.000		0.000	0.000	0.000	
<b>FP - NPM</b>	1.000	0.000	0.000		0.000	0.000	
<b>CSR</b>	1.000	0.000	0.000	0.000		0.000	
<b>CSR*EP</b>	1.000	0.000	0.000	0.000	0.000		

Discriminant validity can be seen by looking at the loading of the latent construct, which is used to predict the indicator better than other constructs. If the correlation of the construct with the main measurement (each indicator) is greater than the other constructs, the discriminant validity is met. Based on the data in the table, all indicators have met the criteria for discriminant validity, with a loading value of 1,000 each, whose loading value is greater than other constructs (Table 7).

Table 7. Output Correlation among Latent Variables

	EP	FP- ROE	FP- NPM	CSR	CSR*EP
<b>EP - PROPER</b>	(1.000)	-0.076	-0.038	0.169	-0.126
<b>FP - ROE</b>	-0.076	(1.000)	0.398	0.245	0.105
<b>FP -NPM</b>	-0.038	0.398	(1.000)	0.144	0.066
<b>CSR</b>	0.169	0.245	0.144	(1.000)	0.118
<b>CSR*EP</b>	-0.126	0.105	0.066	0.118	(1.000)



Based on the results of the table 8, data processing using AVE criteria method, all indicators can be said have met the criteria of discriminant validity. The next test is a construct reliability test that can be measured by 2 criteria, namely composite reliability and Cronbach's alpha. A construct can be declared reliable if the composite reliability value > 0.70 (Table 8).

Table 8. Result of Output Latent Variable Coefficients

	<b>EP</b>	<b>FP- ROE</b>	<b>FP- NPM</b>	<b>CSR</b>	<b>CSR*EP</b>
<b>R-Squared</b>		0.033	0.010		
<b>Composite reliab.</b>	1.000	1.000	1.000	1.000	1.000
<b>Cronbach's alpha</b>	1.000	1.000	1.000	1.000	1.000
<b>Avg. Var. Extract.</b>	1.000	1.000	1.000	1.000	1.000
<b>Full colin. VIF</b>	1.067	1.259	1.192	1.125	1.042
<b>Q-Squared</b>		0.038	0.019		

The next stage is an explanation of the structural evaluation (inner model) which includes a model fit test (model fit), path coefficient, and  $R^2$ . Average Path Coefficient (APC), Average R-Squared (ARS) and Average Variance Factor (AVIF) with APC and ARS criteria accepted on condition that P value < 0.05 and AVIF is less than 5 (Mahfud Sholihin and Dwi Ratmono 2013) (Table 9).

Table 9. Output Model Fit Indices

	<b>Index</b>	<b>P value</b>	<b>Criteria</b>	<b>Description</b>
<b>APC</b>	0.080	0.129	P < 0.05	Rejected
<b>ARS</b>	0.021	0.216	P < 0.05	Rejected
<b>AVIF</b>	1.393 Good if < 5		AVIF < 5	Accepted

It can be concluded that all construct variables are said to be reliable because they have a composite reliability value of 1,000, which indicates that > 0.70 and for cronbach's alpha it has a value of 1,000 which is > 0.60. The next stage is an explanation of the structural evaluation (inner model) which includes a model fit test (model fit), path coefficient,  $R^2$  (figure 2).

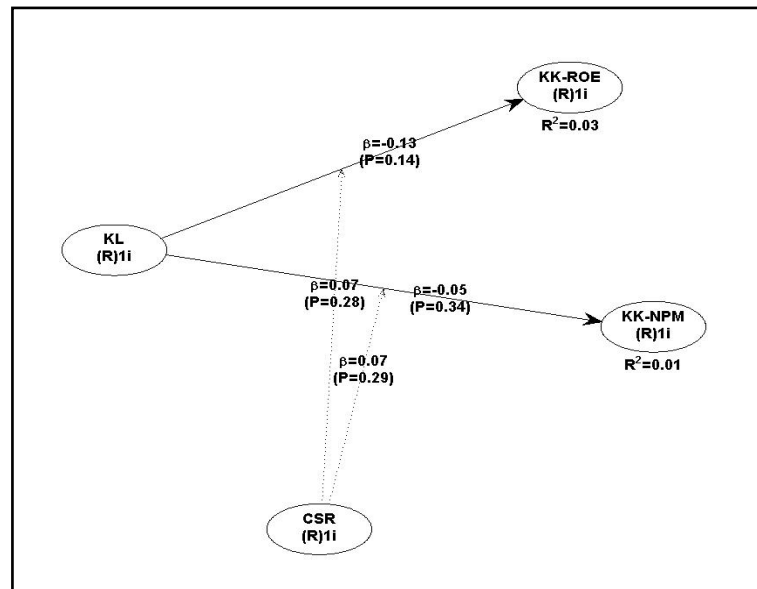


Figure 2. Research model

#### 5.4 Validation and Hypothesis Test Results

Testing this hypothesis to prove the truth of the alleged research or hypothesis. The results of correlations between constructs are measured by looking at the path coefficient and its significance level which are then compared with the research hypotheses contained in chapter two. The level of significance used in this study was 5%. The following is a picture of a research model and the results of the effect sizes obtained based on data processing (Table 10):

Table 10. Hypotheses Test Result

Criteria	Variable	EP	FP-ROE	FP-NPM	CSR	CSR*EP
<i>Path coefficient</i>	EP	-	-	-	-	-
	FP-ROE	-0.130	-	-	-	0.072
	FP-NPM	-0.050	-	-	-	0.066
	CSR	-	-	-	-	-
	CSR*EP	-	-	-	-	-
<i>P-values</i>	EP	-	-	-	-	-
	FP-ROE	0.140	-	-	-	0.280
	FP-NPM	0.341	-	-	-	0.294
	CSR	-	-	-	-	-
	CSR*EP	-	-	-	-	-
<i>Effect sizes for path</i>	EP	-	-	-	-	-
	FP-ROE	0.022	-	-	-	0.011
	FP-NPM	0.004	-	-	-	0.006
	CSR	-	-	-	-	-
	CSR*EP	-	-	-	-	-

The data analysis technique in this research is analyzing the data and testing the hypothesis using descriptive statistics, testing the hypothesis using moderated regression analysis with the help of WarpPLS software version 7.0. The basis for decision making is that:

$P\text{-value} \geq 0.05$ , then  $H_0$  is accepted

$P\text{-value} \leq 0.05$  then  $H_0$  is rejected, and  $H_a$  is accepted.

The following is a hypothesis test proposed as follows:

1) Hypothesis Test 1

$P\text{-value} = 0.140$ , it is  $> 0.05$  then  $H_0$  accepted is or  $H_a$  is rejected. The path coefficient on this variable is -0.130 which means that the environmental performance variable is negative and not significant effect on financial performance ROE. Every 1 percent increase in the environmental performance value, the FP – ROE value will increase by -0.130.

2) Hypothesis Test 2

$P\text{-value} = 0.341$ , it is  $> 0.05$  then  $H_0$  accepted is or  $H_a$  rejected is. The path coefficient in this variable is -0.05, it means every 1 percent increase in the environmental performance value, the FP – NPM value will increase -0.05

3) Hypothesis Test 3

$P\text{-value} = 0.280 > 0.05$  then  $H_0$  is accepted, or  $H_a$  is rejected. Corporate Social Responsibility cannot moderate the Effect of Environmental Performance on Financial Performance ROE. The path coefficient in this variable is 0.072, it means every 1 percent increase in CSR value as moderating effect, the environmental performance value will increase by 0.072.

4) Hypothesis Test 4

$P\text{-value} = 0.294 > 0.05$  then  $H_0$  is accepted, or  $H_a$  is rejected. Variable Corporate Social Responsibility cannot moderate the relationship between environmental performance and financial performance – NPM.

## 5.5 Discussion

*Hypothesis 1 the effect of environmental performance with the PROPER indicator on financial performance as proxied by ROE has no significant effect.*

Even if the typical firm has a blue grade or meets the PROPER standards for environmental management, it does not guarantee that the company's financial performance would improve. This is demonstrated by the fact that PT Panasia Indo Resources Tbk has a PROPER 3 or blue rating yet a low financial performance (ROE) of -1.69 and -0.98 in the 2018-2019 fiscal year. Meanwhile, PT Garuda Metalindo Tbk, which has a PROPER 2 or red rating, has a strong financial performance (ROE) of 0.103 and 0.068, respectively. This finding contradicts the legitimacy theory, which claims that enterprises with strong environmental performance have an impact on the community and investors, which in turn affects financial success.

Environmentally friendly products and services are generally more expensive and do not correspond to the economic status of the majority of people in developing countries like Indonesia, thus they are not the first choice of consumers (Sarumpaet, 2005). However, the regulations requiring the mandatory installation of PROPER for all corporate entities have not yet been fully implemented. Only a tiny number of corporations listed or listed in the Indonesia Stock Exchange, notably in the various industrial sectors, engage in this assessment. Whereas, in Minister of Environment Regulation No. 03 of 2014 relating to PROPER implementation, this program is required for all companies that have a direct influence on the environment and are publicly traded. This shows that the Ministry of Environment and Forestry's commitment is still insufficient.

So, based on the description of the study's findings, it is explained that the company's environmental performance does not ensure an increase in its financial performance (ROE). Because the environmental performance component is not one of the factors determining the company's financial performance, obtaining the PROPER rating has no impact on the company's financial performance (Djuwitaningsih and Ristiawati 2014). This study is in line with research by Angela (2015) and Rafianto (2015) and Maksum and Tamba (2017) which state that environmental performance has no effect on financial performance.

*Hypothesis 2 Environmental Performance Has No Significant Influence on Financial Performance Proxied by NPM*

The average company received a blue rating out of 64 data points evaluated by researchers, indicating that it only makes environmental management efforts that are regulated by law. However, strong financial performance results cannot be guaranteed based on adequate environmental performance. This is demonstrated by the fact that PT Panasia Indo Resources Tbk received a PROPER 3 or blue rating in 2018-2019, although its financial performance (NPM) was poor, specifically -0.44 and -8.21. PT Garuda Metalindo Tbk, on the other hand, has a high financial performance (NPM), specifically 0.064 and 0.043, while having a PROPER rating of 2 or red.

The average PROPER findings in this study failed to build a positive image for the company in the public's perspective, particularly the community's attractiveness to provide reciprocity and positive responses for companies that have endeavored to carry out environmental responsibility. This is because the PROPER assessment criteria pertain to the examination of a company's operational environmental responsibility, specifically the compliance assessment criteria and the criteria that go beyond what the regulations require (beyond compliance). Controlling water and air pollution, B3 waste management, controlling seawater pollution, and potential land damage are among the compliance assessment criteria, while criteria (beyond compliance) include the use of environmental management systems, energy efficiency efforts, emission reduction efforts, and the implementation of reduce, reuse, and recycle programs (Publication PROPER 2015). Based on these criteria, it can be concluded that this is not in direct contact with the interests of the community in general, and that if the company's environmental responsibility fails to touch the community's interests, it will only earn legitimacy and minimal reciprocity from the community. As a result of the company's participation in PROPER, stakeholder theory has been used, but the findings of this study do not support stakeholder theory and legitimacy. On the other hand, the company will have to pay higher costs in order to meet the PROPER criteria's assessment features, which would result in a fall in company profitability.

The stakeholders are not affected by the achievement of the company's environmental performance; therefore, the achievement of the company's environmental performance has not been able to meet the stakeholder's expectations of increasing the company's financial performance (NPM). Apart from this, the publication of PROPER occurred around the end of November and the beginning of December, while data on financial performance and CSR disclosure were obtained at the end of the year. There is a lag of approximately one month between the PROPER announcement and the measurement of the company's financial performance which allows for other events that affect investor behavior in assessing the company's financial performance.

From the company's perspective, the allocation of funds for environmental conservation will increase costs for the company, thereby reducing the company's profit. Then, the reduction in company profits will affect decision making by investors. Therefore, the environmental performance results from the PROPER rating have not been able to attract stakeholders to invest in the company. In fact, with the capital intake, the company can use both for operational and production activities which are intended to increase profits. This study is in line with research by Angela (2015) and Rafianto (2015) and Maksum and Tamba (2017) which state that environmental performance has no effect on financial performance.

### *Hypothesis 3 Corporate Social Responsibility (CSR) Unable to Moderate the Effect of Environmental Performance on Financial Performance Proxied by ROE*

The Corporate Social Responsibility (CSR) variable is included in the "homologiser moderator" type because environmental performance (EP) is declared insignificant and CSR\*EP is also not significant, which means that the moderating variable is CSR is a variable that has the potential to be a moderating variable that affects the strength of the relationship between exogenous and endogenous variables in the relationship model that is formed.

According to Verrecchia (1983) in Suratno et al. (2006) which states that environmental actors revealing their performance means describing good news for market players and strengthening the company's positive image. In general, the behavior of CSR disclosure as a moderating variable is not in line with theoretical predictions. The results are different from predictions, perhaps because the situation in Indonesia is very different from what happened in several other countries, especially in Western countries, related to the behavior of players in the Indonesian capital market. The capital market in Indonesia has not achieved efficiency because the behavior of investors in Indonesia has not been supported by rational considerations in their investment decisions (Suad et al. 2002 in Suratno et al. 2006).

In addition, the PROPER assessment aspects refer to compliance with water pollution control regulations, air pollution control, B3 waste management, AMDAL, and marine pollution control. The compliance aspect assessed by the PROPER committee also includes environmental permits, supervision permits, and the provision of company data. Meanwhile, aspects of CSR assessment refer to the interests of the community directly starting from the interests of the environment, social interests and economic interests of the community. Although there are some similarities in the aspects assessed in PROPER and CSR, there are more differences in aspects that must be met in PROPER requirements and CSR disclosure. The difference in the assessment of aspects between environmental performance

(PROPER) and Corporate Social Responsibility (CSR) lies in the economic and social aspects. CSR does not only refer to environmental interests but also refers to economic and social interests. One example of the economic importance of CSR disclosure is local hiring procedures and the proportion of local senior management employed at significant operating locations. In the environmental performance assessment (PROPER), this is not included in the list of aspects of the assessment. This research is in line with the research of Pek Karin Purnomo & Luky Patricia Widyaningsih (2012) which states that CSR cannot moderate the effect of environmental performance on financial performance, study from Kraus et al. (2020) show that CSR has no direct significant influence on environmental performance, also Maksum and Tamba (2017) results show that corporate social responsibility disclosure could not moderate the effect of environmental performance on financial performance.

*Hypothesis 4 CSR cannot moderate the effect of environmental performance on financial performance proxied by NPM*

Because environmental performance is declared insignificant and CSR\*EP is also declared insignificant, the CSR moderating variable is included in the type of "modulator homologiser." This means that the CSR moderating variable has the potential to affect the strength of the relationship between exogenous and endogenous variables in the relationship model formed.

In general, the theoretical projections for CSR disclosure as a moderating variable are incorrect. According to Suad et al. (2006); (Suratno et al. 2006), the difference between the results and predictions is due to the fact that the situation in Indonesia is very different from what happened in several other countries, particularly in western countries, in terms of investor behavior in the Indonesian capital market. The capital market in Indonesia has not achieved efficiency since investors' decisions are not based on rational reasons. Investors in Indonesia continue to ignore the annual report because they only look at and respond to the information supplied, with the earnings of the company being the most seen. Investors that solely consider the company's profit will conclude that if the profit is high, then the product is also profitable for investment.

When a company has good environmental performance, the relationship between financial performance and environmental performance and CSR is related to signal theory, but CSR disclosure related to a bad environment can also lead to negative thinking about the company's image for investors because it shows information asymmetry. between company management and those interested in the information. This was demonstrated in 2016, when PT Sri Rejeki Isman Tbk reported a CSR of 0.264 (26.4%) but only a PROPER rating of 2 or red. Meanwhile, PT United Tractor Indonesia Tbk. received a PROPER 4 rating or green in 2019, despite only disclosing a CSR of 0.11 (11 percent). As a result of the study's findings, CSR disclosure is not able to moderate the effect of environmental performance (PROPER) on financial performance (NPM). Environmental information disclosure can cause a serious contradiction with environmental performance ratings, which can lead to a negative market reaction. This research is in line with the research of Pek Karin Purnomo & Luky Patricia Widyaningsih (2012) also Maksum and Tamba (2017) which states that CSR cannot moderate the effect of environmental performance on financial performance.

## 6. Conclusion

The current study's implications are mostly applicable to companies who engage in CSR initiatives with the purpose of increasing business value. Our methodologies are sound, yet our research is not without flaws. Second, our sample was confined to miscellaneous companies registered on the Indonesia stock exchange, but these companies are not necessarily indicative of the overall miscellaneous industry in Indonesia or globally, or of companies in other industries. Third, we use data from the Indonesian Ministry of Environment's PROPER to quantify the quality of a company's CSR operations. Future replication studies in diverse circumstances may improve the external validity of these findings. While conducting CSR activities is important for a firm, making stakeholders aware of these activities via adequate communication and via media mentions is more important to leverage CSR into financial performance. Our study contributes to the literature by analyzing the relationship between environmental dimensions from the PROPER of Ministry of Environment and CSR disclosure index and corporate financial performance, for the period 2016-2019 period with 16 observations. We apply path analysis to exercise our model employing environmental performance as predictors of company financial performance, along with moderating variable which is CSR disclosure index. We find that environmental performance cannot predict the financial performance of companies in the manufacturing sector and miscellaneous industry, moreover CSR disclosure is not able to strengthen either weaken the relationship between environmental performance and the financial performance of companies in the manufacturing sector and miscellaneous industries. On the matter of social responsibility, our positive predictions based on the

stakeholder theory and the legitimacy theory have been rejected. Within the agency framework, we believe our evidence is ambiguous because investors appear to overlook superior governance and CSR practices in the manufacturing and miscellaneous sectors.

According to the guidance on ESG- related risks published by the Committee of Sponsoring Organizations of the Treadway Commission and the World Business Council for Sustainable Development (COSO-WBCSD, 2018), in the business world, the awareness of ESG-related risks that were once considered as uncommon issues is becoming stronger than ever.

Our study has some limitations. first, the sample has only 16 manufacturing in miscellaneous industry, which may be considered a small sample. Second, we just apply one dimension in environment, that it will be better if social and governance dimensions included in the future study. The limitation in econometric model can be expanded by considering industry factor, macroeconomic and other internal factor such as the size of the company, the valuation of stock, and company value. More research is needed to identify and classify appropriate corporate financial measurements, as well as how they relate to sustainability policies. Finally, more research is needed to investigate the influence of total sustainability in order to determine the combined impact of all three characteristics. This is necessary not only to increase our understanding of the link between corporate sustainability and financial performance, but also to lessen the disparity between theory and results.

## References

- Albertini, E., Does Environmental Management Improve Financial Performance? A Meta-Analytical Review, *Organ. Environ.*, Vol. 26, pp 431–457, 2013.
- Angela, Pengaruh Kinerja Lingkungan Terhadap Kinerja Finansial dengan Pengungkapan Corporate Social Responsibility (CSR) Sebagai Variabel Intervening, *Skripsi Universitas Sanata Dharma*, 2015
- Brigham, E. F. dan Houston, J. F., *Fundamentals of Financial Management*, Boston: Cengage Learning, 2018.
- Camilia, I., Pengaruh Kinerja Lingkungan dan Biaya Lingkungan Terhadap Kinerja Keuangan Perusahaan Manufaktur, *Skripsi Sekolah Tinggi Ilmu Ekonomi Perbanas*, 2016.
- Chang, Q. and Devine, A., Environmentally certified space and retail revenues: a study of U.S. bank branches, *J. Clean. Prod.*, 211, pp. 1586- 1599. 2019. <https://doi.org/10.1016/j.jclepro.2018.11.266>
- COSO-WBCSD. 2018. Enterprise risk management. Applying enterprise risk management to environmental, social and governance-related risks, Retrieved from WBCSD website: [http://docs.wbcsd.org/2018/02/COSO\\_WBCSD\\_ESGERM.pdf](http://docs.wbcsd.org/2018/02/COSO_WBCSD_ESGERM.pdf), Jun 12, 2018.
- Dixon-Fowler, H.R., Slater, D.J., Johnson, J.L., Ellstrand, A.E., Romi, A.M., Beyond “Does it pay to be green?” A meta-analysis of moderators of the CEP-CFP relationship, *J. Bus. Ethics* 112, pp. 353 – 366, 2013. <https://doi.org/10.1007/s10551-012-1268-8>.
- Fitriyani, F., Keterkaitan Kinerja Lingkungan, pengungkapan *Corporate Social Responsibility* (CSR) dan Kinerja Finansial, *Skripsi Universitas Diponegoro*, 2012.
- Gangi, F., Meles, A., D’Angelo, E., Daniele, L.M., Sustainable development and corporate governance in the financial system: are environmentally friendly banks less risky? *Corp. Soc. Responsib. Environ. Manag.* Vol. 26, 529 - 547, 2019.. <https://doi.org/10.1002/csr.1699>
- Global Reporting Initiative, *Global Reporting Initiative G4 Pedoman Pelaporan Keberlanjutan*, 2013. Diakses melalui <http://www.globalreporting.org> pada tanggal 11 Desember 2019.
- Hadi, N., *Corporate Social Responsibility*, Yogyakarta: Graha Ilmu, 2011.
- Kraus, S., Rehman, S.U., and Garcia, F. J.S., Corporate social responsibility and environmental performance: The mediating role of environmental strategy and green innovation, *Technological Forecasting and Social Change* Volume 160, November 2020.
- Maksum, A. and Tamba, P., The Effect of Environmental Performance and Intellectual Capital on Financial Performance Moderated by CSR Disclosure on Manufacture Companies Listed in IDX, *Advances in Economics, Business and Management Research (AEBMR)*, volume 46, 2017.
- Meiyana, A. and Aisyah, M,N, MSc., Pengaruh kinerja lingkungan, biaya lingkungan, dan ukuran perusahaan terhadap kinerja keuangan dengan *corporate social responsibility* sebagai variabel intervening, (Studi Empiris Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2014-2016), *Jurnal Nominal*, Vol. VIII No. 1, 2019.

- Putri, M.A., Hidayati, N., & Amin, M., Dampak Penerapan Green Accounting dan Kinerja Lingkungan terhadap Profitabilitas Perusahaan Manufaktur di Bursa Efek Indonesia. *Jurnal Ilmiah Riset Akuntansi*, Vol. 8, No. 4, 2019.
- Pujiasih., Pengaruh Kinerja Lingkungan Terhadap Kinerja Keuangan dengan *Corporate Social Responsibility* (CSR) Sebagai Variabel Intervening”. *Skripsi* Universitas Negeri Semarang, 2013
- Rafianto, R.A., Effects of Corporate Social Responsibility Disclosure and Environmental Performance to financial performance (Study on the Mining Sector in Indonesia Stock Exchange in Period 2010-2012), Prodi S1 Akuntansi, Fakultas Ekonomi dan Bisnis, Universitas Telkom, 2015.
- Ramadhanty, N.S. and Budiasih, G.A.N., The Effect of Financial Leverage on Stock Returns with Corporate Social Responsibility Disclosure as Moderating Variable (Empirical Study on Mining Companies Listed on Indonesia Stock Exchange in 2016-2018), *American Journal of Humanities and Social Sciences Research (AJHSSR)* Volume-4, Issue-6, pp-48-53, 2020.
- Rhou, Yinyoung; Singal, Manisha; Koh, Yoon, CSR and financial performance: The role of CSR awareness in the restaurant industry, *International Journal of Hospitality Management*, Vol. 57, pp. 30–39. 2016. doi:10.1016/j.ijhm.2016.05.007
- Sarumpaet, S. 2005. The Relationship Between Environmental Performance and Financial Performance of Indonesian Companies. *Jurnal Akuntansi dan Keuangan*, Vol. 7, No. 2.
- Sawitri, A.P. 2017. Analisis Pengaruh Pengungkapan Akuntansi Lingkungan dan Kinerja Lingkungan terhadap Nilai Perusahaan.
- Shank, T.M.P. and Shockey, B.M.B.A. Investment strategies when selecting sustainable firms. *Financ. Serv. Rev*, 25, 199–214, 2016
- Siregar, I.F., Rasyad, R., & Zam, Z., Pengaruh Implikasi Biaya Lingkungan dan Kinerja Lingkungan terhadap Kinerja Keuangan Perusahaan Pertambangan Umum Kategori Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup (PROPER). *Fakultas Ekonomi dan Bisnis Universitas Dharma Andalas*, Vol. 21, No. 2, 2019.
- Solihin, M., and Ratmono, D. Analisis SEM-PLS dengan warppls 3.0, Yogyakarta: Andi, 2013.
- Suratno, I.B., Darsono, Mutmainah, S., Pengaruh Environmental Performance Terhadap Environmental Disclosure dan Economic Performance (Studi Empiris pada Perusahaan Manufaktur yang terdaftar di BEJ Periode 2001 - 2004), *The Indonesian Journal of Accounting*, Vol.10, No. 2, 2007.
- UY., W. S. and Hendrawati, E., Pengaruh *Corporate Social Responsibility* Dan Kinerja Lingkungan Terhadap Nilai Perusahaan, *LIABILITY* Vol. 02, No. 02, Page 87 – 108, Agustus 2020.

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