

# Corporate Disclosure As Mediating Variable On Effect Of Financial Resources, Capability, And Characteristic Of Corporate To Environmental Performance.

Muliati, Gagaring Pagalung, Harryanto, Grace T. Pontoh

**Abstract:** This study explains the role of corporate disclosure as a mediator in the relationship between environmental performance and financial resources, capabilities and characteristic of corporate. Using a sample of industrial companies that are included in the PROPER program and listed on the Jakarta stock exchange, and the path analysis. This study found that the role of disclosure as a mediator supports hypotheses about, the financial resources, capability, and characteristic of corporate influences on environmental performance through corporate disclosure. Although the relationship between financial resources with environment performance of the corporate is not significant. But in the context of time and involvement of the disclosure as a mediator of the relationship in the long term is positive.

**Keyword:** Environmental Performance, Corporate Disclosure, Financial Resources, Capability, Characteristic of Corporate.

## 1. Introduction

Environmental issues in recent years has become increasingly widespread attention of society. It has become a discourse of people for a variety of corporate overview about the harmful effects on the environment and social life becomes more real. Reports of the corporate, who are not responsible for causing environmental damage disasters, such as landslides, air pollution caused by forest fires, pollution of sea water, and the destruction of marine life regarded as a result of irresponsible behavior. So the social unrest that appears, can not be separated from the people who pay less attention to the rights associated with the existence of the corporate. Corporate as an institution in the community system, always use natural resources available. Their role in exploiting the natural resources of course creates demands to keep the availability of these resources preserved and maintained. This is the companies' important responsibility for the impact rising from the use of these resources. The corporate responsibility efforts reflected in social responsibility reports, which assumed as a corporate social responsibility (CSR). This effort depends on the underlying motivation. For example, the corporate uses as a tool to fulfill the social contract between companies with their social environment, improve reputation, and to get an award from the government [1].

According to Hernan [2] industrial corporate has become a destructive force, or at least give a huge negative impact. Industrial companies trigger the biggest environmental disasters and are responsible for at least 75% social and environmental problems facing society. Therefore industrial companies often face greater pressure from stakeholders to implement CSR activities compared with other companies. Some companies have chosen to meet the expectations of stakeholders and government policy. Corporate's CSR activities minimize waste and reduce energy consumption, as well as the program of human resource management [3]. It can be seen from the results of the environmental performance assessment used by the Indonesian government in the form of Performance Rating Program in Environmental Management or Program for Pollution Control, Evaluation and Rating (PROPER). The study explores the relationship of CSR disclosure of environmental performance is still debated. For instance, research of Pattern [43], Al-Tuwajiri *et al.* [4], Delmas and Blass [5], Clarkson *et al.* [6], [7] found a significant relationship between CSR disclosures of environmental performance. Ingram and Frazier [8]) and Wiseman [9] suggest that corporate disclosure was not related to the environmental performance of the corporate (Corporate Environmental Performance Index). Gond and Herrbach [10] said that CSR reporting was not only beneficial to external parties but also beneficial for the corporate. CSR report, which is created by corporate, will be a self-assessment tool that could identify the strengths and weaknesses of the corporate associated with the corporate's CSR activities. The success of a corporate is not wholly determined by external factors but also by internal factors [1]. External factors such as pressure from various groups of stakeholders [12], whereas internal factors related to the resources used by the firm [13]. Clarkson *et al.* [7] showed that positive change (negative) the financial resources of the corporate in the previous period followed by a significant improvement (decrease) in corporate environmental performance in the next period. The use of financial resources as a predictor for environmental performance has been investigated by Melo [14]. Research results show that the performance of the previous financial influence social and environmental performance or Corporate Social Performance

- Muliati: Department of Accounting, The Faculty of Economics, Tadulako University, Palu, Indonesia [Muly\\_ak@yahoo.co.id](mailto:Muly_ak@yahoo.co.id)
- Gagaring Pagalung, Harryanto, and Grace T.Pontoh: Department of Accounting, The Faculty of Economics and Business, Hasanuddin University, Makassar, Indonesia.

(CSP). Melo [14] also confirmed that slack resources are allocated to specific areas of CSP (product issues, public relations, environmental issues, employee relations and workforce diversity) of the integrated conception of CSP. Research on the relationship of environmental and social performance with financial performance has been widely studied in Indonesia. But generally see social and environmental performance as an independent variable or as a predictor of financial performance as Norhadi [15], Burhany [16], Utami [17], Almilia and Wijayanto [18]. Research Fauzi *et al.* [19], [20] examined the relationship of social performance with financial performance, by using two models, namely models slack resources theory and models of good management. Results of studies using slack resources models show inconsistent findings, due to the use of financial performance data using content analysis of the annual report in the form of financial ratios [19] and the perception of financial performance [20]. Environmental performance data for both is the same research that the index is built based Kinder Lydenberg Domini (KLD) and Michael Jantzi Research Associates (MJRA). According those statements, shows that so far not much attention has been given to the role of the corporate's internal ability to achieve environmental performance, especially for companies in developing countries such as Indonesia. Internal capability in question is financial resources (financial resources) and capabilities, which in terms of the resource-based view or the resources-based view [11], [13], and slack resources hypothesis [21], [22]. In addition, studies examined disclosure of CSR as a mediating variable in the relationship between the ability of the corporate's internal environmental performance is still rare (no), so it's important to do research. Based on that phenomenon, the main theme of this research is; whether financial resources, capabilities, characteristics of the corporate are influence the environmental performance through corporate social responsibility disclosure.

## 2. Previous researches

Slack resources is a term that can indicate the literal meaning of the resources that could potentially be used [23], relating to financial performance or profitability previously [24], [25]. In empirical studies, slack resources had been operated to measure its literal meaning, such as profitability [7], debt to equity [26] or current assets to current liabilities [27]. In CSP, the use of slack resources is more related to the notion of conceptual [28], [29]. Basically organizational slack, in this context is a consequence of doing well [30]. Good financial performance implies profitability leading to available funds [25], [31]. Financial resources cannot be productive by itself but must be accompanied by the capability of the organization to produce environmental performance [32]. Capability cannot be observed directly, according to Clarkson *et al.* [7] innovative management team are more likely to undertake proactive environmental investment strategy. Innovations include the management of open innovation and closed innovation [33]. Open innovation using the ideas and knowledge of outside actors to innovate, while the closed innovation carried out in accordance with the ideas and the knowledge possessed by the corporate internally, without any external party.

## 3. Hypothesis

Research on the effect of profitability to environmental performance has been carried out by Clarkson *et al.* [7], Salama *et al.* [34], Luethge and Han [35]; Kim and Statman [36]. Clarkson *et al.* [7] found that companies with the level of financial performance by proxy profitability (ROA) is higher are more likely to increase environmental responsibility, while Melo [14] found the previous financial performance, as measured by value-added market, positively affect CSP. The results further confirmed that slack resources are allocated to specific areas in the CSP engagement (problem products, public relations, environmental issues, employee relations and workforce diversity). Brammer and Millington [37] shows that the corporate is more profitable (profitable) is expected to give a donation at a higher level, which is a measure of social performance. The results of the study Fauzi *et al.* [19] showed that there is no influence between financial performance (measured by Return on Assets and Return On Equity) with Corporate Social and Environmental Performance. Then Fauzi *et al.* [20] examined the relationship between corporate social performance and financial performance based on the theory of slack resources and good management theory and found significant results. Both research results Fauzi [19] and [20] contradictory, because the use of data from different financial performance indicators, namely secondary data Fauzi [19] while Fauzi [20] using perceptual data (primary data). Research of Zang *et al.* [38], Setyorini and Isaac [39] found that the profitability of the corporate has a positive influence on environmental accounting information disclosure. Luethge and Han [35], Clarkson *et al.* [7] examined the financial performance proximate by return on assets (ROA), found no significant effect on corporate disclosure. Leonidou *et al.* [40] focuses on the corporate's resources (physical, financial, and experience) and abilities (vision together, build relationships, and technology sensing/response) that acts as a driver of environmental marketing strategy. Results of studies using data 152 hotels revealed that physical and financial resources owned quite instrumental in achieving an effective green marketing strategy. Zang *et al.* [38] and Cho *et al.* [42] found a positive relationship between profitability (proximate with ROA) with the level of disclosure. This suggests that the higher level of profitability will be more extensive disclosure of information to the public, because the greater the corporate's financial support will be more disclosure of corporate social responsibility. Melo [41] argues that stakeholder management is not the only way to achieve financial achievement. However, corporate financial performance (CFP) leads to better corporate responsibility performance (CRP). But the intangible development is a key factor in improving financial performance and social responsibility performance, to form a virtuous cycle. Innovation that was conducted by corporate would continuously generate capability [7]. With the capabilities possessed, then the companies will be encouraged to communicate to stakeholders through social responsibility disclosure. Clarkson *et al.* [7] found the intensity of R & D, and sales growth in a positive and significant effect on the disclosure of corporate social responsibility. Characteristics of corporate in this study refer to Clarkson *et al.* [7], which is a proxy for firm size by total of assets (TA). Brammer and Millington [37] showed that greater companies were expected to donate at a higher level, which was a measure of social performance. Bansal [27] research showed

that the size of the organization was positively related to sustainability corporate development, being Clarkson *et al.* [7] showed that the size of the corporate's negative effect on environmental performance. A number of studies have examined the effect of firm size on environmental disclosure. These studies have found firm size is positively related to the level of social and environmental disclosure [43], [4], [44], [38]; [45], [42]. The earliest researcher in CSR is Ingram and Frazier [8] examined the relationship between the content of corporate environmental disclosure and environmental performance of the corporate. Research results show that the disclosure of the corporate not associated with indices of Corporate Environmental Performance (CEP). Similarly, Wiseman [9] suggests that corporate environmental disclosure is incomplete and does not relate to the corporate's actual environmental performance. Al-Tuwaijri *et al.* [4] found a positive relationship between environmental disclosure of environmental performance. Likewise Clarkson *et al.* [6] found a positive and significant relationship between environmental performance as measured by the ratio of reprocessed waste or toxic release index (TRI) and the level of environmental disclosures as measured by the index of GRI (Global Reporting Initiative). Clarkson *et al.* [7] testing the determinant (determinant) environmental performance, one of the variables tested was environmental disclosure, and found that the positive environmental disclosure related to environmental performance. So with the existence of the internal capabilities of the corporate will allow the corporate disclosure of social responsibility. Disclosure of which is based on the stakeholder theory is to meet the interests of stakeholders. The disclosures made will affect environmental performance. It is based on the stakeholder theory which assumes that the disclosure of corporate social responsibility aims to provide information on the implementation of social responsibility has been carried out in accordance with the social contract and the rules that have been set by the government. Accordingly, the hypotheses proposed in this study are as follows. H1a. Financial Resources effects on environmental performance. H1b. Capability effects on environmental performance.

H1c. Characteristic of corporate effects on environmental performance. H1d. Corporate Disclosure effects on environmental performance.

H2a. Financial Resources effects on Corporate Disclosure.

H2b. Capability effects on Corporate Disclosure.

H2c. Characteristic of corporate effects on Corporate Disclosure.

H3a. Financial resources effects on environmental performance through corporate disclosure.

H3b. Capability effects on environmental performance through corporate disclosure.

H3c. Characteristic of Corporate effects on the environmental performance through corporate disclosure.

#### 4. Research Methods

This study aims to determine the effect of financial resources, Capability, and Characteristics of Corporate on

Environmental Performance through the Corporate Disclosure as a mediating variable. The data used are secondary data obtained from the website Indonesian Stock Exchange [www.idx.co.id](http://www.idx.co.id) are corporate disclosure of social and environmental responsibility (Y), financial resource (X1), capability (X2), and characteristics of Corporate (X3). Secondary data were obtained from electronic publications or websites [www.menlh.go.id](http://www.menlh.go.id) is environmental performance (Z) in form PROPER rating period 2008-2013. The sampling method employed was purposive sampling method. The selection criteria for the sample as follow (see table 1).

**Table 1.**  
Procedur of Sampling

No	Criteria of Sampling	Amount of sample
1.	The Industrial corporate (PROPER version) is listed on the Indonesia Stock Exchange during the period 2008-2013.	192
2.	The Industrial corporate that consistently listed in the Indonesia Stock Exchange during the period 2008-2013.	(10)
3.	The Industrial corporate that complete financial statement data, annual reports and sustainability reports during the period 2008-2013.	(20)
4.	The Industrial corporate reported an operating profit (earnings before interest and tax) during the period 2008-2013.	(45)
5.	The Industrial corporate consistently follows the PROPER Ministry of Environment of Indonesia for the period 2008-2013..	(84)
6.	The Industrial corporate that include the cost of innovation (research and development costs, royalties, license fees, and the cost of education and training) in its financial statements.	(18)
<b>The Industrial corporate was chosen as the final sample</b> <b>The number of observations (n) = 15 x 5 years = 75</b>		<b>15</b>

The analytical method used is path analysis, using relationship models such as the following

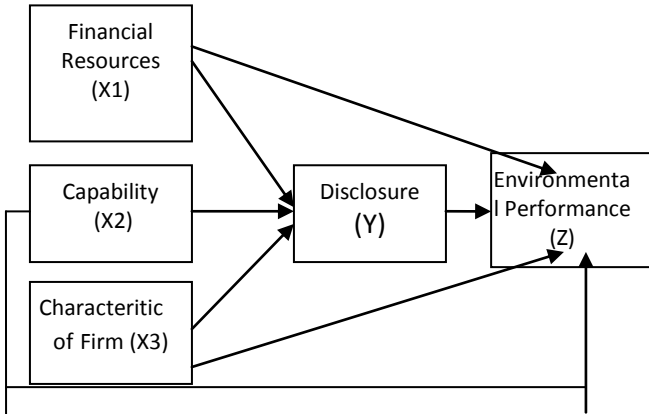


Figure 1. Diagram of Research Theoretical Model

To put the test of the indirect effect (mediation effect) then used the test by Baron and Kenny [47].

**5. Results of Hypothesis Testing**

The data of each indicator of the study variables are presented in Table 2.

**Table 2**  
Descriptive Statistics of Research Variables

Variable	Indicator	N	Mean	Std. Deviation
Environmental Performance (Z)	EPGold	75	0.004	0.038
	EPGreen	75	0.071	0.123
	EPBlue	75	0.127	0.102
	EPRed	75	0.014	0.046
	EPBlack	75	0.002	0.011
Corporate Disclosure (Y)	Social & Environmental Disclosure	75	0.690	0.216
Financial Resources (X1)	ROA	75	0.218	0.126
Capability (X2)	INOV	75	0.027	0.072
Characteristic of Corporate (X3)	Total Asset	75	15.783	1.076

**Note:** Z= Rating of Environmental Performance (EPGold=5, EPGreen=4, EPBlue=3, EPRed=2, EPBlack=1); Y= Social and Environmental Disclosure (disclosure from dimensions of environmental, energy, health and safety employee,

Employee Other, Product, Ccommunity Involvement, and Others [52]); X1= Return On Assets; X2= Ratio of Cost of Innovation (total cost of Research and development, royalty, licensi) to total Assets; X3= In Total Assets.

The results of testing the direct effect between exogenous variables to the endogenous variables using *Partial Least Square* in this study shows that of the relationship between variables, there are 7 significant at 5% level, while the remaining 1 other relationship was not significant (see table 3).

**Table 3.**  
Results of Testing Direct Effect

Hypothesis	Direct Effect	Path Coefisien	T Statistic		Conclusion
			$\alpha=0.05$	(t = 1,666)	
1a.	X1 -> Z	0.101	0.184	0.906	Not significant
1b.	X2 -> Z	0.598	0.049	1,667	Significant
1c.	X3 -> Z	0.165	0.020	1,972	Significant
1d.	Y -> Z	0.372	0.007	2.521	Significant
2a.	X1 -> Y	-0.221	0.049	1.672	Significant
2b.	X2 -> Y	0,316	0.011	2,345	Significant
2c.	X3 -> Y	0.407	0.000	5,213	Significant

Testing the effect of indirect or mediating variable in this study was conducted with four stages, as follows: (1) examine the direct effect of variable X (initial variable) to variable Z (outcome variable); (2) examine the direct effect of variable X to variable Y (mediation); (3) examine the influence of mediating variables to variable Z; (4) test the effect of variable X to variable Z after entering the mediating variables will have no effect. If these four steps are met, it can be concluded that the mediating variable fully mediates the relationship variables beginning with variable results. If the first three steps but step 4 is not met, then this indicates a partial mediation [47].



**Table 4.**  
Results Testing Mediating Variables

Hypothesis	Steps of evaluation				Conclusion
	1	2	3	4	
3a.	X1 → Z t=2,119 (s)	X1 → Y2 t=1,672 (s)	Y2 → Z t=2,521 (s)	X1 → Z t=0,906 (ns)	Full Mediated
3b.	X2 → Z t=2,733 (s)	X2 → Y2 t=2,345 (s)	Y2 → Z t=2,521 (s)	X2 → Z t=1,666 (s)	Partial Mediated
3c.	X3 → Z t=4,725 (s)	X3 → Y2 t=5,212 (s)	Y2 → Z t=2,521 (s)	X3 → Z t=1,972 (s)	Partial Mediated

Notes: ns = non-significant; s = significant

### 5.1 Effect of Financial Resources to the Environmental Performance through Disclosure.

The results of phase 1 testing, showed that the financial resources affect the environmental performance significantly (t-test 2.119 > t-table 1.666). Phase 2, the effect on the disclosure of financial resources is significant (t-test 1.672 > t-table 1.666). Phase 3, the effect of disclosure on environmental performance is significant (t=2.521 > t-table 1.666). Stage 4, the influence of financial resources to the environment of performance, after entering social responsibility disclosure result was not significant (t-test 0.906 < t-table 1.67). So it can be concluded that the variable is a disclosure of mediating variables in relation of financial resources to the environmental performance of the nature of full mediation. Thus the hypothesis which states that "financial resources affect environmental performance through disclosure of social responsibility" is received.

### 5.2 Effect of Capability on the Environmental Performance through Disclosure

The results of phase 1 testing, showed that the effect of capability on the environmental performance significantly (t=2.733 > t-table 1.666). Phase 2, the effect of capabilities on social responsibility disclosure is significant (t-test 2.345 > t-table 1.666). Phase 3, the effect of disclosure on environmental performance is significant (t=2.521 > t-table 1.666). Stage 4, the effect of capability on the performance of the environment after entering social responsibility disclosure is significant (t=1.667 > t-table 1.666). So it can be concluded that the disclosure is a mediating variable in relation of capabilities to the environment performance, the nature of partial mediation. Thus, the hypothesis states that "capability effect on environmental performance through disclosure of social responsibility" is received.

### 5.3 Effect of corporate characteristics on environmental performance through Disclosure

The results of phase 1 testing, showed that its corporate characteristics was affect the environmental performance significantly (t=4.725 > t-table 1.666). Phase 2, the influence of corporate characteristics on social responsibility disclosure

results are significant (t=5.212 > t-table 1.666). Phase 3, the influence of social responsibility disclosure on environmental performance are significant ((t=2.521 > t-table 1.666). Stage 4, the influence of corporate characteristics on environmental performance after entering the disclosure is not significant result (t=1.972 > 1.666 t-table). So it can be concluded that the disclosure of social responsibility as a mediating variable in the relationship of corporate characteristics with environmental performance, the nature of partial mediation. Thus the hypothesis which states that "the characteristics of corporate influence on environmental performance through disclosure" is received.

## 6. Discussion

### 6.1 Effect of Financial Resources on the Environmental Performance through Corporate Disclosure

Efforts to achieve environmental performance would require a fee, so it can reduce profitability. This causes many people who do not support the efforts for environmental performance, as the results in this study that financial resources variable (X1) has no direct effect on environmental performance (Z). When done giving information (disclosure) to stakeholders, supporting the efforts of environmental performance, and stakeholder benefit from these efforts, of course, will bring attention and sympathy of the community and ultimately society (stakeholders) will support the efforts for environmental performance. It can be seen from the attempts to environmental performance conducted by PT. Semen Tonasa that use rice husks and shells of cashew as an alternative fuel so the use of coal as the primary fuel can be further reduced. The use of alternative fuels is done with some consideration; (1) provide a solution for the handling of agricultural waste in the environment, (2) reduce the CO2 emissions resulting from the burning of fossil fuels, (3) creating an environmentally friendly factory, (4) assist government programs in order to reduce the effects of global warming ([www.sementonasa.co.id](http://www.sementonasa.co.id)). These activities involve the community as well as providing economic value of rice husks and skins cashew farming communities, so that people feel the benefits of involvement in these efforts. For companies, the use of fuel oil is reduced due to the replacement of rice husk and cashew bark can reduce production costs, reduce energy consumption, and reducing pollution from fossil fuel use. The results of this study support the stakeholder theory, which assumes that companies provide information to stakeholders as a form of responsibility to stakeholders. However, do not support the hypothesis that slack resources states that the ability of the corporate in the form of financial resources will enable the corporate to conduct the environmental performers. The findings of this study supporting of Fauzi *et al.* [19], but not supporting research of Clarkson *et al.* [7], Salama *et al.* [34], Luethge and Han [35]; Kim and Statman [36]. Clarkson *et al.* [7] and Melo [14] found that companies with the level of financial performance by proxy profitability (ROA) is higher are more likely to increase environmental responsibility. The difference in this study because previous studies also did not consider the presence of mediating variables in the model study, whereas in our model, testing of effect financial resources to the environmental performance by entering the mediating variable (corporate disclosure of social responsibility). According to Fauzi *et al.* [19] that presence of a moderating or

mediating variables often can modify the relationship between the independent variables and the dependent variable. The results of this study in the first phase of testing mediation shows the significant influence of financial resources (ROA) to the environmental performance, but after tested by inserting a mediating variable (corporate disclosure of corporate social responsibility), the effect of financial resources on environmental performance shows results not significant.

### 6.2 Effect of Capability on the Environmental Performance through Corporate Disclosure

The results of this study support the Resource-Based View, which states that the implementation of environmental strategies by leveraging intangible resources (capability) for environmental performance, such as pollution prevention, product stewardship, and sustainable development. Companies provide information to stakeholders regarding its capabilities, which can support the achievement of environmental performance. As performed by PT Ultrajaya Milk Tbk, innovation activities in the form of research and development, as well as checking the quality control of its products. By regularly monitoring related market requirements and consumer demand, PT Ultrajaya Milk Tbk has developed new products. Similarly, the use of tea packaging box certified Forest Stewardship Council (FSC). This certificate signifies that the product packaging PT Ultrajaya Milk Tbk derived from wood and processed materials in a responsible manner. Corporate disclosure of CSR is a partial mediating variable in the relationship with environmental performance capabilities. This suggests that the effect capability either directly or indirectly to the company's environmental performance through disclosure. Thus it can be interpreted that capability is important in achieving environmental performance. This study supports the results of research Clarkson *et al.* [7], Barney and Clark [32], Enkel *et al.* [33], Melo *et al.* [41] Pandza *et al.* [52], which states that the corporate can take advantage of capabilities such as advanced process technology, developed in-house as a result of R & D and manufacturing expertise to carry out business activities for environmental policy. The excellence that meant in this study is superior in the field of environment.

### 6.3. Effect of Corporate Characteristics on the Environmental Performance through the Corporate Disclosure

The findings of this study support the stakeholder theory, which assumes that the existence of a corporate is determined by the stakeholders. Therefore, the corporate will consider the interests of stakeholder because of moral commitment of corporate management to stakeholders [50]. Companies disclose of social and environmental information as a tool to maintain their relationships with stakeholders [49]. The results of this study support the research Patten [43], Al-Tuwaijri *et al.* [4], [44], Zang *et al.* [38], ; Garcia-Sanchez, [45], Cho *et al.* [42], which states that firm size is positively related to the level of social and environmental disclosure. Similarly, the results of research Aerts and Cormier [46], Guidry and Pattern [48] found a significant association between the capital intensity of corporate social responsibility disclosure. The results of this study indicate that the characteristics of the firm as measured by total assets as a measure of corporate influence of corporate social responsibility disclosure. It means the larger corporate more extensive disclosure of its

social responsibility. Large companies have larger economic scale than the smaller companies [50], similar impact of the corporate's existence. Therefore, larger corporate will get more attention of stakeholders. Hence, the larger the corporate the more extensive disclosure of its social responsibility, with the aim to provide information to stakeholders on activities carried out in a responsible manner.

## 7. Conclusions

In sum of foregoing discussion, the conclusion can describe in the following statements.

1. Corporate Disclosures is mediating variable on effect of financial resources to environmental performance. This suggests that financial resources to support social responsibility disclosure by the corporate so as to achieve environmental performance. The results of this study support the stakeholder theory assumes that companies provide information as a form of corporate responsibility to stakeholders.
2. Capability is a very important variable in achieving environmental performance. This is evidenced by the significant influence either directly or indirectly to environmental performance through corporate disclosure. This study supports the resource-based view.
3. Characteristics of corporate are an effect on the achievement of environmental performance, both directly and indirectly through disclosure. This study proves that the total assets of the corporate allows for the disclosure of social and environmental responsibility that will affect the achievement of environmental performance.

## Suggestion

1. Corporate should provide learning to partner industry companies / partners (buyers of products, suppliers of raw materials, etc.) in the course of social responsibility, resulting in a chain of business that socially and environmental responsible.
2. Reports of social responsibility should be updated annually, and reflects a significant increase in activities of social and environmental responsibility. Therefore, it is necessary to follow up on relevant agencies, in this case the Indonesian Stock Exchange to establish rules of reporting social and environmental responsibility. Similarly, Indonesian Institute of Accountants professional organizations should make a standard measurement and disclosure of social and environmental responsibility, to be used as guidelines in making the disclosure.
3. For further research, to perform research development by replacing the indicators of social responsibility disclosure by using primary data, replacing PROPER besides environmental performance indicators, and expand the sample to non-manufacturing companies.

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