

THE INFLUENCE OF CORPORATE ENVIRONMENTAL PERFORMANCE ON ENVIRONMENTAL DISCLOSURE WITH ENVIRONMENTAL RISK AS A MODERATING VARIABLE

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ABSTRACT

Currently environmental performance is information that can increase company value, encourage companies to always disclose it in various media, however, environmental risks also need to be considered. The objective of this study is to analyze the influence of environmental performance on environmental disclosure with environmental risk as a moderating variable. The population of this study are manufacture companies listed on the Indonesia Stock Exchange (IDX) in 2016-2018. The sampling technique used is purposive sampling method, so there are 75 samples obtained that meet the criteria. The analytical method used to test the hypotheses in this study is multiple regression analysis. The results show that environmental performance and environmental risk have a significant positive influence on environmental disclosure, while environmental risk significantly weaken the influence of environmental performance on environmental disclosure.

INTRODUCTION

Global warming is still a serious threat to the environment because its impact can reduce the quality of life at this time as well as in the future. Based on research conducted at NASA's Goddard Institute for Space Studies (GISS), the increase in Earth's temperature in 2018 reached 0.8 ° C relative to average temperatures of 1951-1980. The magnitude of the increase in air temperature that occurs in each country varies. Based on data from observations of air temperature trends in Indonesia in 1981-2018 by BMKG (Meteorology, Climatology, and Geophysics Agency), in general air temperatures in Indonesia have

positive trends with quantities that vary around 0.03 ° C every year. Thus, it is feared that in the next 30 years the average temperature in Indonesia will rise to 0.9 ° C from the current air temperature.

On the World Environment Day celebration held in China on June 5, 2019, the theme raised was "Beat Air Pollution". The theme which is also a slogan in the celebration is a form of invitation to take action in an effort to stop air pollution which is now a worrying global problem. The aim is to encourage public awareness throughout the world to contribute in saving the environment from the dangers of air pollution

Researches about the effect of environmental performance on

environmental disclosure have been widely done, but showed various results. One of them is research conducted by Melvin and Julianti (2016). The research shows that earnings management and profitability are positively related but not significantly to environmental disclosure, while environmental performance and company size have a significant and positive influence on environmental disclosure. Research conducted by Grigoris et al., (2016) shows that the intensity of greenhouse gases has a negative and significant effect on environmental disclosure, while environmental performance has a positive and significant effect on environmental disclosure.

Both previous studies have shown that environmental performance has a positive and significant impact on environmental disclosure, but there are other studies that show different results. First, research conducted by Ismail et al., (2018). In this study, the results show that company size, foreign ownership, profitability, leverage and membership of industry's associations have a positive and significant effect on environmental disclosure, while close to market variables, degree of ownership concentration, multinational status, and environmental certification have positive but not significant impact on the quality of environmental disclosure. Variable type of company, institutional ownership, and state ownership have negative but not significant effect on the quality of environmental disclosure. Research conducted by Stefano et al., (2015) shows that legislation, public shareholders, business industry and firm size have a positive and significant effect on environmental disclosure, while environmental performance has a negative but not significant effect on the availability of corporate environmental disclosures.

Based on the differences in the research results that have been mentioned above, motivating researchers to conduct further research on the effect of financial performance on environmental disclosures. In contrast to previous studies, in this study there is a moderating variable between the influence of environmental performance on environmental disclosure, namely environmental risk. Environmental risk is thought to strengthen the effect of environmental performance on environmental disclosure. This is based on research conducted by Dobler et al., (2015) that environmental risk affects environmental disclosure positively and significantly. Dan Pratiwi and Sari (2016) who explained that the type of industry has a positive and significant effect on Carbon Emission Disclosure.

The purpose of this study is to analyze the effect of environmental performance on environmental disclosure, to analyze the effect of environmental risk on environmental disclosure, and to analyze environmental risk in moderating the effect of environmental performance on environmental disclosure. The researcher will limit this research by selecting a sample of non-financial companies listed on the Indonesia Stock Exchange during the period 2016 to 2018 and which publish sustainability reports consistently.

This research is expected to contribute to the development of theory and practice, especially in relation to the theory of legitimacy and practice of corporate social responsibility, especially in the company's environmental performance.

THEORETICAL FRAMEWORK AND HYPOTHESES

Legitimacy Theory

Legitimacy theory comes from the concept of organizational legitimacy, which has been defined as a condition or status, which exists when the entity's value system is congruent with the social value system in which the company is located (Dowling and Pfeffer, 1975). The main focus of legitimacy is the interaction between companies and the social environment. In the theory of legitimacy, organizations are seen as part of a broader social system and are considered to have no inherent rights to resources. The greater the resources needed by the company, the greater the company's efforts to obtain legitimacy from all stakeholders (Krisna and Suhardianto, 2016). The company must take action that is acceptable to the social community in order to continue its operational activities (O'Donovan, 2002). In general, companies with a high level of industry sensitivity to the environment will also receive high attention from the community because of its operational activities that have the potential to affect nature (Solikhah and Winarsih, 2016). In the theory of legitimacy there is an assumption that the role of managers is needed in ensuring that the company's operational activities have been running in accordance with the expectations of the community so that it can be said as a legitimate or legitimate company (Deegan, 2018).

Legitimacy in his theory is always associated with the idea of social contracts. In this case the social contract is an expectation of the social community both implicitly and explicitly about how the company should operate (Deegan, 2018). The stakeholders must know the realization of environmental responsibility that has been done by the company if the company wants to gain legitimacy for its environmental performance. Thus,

companies must report on their environmental responsibilities to increase transparency and accountability of the company and gain legitimacy from stakeholders (Solikhah and Winarsih, 2016). Especially in companies whose social legitimacy gets public pressure and is widely exposed, disclosure of environmental responsibility can also be used as a medium to maintain the company's reputation (Krisna and Suhardianto, 2016).

When there are actual and potential differences between company activities and community expectations, a legitimacy gap will arise that can threaten the company's legitimacy. Companies that fail to meet the community's expectations have a high risk of losing their legitimacy to continue operating, even though meeting the community's expectations is not legally bound (Chandok and Singh, 2017). The company operates in a changing environment so that legitimacy is dynamic, therefore the legitimacy gap can also change even though there is no change in every company's activities. Companies that are deemed to have failed to meet the expectations of the community will get threats from the community and sanctions from the authorities such as restrictions on operational activities, difficulties in maintaining resources, to the impact on decreasing demand for company goods or services, therefore, managers always try to ensure that every operational activity of the company is still within the limits of social norms and values. If a legitimacy gap occurs, there needs to be corrective action from the company and disclosure to the community to ensure the survival of the company (Deegan, 2018).

Signaling Theory

In the signaling theory, there are three main roles involved, namely the sender, receiver, and signal. The sender is

the internal party of the company who has information about the company that has not been or is not available to outside parties, both positive and negative information. This gives rise to different perspectives about the company between internal and external parties. The recipient is an external party of the company who has no information about the company. The recipient requires certain information about the company in the decision-making process related to the company with the aim of obtaining profits. Signals are all information from within the company that is disclosed to external parties. The information contained in the company is either positive or negative and the sender decides which information will be disclosed. In signal theory, companies reveal information to build a positive image of information users (Connelly et al., 2011).

The meaning of the signal theory is how the signal receiver analyzes various types of signals given by the company to draw conclusions about the company's actual condition. The results of this analysis will affect the profit or loss of the parties in making decisions related to the company (Ching and Gerab, 2017). Signals sent by the company do not provide perfect information regarding the condition of the company. There is information asymmetry between the sender and receiver of the signal and the challenge is how the signal recipients make decisions without perfect information (Presley et al., 2018). For this reason, users of company information will look for information about companies that have been tested for fairness by auditors, those who provide independent guarantees on company reports (KPMG, 2017).

Resource Based Theory

Environmental sustainability is one of the problems faced in operational

management. To ensure long-term financial success, companies need to realize that they operate in a large environment and social environment. Companies need to pay attention to the limitations of the community and regulations that govern the sustainability of ecosystems in utilizing natural resources to carry out their operational activities (Joshi and Li, 2016). Not only that, the company must also compete with business competitors so the company must have a competitive advantage.

In Resource Based Theory (RBT), companies can create and maintain competitive advantage through the collection and integration of scarce, valuable, non-replicable, and irreplaceable resources (Hitt et al., 2016). RBT arises because of the heterogeneity of resources within the company. The heterogeneity of resources in this case means the different characteristics of resources owned by each company in an industry. These different characteristics of resources arise because the advantages of each company are different in obtaining and using resources in their operational activities (Mulyono, 2013).

RBT in relation to the company's environmental performance states that not all companies can benefit from implementing a green strategy, but only companies with unique resources and good management capabilities can benefit financially from increasing environmental efficiency. The company's specific resources and capabilities cannot be easily imitated by other companies (Joshi and Li, 2016).

Environmental Disclosure

Environmental disclosure is a process used by companies to disclose information relating to company activities and their effects on environmental conditions (Julianto and Sjarief, 2016).

Companies that are involved in industries that have a large impact on the environment are greater in carrying out environmental disclosures compared to industries that have little effect on the environment. Transparency and accountability are demonstrated by companies by disclosing information in their annual reports (P. C. Pratiwi and Sari, 2016). Enclosure of the environment is also seen as a corporate strategy in providing certain information signals so as to attract investors and enhance the company's reputation (Giannarakis et al, 2017).

Information disclosed in the annual report is divided into two, namely mandatory disclosure and voluntary disclosure. Mandatory disclosure is the minimum disclosure required by the competent agency, while voluntary disclosure is information disclosure beyond the applicable minimum requirements. Companies have the discretion to make voluntary disclosures in annual reports that give rise to the diversity or variations of voluntary disclosures between companies (Gunawan and Lina, 2015).

Environmental Performance

Environmental performance can be defined as a company's performance in creating a good environment (green) (Julianto and Sjarief, 2016). Companies in carrying out operational activities require raw materials that come from nature. The more goods to be produced, the more natural resources are needed. In processing these natural resources, there are impacts on the environment, one of which is the emission of greenhouse gases such as carbon dioxide (CO₂) which is one of the causes of global warming.

Seeing the impact on the environment, the company should not only focus on achieving maximum profit in

carrying out its business activities, but must also pay attention to environmental safety. In addition to being a corporate responsibility, good environmental performance can add value to the company. Companies that actively contribute to efforts to preserve the environment show that the company has a concern for the environment. This will build a good corporate image in front of stakeholders.

Environmental Risk

According to the Kamus Besar Bahasa Indonesia (KBBI), risk is an unpleasant (detrimental, dangerous) effect of an action or action. In the context of the company and the environment, environmental risk is the possibility of the impact of environmental damage that must be borne by the company due to a series of activities in its business processes. Corporate activities that affect the environment both physically, chemically, and biologically can cause dangerous responses from the environment that can affect soil, water, air, natural resources, and ecosystems. Impacts that occur on the environment can occur directly or indirectly (Riyadi and Nuzula, 2018).

Seeing the existence of environmental risks that occur from every activity of the company, the company should conduct an "amdal". According to Peraturan Pemerintah Republik Indonesia Nomor 27 Tahun 2012, Analysis of Environmental Impacts, hereinafter referred to as amdal, is a study of the significant impacts of a planned business and / or activity on the environment required for the decision-making process regarding the conduct of a business and / or activity. With the implementation of amdal, the expected goal will be achieved is to guarantee a development business or activity can run in a sustainable manner without damaging the environment.

Through the amdal study it is expected that development businesses and / or activities can utilize and manage natural resources efficiently, minimize negative impacts and maximize positive impacts on the environment (Mukono, 2005).

Hypothesis Development

The Effect of Environmental Performance on Environmental Disclosure

Environmental performance is a mechanism for companies to integrate their attention on the environment in its operational activities. The company pays attention to the environment as a form of corporate responsibility and care for the environment. Communities living around the company have an interest in the social and environmental impacts arising from the company's activities. Thus, according to the theory of legitimacy, companies must always adjust the value of the company with the value of society as part of stakeholders to avoid the legitimacy gap that can threaten the legitimacy of the company (Chandok and Singh, 2017).

The selection of raw materials and resources that do not damage the environment and support sustainability is one of the indicators of environmental performance evaluation. In resource-based theory (RBT), a company's competitive advantage is obtained by using resources that are not easily imitated by other companies (Hitt et al., 2016). Companies compete with each other to develop a green strategy, which is an effort to explore raw materials and environmentally friendly energy. Only companies that have special capabilities to manage raw materials and energy can obtain financial benefits and good environmental performance (Joshi and Li, 2016). The greater the natural resources needed by the company, the greater the

effort needed to obtain legitimacy from the community. One of the company's efforts in gaining community legitimacy is to reveal its environmental performance.

Based on signal theory (signaling theory), the public will assess any information (signal) provided by the company. By disclosing their environmental performance, the community can assess the extent to which the company is environmentally responsible. Good or bad information disclosed by the company will affect the public judgment, as well as environmental disclosure. Thus, the company will strive to improve its environmental performance so as to produce good environmental disclosure. This is done so that the company can create a good image of the community to ensure the company's sustainability.

Research conducted by Julianto and Sjarief (2016) shows that environmental performance has a significant positive effect on environmental disclosure. Companies with good environmental performance disclose better environmental information than companies with poor environmental performance in terms of both quality and quantity. This is supported by research conducted by Giannarakis et al., (2017) shows that higher levels of pollution in terms of greenhouse gas (GHG) emissions negatively affect the dissemination of carbon disclosure information. Based on the description, the first hypothesis that will be tested in this study are:

H1: Environmental performance has a positive and significant impact on environmental disclosure.

The Effect of Environmental Risk on Environmental Disclosure

The company's business activities will have an impact on the environment. Possible environmental impacts that must

be borne by the company for its operational activities are called environmental risks. Environmental risk for each company varies, depending on the level of sensitivity of the company to the environment. Environmental risk is one of the important factors in efforts to get legitimacy from the community. The operational activities of companies that have greater potential for environmental damage will get more attention from the community, so companies that have high environmental risks will be more difficult to obtain legitimacy from the community.

The public can assess a company's environmental risk from environmental disclosure. When associated with signal theory and legitimacy theory, companies that have a higher environmental risk tend to disclose their environmental performance better to gain legitimacy for their operational activities. Research conducted by Dobler et al., (2015) concluded that environmental risk positively and significantly affects environmental disclosure, a similar study was also conducted by Pratiwi and Sari (2016). In this research environmental risk is explained through industry type variables. The study also showed that the type of industry had a positive and significant effect on Carbon Emission Disclosure. In research conducted by Solikhah and Winarsih (2016), environmental risk is demonstrated by assessing the sensitivity of the industry to the environment. The research shows that industry sensitivity has a positive and significant effect on the quality of corporate environmental disclosure, meaning companies that have a high level of sensitivity to the environment will disclose environmental information more broadly. From this description, the second hypothesis that will be tested in this study are:

H2: Environmental risk has a positive and significant effect on environmental disclosure.

The Effect of Environmental Performance on Environmental Disclosure with Environmental Risk as a Moderation Variable

Previous research on the effect of environmental performance on environmental disclosure showed different results. Research conducted by Julianto and Sjarief (2016) shows that environmental performance has a positive and significant effect on environmental disclosure. This is supported by the assumption that companies have the drive to disclose good environmental performance and companies with good environmental performance can reduce costs related to the environment in the future. Other studies that show that environmental performance has a positive and significant effect on environmental disclosure are shown by research conducted by Giannarakis et al., (2017). In the study, environmental performance was explained by greenhouse gas emission variables and environmental disclosure was explained using carbon disclosure variables. The research shows that the level of greenhouse gas emissions produced by the company negatively affects carbon disclosure.

On the other hand, there are several studies that show conflicting results such as research conducted by Dobler et al., (2015) which shows that environmental performance has a negative but not significant effect on environmental disclosure. In addition, research conducted by Ismail et al., (2018) which uses environmental certification variables in explaining environmental performance, shows that environmental certification owned by companies has a positive but not significant effect on the quality of

environmental disclosure. This can be considered as a signal for companies to give more attention to several stakeholders such as the public, foreign shareholders, creditors and industry associations.

Seeing the differences in results from previous studies, the authors examined other variables that moderate the effect of environmental performance on environmental disclosure. In this study the moderating variable used is environmental risk. Based on previous research conducted by Solikhah and Arga Mustika Winarsih (2016), Pratiwi and Sari (2016), and Dobler et al., (2015) showed that environmental risk had a positive and significant effect on environmental disclosure. Based on the description, the third hypothesis that will be tested in this study are:

H3: Environmental risks can strengthen the effect of environmental performance on environmental disclosure.

RESEARCH METHODS

Data collection techniques and sampling

This study uses secondary data obtained through literature study from the data available in the annual reports and sustainability reports of companies listed on IDX, which are available on the websites of each company. The sampling method used in this research is purposive sampling method, determining the sample based on certain criteria.

These criteria are manufacture Companies listed on the Indonesia Stock Exchange during 2016-2018, Companies that publish sustainability reports on the company's official website every year for 2016-2018 and have complete data for each variable used in this study.

Research Design

This study uses hypothesis testing to test the effect of environmental performance as an independent variable on environmental disclosure as a dependent variable, also to test environmental risk as a variable that moderates the effect of the independent variable with the dependent variable. The object of this research is manufacturing companies (non financial industries) in Indonesia. The type of data used in this study is secondary data, obtained from the official website www.idx.co.id and the official website of each company. The data taken in this study is panel data or pooling data.

Types of variables and measurements

In this study, environmental disclosure was measured using Core Environmental Disclosure Items. This measurement is consistent with the measurement of environmental disclosure used in research conducted by (Hummel and Schlick, 2016).

Table 1

<i>Core Environmental Disclosure Item</i>	
Disclosure Item	Disclosure Content
Use of Raw Materials	Weight and volume of all raw materials used
Energy Consumption	Total direct and indirect energy consumption
Water Consumption	Total water consumption based on the source
Green House Gas (GHG) Emission	Total direct and indirect GHG emissions
Ozone-depleting Gas Emissions and Other Pollutant Gas Emissions	Total emissions of ozone-depleting gases and other pollutant gas emissions by type and volume
Water Discharge	Total water discharge based on the type of emission that was carried by the water
Waste	Total weight of waste by type

Source: Hummel dan Schlick (2016)

The measurement of environmental disclosure consists of 7 items of

disclosure. Each item disclosed is worth 1 and if not disclosed is 0, so if the company discloses all items then the value obtained is 7. The formula for calculating the value of environmental disclosure is as follows:

$$CEDI_j = \frac{\sum X_{yj}}{n_j}$$

Explanation:

- CEDI_j : Corporate Environmental Disclosure Index of the company studied
- $\sum X_{yj}$: the total score of items disclosed by the company studied
- n_j : sum of disclosure items

Environmental performance is a mechanism for companies to integrate their attention to the environment into their operational activities and interactions with stakeholders, which exceeds organizational responsibility in the legal field (Haholongan, 2016). In this study, environmental performance variables were measured using Environmental Performance Factors. This measurement was developed in a study conducted by (Ezzi and Jarboui, 2016).

Table 3
Environmental Sensitivity
Classification

Industrial Sector	Environmental Sensitivity	Score
Aerospace and Defense Contracting Chemicals Energy Supply Extraction and Mining Food Processing Medical and Telecom Equipment Paper and Pulp Steel and Auto Parts	High	2
Sektor Industri Lainnya	Low	1

Source: Fontana et al., (2015)

In this study, there are control variables consisting of Leverage, Performance, and size of company. Leverage is the company's ability to use assets or funds that have a fixed cost (fixed cost assets or funds) to increase the level of income (return) for company owners. In this study, leverage is measured using the ratio between liabilities and assets (Biswas et al., 2018), namely by the formula total liabilities divided by total assets. Profitability is the company's ability to generate profits. In this study, profitability is measured using the value of ROA (Return on Assets) (Dobler et al., 2015), namely by the formula net income divided by total asset. The size of the company is the size of a company that is indicated by the value of total assets. In this study, company size is measured using the logarithm value of natural total assets (Ismail et al., 2018), namely by the formula Ln Total of Assets.

Data analysis method

The data analysis method used in this research is quantitative data analysis method, while data testing is done using SPSS (Statistical Product and Service Solution) application. In this study, hypothesis testing was carried out by multiple regression analysis. Multiple regression analysis was conducted to examine the effect of the independent variable on the dependent variable. In this case, namely to examine the effect of environmental performance as an independent variable on environmental disclosure as the dependent variable with environmental risk as a moderating variable. In addition, in this study, a classic assumption test was also carried out before testing the hypothesis. The aim is to ensure that the data to be used are free from various disturbances such as

normality, multicollinearity, heterocedasticity, and autocorrelation so that the data becomes feasible to be tested.

Multiple Regression Model

Multiple regression analysis was conducted to determine the role of environmental performance as an independent variable affecting environmental disclosure as the dependent variable with environmental risk as a moderating variable. This study also uses control variables, namely leverage, company size, and profitability. The multiple regression equation in this study is as follows:

Model 1 (Before Moderation):

$$ED = \alpha + \beta_1 EP + \beta_2 ER + \beta_3 LEV + \beta_4 SIZE + \beta_5 ROA + e$$

Model 2 (after Moderation):

$$ED = \alpha + \beta_1 EP + \beta_2 ER + \beta_3 KL*RL + \beta_4 LEV + \beta_5 SIZE + \beta_6 ROA + e$$

ED is Environmental Disclosure, EP is Environmental Performance, ER is Environmental Risk, Lev is leverage, Size is Size company.s, ROA is Return and Assets, α is konstanta, and e is Standar Error

RESULTS AND DISCUSSION

Research sample and Descriptive Statistics

Based on the sample data selection using certain criteria as mentioned above, the number of samples in this study is 75. Following are the results of the descriptive analysis test that has been carried out using SPSS Statistics:

Table 4
Descriptive Statistics

	N	Minimum	Maximum	Mean	deviation standard
EP	75	0,1667	1	0,63	0,183
ER	75	1	2	1,52	0,502
ED	75	0,1429	1	0,66	0,235
LEV	75	0,1331	0,7918	0,49	0,175
SIZE	75	2.950.559 jt	126.723.419 jt	33.471.547 jt	30.452.026 jt
ROA	75	-0,1149	0,480	0,066	0,089

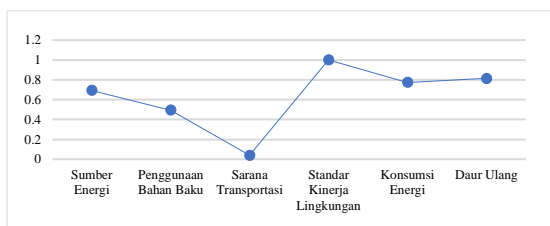
Source: Data processed using SPSS Statistics version 25. 2019

Descriptive statistical analysis for environmental disclosure variables showed the highest value (max) of 1 and the lowest value (min) of 0.1429 with an average of 0.666664 out of the total score of 0-1. This shows that the companies sampled in this study on average have revealed environmental information quite well. The standard deviation of environmental disclosures of 0.2352339 is lower than the average value indicating the low fluctuation of environmental disclosure variable data. The environmental performance variable in this study shows the highest value (max) of 1 and the lowest value (min) of 0.1667 with an average of 0.635551 of the total score of 0-1. This shows that the companies sampled in this study have on average had a good environmental performance. The standard deviation of environmental performance of 0.1831705 is lower than the average value indicating the low fluctuation of environmental performance variable data. The environmental risk variable in this study produced the highest value (max) of 2 and the lowest value (min) of 1 with an average of 1.52 of the total score of 1-2. This shows that the comparison of the high and low environmental risks of the companies sampled in this study is balanced. The environmental deviation standard of 0.5029642 is lower than the average value indicating the low fluctuation of environmental risk variable data.

The results of descriptive analysis for environmental performance variables in this study indicate that

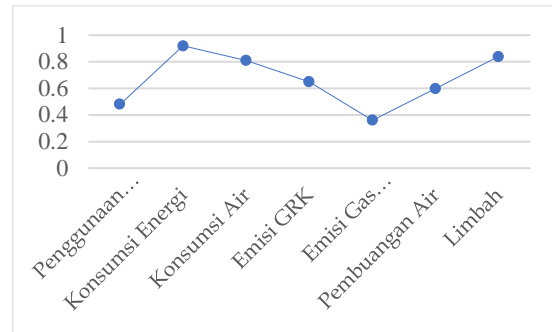
environmental performance factors in the form of transportation facilities have the lowest average value of 0.04, only 1 out of 25 companies sampled in this study use efficient transportation to reduce air pollution. The environmental performance factor that has the highest value is the environmental performance standard factor, in which all companies in this study apply high standards in environmental performance, namely ISO 14001 concerning environmental management systems.

Picture 1
Environmental Performance Graph



The results of descriptive analysis for environmental disclosure variables in this study indicate that environmental disclosure indicators in the form of ozone-depleting gas emissions and other polluting gas emissions have the lowest average value of 0.3867. This shows that there are still few companies that disclose information about gas emissions. ozone destroyer and other polluting gas emissions produced by the company. Environmental disclosure indicators in the form of total direct and indirect energy consumption have the highest value, namely 0.92, which means that 69 out of 75 company sample data reveal the total direct and indirect energy consumption

Picture.2
Environmental Disclosure Graph



Data Analysis

The Classical Assumption Test is carried out to ensure that the research model meets certain requirements before testing multiple linear regressions. The requirements that must be met are normal data distribution, not containing multicollinearity, heteroscedasticity, and autocorrelation.

Based on the results of the One-Sample Kolmogorov-Smirnov test (1-sample K-S), both model I (before moderation) and model II (after moderation) show a probability value (sig) of $0.200 > 0.05$. Thus, H_0 is accepted, the data is normally distributed. The multicollinearity test of the data in this study for model I, all variables show a tolerance value > 0.1 and $VIF < 10$, meaning that H_0 is accepted, there is no multicollinearity, while for model II, environmental performance, environmental risk, and environmental performance * environmental risk indicates a tolerance value < 0.1 and a VIF value > 10 , meaning that H_0 is rejected, there is multicollinearity. This can occur because the moderating variable value of Environmental Performance * Environmental Risk is the result of the multiplication of environmental performance variables and environmental risk, so that there is a relationship between these variables. The Glejser test to test the heteroscedacity of the data in this study for models I and II shows the value of $Sig. > 0.05$ for each variable. Thus, H_0 is accepted, there is no heteroscedasticity. Autocorrelation testing using the Durbin-Watson test, the results show that in model I (before moderation) the value of $dW = 2.057$ is in a condition that the regression

model is free from autocorrelation. Likewise, model II (after moderation) shows the value of $dW = 2.096$. means that the regression model is free from autocorrelation.

Goodness of fit and Hypothesis Test

The following results are the coefficient of determination in this study:

Table 5

Determination Coefficient Test Results

Model	Adjusted R Square	Std. Error of the Estimate
I	0,568	0,1545229
II	0,593	0,1501379

Source: Data processed using SPSS Statistics version 25. 2019

In the table above it is known that the coefficient of determination shown by the adjusted R Square value for model I (before moderation) is 0.568, meaning that the environmental disclosure variable of 56.8% can be explained by the environmental performance and environmental risk variables as independent variables, as well as leverage, size company, and profitability as a control variable, while the remaining 43.2% can be explained by other factors outside the variables studied. The coefficient of determination shown by the adjusted R Square value for model II (after moderation) is 0.593 which means that in this study the environmental disclosure variable of 59.3% can be explained by the variables of environmental performance, environmental risk, environmental risk that moderates environmental performance, and leverage, company size, and profitability as control variables, while the remaining 40.7% can be explained by other factors outside the variables studied. There is an increase in the value of R square of 0.027 after adding the environmental risk variable as a moderating variable.

The results of the simultaneous F test in this study can be shown as follows

Table 6
Simultaneous F Test

Model	F	Sig.
I	20,499	.000 ^b
II	18,943	.000 ^b

Source: Data processed using IBM SPSS Statistics version 25. 2019

The simultaneous F test results in this study for model I (before moderation) show the prob value. (F-statistics), i.e. $0,000 < 0.005$ and the calculated F value is 20.499, while the F value of the Table (5.70) = 2.35 so that the F calculated > F table. Thus, the simultaneous F test results for model I show that simultaneous environmental performance and environmental risk as independent variables, as well as leverage, company size, and profitability as control variables have a significant effect on environmental disclosure as the dependent variable. F test results for model II (after moderation) show the prob value. (F-statistic) that is $0,000 < 0.005$ and the calculated F value of 18.943, while the value of F Table (6.69) = 2.23 so that the F count > F table. Thus, the simultaneous F test results for Model II show that simultaneous environmental performance as an independent variable, environmental risk as a moderating variable, as well as leverage, company size, and profitability as control variables have a significant influence on environmental disclosure as the dependent variable.

The partial test results (T test) for the model I in this study can be shown as follows:

Table 7
Partial Test (T Test) Model I

Model	Variable	Regression Coefficient (B)	Sig.
I	(Constant)	-6,109	.000
	Environmental Performance	0,357	.002
	Environmental Risk	0,112	.005
	Leverage	0,099	.366
	Company Size	0,142	.000

Profitability	0,074	.722
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Source: Data processed using IBM SPSS Statistics version 25. 2019

Based on table 8 above, it can be concluded that environmental performance and environmental risk have a positive and significant effect on environmental disclosure. The regression model for model I (before moderation) is as follows:

$$ED = -6,109 + 0,357 EP + 0,112 ER + 0,099 LEV + 0,142 SIZE + 0,074 ROA + e$$

The partial test results (T test) for model II in this study can be shown as follows:

Table 8
Partial Test (T Test) Model II

Model	Variabel	Koefisien Regresi (B)	Sig.
II	(Constant)	-6,260	.000
	Environmental Performance	1,295	.004
	Environmental Risk	0,434	.004
	Environmental Performance *	-0,537	.027
	Environmental Risk		
	Leverage	0,015	.894
	Company Size	0,134	.000
	Profitability	-0,130	.560

Source: Data processed using SPSS Statistics version 25. 2019

Based on table 8 above, it can be concluded that environmental performance and environmental risk have a positive and significant effect on environmental disclosure, while the environmental risk variable significantly weakens the effect of environmental performance on environmental disclosure. The regression model for model II (before moderation) is as follows:

$$ED = -6,26 + 1,295 EP + 0.434 ER - 0,537 EP*ER + 0,015 LEV + 0,134 SIZE - 0,130 ROA + e$$

DISCUSSION

The Effect of Environmental Performance on Environmental Disclosure

Environmental performance illustrates the form of company attention to the environment for the company's operational activities that involve the environment. In this study, hypothesis testing regarding the effect of environmental performance on environmental disclosure shows the results that environmental performance has a significant and positive effect on environmental disclosure both in model I (before moderation) and model II (after moderation).

The results of this study are in line with research conducted by Julianto and Sjarief (2016) which shows that environmental performance has a significant positive effect on environmental disclosure. One indicator of environmental performance is the management of raw materials and resources. Companies compete with each other to develop a green strategy, which is an effort to explore raw materials and environmentally friendly energy. The greater the natural resources needed by the company, the greater the effort needed to obtain legitimacy from the community. One of the company's efforts in gaining community legitimacy is to reveal its environmental performance.

The results of this study are also supported by research conducted by Giannarakis et al., (2017), shows that higher levels of pollution in terms of greenhouse gas (GHG) emissions negatively affect the dissemination of carbon disclosure information. Companies with good environmental performance disclose better environmental information than companies with poor environmental performance in terms of both quality and

quantity. Based on signal theory (signaling theory), the public will assess any information (signal) provided by the company. Good or bad the community's assessment of the company depends on the information received. Thus, the company will continue to improve its environmental performance to produce good environmental disclosure. In the theory of legitimacy, a company that has a social contract to the community that discloses its environment based on the environmental performance carried out by the company. In resource based theory, a company can create or maintain its scarce resources so that they cannot be imitated to excel in competition, one of which is through environmental performance disclosure.

The Effect of Environmental Risk on Environmental Disclosure

Environmental risk describes the possible environmental impacts that companies must bear for their operational activities. The environmental risk of each company is different, depending on the characteristics and types of each company that affect the company's sensitivity to the environment. In this study, hypothesis testing regarding the effect of environmental risk on environmental disclosure shows the results that environmental risk has a significant positive effect on environmental disclosure in both model I (before moderation) and model II (after moderation).

The results of this study are in line with research conducted by Dobler et al., (2015) and Pratiwi and Sari (2016) which states that environmental risk has a significant positive effect on environmental disclosure. Companies that have high environmental risks require legitimacy from stakeholders to run their business activities so that environmental disclosure

is very important to build a good corporate image and to obtain legitimacy.

Environmental Risk Strengthens the Effect of Environmental Performance on Environmental Disclosure

In this study, hypotheses regarding environmental risk amplifying the effect of environmental performance on environmental disclosure were rejected. The results of hypothesis testing in this study indicate that environmental risk significantly weakens the effect of environmental performance on environmental disclosure. Companies that have good environmental performance have a good image in the eyes of stakeholders in an effort to gain legitimacy, so the company will reduce the disclosure of environmental information related to environmental risks. Based on the signaling theory, the stakeholders will assess the company in accordance with the information (signal) provided, therefore the company will reduce environmental disclosures related to its environmental risks. This was done to avoid the emergence of negative stigma from stakeholders that could worsen the good image of the company that had been built through environmental performance.

CONCLUSIONS

Based on the results of research and discussion that has been stated, the conclusions of this study are as follows: The results of testing the first hypothesis show that environmental performance has a significant positive effect on environmental disclosure in both model I (before moderation) and model II (after moderation). The results of testing the second hypothesis show that environmental risk has a significant positive effect on environmental disclosure in both model I (before moderation) and model II (after moderation).

The results of testing the third hypothesis indicate that environmental risk significantly weakens the effect of environmental performance on environmental disclosure. The results of the control variable testing show that both in model I (before moderation) and model II (after moderation), firm size has a significant positive effect on environmental disclosure while leverage and profitability do not significantly influence environmental disclosure.

IMPLICATIONS

The implications of this research are as follows:

For the company, It is hoped that companies that have published sustainability reports can better disclose environmental performance in these reports so that the quality of their sustainability reports will increase. Companies that have not published a sustainability report are expected to publish it because a good sustainability report can provide long-term benefits for company value. For Investors or government, the quality of the company's environmental disclosure can be considered in addition to the company's financial information in making investment decisions. Quality environmental disclosure shows evidence of corporate responsibility towards the environment which will provide long-term benefits for the environment, the company and its stakeholders. This study can also be a reference for academics and researchers for further research related to environmental disclosure, environmental performance, and environmental risks.

Suggestions for further research

Based on the limitations of this study, here are some suggestions for further research:

It is expected that company management will publish sustainability reports in a complete and consistent manner every year. It is hoped that further research will use more independent variables, such as corporate governance indexes and audits, as well as broader research periods so that research results will be more significant.

LIMITATIONS

The limitations in this study are as follows: This research does not cover companies from the financial sector because the influence of financial sector business activities on the environment is not significant. Limited sample size because there are still many companies in Indonesia that have not yet published sustainability reports. Companies that issue their financial statements in US dollars are still calculated as a research sample and the values in their financial statements are converted to rupiah based on the BI middle rate at the end of each financial year. Thus, the original rupiah value in the company's financial statements cannot be ascertained.

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