# IMPROVING UNDERSTANDING ON DETERMINANT OF ENVIRONMENTAL DISCLOSURE AND MODERATING EFFECT OF CORPORATE GOVERNANCE

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#### **ABSTRACT**

Industrial activities have a positive impact on the economy; on the other hand they have a negative impact on the environment. Therefore it must be controlled and balanced. So that issues related to green industry and environmental accounting are increasingly urgent to be formulated by the government. This research aims to analyse the effect of company size, financial performance, and environmental performance on environmental disclosure using good corporate as the moderating variable. By using the purposive sampling technique, the final samples of the research are 23 companies from top 45 listed companies in Indonesia during the period of 2011-2016. Data were analysed with SEM by using Smart PLS 3.0 software. The result showed that the company size and environmental performance have a significant positive effect on the environmental disclosure. Conversely, the effect of financial performance on environmental disclosure is negative. Good Corporate Governance moderates the effect of company size on environmental disclosure. Nevertheless, good corporate governance does not moderate the effect of financial performance and environmental performance on environmental disclosure. Based on the results, top 45 companies in Indonesia are still low in reporting their environmental performance. The practical implication from this study, the authorized bodies should encourage the company by providing education and supervision on the implementation of existing regulations to increase the environmental disclosure.

**Keywords**: Environmental Disclosure, Environmental Performance, Company Size, Financial Performance, Good Corporate Governance.

#### INTRODUCTION

Today the public's need for information for their investment decisions has increased, not only in financial statements but also in relation to sustainability reports. Pratiwi and Chariri in their research stated that the growing demand for information gave rise to a new paradigm in the business world, which was previously profit oriented and shifted to three goals called Triple-P (3Ps) Bottom Line, namely Profit, Planet, and People. Elkington states that the basic pillars of the sustainability of a business are the universe or the environment (planet), society (people), and company profit (profit). Therefore, if a company wants its

business to grow and develop in a sustainable manner, the three basic pillars must be managed properly. By synergizing the 3Ps in business practices, business and corporate profits will grow sustainably in the long run.

The community needs information about the extent to which the company pay attention about social and environmental activities, so that the right of people to live safely and peacefully, employee welfare, and food consumption security can be fulfilled (Pratiwi & Chariri, 2013). Environmental disclosure is one of the processes used by companies to disclose information related to the company's activities and its effect on the social condition of society and its environment (Suratno, 2006). According to O'Donovan & Ghozali state that the many benefits companies will gain in social and environmental disclosure practices, including aligning social values, avoiding pressure from certain groups, enhancing corporate image and reputation, demonstrate managerial principles and demonstrate corporate social responsibility. But in fact, the rate the reporting of environmental responsibility by public companies in Indonesia is still low. This is evidenced by the initial survey of researchers on sustainability report published by the company LQ45 from 2012 until 2016.

From the search conducted, obtained 84 emitters whoever entered in the LQ45 index? Of the 84 emitters, only 10 emitters (11.9%) prepared the sustainability report for five consecutive years. This shows the company's low awareness to do environmental disclosure. For that researchers interested to examine the factors that affect the environmental disclosure.

Factors influencing the company in conducting environmental disclosure based on previous research include corporate governance (Winarsih, 2015), company size (Arifianata, 2016), financial performance (Hamdani, 2013), and environmental management system (Kumalasari, 2016). But from the research there are inconsistent results. Kumalasari (Kumalasari, 2016) explains that company size has no effect on environmental disclosure. While research conducted by Van. De Burgwal & Muzzammil shows that the influence of corporate size on environmental disclosure. Aulia & Agustina obtained the results of the study that profitability which is a measurement of financial performance has a significant influence on environmental disclosure. In contrast to research conducted (Oktafianti, 2015) showed the result that there is a negative effect on environmental disclosure. Other than that (Pratama, 2013) found results that environmental performance did not affect the disclosure of the environment. While, Galani, 2012 shows environmental management system has a positive effect on environmental disclosure.

## LITERATURE REVIEW

## **Grand Theory**

Grand Theory in this research is legitimacy theory and stakeholder theory (Ghozali, 2002) reveals the definition of theory of legitimacy as a condition or status that exists when a company's value system is in line with a larger social value system where the company is a part. The future of the company will be threatened if there is a difference between corporate values and values in society.

Stakeholder theory says that a company is not an entity that only operates for its own sake, but must benefit its stakeholders (investors, communities, governments, creditors, etc.) The company must also demonstrate the usefulness of its existence in order to always run in tandem with stakeholders.

# **Hypothesis Development**

Company size is a variable that can explain the quantity of disclosure in the company's annual report Based on the theory of legitimacy, large companies will more and more activity, the greater the impact caused by its activity. These impacts will draw the public's attention. As a result of the attention from the public, big companies get greater public pressure than small companies. The existence of public pressure and attention through mass media, public opinion as well as government causes large companies to disclose more information about the environment (Galani, 2012). Arifianata & Wahyudin found that firm size had a positive effect on environmental disclosure.

#### H1 Company size has positive effect on environmental disclosure.

Based on research conducted O'Donovan states that based on the theory of legitimacy, companies that have high financial performance assume no longer need to disclose additional information, such as environmental disclosure information. This is because it has got a good legitimate from the stakeholders by having a high financial work. Conversely, when the level of financial performance is low, the company expects the users of the report to read the "good news" of the company's performance, such as social scope. Thus investors will continue to invest in the company.

Oktafianti & Rizki found that the financial performance measured using profitablity negatively affects environmental disclosure.

## H2 Financial performance negatively affects environmental disclosure

Social disclosure of the environment can be used as a means of notifying the company's environmental performance to stakeholders, especially to investors or owners. Stakeholders will tend to choose companies that have good environmental performance in determining investment decisions. So one of the stakeholder needs will be the environmental performance information undertaken by the company will be fulfilled through environmental disclosure.

Nugraha and Juliarto found that environmental performance has a positive effect on environmental disclosure.

## H3 Environmental Performance positively affects environmental disclosure

One of the goals of good corporate governance is to increase stakeholders' trust in the company. If the company has been running good corporate governance then it will gain more trust from its stakeholders because the company is able to be responsible for all its operations activities, especially in this case is the responsibility of the environment. Large-size companies have substantial funds to carry out all activities that are the responsibility of the company so that the role of good corporate governance is required so that the company can manage the funds for various purposes including environmental disclosure in its annual report.

Arifianata and Wahyudin prove that good corporate governance moderates the effect of firm size on environmental disclosure.

H4 Mechanism of good corporate governance strengthening the influence of company size on environmental disclosure.

Corporate governance is deemed capable of managing all forms of activities undertaken by the company through the oversight function of the company's performance. One of them is financial performance. With the function of supervision is done effectively will improve the financial performance of a company.

Stakeholder also believes that companies that implement good corporate governance will have a good impact on the level of return earned if investors remain invested in the company. Companies that have high financial performance and good corporate governance apply no longer need to disclose additional information because without disclosing the company's environmental disclosure information has received a good image in the eyes of the stakeholders.

H5 Good corporate governance mechanisms strengthen the impact of financial performance on environmental disclosure.

Stakeholders assume that companies that implement good corporate governance will also encourage environmental disclosure. This is because corporate governance is deemed capable to manage all forms of activities undertaken by the company through the function of supervision on the performance of the company. One of them is environmental performance. With such an effective supervisory function, it will improve a company's environmental performance, thereby increasing the awareness of the company to expand its environmental disclosure information as managers are also aware that by disclosing environmental performance can increase stakeholder confidence in the company.

H6 Good corporate governance mechanism strengthens environmental performance impact on environmental disclosure.

#### RESEARCH METHOD

The population in this study are 89 companies that have entered LQ45 listed on the BEI in 2011-2016. The sampling technique used is purposive sampling based on certain criteria that produce sample of 23 companies, so the unit of analysis in this study amounted to 138 units of analysis.

Based on the framework of thinking, this research has five variables, including environmental disclosure, company size, financial performance, environmental performance, and good corporate governance. Variable ED is one of the processes used by companies to reveal information related to company activity and its influence on social condition of society and its environment. ED was measured using the number of environmental disclosure scores made by the company on the GRI G4 disclosure item (Ariningtika & Kiswara, 2013)

This study uses total assets, sales, and market capitalization to measure firm size as used by previous research such as (Arifianata, 2016; Hamdani, 2013). Financial performance is measured using ROE, DER, and QR (Kumalasari, 2016). Environmental performance was measured using PROPER ratings and ISO 14001 certificates as conducted in previous studies such as (Kumalasari, 2016; Aulia & Agustina, 2015). While the variable of good corporate governance is measured by using the number of boards of commissioners, the number of board of commissioners meeting, the size of the audit committee, and the number of audit committee meetings. This study uses data analysis methods SEM (Structural Equation Modeling) based Partial Least Square (PLS). PLS is a powerful analytical method because it is not based on many assumptions.

#### **RESULT**

Descriptive statistics provide an overview of data and variables that include mean, standard deviation, variance, maximum value, and minimum value. Descriptive statistical test results can be observed in Table 1.

Table 1 STATISTIC DESCRIPTIVE					
Variables/Indicators	Mean	Min	Max	Stand. Dev	
Environmental Disclosure					
Material	1.029	0	2	0.924	
Energy	2.246	0	5	2.06	
Water	1.145	0	3	1.26	
Biodiversity	1.507	0	4	1.647	
Emission	2.08	0	7	2.64	
Effluents and Waste	1.899	0	5	2.03	
Products and Services	0.667	0	2	0.896	
Obedience	0.326	0	1	0.469	
Transportation	0.145	0	1	0.352	
Etc	0.261	0	1	0.439	
Supplier Environmental Assessment	0.254	0	2	0.603	
Complaints Mechanism for the Environment	0.145	0	1	0.352	
Company Size					
Total Aset	696 T	1 T	9.182 T	2.069 T	
Sales	33 T	1 T	194 T	40 T	
Market Capital	66 T	0.7 T	445 T	92 T	
Financial Performance					
ROE	1.743	- 0.568	1.358	0.277	
Quick Ratio	1.496	0.123	8.67	14.57	
Debt to Equity Ratio	1.081	0.401	5.255	0.981	
Environmental Performance					
PROPER	3.145	2	5	0.654	
ISO	0.609	0	1	0.488	
GCG					
Number of Board of Commissioners	5.754	2	11	1.756	
Number of Board of Commissioners Meetings	6.754	1	26	4.535	
Number of Audit Committees	3.399	3	7	0.728	
Number of Audit Committee Meetings	11.159	2	59	11.834	

Table 1 indicates that environmental disclosure in Indonesia is still low. According to GRI version 4, there are 12 environmental disclosure aspects, only disclosure in the aspects of the materials used in the production process (BA) that has been well disclosed.

Meanwhile, disclosure of other aspects such as the Environmental Complaints Mechanism, Supplier Assessment of the Environment and Transportation still needs to be improved. This data shows that the company's awareness of environmental disclosure needs to be increased.

Before conducting a structural test it first assesses the validity of the indicator by seeing outer loading (above 0.50) and the construct reliability (0.70) for the reflective indicator (see Table 2).

Table 2

TEST OF VALIDITY AND RELIABILITY					
Variables	indicator	Validity Outer Loading	Reability Composite Reliability		
Good Corporate Governance (GCG)	JK	0.681			
	RK1	0.839	0.845		
	RKA	0.88			

In this study all formative indicators contained in the Environmental Disclosure, Company Size, Financial Performance, and Environmental Performance variables are declared valid because they have a T-Statistic value> 1.29 (see Table 3).

Table 3 SIGNIFICANT OF WEIGHTS						
Variables	indicator	<b>Original Sample</b>	T-statistics			
Environmental Disclosure	EF	0.211	1,332			
	EM	0.547	1.974			
	ENE	0.391	1,690			
	TR	-0.378	1.666			
	PENG	0.407	1.932			
Company Size	TA	0,000	-			
Financial Performance	ROE	0,000	-			
Environmental Performance	ISO	0.393	1.505			
	PRO	0.828	4,156			

Table 4 shows a summary of the results of hypothesis testing with an analysis path for both direct effects and moderation effects.

	Table 4 SUMMARY OF HYPOTHESIS TEST RESULTS						
Hypothesis Statement		Original Sample	P-value	Results			
H1	Company size has positive and significant effect to environmental disclosure.	0.325	0.017 *	Accepted			
H2	Financial performance has a negative and significant effect on environmental disclosure.	-0.2	0.043 *	Accepted			
Н3	Environmental performance has positive and significant effect on environmental disclosure.	0.342	0.000 *	Accepted			
H4	Good corporate governance moderate positive influence size company against environmental disclosure	-0.105	0.079	Rejected			
Н5	Good corporate governance moderates positively the influence of financial performance on environmental disclosure.	-0.096	0.275	Rejected			
Н6	Good corporate governance moderates positively the influence of environmental performance on environmental disclosure.	-0.072	0.166	Rejected			

In this study there are six hypotheses, three of them received and three others rejected.

# **DISCUSSIONS**

The Effect of Company Size on Environmental Disclosure

Company size has a significant positive effect on environmental disclosure. Company size is a variable that can explain the quantity of disclosure in the company's annual report Based on the theory of legitimacy, large companies will more and more activity, the greater the impact caused by its activity. These impacts will draw the public's attention. As a result of the attention from the public, big companies get greater public pressure than small companies. The existence of public pressure and attention through mass media, public opinion as well as government causes large companies to disclose more information about the environment (Galani, 2012). Arifianata & Wahyudin found that firm size had a positive effect on environmenal disclosure.

#### The Effect of Financial Performance on Environmental Disclosure

The results showed that financial performance has a negative effect on environmental disclosure. This means that if the financial performance of the company LQ45 it will be narrow level of corporate disclosure conducted by the company. It supports the theory of legitimacy (O'Donovan, 2002) which states that firms with high financial performance assume no more need to disclose additional information, such as environmental disclosure information. This is because it has got a good legitimate from the stakeholders by having a high financial work. Conversely, when the level of financial performance is low, the company expects the users of the report to read the "good news" of the company's performance, such as social scope. Thus investors will continue to invest in the company.

Oktafianti & Rizki found that the financial performance measured using profitability negatively affects environmental disclosure.

#### Effect of Environmental Performance on Environmental Disclosure

Environmental performance has a positive influence on environmental disclosure. Social disclosure of the environment can be used as a means of notifying the company's environmental performance to stakeholders, especially to investors or owners. Stakeholders will tend to choose companies that have good environmental performance in determining investment decisions. So one of the stakeholder needs will be the environmental performance information undertaken by the company will be fulfilled through environmental disclosure.

Nugraha & Juliarto (2015); Fontana et al., (2015) found that environmental performance has a positive effect on environmental disclosure.

# The Effect of Company Size on Environmental Disclosure Which is Moderated By Good Corporate Governance Mechanism

The results show Good corporate governance can weaken the effect of firm size on environmental disclosure. Large companies will have more complex financial statements, so it is possible that the presence of board of commissioners, board of commissioners, audit committees, and audit committee meetings as a Good Corporate Governance (GCG) mechanism will focus more on improving the quality of financial statements to comply with the standards accepting mandatory general accounting. While the environmental disclosure information is less the focus of board of commissioners, board of commissioners was meeting, audit committee, and voluntary audit committee meeting.

# The Influence of Financial Performance on Environmental Disclosure Moderated by Good Corporate Governance Mechanism

Good corporate governance cannot be a determinant to strengthen or weaken the impact of financial performance on environmental disclosure as described by stakeholder theory. The result of this research is possible because companies that become object research apply good corporate governance which proxy with the number of board of commissioner, board of commissioner meeting, audit committee number, and audit committee meeting only limited to fulfill the obligation of regulation, not because awareness of company.

# The Influence of Environmental Performance on Environmental Disclosure Moderated By Good Corporate Governance Mechanism

Good corporate governance mechanisms are not able to moderate the influence of environmental performance to environmental disclosure. Environmental performance to environmental disclosure so H5 is rejected. The results are allegedly caused by the company's implementation of good corporate governance proxyed by the number of boards of commissioners, board of commissioners meeting, the number of audit committees, and audit committee meetings only to fulfil the applicable regulatory obligations, not because of the awareness of the company itself. Based on research data, many companies have a minimum number of audit committees of the required number in the study, ie three. The results of this study have not been able to prove the theory of stakeholders who are believed that gcg will increase awareness and corporate social responsibility to the community and environmental sustainability around the company so as to maintain long-term business sustainability and reduce the problem between the company and stakeholders.

#### **CONCLUSION**

Measuring environmental performance uses 2 indicators, namely environmental performance rating organized by the government of the environment ministry called PROPER and ISO 14001 certificates related to environmental management. Companies will be given a score of 5 to 1. The meanings of the scores from best to worst are as follows: A score of 5 for a gold rank, 4 for a green rank, 3 for a blue rank, 2 for a red rank, and 1 for a black rank. The PROPER score shows an average value of 3.145 and belongs to the blue rank group. This means that the company has made environmental management efforts that are required by the prevailing laws and regulations. Meanwhile, environmental performance measurement uses an ISO certificate with a score of 1 for companies that have ISO certificates and a score of 0 for companies that do not have ISO certificates. Of the companies studied, as many as 138 units of analysis, 84 units of analysis have ISO 14001 certificates, while 54 units of analysis do not have ISO certificates related to environmental management.

The conclusion of this research is firm size and environmental performance have positive effect to environmental disclosure while financial performance have negative effect to environmental disclosure. Good corporate governance is able to weaken the effect of company size on environmental disclosure but has not been able to strengthen and weaken the influence of financial performance and environmental performance against environmental disclosure.

For corporate management, it is necessary to improve environmental disclosure in several aspects, including energy, water, biodiversity, emissions, effluent and waste aspects, products and services, compliance, transportation, etc., the supplier's assessment of the environment, as well as the complaints mechanism on the environment annual report and sustainability report. Subsequent research is suggested to add other measurements on

financial performance variables, such as profit margin, Return On Investment (ROI), and Price Earnings Ratio (PER).

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