Influence of board commissioners size, managerial ownership, and profitability toward environmental disclosure on website

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#### Abstract

The purpose of this research is to examine the influence of the size of a board of commissioners, managerial ownership and profitability towards environmental disclosure on the website. Companies generally disclose CSR activities in annual reports or ongoing reports; this study will empirically test the investors' response to the CSR information disclosed on the website. This study utilizes data from 101 manufacturing companies listed on the Indonesia Stock Exchange for the year 2015. Board of commissioners size is measured by the number of board of commissioners in the company; managerial ownership is measured by the percentage of management share of ownership, profitability is measured by ROA, and environmental disclosure is measured by Environmental Disclosure Index. The results of this study show that board of commissioners size and profitability significantly influenced environmental disclosure on the website while managerial ownership has no influence on environmental disclosure on the website. The results of this study can be used by management as a reference when making decicions about company environmental disclosure on website.

Keywords: board of commissioners size, environmental disclosure, managerial ownerships, profitability, website

# 1. Research Background

Today, the concerns of industry's survival and social responsibility have been increased in several industries in many countries. Companies should realize that CSR in developing capital market are responded to by investors (Arya and Zhang, 2009). At the same time, stakeholders (customers, labor and creditors) also respond to CSR disclosure made by the company (Dhaliwal et al., 2011; Francis, Khurana, and Pereira, 2005).

Effective communication regarding a company's CSR is a very important thing (Hilson and Murck, 2000). Communications can be achieved through several forms of media; one of them is through the website. The website can be used as a form of media to disclose information about environmental responsibility to stakeholders. Disclosure through the website can be done rapidly and is easier to access.

Coller and Gregory (1999) stated that the greater the number of the board of commissioners members, the easier it becomes for the CEO to undertake controlling and monitoring, and it will be more effective. If environmental disclosure is occurring, then the pressure of providing environmental disclosure will be greater for management. Siregar and Bachtiar (2010) also stated that the greater the size of board of commissioners the greater will be amount of disclosure. Studies by Tarmizi (2012) and Suttipun and Stanton (2012) support the relationship between managerial ownership and company's environmental disclosure. The studies state that the higher the managerial ownership, the higher the environmental disclosure. A study by Joshi and Gao (2009) found that a significant effect of profitability towards a company's environmental disclosure. Conversely studies by Suttipun and Stanton (2012) and Saleh Al Arussi et al. (2009) stated that profitability has no effect towards a company's environmental disclosure.

Companies generally disclose CSR activities in the annual report or sustainability report (Reverte, 2009). This study will empirically examine investors' response towards CSR information that is revealed in the company's website. Furthermore, this article will present a literature review, research methods, results and discussion. The literature review will discuss theories regarding the importance of company size, board of commissioner size, managerial ownership and profitability towards environmental disclosure on a company's website. Research methods will explain the approach used, operational definition and the measurement of variables used in this study. Research methods also shows the research hypotheses, and the results pwill shows the statistical results of the hypothesis testing along with the interpretations. The last part will discuss the results and its implications.

## 2. Literature Review

Agency theory predicts that conflicts arise because of the ownership separation and control of the company, with the owner of the company wanting assurances that the equity owned is not abused or even taken over by management. On the other hand, to reduce unwanted things, management voluntarily perform some action such as disclosure. Management must provide and reveal enough information to minimize the agency gap and to strengthen the company's market (Richardson and Welker, 2001).

Coller and Gregory (1999) stated that the greater the number of the board of commissioners members, the easier it is for CEO to do the controlling and monitoring and it will be more effective. If associated with environmental disclosure, then the pressure of providing environmental

disclosure will be greater for management. Veronica Siregar and Bachtiar (2010) also state that the greater the size of the board of commissioners, the greater the company's social and environmental disclosure.

H1: The size of the Board of Commissioners affects environmental disclosure on the company's website.

Management with low company's stock percentage will focus on their own interests which are to expand the company. Management will disclose environmental information in order to increase the company's reputation. A study by Tarmizi (2012) also supports the relationship between managerial ownership and company's environmental disclosure. The study states that the higher the managerial ownership, the higher the responsibility of environmental disclosure.

H2: Managerial ownership affects environmental disclosure on the company's website.

Previous studies proved that profitability significantly affects environmental disclosure. Joshi and Gao (2009) found that profitability significantly affects a company's social and environmental disclosure. Parsa and Kouhy (2001) in Joshi and Gao (2009) claim that companies with high a profitability level use environmental disclosure to dispel public concern over shortages that exist within the company so that the public is focused on the image of a company with good prospects in the future. However companies with low profitability will focus more on the improvement of their economic performance and are less likely to pay attention to the environment. Ahmed et al. (2002) stated that companies with higher profitability levels tend to reveal more environmental information compared to companies with low profitability because management wished to display achievements of the company to the public. This is done to maintain the company's position or to draw the public's attention.

H3: Profitability affects environmental disclosure on company's website.

### 3. Research Method

Data were obtained by collecting information from the annual reports published by the Indonesia stock exchange. Sample selection in this study was carried out using the *purposive* sampling method, with 101 sample data of companies that met the criteria specified.

Independent variables used in this study are the size of the Board of Commissioners, managerial ownership and profitability. The dependent variable used in this study is the disclosure environment on company's website. Variable control used is the size of the company.

The environmental disclosure emphasized is the environmental information that is disclosed on the website of each company. The measurement of these variables is the standard disclosure environment on the Global Reporting Initiative (GRI) 3.1. The environmental disclosure index according to the GRI 3.1 is measured through 8 dimensions including materials; energy; water; biodiversity; emissions, effluents and waste; products and services; transport; and compliance. This research will give a value of 1 if the company discloses environmental information on the website, others 0. And then, the percentage of disclosure index will be calculated:

$$ED \ index = \frac{\sum EDit}{\sum EDGRI} \times 100 \% \tag{1}$$

EDIndex = dependent variable index of environmental disclosure on company's website.

EDit = the amount of environmental disclosure provided by the company on their website, 1 if disclosed, 0 for others.

EDGRI = the total of environmental disclosure index that is supposed to be reported according to GRI.

The size of the board of commissioners in this study is measured by the proportion of the board of commissioners owned by the company.

The managerial ownership measures by dividing the amount of stocks owned by management (board of commissioners and board of directors) by total stocks owned by the company.

$$KM = \frac{\text{the amount of stocks owned by management}}{\text{total stocks}} \times 100\%$$
 (3)

Profitability measured by Return on Asset as follows:

$$ROA = \frac{Earnings\ after\ tax}{Total\ Asset} \tag{4}$$

The size of company is determined by the company's total asset and is measured by the natural logarithm of total asset.

$$SIZE = Ln(total \ asset) \tag{5}$$

This study also use multiple linear regression. The regression model used for examining hypothesis formulating is as follows:

$$ED = \alpha + \beta 1KOM + \beta 2KM + \beta 3ROA + \beta 4SIZE + e$$
 (6)

Legend:

EDIndex = Environmental Information Disclosure On Company's Website

KOM = the Size of Board of Commissioners

KM = Managerial Ownership

ROA = Profitability

SIZE = Size of the Company

 $\beta$ 1-4 = Coefficients Of Regression

 $\alpha$  = Constant

e = Degrees of Fault/Error

4. Results and Discussion

# 4.1 Results

Table 1 presents the descriptive statistics of the variables used in the study. Based on this table, the minimum value of environmental disclosure on the company's website, which is the independent variable, is 0.00000. The maximum value is 0.62500 owned by Unilever Indonesia

Tbk in 2015. The average environmental disclosure on the company's website is 0.1336634 with a standard deviation of 0.16701181which shows the level of ED data distribution has 124.95% of level variation.

Based on Table 1, the size of the company has a minimum value of 25.32401 owned by Primarindo Asia Infrastructure, whereas the maximum value is 33.13405 owned by Astra International Tbk. The average size of a company is 28.2243031 with a standard deviation of 1.57796417. The size of the Board of Commissioners with a minimum value of 2 members are owned by Beton Jaya Manunggal Tbk, Ekadharma International Tbk, Champion Pasific Indonesia Tbk, Impack Pratama Industri Tbk, Tirta Mahakam Resources Tbk, Alkindo Naratama Tbk, Dwi Aneka Jaya Kemasindo Tbk, Kertas Basuki Rachmat Indonesia Tbk, Ateliers Mecaniques D'Indonesie Tbk, Garuda Metalindo Tbk, Star Petrochem Tbk, Nusantara Inti Corpora Tbk, Siantar Top Tbk, Chitose International Tbk, and Langgeng Makmur Industri Tbk. The value of the maximum of 11 members is owned by Astra International Tbk. For the whole company, which is used as the research sample, the average size of the Board of Commissioners is 3.9801980 with a standard deviation of 1.7662400.

Managerial ownership has the minimum value of 0.00000 and a maximum value of 73.91378 owned by Saranacentral Bajatama Tbk. The average managerial ownership is 3.1227721 with a standard deviation of 9.32952957. Profitability has the minimum value of -21.99476 owned by Dwi Aneka Jaya Kemasindo Tbk, whereas the maximum value of 37.20169 is owned by Unilever Indonesis Tbk. The average size of profitability is 4.9959959 with a standard deviation of 9.22855008. Due to the level of variable variation > 100%, then it can be inferred that the data is heterogeneous.

Table 1: Statistics Descriptive

Variabel	Mean	Standard deviation	Min	Max
ED	0.1336634	0.16701181	0.00000	0.62500
SIZE	28.2243031	1.57796417	25.32401	33.13405
KOM	3.9801980	1.76624006	2.00000	11.00000
KM	3.1227721	9.32952957	0.00000	73.91378
ROA	4.9959959	9.22855008	-21.9947	37.20169

Source: Data proceeded, 2017

Table 2 presents the results of the coefficient determination test. Based on the table, the value of adjusted R Square is 0.363. This indicates that the size of the company, the size of the Board of Commissioners, managerial ownership and profitability variable are simultaneously able to predict environmental disclosure on the company's website by 36.3%, while the rest amounted to 63.7% predicted by other variables that are not used in research

Table 2: Coefficient Determination Test

Model	R	R Square	Adjusted R Square
1	0.625 <sup>a</sup>	0.391	0.363

Source: Data proceeded, 2017

The results of multiple linear regression test are presented in Table 3. The hypotheses can be tested from this table.

Table 3: Result of Multiple Analysis Regression

Model	Unstandardized Coefficients		t	Sig.
	В	Std. Error		
(Constant)	-0.808	0.268	-3.019	0.003
SIZE	0.029	0.010	2.790	0.006
KOM	0.023	0.009	2.456	0.016
KM	-0.001	0.009	0.543	0.588
ROA	0.004	0.001	3.367	0.001

Source: Data proceeded 2017

Hypothesis 1 which states that the size of the Board of Commissioners affects environmental disclosure on the company's website is supported. This is shown by the results of the statistical test with a t value of 2.456, and the value of significance is 0.016 < 0.05. The larger the size of the Board of Commissioners then the more extensive the disclosure of corporate environment.

Hypothesis 2 which states that managerial ownership affects environmental disclosure on the company's website is not supported. This is shown by the results of the statistical test with a t value of 0.543 and the significance value of 0.588 > 0.05 significant level.

Hypothesis 3 which states that the profitability affects environmental disclosures on the company's website is supported. This is shown from the results of the statistical test with a t value of 3.367 and the value of significance is 0.001 < 0.05 significant level. The higher the profitability then the more extensive the disclosure of corporate environment will be.

## 4.2 Discussion

The results showed that the size of the Board of Commissioners in a company can affect environmental disclosure on the company's website. The Board of Commissioners is considered as the highest internal control mechanism, which is responsible for monitoring the actions of top management. Associated with disclosure of corporate environment, then the pressure on management will also increase on revealing it. Jensen and Meckling (1976) also revealed that the greater the number of people who monitor actions, the greater the decrease of occurrences of conflict and this will eventually lower the agency cost. These results are in accordance with research done by Siregar and Bachtiar (2010) which states that the greater the number of Board

members, the easier the supervision will be and this affects the disclosure of environmental the company.

The results showed that the managerial ownership has no effect on the environmental disclosure. Absence of influence between the managerial ownership happens because the statistical average of company's managerial stock ownership in Indonesia is relatively small, only around 3.12% so there's no conformity of interest between owners and managers at this time. The small managerial ownership make managers incapable of maximizing the value of the company through the disclosure of environmental information. This is compatible with the results of the research conducted by Huafang and Jianguo (2007), which states that managerial ownership has no effect on the disclosure of corporate social responsibility because the proportion of managerial is still too little. Research conducted by Said et al. (2009) also has the same results.

Companies with high profitability tend to reveal more environmental information. This information is used to support the continuity of the company's position, because the lack of disclosure of company's environmental information is a bad signal coming from the company. This result is also in accordance with signaling theory, which reveals that the company should give a signal to the parties concerned. The signal given can be information about what has been done by management, of which one is information about disclosure of corporate environment which can be seen through the company's website. The results of this study are in accordance with the research done by Joshi and Gao (2009) stating that the company with a high profitability level uses social and environmental disclosure to dispel public concern over shortages in the company so that the public focus will divert onto the corporate image with good prospects in the future. However companies with low profitability will focus more on the improvement of their economic performance and ares less likely to pay attention to the environment.

#### 5. Conclusion

The results of this research using the 101 data of manufacturing companies listed on the Indonesia Stock Exchange for the year 2015 show that the size of the Board of Commissioners and profitability increase the environmental disclosure on the company's website, while the managerial ownership has no effect on environmental disclosure on the company's website. Implementation of environmental disclosure is very important as a form of corporate responsibility over environmental impacts resulting from the production process, especially the disclosure of environmental information through website, because it's easy to access and there's no time limit. Therefore, the companyies' attention is expected to continue increasing, as well as companies' more extensive performance of their environmental responsibilities are disclosed on their websites.

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