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Effect of Company Characteristics and Corporate Governance on the Quantity of Environmental Disclosure

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Abstract. The aim of this study is to examine the effect of companies' characteristics and corporate governance on the quantity of environmental disclosure. The population of this study was listed companies on the Australian Securities Exchange (ASX) in the year of 2017. This study used the top 100 companies on the ASX by the highest market capitalisation as samples. All companies included and represented on the ASX 100 index and used multiple regression analysis as analysis technique. The results indicates that company size, industrial type had a significant positive effect on environmental disclosure. This study also concludes that companies that fall into the category of sensitive industry disclose more environmental information than companies that fall into the category of non-sensitive industries. Furthermore, this finding can help regulators draft appropriate laws for the industry regarding specific environmental disclosure practices and conduct environmental performance assessments on companies, to assess the extent to which companies have been responsible for the environmental impacts caused by their operations.

1. Introduction

The recognition of social responsibility shows that the company recognizes the fragile relationship with the community [1]. For companies to be socially responsible, companies must always provide information to the public by conducting environmental disclosure. Previous studies by Ghomi & Leung [2], Barka & Dardour [3], Ohidoa, et al. [4], Gatimbu & Wabwire [5], Ezhilarasi & Kabra [6] and Wahyuningrum & Budihardjo [7] have identified company characteristics and good corporate governance regarding their effects on the environmental disclosure. The studies indicated the influence of company age, company size, industrial type, board size and gender on environmental disclosure with various result. In this study, the effect of those factors on environmental disclosure will be measured using company data of the 100 biggest companies listed on the Australian Securities Exchange (ASX) in 2017.

According to Munsaidah, Andini, & Supriyanto [8], the longer the company can survive, the greater the return on investment. The age of the company describes the length of time the company was established and carried out its business activities. Meanwhile, in stakeholder theory, large companies are more visible than small companies so that the demands and pressures from stakeholders and the community will be even greater. Luo, Lan, & Tang [9] stated that large companies will get great pressure from the public and stakeholders have high expectations regarding carbon management practices.

Industrial type is a characteristic that is owned by a company related to the line of business, business risk, company employees, and company environment. Companies that have a high level of industry sensitivity will receive more attention from the public and other interests because industrial activities have the potential to affect broad interests, in terms of economic, social and environmental [10]. On the other hand, the number of directors has an important role to oversee management performance. The relationship of board size with environmental disclosure is that the larger board has the experience and expertise needed to give advices environmental aspect [11]. According to Rupley, Brown, & Marshall [12] gender diversity in the council will be positively related to environmental disclosure. Women have better social sensitivity [13]. The proportion of women directors related is able to influence the company's environmental disclosure.

Refereeing to the above mentioned information, the following hypotheses are proposed:

H1: Company age has a significant positive effect on environmental disclosure.
H2: Company size has a significant positive effect on the environmental disclosure.
H3: Industrial type has a significant positive effect on the environmental disclosure.
H4: Board of director size has a significant positive effect on the environmental disclosure.
H5: Gender has a significant positive effect on environmental disclosure footprint.

2. Methodology

This study used a deductive approach and hypothesis testing to examine the influence of the variables hypothesized in the study. The population in this study was the top 100 companies by largest capitalization listed on the Australian Securities Exchange (ASX) in 2017. The dependent variable in this study was environmental disclosure while there were five independent variables, namely company age, company size, industrial type, board of director size, and gender (table 1). The multiple regression equation used in this study is shown in equation 1.

$$ED = \alpha + \beta 1AGE + \beta 2SIZE + \beta 3TYPE + \beta 4BS + \beta 5FD + \varepsilon \quad \ldots(1)$$

Table 1. Operational definitions of research variables

No	Variables	Definition	Measurement
1	Environmental Disclosure (ED)	Measuring Environmental Disclosure based on the number of items revealed.	Content Analysis using the GRI Standard 2016 environmental indicators
2	Company Age (AGE)	Measuring the age of the company based on the length of the month from the company established until the year of research.	Log n (Amount of Months)
3	Company Size (SIZE)	Measuring company size based on total assets owned by the company.	Log n (Total Asset)
4	Industrial Type (TYPE)	Industrial types based on sensitivity to the environment.	Sensitive company = 1 Non-sensitive company = 0
5	Board of Directors Size (BS)	Measuring the number of board of directors.	∑=Board of Directors

No	Variables	Definition	Measurement
6	Gender (FD)	The proportion of women on the board of directors.	= Number of women directors / number of directors

3. Results and discussion

3.1 Regression result

The ANOVA test indicates F count value of 9.191 with a probability of 0.000. The result indicates that AGE, SIZE, TYPE, BS and FD simultaneously influence ED.

$$ED = -0.553 - 0.108\ AGE + 0.397\ SIZE + 1.942\ TYPE + 0.046\ BS + 0.948\ FD + \varepsilon \quad \text{……….. (2)}$$

Table 2. ANOVA test results

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	103.580	5	20.716	9.191	.000[b]
1	Residual	211.878	94	2.254		
	Total	315.458	99			

Based on the hypothesis testing, the regression equation can be written shown in equation 2 while the results of hypothesis testing can be seen in table 3.

Table 3. Hypotheses testing

Hypothesis	B	Sig	Results
1. H1	-0.108	0.512	Rejected
2. H2	0.397	0.004	Accepted
3. H3	1.942	0.000	Accepted
4. H4	0.046	0.688	Rejected
5. H15	0.948	0.516	Rejected

3.2 Hypothesis discussion

3.2.1. The effect of company age on the environmental disclosure. The results show that the age of the company does not significantly influence the environmental disclosure variable and tends to have a negative direction. It can be interpreted that the age of the company does not affect the company's environmental disclosure efforts if the level of corporate awareness concerning the importance of environmental disclosure and the company's commitment to seek environmental disclosure is still lacking. Long established companies tend to gain legitimacy from the community by carrying out social responsibility (CSR) programs that really help the community, so the companies tend not to disclose environmental information [14].

3.2.2. The effect of company size on the environmental disclosure. This study demonstrates similar finding that is in line with stakeholder theory. The activities of large companies will be more visible compared to small companies [15]. This study is consistent with the results proposed by Burgwal & Vieira [10], Welbeck, et al. [16], and Gatimbu & Wabwire [5], who suggest that company size has a significantly positive effect on the environmental disclosure.

3.2.3. The effect of industrial type on the environmental disclosure. The results show that the type of industry has a significant positive effect on the environmental disclosure. Companies that have a greater negative impact on the environment will be given more attention by the community. This is due to its operational activities have the potential to affect nature. This research is in line with previous researches conducted by Burgwal & Vieira [10], Emre [17], Ohidoa et al. [4], and Wahyuningrum & Budihardjo [7], that suggest that the type of industry has a significant positive effect on environmental disclosure.

3.2.4. The effect of board of directors size on the environmental disclosure. It can be inferred that the board of director size does not significantly influence the environmental disclosure variable. The smaller board size can effectively monitor management because they are able to make unanimous decisions easily [18]. Guest [19] stated that companies with large board of director size will incur higher coordination costs leading to free riders problems.

3.2.5. The effect of gender on the environmental disclosure. The result of the study indicates that gender does not significantly influence on the environmental disclosure variable. This means that the proportion of women director board does not influence the company's decision to disclose the environment. The perspective that gender has an influence on the environmental disclosure has less evidence because that women directors can gain their position because of their skills and experience (background) not because of their gender or quota system [3].

4. Conclusions

This research is performed to find out the influence of the characteristics of the company and good corporate governance on the environmental disclosure of the companies listed on the Australian Stock Exchange for the year 2017. The findings indicates that only two of the five hypotheses are proved. The results of multiple regression analysis show that there is a positive influence between company size and industrial type on the environmental disclosure, while the age of the company, board of directors size and gender have the opposite results. However, this study cannot be generalized for all companies since it is only considered the companies listed in the ASX 100, where most of these companies are large companies. This means that the results of the study may not be generalized for all companies such as small and medium companies.

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