

# The Effect Environmental Performance, Environmental Disclosure, Firm Size, and Return on Equity on Economic Performance

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## Abstract

*This research aimed to examine the effect of environmental performance, environmental disclosure, firm size, and return on equity to the economic performance. The population in this study is a 35 non financial company listed on the Indonesia Stock Exchange. These results indicate that environmental performance (X1), environmental performance (X2), firm size (X3) return on equity (X4) positively influence on economic performance (Y).*

**Keywords:** economic performance; environmental performance; firm size; return on equity; environmental disclosure.

## 1. Introduction

Successful business strategies depend on the quality and comprehensiveness of information available to decision-makers. The practice of generating management information such as cost of sales is well established, and the systems employed to produce conventional management reports generally ensure timely availability of high-quality data to management. However, competitive advantage is gained by generating and capitalizing on business information not generally investigated by one's competitors. Comprehensive management information, including information on environmental costs and opportunities, can yield competitive advantage. Typically, environmental costs and associated opportunities are buried in various overhead accounts. By distorting costing and pricing across the business, this practice can result in poor investment and strategic decisions. The term "environmental accounting" is open to interpretation. In this guideline, environmental accounting is the identification, measurement and allocation of environmental costs, the integration of these environmental costs into business decisions, and the subsequent communication of the information to a company's stakeholders (Institute of Management Accountants, 1996). Ikhsan (Ikhsan, 2009) said that environmental issues direct or not, has been included in the economic performance of a business/activity or organization. Environmental Accounting can support national income accounting, ecological accounting at local administration level and at micro level related to financial accounting, cost accounting or internal business managerial accounting. Ferreira (Ferreira, Erasmus, & Groenewald, 2009) stated that the issue of environmental conservation is the duty of every individual, government and company. The company has an important role in creating a good and healthy environment. Similarly, Djajadiningrat (Djajadiningrat, Hendriani, Famiola, & Wisesa, 2011) said that the world business (company) must play an active role in redefining its operations in a sustainable direction, because without the intervention of the world business, the world as a whole will not be able to succeed in creating sustainable conditions. Therefore, the emphasis of the company's participation in realizing a healthy social and environmental conditions is good.

## 2. Overview Theory

### 2.1. The Effect of Environmental Performance on Economic Performance

The relationship between environmental and economic performance of firms is an important issue for environmental policy making. In the current discussion about this relationship, it is often argued that there is a conflict between competitiveness of firms and their environmental performance (Walley & Whitehead, 1994). For example, at the level of a specific industry, the share of environmental costs in total manufacturing costs might be considerably higher than average (Stavropoulos, Wall, & Xu, 2018). Particularly, this might be the case for industries upstream in the production chain (such as primary resource extraction or primary manufacturing), which have been shown to give rise to environmental impacts disproportionate to the value added associated with their production activities (Cliff & Wright, 2000). Only recently, the notion emerged that improved environmental performance is a potential source for competitive advantage as it can lead to more efficient processes, improvements in productivity, lower costs of compliance and new market opportunities (Porter, 1991; Porter & Linde, 1995), although this often refers to other aspects of environmental performance than those addressed and measured traditionally (Wehrmeyer & Tyteca, 1998). Therefore, the preceding arguments lead to the first hypothesis:

H1 = The environmental performance has influence on economic performance

### 2.2. The Effect of Environmental Disclosure on Economic Performance

Corporate Environmental Disclosure (CED) refers to "accountability to society as a whole with respect to matters of public interest such as community welfare, public safety, and the environment" (Mahmes, 2016; Radebaugh, Gray, & Black, 2006). To justify its continued existence, a company should be held accountable for its performance and actions that impact upon people, their communities and their environment (Arevalo & Aravind, 2011); to create a communication channel with

society and legitimise its behaviour and attitudes to society in which it operates (Deegan & Rankin, 1996). The relevance of environmental disclosure derives from the fact that the most of information on CED is financial and quantitative in nature, and it can have a direct impact on the financial and economic performance of the corporation (Marston & Shrivs, 1991). Therefore, it should be noted that environmental responsibility does not require the corporation to abandon its other main operations.

However, the economic performance of business enterprises is often considered in correlation with its social and environmental disclosure (Gerbens-Leenes, Moll, & Schoot Uiterkamp, 2003). Based on the explanation, the second hypothesis of this research is as follows:

H2 = The environmental disclosure has influence on economic performance

### 2.3. The Effect of Firm Size on Economic Performance

Big firms have more competitive power when compared to small firms in fields requiring competition. Since they have a bigger market share, big firms have the opportunity to profit more. In addition to this, big firms are able to seize the opportunity to work in the fields which require high capital rates since they have larger resources, and this situation provides them the opportunity to work in more profitable fields with little competition (Doğan, 2013). When the studies concerning the relation between firm size and profitability are reviewed, mixed results have been found present. Majumdar (MAJUMDAR, 1997) investigated the impact that firm size has on firm profitability and productivity with a sample of 1020 Indian firms. While controlling for other variables that may affect firm performance, the study provided evidence that larger firms are less productive but more profitable. Dogan have found a positive relation between firm size and profitability (Doğan, 2013). Based on the explanation, the third hypothesis of this research is as follows:

H3 = Firm Size has influence on economic performance

### 2.4. The Effect of Return On Equity on Economic Performance

Return on Equity is a commonly used analysis by investors and corporate leaders, to measure how much profit can be the right owner's own capital. For investors, the analysis of return on equity is important because the analysis can determine the benefits of the investments made (Purnamasari, 2015). For companies, this analysis is important because it is a pull factor for investors to invest. Return on equity is a measure of earnings (income) are available for the owners of the company (both ordinary shareholders and preferred shareholders) on the capital they invest in the company. In general, of course, the higher the return or income earned, the better the position of the owner of the company. Return on Equity shows the profitability of own capital or often referred to as the profitability of the business. This ratio is also influenced by the large-small enterprise debt, if the debt the greater proportion of this ratio will also increase. Based on the explanation, the fourth hypothesis of this research is as follows:

H4 = Return on equity has influence on economic performance

## 3. Research Methods

Non financial Indonesian companies listed on the Indonesian Stock Exchange (ISE) are the sample population of this study. The sample companies are selected based on some selection criteria. First, company must listed on the Indonesian Stock Exchange after 1 January 2012. Second, company not delisting during research. Third, company must publish their financial report audited during 2012-2014. Secondary data chosen as the source data, whereas the sources of the data indirectly obtained

through intermediary media (Ikhsan & others, 2014). There are many advantages in using secondary data since the data gathered are less expensive, faster, and easier to obtain compared primary data.

To analyze the data, we use some technical in classical assumption such as test of normality, multicollinearity, autocorrelation and heteroskedasticity. The result shows that model is normal and free from multicollinearity, autocorrelation and heteroskedasticity. To test hypothesis from H1 to H4, we use statistical multiple regression analysis. The multiple regression analysis model used in this study is shown in the following equation:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

## 4. Result and Discussion

### 4.1. Descriptive Analysis

The purpose of the variable description is to provide a brief overview of the research variables. Description of research variables described using the minimum, maximum, and mode of each variable. The minimum, maximum, and mode values of each variable are based on data from companies listed on the ISE during 2012-2014. Some of the variables in this study were measured using more than one indicator based on previous research and other relevant referential. Table 1 presents the results of research data processing that results in minimal, maximum, and mode values of the research variables.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Ecp (Y)	105	-.76082	1.45396	.0307221	.30018982
Enp (X1)	105	1.00000	5.00000	3.2666667	.82353211
End (X2)	105	.03333	.90000	.2965079	.29092184
Size (X3)	105	26.61265	32.03368	29.6061873	1.28446323
Roe (X4)	105	-.56844	1.25806	.1623671	.25740723
Valid N (listwise)	105				

Table 1. Descriptive Analysis

Source: Ouput SPSS

### 4.2. Multi Regression Analysis

The result of multiple regression analysis shows on the table 2.

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.580	.723		-.802	.424
	Enp (X1)	.004	.042	.011	.095	.925
	End (X2)	-.104	.117	-.101	-.892	.375
	Size (X3)	.020	.025	.086	.799	.426
	Roe (X4)	.205	.122	.176	1.684	.095

a. Dependent Variable: Ecp (Y)

Table 2. Multiple Regression Analysis Test

Source: Ouput SPSS

The result of the test multiple regression analysis in table 2 concludes accepted hypothesis 1 (H1). Therefore, we conclude that environmental performance (X1) positively influence on economic performance (Y). This is consistent with the result obtained (Al-Tuwaijri, Christensen, & Hughes, 2004), (Heriningsih & Saputri, 2015) and not consistent with (Sarumpaet, 2006), (Almilia & Dwi, 2007) finding. The result of the hypothesis 2 (H2) in table 2 conclude accepted hypothesis 2 (H2). Therefore, we conclude that environmental performance (X2) positively influence on economic performance (Y). This is consistent with the result obtained (Lindrianasari, 2007) and not consistent with Almilia finding (Almilia & Dwi, 2007). The result of the hypothesis 3 (H3) in table 2 conclude accepted hypothesis 3 (H3). Therefore, we conclude that firm size (X3) positively influence on economic performance (Y). This is consistent with the result obtained Fachrudin (2011) and not

consistent Sunarko result (Sunarko, Saptantinah, & Astuti, 2012) and also Hasnawati finding (Hasnawati & Sawir, 2015). The result of the hypothesis 4 (H4) in table 2 conclude accepted hypothesis 4 (H4). Therefore, we conclude that return on equity (X4) positively influence on economic performance (Y). This is consistent with the result obtained Herdiana (Herdiana, 2003) and not consistent with Hutami and Carlo finding (Carlo, n.d.; Hutami, 2012).

ANOVA <sup>b</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.478	4	.119	1.343	.260 <sup>a</sup>
	Residual	8.894	100	.089		
	Total	9.372	104			

a. Predictors: (Constant), Roe (X4), End (X2), Size (X3), Enp (X1)  
b. Dependent Variable: Ecp (Y)

Table 3. F test  
Source: Ouput SPSS

Table 3 shows F-test value are 1.343 with F probability are 0.260, this value more than  $\alpha$  5% (0.05), it means all the variables not affected as significant between *environmental performance, environmental disclosure, firm size, and return on equity on economic performance*.

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.226 <sup>a</sup>	.051	.013	.29823190

a. Predictors: (Constant), Roe (X4), End (X2), Size (X3), Enp (X1)  
b. Dependent Variable: Ecp (Y)

Table 4. Coefficient Determination Test  
Source: Ouput SPSS

In Table 4, the coefficient determination test indicates that adjusted *R square* values are 0.013, which means that the variation rate of the dependent variables can be explained by the independent variables are 1.3%. While the rest 98.7% is explained by other variables outside the proposed model.

## 5. Conclusion

With the general objective to identify characteristics related to economic performance. First, we conclude that environmental performance (X1) positively influence on economic performance (Y). Second, we conclude that environmental performance (X2) positively influence on economic performance (Y). Third, we conclude that firm size (X3) positively influence on economic performance (Y). Fourth, we conclude that return on equity (X4) positively influence on economic performance (Y).

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