Variables Affected on Economic Performance

Darwin Lie¹, Arfan Ikhsan ², Jubi¹, Andy Inrawan¹ and Hendra Harmain²
{darwinlie@gmail.com, jubi@gmail.com, andyinrawan@gmail.com, hendraharmain@gmail.com}

¹STIE Sultan Agung, Indonesia
²Universitas Negeri Medan, Indonesia
³Universitas Islam Negeri Sumatera Utara, Indonesia
⁴Universitas Islam Negeri Sumatera Utara, Indonesia

Abstract: This research aimed to examined some variables affected on economic performance. The variables consist of environmental disclosure (ED), firm size (FS), return on equity (ROE). The population in this research is a 35 non financial company listed on the Indonesian Stock Exchange (ISE). The results conclude that environmental performance (EP), environmental disclosure (ED), firm size (FS), return on equity (ROE) positively influence on economic performance (EcP).

Keywords: economic, environmental, firm, disclosure.

1. Introduction

The company's success strategy depends on the quality and integration of information available to decision makers. The way to produce management information such as costs of sales is well established, and the systems employed to produce conventional management reports generally ensure timely availability of high-quality data to management. Economic systems based on competition not only realize high allocation efficiency, that is efficiency related to the most effective combination of labor production factors, basic capital. The superiority of the competition system is mainly seen when viewed dynamically as a driver of economic development. 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. (Ikhsan, 2010, p. 5) said that environmental issues direct or not, has been included in the economic performance of a business/activity or organization. (Ferreira, Erasmus and Groenewald, 2004) 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, 2014) 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 Teori

2.1 The Effect EP on EcP

The relationship between EP and EcP of firms is an important issue for environmental policy making. (Walley and Whitehead, 1994) stated in the context this relationship, it is often
stated that there is a conflict between competitiveness of firms and their EP. For example, according to the (Luken, 1997) at the level of a certain industry, the share of environmental costs (EC) in total manufacturing costs might be considerably higher than average. (Clift and Wright, 2000) stated particularly this might be the case for industries upstream in the production chain (such as primary resource extraction or primary manufacturing), which has been proven to cause environmental impacts that are not proportional to the value added associated with their production activities. (Porter, 1991; Porter and Van der Linde, 1995) and Schmidheiny (1992) stated only recently, the idea of increasing environmental performance is a potential source of competitive advantage because it can lead to more efficient processes, increased productivity, lower compliance costs and new market opportunities, although this often refers to other aspects of EP than those addressed and measured traditionally (Wehrmeyer and Tyteca, 1998). Therefore, the preceding arguments lead to the first hypothesis:

\[ H_1 = \text{The EP has influence on EcP} \]

### 2.2 The Effect of ED on EcP

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" (Radebauh and Gray, 2002; Mahmes, 2016). According to (Arevalo and Aravind, 2011) to justify its continued existence, a firm should be held accountable for its performance and actions that impact upon people, their communities and their environment; to create a channel of communication with the community and legitimize its behavior and attitude towards the community in which it operates (Deegan and Rankin, 1996). The relevance of ED 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 EcP of the corporation (Marston and Shrives, 1991). Therefore, it should be noted that the environment responsibility does not require the company to abandon other main operations. According to (Gerbens-Leenes, Moll and Schoot Uiterkamp, 2003) however, the ECP of business enterprises is often considered in correlation with its social and ED. Based on the explanation, the second hypothesis of this research is as follows:

\[ H_2 = \text{The ED has influence on EcP} \]

### 2.3 The Effect of FS on EcP

According to Bayyurt (2007) and (Doğan, 2013) big companies have more competitive strength compared to smaller companies in fields that require competition. Because they have a larger market share, big companies have more profit opportunities. In addition, big companies can take advantage of opportunities to work in fields that require high levels of capital because they have more resources, and this situation gives them the opportunity to work in more profitable fields with little competition. When the studies focus the relation between FS and profitability are reviewed, mixed results have been found present. (Majmudar, 1997) found the impact that FS has on firm probability and productivity with a sample of 1020 Indian firms. While controlling for other variables that may affect firm performance, the study found evidence that bigger firms are less productive but more profitable. (Doğan, 2013) stated some result previous research (like Hall and Weiss, 1967; Fiegenbaum and Karnani, 1991; (Majmudar, 1997); Özgülbahş et al. 2006; Jonsson, 2007; Serrasqueiro and Nunes 2008; Lee, 2009; Stierwald, 2009; Karadeniz and Iskenderoğlu, 2011; Salih and Abdessatar, 2011; Akbaş and Karaduman, 2012; Shubita and Alsawalhah, 2012) have found a positive relation
between FS and profitability. Based on the explanation, the third hypothesis of this research is as follows:

$$H_3 = \text{FS has influence on EcP}$$

2.4 The Effect of ROE on EcP

According to (Purnamasari, 2015), ROE is an analysis commonly used by investors and company leaders, to measure how much profit can be the right owner's own capital. For investors, the analysis of ROE is important because the analysis can determine the benefits of the investments made. For firms, this technique is important because it is a pull factor for investors to invest. ROE is a measure of earnings (income) available for the owners of the firm (both ordinary shareholders and preferred shareholders) on the capital they invest in the firm. Commonly, the higher return or income earned, the better position of the firm owner. ROE shows the profitability of own capital or often referred to as the profitability of the business. Based on the explanation, the fourth hypothesis of this research is as follows:

$$H_4 = \text{Return on equity has influence on economic performance}$$

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 chosen based on some selection criteria. First, firm must listed on the Indonesian Stock Exchange after 1 January 2012. Second, firm 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, 2011). 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, multicolinearity, autocorelation and heteroskedasticity. The result shows that model is normal and free from multicolinearity, 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 formula:

$$\text{EcP} = \alpha + \beta_1\text{EP} + \beta_2\text{ED} + \beta_3\text{FS} + \beta_4\text{ROE} + \epsilon$$

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 references. Table 1 presents the results of research data processing that results in minimal, maximum, and mode values of the research variables.

<table>
<thead>
<tr>
<th>Table 1. Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td>EcP (Y)</td>
</tr>
</tbody>
</table>
Table 2. Multiple Regression Analysis Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-0.580</td>
<td>0.723</td>
<td>-0.802</td>
<td>0.424</td>
</tr>
<tr>
<td>Enp (X1)</td>
<td>0.004</td>
<td>0.042</td>
<td>0.011</td>
<td>0.95</td>
</tr>
<tr>
<td>End (X2)</td>
<td>-1.04</td>
<td>-0.117</td>
<td>-1.01</td>
<td>0.892</td>
</tr>
<tr>
<td>Size (X3)</td>
<td>0.202</td>
<td>0.025</td>
<td>0.086</td>
<td>0.799</td>
</tr>
<tr>
<td>Roe (X4)</td>
<td>0.205</td>
<td>0.122</td>
<td>0.176</td>
<td>1.68</td>
</tr>
</tbody>
</table>

*Dependent Variable: Ecp (Y)*

The result of the test multiple regression analysis in table 2 conclude accepted hyphotesis 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 and Hughes, 2004), also (Heriningsih and Saputri, 2015) and not consistent with (Sarumpaat, 2006), also (Almilia and Herdiningtyas, 2005) also (Rakhiemah and Agustia, 2009) finding. The result of the hyphotesis 2 (H2) in table 2 conclude accepted hyphotesis 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 and Herdiningtyas, 2005) finding. The result of the hyphotesis 3 (H3) in table 3 conclude accepted hyphotesis 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 with (Sunarko and Astuti, 2012; Hasnavati and Sawir, 2015) finding. The result of the hyphotesis 4 (H4) in table 2 conclude accepted hyphotesis 4 (H4). Therefore, we conclude that return on equity (X4) positively influence on economic performance (Y). This is consistent with the result (Herdiana, 2003) and not consistent with (Hutami, 2012; Carlo, 2014) finding.

Table 3. F-test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.478</td>
<td>4</td>
<td>0.119</td>
<td>1.34</td>
<td>0.260</td>
</tr>
<tr>
<td>Residual</td>
<td>8.894</td>
<td>100</td>
<td>0.089</td>
<td>3</td>
<td>a</td>
</tr>
<tr>
<td>Total</td>
<td>9.372</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3. ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.478</td>
<td>4</td>
<td>.119</td>
<td>1.34</td>
<td>.260</td>
</tr>
<tr>
<td>Residual</td>
<td>8.894</td>
<td>100</td>
<td>.089</td>
<td>3.260</td>
<td>a</td>
</tr>
<tr>
<td>Total</td>
<td>9.372</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Source: Output SPSS

Table 3 shows F-test value are 1,343 with F probability are 0,260, this value more than α 5% (0,05), it means all the variables not affected as significant between EP, ED, FS, ROE on EcP.

### Table 4. Coefficient Determination Test

<table>
<thead>
<tr>
<th>Model Summaryb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

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

Source: Output SPSS

In Table 4, the coefficient determination test indicates that adjusted $R^2$ values are 0,013, which means that the variation rate of the EP, ED, FS, ROE variables can be explained by the EcP variables are 1,3%. While the rest 98,7% is explained by other variables outside the proposed model.

### 5. Conclusions

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).

### References


