THE EFFECT OF CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE TO EARNINGS RESPONSE COEFFICIENT

Hery Syaerul Homan

ABSTRACT

Earnings information becomes one of the main information in the financial statements that can be taken into consideration by investors in making decisions to invest, sell and retain shares owned. Investor response to earnings information can be measured using earnings response coefficient. The purpose of this research is to get an overview of corporate social responsibility disclosure (CSRD) and earning response coefficient (ERC) as well as to know the influence of CSR disclosure to earning response coefficients at public company listed on Indonesia Stock Exchange 2014-2016. The research method used is descriptive study and verification study. To obtain the value of ERC then used the events study. The number of companies was analyzed is 27 companies with descriptive analysis techniques and panel data regression. The results showed that CSR disclosure of sample companies in the observation period showed scores that tend to be low. Likewise, the ERC values tend to be low. Disclosure of CSR has a negative and significant effect on ERC. The results from this study are expected to contribute to companies in Asia by showing that current investors not only consider earnings information but also information about CSR activities. In addition, this study is further expected to contribute in encouraging the government to oblige go public companies to disclose CSR activities on annual reports.

Keywords: CSR disclosure, earnings response coefficient.

INTRODUCTION

Information on profit is one of the information in the financial statements that can affect economic decision-making and responded by investors. Profit in general can be used as an investment guide, as well as profit has an element of prediction, becomes the basis for taxation, the determinant on dividend payout policy and other business decision making basis. Thus it can be said that profit is one of the main financial information to be considered by investors in decision-making, for example, in investing, selling shares, and retain shares owned.

Ball and Brown (1968) found a significant relationship between the announcements of corporate profits with changes in stock prices. When the company announces an increase in profit, afterwards what happens is the trend of positive changes in stock prices and vice versa if the declared earnings decreased, after that what will happen is a negative change on the stock price to the company.

One measure that can be used to measure investor’s reaction to accounting earnings information is earnings response coefficient (ERC), which is a correlation between unexpected earnings with abnormal return of stock. Earnings response coefficient was defined as the measure of the abnormal return of the stock in response to the unexpected earnings (Scott, 2015). The abnormal return is the difference between the actual return and the normal return (Hartono, 2015). The strong market reaction to earnings information will be reflected in the high earnings response coefficient which means the high quality of corporate profits, vice versa (Sayekti & Wondabio, 2007).

The phenomenon of earning response coefficients that occurred in Indonesia Stock Exchange can be traced through the results from previous research presented in table 1 below.

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Company</th>
<th>N</th>
<th>ERC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mulyani et al (2007)</td>
<td>51 manufacturing companies listed on the Jakarta Stock Exchange (JSE) 2001-2005</td>
<td>256</td>
<td>0.030000</td>
</tr>
<tr>
<td>Melati (2013)</td>
<td>43 manufacturing companies listed on Indonesia Stock Exchange 2009-2011</td>
<td>129</td>
<td>0.000498</td>
</tr>
<tr>
<td>Sandi (2013)</td>
<td>34 companies listed on Indonesia Stock Exchange 2009-2011</td>
<td>94</td>
<td>-0.014800</td>
</tr>
<tr>
<td>Herdirinandasari dan Asyik (2016)</td>
<td>47 manufacturing companies listed on Indonesia Stock Exchange 2012-2014</td>
<td>141</td>
<td>-0.030000</td>
</tr>
</tbody>
</table>
Referring to table 1 above, the average ERC value in previous studies indicates a low number even a negative value. This means that the profit information submitted by the company gets a paltry reaction by the market. It can be also said that investors and other businesses need information about the company’s financial condition and performance, but not limited to profiting information. Investors need another information in making investment decisions.

The results from empirical research indicate that although profit information is used by investors, but the usefulness of the earnings information is felt very limited by investors (Lev, 1989). This is due to the weak and unstable correlation between stock returns and earnings, as well as the low profit contribution in predicting stock prices and returns (Lev, 1989). Furthermore, Lev (1989) suggests that capital market research examines the role of measurements in asset valuation, both in terms of both positive and normative aspects. In addition, Lev (1989) also suggests that more research is aimed at understanding investors about the information contained in the financial statements and annual reports of an entity.

One of the parts disclosed and the investor's concern in the annual report are the disclosure of corporate social responsibility. A global survey conducted by The Economist Intelligence Unit shows that 85% of senior executives and investors from various organizations make CSR a key consideration in decision making (Warta Ekonomi, 2006). Epstein and Freedman (1994) found that individual investors are attracted to the social information reported in the financial statements. The information is in the form of safety and product quality and environmental activity. In addition, they want an information about ethics, relationships with employees and society (Epstein & Freedman, 1994).

The results of Nuzula and Kato (2011) showed that in companies in Japan, investors responded to corporate CSR disclosure. In Indonesia, the results of research conducted by Melati (2013) indicates that social responsibility has a significant effect on earnings response coefficient. The results of this study are consistent with Sayekti and Wondabio (2007) which conclude that CSR implementation has a positive and significant impact on market reaction. This can be evidence that corporate social responsibility is trusted by investors for decision making and investment.

Reporting on social responsibility or also called sustainability reporting shows a positive trend where the number of companies making it every year is increasing. In table 2 below, we can see comparison of the number of companies in South East Asia that report social responsibility and disclosure based on Global Reporting Initiatives (GRI) report in February 2016.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>97</td>
</tr>
<tr>
<td>Indonesia</td>
<td>85</td>
</tr>
<tr>
<td>Malaysia</td>
<td>59</td>
</tr>
<tr>
<td>Singapore</td>
<td>54</td>
</tr>
<tr>
<td>Philippines</td>
<td>30</td>
</tr>
<tr>
<td>Vietnam</td>
<td>12</td>
</tr>
<tr>
<td>Cambodia</td>
<td>1</td>
</tr>
</tbody>
</table>

The mainly issue of this research is the low response of investor to the earnings information. This study aims to obtain a description of CSR disclosures and earnings response coefficients and the influence of CSR disclosure to ERC on public companies listed on the Indonesia Stock Exchange 2014-2016. The results from this study are expected to be a comparison of similar research results as well as further reference materials for the development of accounting science, especially regarding earnings response coefficients and corporate social responsibility disclosure.

**LITERATURE REVIEW**

**Corporate Social Responsibility Disclosure**
World Business Council for Sustainable Development (WBCSD, 1999) defined CSR was the ethical behavior of a company towards society; management acting responsibly in its relationship with other stakeholders who have a legitimate interest on the business, and it are the commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large. The European Union (Idowu & Filho, 2009) defined CSR as a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.

Disclosure of corporate social responsibility is often referred to as social disclosure, corporate social reporting, or social accounting (Rahmawati, 2012: 183). Demanding Ghozali and Chariri (2014: 430) social and environmental disclosure can be linked to the social audit concept proposed by Elkington (1997). According to Elkington (1997) in Ghozali and Chariri (2014: 430) social audit is a process that allows an organization to assess its performance based on expectations and requirements specified by the community. Furthermore, Ghozali and Chariri (2014) define social and environmental disclosure as a process used by companies to disclose information relating to corporate activities and their impact on the social conditions of society and the environment.

Referring to table 1 above, the average ERC value in previous studies indicates a low number even a negative value. This means that the profit information submitted by the company gets a paltry reaction by the market. It can be also said that investors and other businesses need information about the company’s financial condition and performance, but not limited to profiting information. Investors need another information in making investment decisions.
Corporate social responsibility disclosure is measured by GRI 4 consisting of 91 standard items. The calculation formula of Corporate Social Responsibility Disclosure Index (CSRD) is as follows:

\[
CSRD_{ij} = \frac{\sum \Delta X_{ij}}{N_j}
\]

Information:

CSRD_{ij} : Corporate Social Responsibility Disclosure Index on company j
\(\sum \Delta X_{ij} \) : Number of items disclosed by the company, Value 1 = If item i is disclosed; 0 = if item i is not disclosed
N_j : Number of CSR indicators based on GRI 4.0 consist of 91 items (using content analysis where comparing CSR report to CSRD)

Gray et al (1995) mentioned that the theory perspectives to explain social and environmental disclosure practices were grouped into decision-usefulness studies, economic theory studies (positive accounting theory), and social and political theory studies.

1. Decision-Usefulness Studies. This theory takes an approach by trying to explain social and environmental disclosure practices in terms of benefits gained. One flow of this theory seeks to determine whether social responsibility information has information value for the capital market or market participants.

2. Economic-Based Theory. The two factors underlying this economical theory is those that prioritize the maximization of individual wealth and self-interest. Based on this view, the company has a responsibility to use its economical resources and run its business activities with the aim of improving profits. The use of this economic-base theory was criticized by Gray et al (1995) for being inappropriate, and contrary to the social logic developed in social and environmental disclosure practices.

3. Social and Political Theory. This theory does not base on the viewpoint of profit maximization and individual interests, but instead considers the political, social, and institutional framework in which the economic activity is carried out (Gray et al., 1995). Several studies show that the level of social and environmental disclosure in the company's annual report increases with the period in which social and environmental issues are important both in political and social aspects.

In addition to the above three theories, according to Ghozali and Chariri (2014:439-444) the theory underlying CSR disclosure is stakeholder theory and legitimacy theory. According to the stakeholder theory, the company is not an entity that only operates for its own interests but must provide benefits for its stakeholders, namely shareholders, creditors, consumers, suppliers, government, community, analysts and others. Thus, the existence of a company is strongly influenced by the support provided by the company's stakeholders.

According to Gray et al in Ghozali and Chariri (2014:439) states that the survival of the company depends upon the support of stakeholders, and support should be sought so that the company's activity is to seek such support. The more powerful the stakeholders, the greater the company's effort to adapt. Social disclosure is considered part of a dialogue between the company and its stakeholders.

According to Ghozali and Chariri (2014:441) several studies of social and environmental disclosure have used the theory of legitimacy as a basis for explaining social and environmental disclosure practices. Dowling and Pfeffer (1975) in Ghozali and Chariri (2014) explain that the theory of legitimacy is very useful in analyzing organizational behavior because legitimacy is important for the organization, the limits emphasized by social norms and values, and reactions to these limits promote the importance of organizational behavioral analysis with regard to the environment.

Gray et al (1995) argues that theories of legitimacy and stakeholder theory are the theoretical perspectives within the framework of political economy theory. Because the influence of the wider community can determine the allocation of financial resources and other economic resources, companies use environment-based performance and disclosure of environmental information to provide or legitimize corporate activity through the eyes of the community.

According to Suwardjono (2008: 583) signaling theory underlies voluntary disclosure. In this case, social and environmental disclosure is included in voluntary disclosure. Management always strives to disclose private information which, according to its consideration, is in great demand by investors and shareholders, especially if the information is good news.

**Earnings Response Coefficient**

Earnings Response Coefficient (ERC) is a measure of the abnormal return of a stock in response to the unexpected earnings component reported by the issuing firm (Scott, 2015). ERC is useful in fundamental analysis by investors, in a valuation model to determine the market reaction to corporate earnings information (Melati, 2013). Referring to Chaney and Jeter (Chaney & Jeter, 1991), ERC is a coefficient derived from the regression between the share price and accounting earnings. The stock price represented by cumulative abnormal return (CAR), while the accounting profit represented by unexpected earnings (EU). The regression model will produce an ERC for each sample to be used for subsequent analysis. Based on these definitions, the earnings response coefficient is formulated as follows (Chaney & Jeter, 1991):

\[
CAR_{it} = a + buEARN_{it} + e_{it}
\]

Information:

CAR_{it} : Cumulative Abnormal Return firm i \( t = \pm 5 \) days from publication of annual report
\( \alpha \) : Constants
bu : coefficient showing earnings response coefficient
EARN_{it} : Unexpected Earnings of firm i in the year t
Taking on the literature review above, the hypothesis in this study is the disclosure of CSR has a negative effect on earnings response coefficients.

**RESEARCH METHODS**

The method used in this research is descriptive study and causal study with the quantitative approach. This study tested the market reaction of an event or announcement, so that also used the method of event study. According to Bowman (1983) in Hartono (2015) mentions that event studies are defined as studies involving the behavior of securities prices around the time of an event or an announcement of information. In other words, this method tests the capital market reaction of an event or announcement. The event or announcement referred to in this study is the publication or disclosure of corporate social responsibility disclosure in the company's annual report.

The population used in this study is a public listed company listed on the Indonesia Stock Exchange period 2014-2016. Considering that not all listed companies listed on the Indonesia Stock Exchange consistently follow the Corporate Performance Rating Program in Environmental Management (PROPER), the researcher sets the sample frame. The sample frame is a collection of all elements in the population where the sample is taken (Sekaran and Bougie, 2016: 240). What is meant by the sample framework in this study are companies that consistently follow PROPER, and disclose the social responsibility (corporate social responsibility) in the annual report during the year 2014-2016 totaling 27 companies. Methods of data collection using the basis data techniques. PROPER ranking data obtained from the Ministry of the Environment (www.menlh.go.id), an environmental indicator is obtained from the Global Reporting Initiative (www.globalreporting.org), the annual report of the company is obtained from the Indonesia Stock Exchange (www.idx.co.id).

The analysis technique used in this research is descriptive statistical analysis and panel data regression analysis. The research hypothesis that has been compiled needs to be translated first into a statistical hypothesis. This is intended to be statistically testable. The null hypothesis (H0) and alternative hypothesis (Ha) in this study are:

**H0:** \( \beta_1 \geq 0 \): Disclosure of corporate social responsibility not negatively affects earnings response coefficient.

**Ha:** \( \beta_1 < 0 \): Disclosure of corporate social responsibility negatively affects earnings response coefficient.

**RESULTS AND DISCUSSION**

Descriptive analysis was used in this research to the value of each research variable to know the description of CSR disclosure index, and earning response coefficients (ERC) during the observation period of 2014 to 2016. This descriptive analysis is done by looking at the mean, median, maximum value, minimum value, and standard deviation and median data of each research variable.

<table>
<thead>
<tr>
<th>Table 3: Descriptive Analysis Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CSRDI</strong></td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Std. Dev.</td>
</tr>
</tbody>
</table>

The result of descriptive analysis in Table 4.1 shows that the CSRDI has the lowest value of 6.593 and the highest is 95.604 with the average equal to 33.686, median equal to 35.165 and deviation standard equal to 16.752. Based on the results of the analysis, the average value of the CSR disclosure variable is below its median value which means the CSR disclosure of the sample companies during the observation period tends to be low.

The result of descriptive analysis in Figure 1 shows that during the observation period, AMFG and LSIP companies are companies with high CSRDI value compared to other sample companies.

**Figure 1: Graph of Corporate Social Responsibility Disclosure Index**
The result of descriptive analysis in table 3 shows that the ERC value of all sample companies during the observation period has the lowest value of -2.474 and the highest value of 0.864 with an average value of -0.170, median of -0.060 and standard deviation of 0.470. Based on the results of the analysis, the average value of the ERC variable is well below its median value which means that the sample company's ERC during the observation period tends to be low.

The result of descriptive analysis of ERC variable in figure 2 shows that the CTBN and INDS company during the observation period had been the company with the lowest ERC value, while the LPCK and LSIP companies were the companies with the highest ERC value during the observation period.

The classic assumption test contained in panel regression analysis consists of normality test, heteroscedasticity test, multicollinearity test and autocorrelation test. According to Gujarati and Porter (2012), the equations that satisfy the classical assumption are only equations using the Generalized Least Square (GLS) method. In Eviews, estimation model using GLS method merely random effect model, while fixed effect and common effect using Ordinary Least Square (OLS).

Based on Jarque-Bera normality test results obtained probability value of 0.706> 0.05 indicating that the residual data is normally distributed. This means that the panel data regression model has met the assumption of normality. The multicollinearity test results show that the VIF value of the independent variable is <10, this indicates that there is no multicollinearity in the model. Based on the results of Gletsjer test probability value Obs*R-squared of 0.2939> 0.05 which means no heteroscedasticity in the model. The results of the autocorrelation test obtained results Chi Square probability value of 0.0717> 0.05 which means there is no autocorrelation in the model. Based on Chow test results obtained by probability value cross-section F test result is 0.0094 <0.05 which means Ho is rejected and concluded that the best model is Fixed Effect model. Likewise with Hausman test.
results obtained the probability value of cross section F of 0.0500 ≤ 0.05 which means Ho is rejected and concluded that the best model is Fixed Effect model.

In panel data regression analysis, t test is used to test the influence of independent variables partially to dependent variable. The test hypothesis used in this partial test is tested with a significant level of 0.05 then Ho is rejected if the probability value <0.05 and Ho will be accepted if the probability value > 0.05.

Table 4. Regression Analysis Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.109847</td>
<td>0.022565</td>
<td>-4.868042</td>
<td>0.0000</td>
</tr>
<tr>
<td>CSRD</td>
<td>-0.047800</td>
<td>0.011934</td>
<td>-4.005437</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

Based on table 4 above, the probability value of CSR disclosure effect to ERC is 0.0002 with a negative regression coefficients. Therefore, the probability value obtained <0.05 and regression coefficient marked negative hence Ho is rejected and concluded that disclosure of CSR has negative and significant effect to ERC. This indicates that the higher the CSR disclosure, the company's ERC will decrease, and vice versa.

Coefficient of Determination

The coefficient of determination in panel regression analysis is used to know the contribution given by the independent variable to the dependent variable. The result of panel regression analysis in table 5 shows that R Square value of a panel regression model obtained is 0.863829, it shows that the contribution of free variable simultaneously to ERC is 86.38%. This means that there is a 13.12% variance of the ERC value of the sample company influenced by factors other than CSR disclosure.

Table 5: Regression Analysis Results of Panel Data

<table>
<thead>
<tr>
<th>R-squared</th>
<th>Mean dependent var</th>
<th>-0.040311</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-squared</td>
<td>0.751974</td>
<td>S.D. dependent var</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.056145</td>
<td>Akaike info criterion</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>0.088263</td>
<td>Schwarz criterion</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>92.06081</td>
<td>Hannan-Quinn crit.</td>
</tr>
<tr>
<td>F-statistic</td>
<td>7.722781</td>
<td>Durbin-Watson stat</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000001</td>
<td></td>
</tr>
</tbody>
</table>

The probability value of CSR disclosure effect to ERC is 0.0002 with a negative regression coefficients. Therefore, the probability value obtained < 0.05 and the regression coefficient is a negative sign so Ho is rejected, and it can be said that CSR disclosure has a negative and significant effect to ERC. This means that the more corporate social responsibility items expressed by the company in the annual report in both the economic, environmental, and social categories, the lower the value of earnings response coefficient.

The results from this study support the theory of decision-usefulness studies (Gray, 1995) which explains that social and environmental disclosure practices provide benefits in the form of social responsibility that has value information for capital markets or market participants. This social and environmental disclosure information results in low earnings response coefficient values. That is, in companies that are sampled, CSR disclosure received a response from investors by making the disclosure information CSR as one consideration to invest by not only considering the earnings information.

The results of this study are consistent with the results of research from Sayekti and Wondabio (2007) stating that disclosure of corporate social responsibility information in the company's annual report negatively affects earnings response coefficient. In addition, the results of this study are also in accordance to the results of research Melati (2013) which says that social responsibility has a negative and significant impact on earnings response coefficient. The results of this analysis also support the results of Nuzula and Kato (2011) studies, which show that CSR disclosure of the company gets a response from investors in Japan. However, the results of this analysis are not in accordance with the results of Hidayati and Murni (2009) and Wulandari and Wirajaya (2014) studies which stated that corporate social responsibility disclosure does not affect earnings response coefficient as measured by cumulative abnormal return.

Based on the results of this study can be explained that the disclosure of corporate social responsibility into information used by investors in making investment decisions other than the company's reported earnings information. Therefore, the disclosure of corporate social responsibility results in a low abnormal return that can ultimately decrease earnings response coefficient.

Disclosure of corporate social responsibility, thus can be said to have information content, so investors react to the announcement or annual report prepared by the company. Disclosure of corporate social responsibility can provide a positive signal to stakeholders and the market regarding the company's ability to maintain its future survival. In addition, CSR disclosure is considered part of an inter-company dialogue with its stakeholders.
The results of this study also reinforce the notion that investors in Indonesia have used the information disclosure corporate social responsibility as one of the considerations in making investment decisions. In addition, it also indicates that the capital market in Indonesia is in the direction of following the global trend where corporate social responsibility themes become an important part of investment decision making.

CONCLUSION

The conclusions obtained from the results of this study are as follows: 1) Disclosure of CSR sample companies over the period of observation showed a score that tends to be low. Similarly, ERC values tend to be low, 2) Disclosure of CSR has a negative and significant effect on ERC. This indicates that the more items disclosed in both the economic, environmental, and social categories the ERC will decrease, and vice versa.

The implication from this research is that the company not only prepares earnings information and other financial information, but also needs to prepare non-financial information such as CSR disclosure. It is therefore, advisable for companies to improve their CSR activities, integrated them with corporate strategy, and discloses them in annual reports taking into account reporting standards such as those developed by global reporting initiatives. The results from this study are also expected to contribute to companies in Asia by showing that current investors not only consider earnings information but also information about CSR activities. In addition, this study is further expected to contribute in encouraging the government to oblige go public companies to disclose CSR activities on annual reports.

Given the limitations for this study, other researchers are expected to expand the population and sample research using the most up-to-date annual report data to illustrate the most-recent conditions. In addition, the researchers should add other independent variables that affect ERC, so can get better results.

REFERENCES


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