Sustainability Concerns and Investor Responses to Earnings Announcements

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Abstract: This study aims to examine the effects of corporate sustainability concerns on investor responses to earnings announcements (earnings response coefficient). The study was conducted on 110 companies that announced sustainability disclosures based on Global Reporting Initiative standards during the 2008–2017 observation period. With multiple linear regression models, the results of the study show that companies' concerns regarding economic, environmental, and social sustainability have a positive effect on investor response to earnings announcements. The results of this study imply that investors have the awareness and confidence that financial performance manifesting as an investment return is not an instant goal, but must be sustainable over the long-term. Investors are aware that investment returns, directly or indirectly, are influenced by social stability and environmental sustainability.

Keywords: disclosure, earnings response coefficient, financial performance, Global Reporting Initiative, sustainability.

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INTRODUCTION

As a complement to financial reports, sustainability reports have become a necessity for corporate stakeholders (Braam & Peeters, 2018). The need for sustainability reports is based on the desire that the company should not only provide financial performance information, but also provide information about socio-ecological performance, namely information about the positive and negative impacts of the company's business activities for community and environment (Livesey & Kearins, 2002; Lestari et al., 2019). Investors are indeed the majority of corporate stakeholders who really need financial performance information, so it is not too surprising if financial performance is responded positively by investors and creditors (Boyce, 2000; Dunk, 2002; Burritt & Schaltegger, 2010; de Villiers & van Staden, 2012). However, the company's financial performance is not a stand-alone variable to influence the investor's response, because from other studies it
is shown evidence that the investor's response to financial performance becomes even greater when the company has a high concern for social issues and environmental problems; on the contrary, investors' responses weaken if companies show low concern for social problems and environmental problems (Deegan, 2002; Gray, 2006; Dascalu et al., 2010; Sen et al., 2011; Islam & Dellarapas, 2011; Sridhar, 2012; Cho et al., 2012; Alewine & Stone, 2013; Dobler et al., 2015; Madein & Sholihin, 2015; Agrawal et al., 2016; Haninun et al., 2019).

The results of these studies indicate that investors have an awareness and confidence that financial performance, which will manifest as an investment return, is not a momentary goal, but must be sustainable in the long-term (Deegan, 2002; Gray, 2006; Alewine & Stone, 2013; Madein & Sholihin, 2015). Investors have confidence that the sustainability of financial performance in the long-term, both directly and indirectly, is influenced by social stability and environmental sustainability (Dascalu et al., 2010; Sen et al., 2011; Islam & Dellarapas, 2011; Sridhar, 2012; Cho et al., 2012; Dobler et al., 2015). Thus, sustainability reports have become a necessity for investors and creditors in particular, and all stakeholders in general. The expectations of stakeholders who wish to obtain better information about the socio-ecological impacts of business activities have attracted the attention of managers to make social and environmental factors the strategic elements of corporate sustainability programs (Burritt & Schaltegger, 2010), and since then also studies on social accounting and the environment began to be carried out. Burritt & Schaltegger (2010) note that since then accounting studies have not only focused on testing the effect of financial performance on investor response (firm value), but research ideas have begun to examine the influence of corporate concern on social and environmental issues in investor response.

Research on the determinants of investor response to the publication of earnings information has been carried out. Determinants include audit quality (Okolie, 2014), insider trading (Tartaroğlu & İmho, 2017), earnings persistence (Imhoff & Lobo, 1992; Ghosh et al., 2005), earnings quality (Ghosh et al., 2005; Ronald et al., 2019), earnings management (Teoh & Wong, 1993; Kwag & Stephens, 2010; Suprianto et al., 2017), firm growth (Ghosh et al., 2005), firm size (Riahi-Belkaoui, 2002), level of voluntary disclosure (Fernando et al., 2018), operating cash flows (Visvanathan, 2006), and accounting conservatism (Heflin et al., 2015). The results of their research show that these variables are determinants that positively influence the investor's response to earnings information published by the company.

Phenomenal research Ball & Brown (1968) found evidence that fluctuations in earnings affect the fluctuation of stock prices. The results of the Ball & Brown (1968) study suggest that there are differences in market responses to earnings information, while emphasizing that earnings reported in the income statement are beneficial for investors to make investment decisions. In subsequent developments, the Ball & Brown (1968) research is considered to still contain limitations or weaknesses (Scott, 2015). Their research is considered to be less accurate in measuring the magnitude of the stock price response to earnings, because the content of information examined by Ball & Brown (1968) is only classified in good news and bad news. Based on these weaknesses, further research is directed at research on earnings response coefficients.

Jung & Cho (1991) are the researchers who first defined the accounting earnings response coefficient as the effect of any unexpected earnings on stock returns, which is indicated by the slope coefficient in abnormal stock return regression with unexpected earnings (see also Okolie, 2014; Mahjoubi & Abaoub, 2015; Kim et al., 2018); ERC is also called the sensitivity of earnings, which is a measure of the sensitivity of changes in stock prices to changes in earnings (Beaver, 1997). The theoretical framework of ERC research is classified by Jung & Cho (1991) into two approaches or models, namely: 1) information economics based valuation model. This model assumes that ERC is a function of the signal information content of earnings and investor perceptions of information systems. The worse the signal information content of earnings and investor perceptions of information systems (meaning the lower the earnings quality), the smaller the ERC, and vice versa; 2) a time-
series based valuation model. This model assumes that ERC is a function of time-series processes of various information variables that can predict the dividends paid. This research includes research using the first model, which shows that ERC is a function of the signal information content of earnings and investor perceptions of the earnings quality.

From the empirical aspect, research on ERC is classified by Jung & Cho (1991) into two groups, namely: 1) research on ERC determinants, and 2) research on the informativeness of earnings or earnings information content. ERC determinant research usually measures ERC as an earnings relationship with stock returns using a long period window, with the main focus to identify determinants or factors that influence ERC, without linking them to certain events. Determinants of ERC that were successfully summarized by Jung & Cho (1991) based on the results of previous studies include earnings persistence, earnings predictability, profit growth, corporate risk, company size, and industrial effects. Research on the informativeness of earnings is directed at examining the effect of certain events on ERC changes by using short period windows. Most earnings informativeness studies focus on 1) changes in the uncertainty of future earnings, and 2) changes in the earnings quality. So, in the study of earnings informatization, ERC can be used as a clue about future corporate earnings prospects and clues about the earnings quality. This is consistent with the statement of Lev & Thiagarajan (1993), that the higher the earnings quality will be the higher the ERC. This research belongs to the second ERC research group, namely research on the informativeness of earnings or earnings information content.

Lacina et al. (2009) states that quality earnings if the elements that make up profit can be interpreted and understood satisfactorily by interested parties. Whereas, Easton (2000) state that earnings quality is earnings that has little or no perceived noise in it and can reflect the company's true financial performance. According to Easton (2000), perceived disruption in earnings can be caused by transitory events or the application of accruals in accounting (accounting accruals). Transitory events are events that occur at a certain time and only affect the period of occurrence of the event. Stunda & Typpo (2004) explain that the transitory component is a component that only affects a certain period, the occurrence is not persistent or not continuous, and results in the number of profit (loss) reported in the income statement fluctuating (see also Schmidt, 2006). Perceived disturbances in earnings due to the application of accrual concepts exemplified by Schmidt (2006) include write-downs, write-offs, and provision of losses, which are also transitory components in the income statement, because they do not occur continuously and only affects the current period profit and loss statement. Easton (2000) argue that the greater perceived disruption contained in earnings, the lower the earnings quality.

Although Lacina et al. (2009); Easton (2000) have put forward the characteristics of earnings quality, but in practice, the earnings quality is difficult to measure. Therefore, each researcher uses a different approach to measure the earnings quality. Some researchers use accounting method variables as a proxy for the earnings quality, which is essentially only a signal of earnings quality. Other researchers use variables other than accounting methods as a proxy for accounting earnings quality, which in essence only shows signals about earnings quality, for example auditor quality variables (Okolie, 2014), broad voluntary expressions (Fernando et al., 2018), accounting conservatism (Heflin et al., 2015), earnings management (Kwag & Stephens, 2010; Suprianto et al., 2017), auditor industry specialization (Okolie, 2014), corporate governance (Ahmed, 2013; Mukhtaruddin et al., 2019), and sustainability concerns (Kim et al., 2018). This study uses a sustainability concern variable as a signal of accounting earnings quality as carried out by Kim et al. (2018).

The company's concern for economic sustainability is the main demand of investors, because the main goal of investors to invest is to obtain adequate returns (Kim et al., 2018). Based on the disclosure standards for the sustainability of the Global Reporting Initiative, economic sustainability concerns are reflected in the
Disclosure of specific indicators related to financial performance and efforts made by companies to achieve financial performance, for example employee remuneration, production capacity, production processes, product quality, relationships with suppliers, customer relations, supply chain, value chain, market share, anti-discrimination policies, act–corruption policies, and anti–monopoly policies (Global Reporting Initiative, 2013). Research by Kim et al. (2018) obtain evidence that the company's concern for economic sustainability has a positive effect on investor response to earnings response coefficient. Likewise, the results of the research of Al-Shaer et al. (2017); Jitmaneeroj (2018); (Nyarku & Ayekple, 2019), obtained the same evidence. With different analytical methods, Omar & Zallom (2016) research shows the same results, that economic sustainability disclosure moderates the positive influence of corporate financial performance on investor response.

According to Kim et al. (2018) the company's concern for environmental sustainability is also a determinant for investors in investing, because investors perceive that financial performance is not a stand-alone determinant. Kim et al. (2018) states that investors believe that the company's financial performance in the long run is influenced by the company's concern for environmental sustainability. Based on the disclosure standards for the sustainability of the Global Reporting Initiative, the concern for the company's environmental sustainability is reflected in the disclosure of specific indicators related to efforts made by companies to maintain and manage the environment, such as handling waste and pollution, preventing environmental damage, maintaining biological resources, and policies environmental revitalization (Global Reporting Initiative, 2013). By placing environmental sustainability disclosure as a moderating variable, research de Villiers & van Staden (2012); Alewine & Stone (2013); Omar & Zallom, 2016 all show the same results, that disclosure of environmental sustainability moderates the positive influence of financial performance company to investor response. Based on the different analytical methods with the above studies, Al-Shaer et al. (2017); Kim et al. (2018); Jitmaneeroj (2018), Nyarku & Ayekple (2019) place the disclosure of environmental sustainability as an independent variable. Their research obtained evidence that the company's concern for environmental sustainability had a positive effect on investor response to earnings response coefficient.

Research by Boyce (2000); Chen & Wongsurawat (2011), found evidence that disclosure of social sustainability positively moderates the effect of corporate financial performance on investor response. Chen & Wongsurawat (2011) state that investors have a belief that social stability can influence a company's ability to improve financial performance in the long run, similar to the opinion of Kim et al. (2018) that the company's concern for social sustainability is a determinant for investors in investing, because investors perceive that financial performance is not a stand-alone determinant, meaning that investors believe that the company's financial performance in the long run is influenced by the company's concern for social sustainability. Based on the disclosure standards for the sustainability of the Global Reporting Initiative, the concern for corporate social sustainability is reflected in the disclosure of specific indicators relating to efforts made by companies to maintain and manage social stability, such as work safety, worker rights, age of workers, and other related indicators with corporate social impacts (Global Reporting Initiative, 2013). Research de Villiers & van Staden (2012); Alewine & Stone (2013); Omar & Zallom (2016); Kim et al. (2018) all show the same results, that disclosure of social sustainability has a positive effect on investor response to earnings response coefficient (see also Al-Shaer et al., 2017; Jitmaneeroj, 2018; Nyarku & Ayekple, 2019). Using the method different analysis, Jones et al. (2009) found evidence that earnings response coefficients in companies that care about social sustainability are greater than companies that do not care.

Research that focuses on examining the effect of corporate social responsibility on financial performance, firm value, and investor response to earnings information has also been done, for example by (Jones et al., 2009; Chen & Wongsurawat, 2011; de Villiers & van Staden, 2012; Alewine & Stone, 2013; Omar & Zallom, 2016, Al-Shaer et al., 2017, Kim et al., 2018; Jitmaneeroj, 2018; Nyarku & Ayekple, 2019). The results of
their research show different evidence. This study aims to examine whether the investor's response to the publication of earnings information is influenced by company compliance in fulfilling social and environmental responsibilities. This study was carried out as a follow-up to the research of Kim et al. (2018) which focuses on examining the effect of corporate social responsibility on investor responses to earnings information. In contrast to the research of Kim et al. (2018) who observed and analyzed data for 10 years as a whole, this study observed and analyzed data for 10 years divided into two observation groups. In addition, in contrast to Kim et al. (2018), this study included control variables in the analysis.

METHODS

The study was conducted by taking 110 samples of public companies in Indonesia which are engaged in the energy, mining, food and beverage, paper, utilities, construction and real estate, and other services sectors. Samples were selected from companies that implement sustainability disclosures based on GRI 2006 and GRI 2011 disclosure standards. The observation period is 10 years, namely 2008–2017 which are grouped into two segments of the observation period, namely the period 2008–2012 (implementation of the GRI 2006 standard) and the 2013–2017 period (implementation of the GRI 2011 standard).

The dependent variable in this study is the investor response to the announcement of earnings information that is proxied by earnings response coefficient (ERC). ERC is calculated in two observation periods, 2008–2012 and 2013–2017, respectively through the following regression models:

\[
CAR_{it} = \beta_0 + \beta_1 U_E_{it} + \epsilon_{it}
\]

in this case:
- \(CAR_{it}\): cumulative abnormal return company \(i\) in year \(t\) (5 years)
- \(U_E_{it}\): unexpected earnings company \(i\) in year \(t\) (5 years)
- \(\beta_1\): earnings response coefficient (ERC)

\.CAR is the cumulative number of abnormal returns (AR) around the date of publication of earnings information. CAR is calculated in a short event window for 7 days (event window -3, 0, +3) around the date of publication of financial statements. Unexpected earnings (UE) are calculated using the random-walk model as done by Beaver et al. (1987); Collins & Kothari (1989). Unexpected earnings are measured by the following formula:

\[
U_E_{it} = \frac{E_{it} - E_{it-1}}{|E_{it-1}|}
\]

in this case:
- \(E_{it}\): earnings after tax \(i\) in year \(t\)
- \(E_{it-1}\): earnings after tax \(i\) before year \(t\)

The independent variable in this study is the company's concern for sustainability, which is represented in three proxies, namely the level of disclosure of economic sustainability (ECS Disclosures Index), environmental sustainability (ENS Disclosures Index) and social sustainability (SOS Disclosures Index) as required by Standards GRI 2006 and GRI 2011. Referring to Kim et al. (2018), each independent variable is measured as follows:
\[
ECSDI_{in} = \frac{\sum(ECSD_{it}/ECSD\text{GRI})_{n \text{ years}}}{n}
\]

\[
ENSDI_{in} = \frac{\sum(ENSD_{it}/ENSD\text{GRI})_{n \text{ years}}}{n}
\]

\[
SOSDI_{in} = \frac{\sum(SOSD_{it}/SOSD\text{GRI})_{n \text{ years}}}{n}
\]

in this case:

\(ECSDI_{in}\) : average economic sustainability disclosure index of companies for \(n\) years
\(ENSDI_{in}\) : the company's average environment sustainability disclosure index for \(n\) years
\(SOSDI_{in}\) : the company's average social sustainability disclosure index for \(n\) years
\(ECSD_{it}\) : economy sustainability disclosure company \(i\) in year \(t\)
\(ENSD_{it}\) : environment sustainability disclosure company \(i\) in year \(t\)
\(SOSD_{it}\) : social sustainability disclosure company \(i\) in year \(t\)
\(ECSD\text{GRI}\) : total economy sustainability disclosure based on GRI Standards
\(ENSD\text{GRI}\) : total environment sustainability disclosure based on the GRI Standards
\(SOSD\text{GRI}\) : total social sustainability disclosure based on GRI Standards
\(n\) : observation period (i.e. 5 years in 2 segments of the observation period)

This study includes control variables in the analysis, namely earnings persistence, capital structure, and firm size. Earnings Persistence (EP), is an indicator of the company’s ability to maintain the amount of profits obtained today to the future. The persistence of earnings is measured using the regression coefficient between the earnings of the current period and the earnings of the previous period as done with the following formula:

\[
E_{it} = \beta_0 + \beta_1 E_{it-1} + \varepsilon_{it}
\]

in this case:

\(E_{it}\) : earnings after tax \(i\) in year \(t\)
\(E_{it-1}\) : earnings after tax \(i\) before year \(t\)
\(\beta_1\) : earnings persistence (EP)

Capital structure (CAPS), measured by the ratio between total liabilities and total assets (Ghosh et al., 2005) which in this study was modified as the average capital structure for 5 years in 2 segments of the observation period, with the formula as follows:

\[
CAPS_{in} = \frac{\sum(TOLIA_{it}/TOAST_{it})_{n \text{ years}}}{n}
\]

in this case:

\(CAPS_{in}\) : average company capital structure for \(n\) years
\(TOLIA_{it}\) : total liability in year \(t\)
\(TOAST_{it}\) : total assets in year \(t\)
\(n\) : observation period (i.e. 5 years in 2 segments of the observation period)
Firm size (SIZE), measured based on equity market value (EMV) (Ghosh et al., 2005), which in this study was modified as the average company size for 5 years in 2 segments of the observation period, with the formula as follows:

$$SIZE_{in} = \frac{\sum(LogEMV_{it})n \text{ years}}{n}$$

in this case:
SIZE_{in} : firm size for n years
EMV_{it} : equity Market Value in year t
n : observation period (i.e. 5 years in 2 segments of the observation period)

The use of logarithmic values is done to avoid bias in measurement due to differences in the scale of the company’s operations.

The hypothesis in this study was tested using a regression equation by including three control variables as follows:

$$ERC_{it} = \beta_0 + \beta_1 ECSDI_{it} + \beta_2 ENSDI_{it} + \beta_3 SOSDI_{it} + \beta_4 EP_{it} + \beta_5 CAPS_{it} + \beta_6 SIZE_{it} + \epsilon_{it}$$

in this case:
ERC_{it} : earnings Response Coefficient company i in year t
ECSDI_{it} : average Economic Sustainability Disclosure Index of companies i for t years
ENSDI_{it} : the company’s average Environment Sustainability Disclosure Index company i for t years
SOSDI_{it} : the company’s average Social Sustainability Disclosure Index company i for t years
EP_{it} : earnings Persistence company i for t years
CAPS_{it} : average company capital structure company i for t years
SIZE_{it} : firm size company i for t years

The significance of the influence of corporate concern on sustainability concern on earnings response coefficient (ERC) is determined by evaluating the p-value of the coefficients from the three proxy sustainability concern variables resulting from the regression analysis. If the p-value is smaller than α (0.05), the hypothesis is accepted. The influence of control variables on ERC, namely the variable persistence of earnings, capital structure, and company size will also be evaluated.

RESULTS AND DISCUSSION

Descriptive statistics for the research variables used in the regression equation model are presented in Table 1. The results of the autocorrelation test, multicollinearity, heteroscedasticity, and data normality regression models are presented in Table 2. Table 2 shows that there is no VIF for each independent variable greater than 5. Thus, the regression model does not indicate a multicollinearity problem. The autocorrelation test results show that the Durbin–Watson value is 1.904. This value is between 1.79 and 2.21 so, that the regression model is free from the problem of autocorrelation. The results of heteroscedasticity test show that the significance of Levene-Test is entirely greater than α (0.05), so the third regression model is free from the problem of heteroscedasticity. All data used in the third regression model are also normally distributed. This is indicated by the results of the Kolmogorov–Smirnov (KS) test which all showed significance values above α (0.05).
This study also supports the results of the company's programs and strategies to achieve economic performance are seen by investors as signals of the company's concern for economic sustainability has a positive effect on investor response to earnings. These results support the results of the study by Shaer et al., (2017); Kim et al. (2018); Jitmaneeroj (2018); Nyarku & Ayekple (2019) who obtain evidence that the company's concern for economic sustainability has a positive effect on investor response to earnings. Although with different analytical methods, this study also supports the results of the research of Omar & Zallom (2016) which obtained evidence that economic sustainability disclosures positively moderated the effect of corporate financial performance on investor responses.

The three hypotheses in this study were tested with a regression model. The results of the regression analysis are presented in Table 3. Table 3 shows that the regression coefficient for the Economic Sustainability Disclosure Index (ECSDI) variable is 0.32225 with p-value 0.001 which means significant at $\alpha \leq 1\%$. The results of this analysis indicate that this study accepted $H_0$. Thus, this study proves that Economic Sustainability Concern has a positive effect on earnings response coefficient (ERC). These results support the results of the study by Al-Shaer et al., (2017); Kim et al. (2018); Jitmaneeroj (2018); Nyarku & Ayekple (2019) who obtain evidence that the company's concern for economic sustainability has a positive effect on investor response to earnings response coefficient. Although with different analytical methods, this study also supports the results of the research of Omar & Zallom (2016) which obtained evidence that economic sustainability disclosures positively moderated the effect of corporate financial performance on investor responses.

### Table 1 Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERC</td>
<td>220</td>
<td>-0.12700</td>
<td>0.32900</td>
<td>0.00514</td>
<td>0.06388</td>
</tr>
<tr>
<td>ECSDI</td>
<td>220</td>
<td>0.89848</td>
<td>0.98954</td>
<td>0.93452</td>
<td>0.19740</td>
</tr>
<tr>
<td>ENSDI</td>
<td>220</td>
<td>0.78200</td>
<td>0.93820</td>
<td>0.85324</td>
<td>0.19876</td>
</tr>
<tr>
<td>SOSDI</td>
<td>220</td>
<td>0.84476</td>
<td>0.95387</td>
<td>0.89487</td>
<td>0.18129</td>
</tr>
<tr>
<td>EP</td>
<td>220</td>
<td>-0.98000</td>
<td>1.43800</td>
<td>-0.05050</td>
<td>0.39876</td>
</tr>
<tr>
<td>CAPS</td>
<td>220</td>
<td>0.11534</td>
<td>1.91908</td>
<td>0.75686</td>
<td>0.35599</td>
</tr>
<tr>
<td>SIZE</td>
<td>220</td>
<td>9.89878</td>
<td>13.54330</td>
<td>11.39426</td>
<td>0.73914</td>
</tr>
</tbody>
</table>

### Table 2 Classical Assumption Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Multicollinearity</th>
<th>Autocorrelation</th>
<th>Heteroscedasticity</th>
<th>Normality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VIF $^1$</td>
<td>Durbin-Watson</td>
<td>Levene Test</td>
<td>K-S $^2$</td>
</tr>
<tr>
<td>ECSDI</td>
<td>1.286</td>
<td></td>
<td>0.097</td>
<td>0.137</td>
</tr>
<tr>
<td>ENSDI</td>
<td>1.377</td>
<td></td>
<td>0.106</td>
<td>0.143</td>
</tr>
<tr>
<td>ENSDI</td>
<td>1.274</td>
<td>1.904</td>
<td>0.098</td>
<td>0.166</td>
</tr>
<tr>
<td>EP</td>
<td>1.151</td>
<td></td>
<td>0.411</td>
<td>0.157</td>
</tr>
<tr>
<td>CAPS</td>
<td>1.125</td>
<td></td>
<td>0.410</td>
<td>0.112</td>
</tr>
<tr>
<td>SIZE</td>
<td>1.125</td>
<td></td>
<td>0.840</td>
<td>0.200</td>
</tr>
</tbody>
</table>

$^1$ VIF = Variance-Inflating Factor  
$^2$ K-S = Kolmogorov-Smirnov test

The three hypotheses in this study were tested with a regression model. The results of the regression analysis are presented in Table 3. Table 3 shows that the regression coefficient for the Economic Sustainability Disclosure Index (ECSDI) variable is 0.32225 with p-value 0.001 which means significant at $\alpha \leq 1\%$. The results of this analysis indicate that this study accepted $H_0$. Thus, this study proves that Economic Sustainability Concern has a positive effect on earnings response coefficient (ERC). These results support the results of the study by Al-Shaer et al., (2017); Kim et al. (2018); Jitmaneeroj (2018); Nyarku & Ayekple (2019) who obtain evidence that the company's concern for economic sustainability has a positive effect on investor response to earnings response coefficient. Although with different analytical methods, this study also supports the results of the research of Omar & Zallom (2016) which obtained evidence that economic sustainability disclosures positively moderated the effect of corporate financial performance on investor responses.

### Table 3 Regression Analysis Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.15900</td>
<td>0.058</td>
<td>2.749</td>
<td>0.028</td>
</tr>
<tr>
<td>ECSDI</td>
<td>0.32225</td>
<td>0.018</td>
<td>3.417</td>
<td>0.001</td>
</tr>
<tr>
<td>ENSDI</td>
<td>0.22611</td>
<td>0.011</td>
<td>2.422</td>
<td>0.001</td>
</tr>
<tr>
<td>SOSDI</td>
<td>0.21672</td>
<td>0.021</td>
<td>2.117</td>
<td>0.001</td>
</tr>
<tr>
<td>EP</td>
<td>0.02897</td>
<td>0.140</td>
<td>2.001</td>
<td>0.048</td>
</tr>
<tr>
<td>CAPS</td>
<td>-0.03317</td>
<td>0.016</td>
<td>-2.120</td>
<td>0.031</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.01130</td>
<td>0.008</td>
<td>1.463</td>
<td>0.146</td>
</tr>
</tbody>
</table>

$^*$ Statistically significant at $p < 0.01$  
$^{**}$ Statistically significant at $p < 0.05$

Investors respond positively to economic sustainability disclosures made by companies because the company's programs and strategies to achieve economic performance are seen by investors as signals of

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earnings quality. The clearer and more relevant strategies and company programs to achieve economic performance, the higher the earnings quality. The higher the earnings quality, the higher the investor’s response to the publication of earnings information made by the company. In this context, investors have the belief that quality earnings are profits that reflect the company's performance obtained through concrete programs and strategies, and will manifest as concrete returns. Good corporate programs and strategies to achieve economic performance are part of good corporate governance, especially related to aspects of accountability and responsibility (Global Reporting Initiative, 2013; Rodriguez-Fernandez, 2016; Suteja et al., 2017). This is also recognized by Ahmed (2013); Kim et al. (2018) which states that the company's awareness to disclose programs and strategies for achieving economy sustainability cannot be separated from the company's awareness to implement good corporate governance.

The findings of this study support and reinforce GRI’s arguments that company economic sustainability disclosure is needed so that investors can evaluate the company's programs and strategies to ensure the company's sustainability in providing return on investment (long-term) (Global Reporting Initiative, 2013). The company's programs and strategies to achieve economic sustainability for investors, for example programs for determining employee remuneration, managing production capacity, production process strategies, product quality management, supplier relations, customer relations, supply chain, value chain, market share, anti-discrimination policies, anti-corruption policies, and anti-monopoly policies (Sarkar, 2012; Gollic & Smith, 2013; Joseph et al., 2016; Blanc et al., 2017; Sarwono et al., 2018; Banihashemi et al., 2019; Yun et al., 2019). The results of this study indicate that investors positively respond to information disclosures required by Global Reporting Initiative (2013). The higher the level of disclosure of economic sustainability indicators as required by Global Reporting Initiative (2013), the higher investor confidence in the earnings information announced by the company.

Table 3 shows that the regression coefficient for the Environment Sustainability Disclosure Index (ENSDI) variable is 0.22611 with p-value 0.001 which means significant at $\alpha \leq 1\%$. The results of this analysis indicate that this study accepted $H_{0}$. Thus, this study proves that the Environment Sustainability Concern has a positive effect on earnings response coefficient (ERC). These results support the results of the study by Al-Shaer et al. (2017), Kim et al. (2018), Jitmaneeroj (2018), Nyarku & Ayekple (2019) who obtain evidence that the company's concern for environmental sustainability has a positive effect on investor responses to earnings response coefficient. Even with different analytical methods, this study also supports the results of the research of de Villiers & van Staden (2012); Alewine & Stone (2013); Omar & Zallom (2016) which obtain evidence that disclosure of environmental sustainability moderates the effect of corporate financial performance to investor response.

Investors respond positively to the disclosure of environmental sustainability carried out by the company because the company's programs and strategies to achieve environmental sustainability are seen by investors as a signal of the quality of profits generated by the company. The clearer and more relevant strategies and company programs to achieve environmental performance, the higher the earnings quality. The higher the earnings quality, the higher the investor’s response to the publication of earnings information made by the company. In this context, investors have the belief that quality earnings are profits that reflect the company's performance obtained without exploiting and destroying the environment, but rather maintaining environmental balance and sustainability. In the view of investors, the company's awareness to preserve and preserve the environment is a signal for the long-term economic sustainability of the company. Good corporate programs and strategies to achieve economic performance by considering environmental sustainability are also part of good corporate governance, especially related to aspects of accountability and responsibility (Global Reporting Initiative, 2013). This is also recognized by Ahmed (2013); Kim et al. (2018) which
the company's awareness to disclose programs and strategies to achieve environment sustainability cannot be separated from the company's awareness to implement good corporate governance.

With the acceptance of H3 in this study, the GRI argument is supported (Global Reporting Initiative, 2013). Global Reporting Initiative (2013) argued that the disclosure of environmental sustainability (environment sustainability disclosure) by companies is needed so that stakeholders can evaluate the company's concern in ensuring environmental sustainability, because the existence of the company must essentially benefit the environment, not just preserve it, but also changing the environment for the better. The company's concern in ensuring environmental sustainability is reflected in the disclosure of specific indicators related to the efforts made by companies to maintain and manage the environment, such as handling waste and pollution, preventing environmental damage, maintaining biological resources, and environmental revitalization policies (Global Reporting Initiative, 2013). The results of this study indicate that investors respond positively to disclosure of environmental sustainability information required by Global Reporting Initiative (2013). The higher the level of disclosure of environmental sustainability indicators as required by Global Reporting Initiative (2013), the higher the investor confidence in the profit information announced by the company. Cho et al. (2010) stated that investors believe that the company's concern for environmental sustainability is a good signal about economic sustainability in the future, so it is considered feasible to invest (see also Gallhofer et al., 2000; Mobus, 2005; Tilt, 2006; Cho & Patten, 2007; Russell et al., 2017; Sundin & Brown, 2017).

Table 3 shows that the regression coefficient for the Social Sustainability Disclosure Index (SOSDI) variable is 0.21672 with p-value 0.001 which means significant at $\alpha = 1\%$. The results of this analysis indicate that this study received H3. Thus, this study proves that the Social Sustainability Concern has a positive effect on earnings response coefficient (ERC). These results support the results of the study by Al-Shaer et al. (2017), Kim et al. (2018), Jitmaneeroj (2018), Nyarku & Ayekple (2019) who obtain evidence that the company's concern for social sustainability has a positive effect on investor responses to earnings response coefficient. Even with different analytical methods, this study also supports the results of research by de Villiers & van Staden (2012); Alewine & Stone (2013); Omar & Zallom (2016) which obtain evidence that disclosure of social sustainability positively moderates the effect of corporate financial performance to investor response.

Investors respond positively to social sustainability disclosures made by the company because the company's programs and strategies for managing social stability are seen by investors as a signal of the quality of profits generated by the company. The clearer and more relevant the company's strategies and programs for managing stability, the higher the earnings quality. The higher the earnings quality, the higher the investor's response to the publication of earnings information made by the company. In this context, investors have confidence that quality earnings are profits that reflect the company's performance obtained without degradation of the conditions of social life (community), but instead still maintain and even improve people's lives. In the view of investors, the company's awareness to safeguard and change people's lives for the better is a signal for the long–term economic sustainability of the company. Good corporate programs and strategies to achieve economic performance by considering the sustainability of social life are also part of good corporate governance, especially related to aspects of accountability and responsibility (Global Reporting Initiative, 2013). This is also recognized by Ahmed (2013); Kim et al. (2018) which states that the company's awareness to disclose programs and strategies for achieving social sustainability cannot be separated from the company's awareness to implement good corporate governance.

The findings of this study support and reinforce GRI's arguments that disclosure of social sustainability (social sustainability disclosure) by companies is needed so that stakeholders can evaluate the company's concern in ensuring the sustainability of society (social), because the existence of the company must provide
benefits to the community (Global Reporting Initiative, 2013). The company's concern in ensuring social sustainability is reflected in the disclosure of specific indicators relating to efforts made by companies to maintain social stability and community empowerment, for example the involvement of local communities in corporate governance, local community empowerment, partnership programs, grants and assistance, as well as coaching (Global Reporting Initiative, 2013). The results of this study indicate that investors respond positively to social disclosure of information required by GRI 2006 and GRI 2011. The higher the level of disclosure of social sustainability indicators as required by GRI 2006 and 2011, the higher investor confidence in the earnings information announced by the company. Nikolaou & Evangelinos (2010) state that investors perceive corporate concern for social sustainability can create a stable operating company, and thus will support economic sustainability in the future which is the main investment destination (see also Owen et al., 2000; O'Dwyer, 2005; Cho & Patten, 2007; Homayoun et al., 2016).

Besides examining the effect of sustainability concern on ERC, from the results of regression analysis (as summarized and presented in Table 3) it can also be evaluated the effect of three control variables on ERC as follows: 1) earnings persistence has a positive effect on ERC. This empirical evidence is consistent with the results of the research of Imhoff & Lobo (1992); Lev & Thiagarajan (1993); Ghosh et al. (2005); 2) capital structure has a negative effect on ERC. This empirical evidence is consistent with the results of the research of Ghosh et al. (2005); 3) The size of the company does not affect the ERC. This empirical evidence is consistent with the results of the research of Riahi-Belkaoui (2002); Okolie (2014), Heflin et al. (2015).

The findings above can be used as an explanation that investors' response to the publication of earnings information is also influenced by economic factors that are considered by investors, including factors such as earnings persistence and company policy regarding capital structure. The evaluation of the influence of several control variables on investor response to earnings information (ERC) is intended to show that investor response to earnings information is not only influenced by the company's concern for sustainability, but investor response to earnings information is also influenced by other variables. In this case, another variable that can influence investor response to earnings information is the persistence of earnings and capital structure.

**CONCLUSION**

This study found evidence that the company's concern for economic, environmental and social sustainability had a positive effect on investor response to earnings announcements. This shows that in the view of investors, concern for sustainability is a good signal of the earnings quality. Investors believe that a profit that will manifest concretely as an investment return is not a momentary expectation and goal, but is seen as a long–term goal. In the view of investors, the return on investment given by the company to investors in the long–term will be maintained, even enhanced, if the company implements a clear program and strategy about economic sustainability, environmental sustainability, and social sustainability.

The results of the study bring several implications, specifically the implications for corporate governance. First, companies must carry out business activities by implementing triple bottom-line or triple-p managerial programs and strategies, namely programs and strategies to ensure economic sustainability, in this case profit (profit) by considering environmental or natural (planet) sustainability and sustainability community or social life (people). This needs to be done by the company because stakeholders not only evaluate the success of the company from the economic aspect (profit), but also evaluate the success of the company from the aspect of fulfilling the company's responsibility on environmental sustainability and social sustainability. Second,
companies must be willing to disclose triple bottom-line (or triple-p) programs and strategies transparently to stakeholders. In this case, the company should make disclosures in accordance with the disclosure standards set by the Global Reporting Initiative (GRI). Third, even though disclosure of sustainability (economic, environmental, and social) is needed by stakeholders, companies cannot ignore management of other financial performance indicators that are determinants of investors in economic decision making. Therefore, good financial management is still needed, for example to ensure earnings persistence and maintain an optimal and ideal capital structure for the company.

This research has limitations especially in assessing (measuring) the company's concern for sustainability (sustainability concern). This study measures the company's concern for sustainability concerns based on the level of disclosure of economic, environmental and social sustainability in accordance with the disclosure index of the Global Reporting Initiative. Thus, sustainability concern is only measured from the aspect of disclosure quantity, not from the quality aspect of disclosure. This study assumes that the disclosure of sustainability has been done honestly by the company, in the sense that all aspects disclosed by the company are in accordance with their concrete reality, although from several studies it is found the fact that disclosure of company sustainability is not in accordance with concrete reality (see for example Boiral, 2013). Future research is expected to be able to modify the measurement of sustainability concern by considering the existence of disclosure of sustainability that is not in accordance with the concrete reality.

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REFERENCES


