Managerial Ability, Corporate Social Responsibility, Tone of Earnings Announcement and Market Reaction in Indonesia

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Abstract
This study aims to provide empirical evidence and discuss the effect of earnings announcement tone on market reaction with managerial ability and corporate social responsibility as moderating variables. The market reaction was proxied by cumulative abnormal return (-2.04). This study used a sample of 924 companies that were included in the Indonesia Sharia Stock Index (ISSI) from 2014 to 2019 was carried out by the purposive sampling method. Multiple linear regression analysis was used to test the first hypothesis and moderated regression analysis was used to test the second and third hypotheses. The results showed that tone of earnings announcement had a positive effect on market reaction, managerial ability moderate or strengthen the relationship between earnings announcement tone and market reaction, and CSR did not moderate the relationship between earnings announcement tone and market reaction. The results of the study of control varibel showed that size had a positive effect on market reactions and ROA had no effect on market reactions.

Keywords: market reaction; abnormal return; earnings announcement tone; managerial ability; disclosure of corporate social responsibility.

INTRODUCTION
Financial statements can be said to be useful when they contain information that can cause market reactions (Fanani & Merbaka, 2020). The market reaction can be measured by using the value of changes in stock prices or by using abnormal returns (Hartono, 2015). Issuance of financial statements that also brings news related to earnings will bring information to external parties. The tone of earnings announcements can be used by investors to assess the company’s wealth and profitability and provide notifications about
possible dividends (Angelovska, 2017). The announcement will cause a market reaction. Several studies have shown that the tone of earnings announcements caused the market to react (Davis, Ge, Matsumoto, & Zhang, 2015; Fanani & Merbaka, 2020; Luo & Zhou, 2017; Demers & Vega, 2014).

According to Davis et al. (2015) and Demers & Vega (2014) the tone of earnings announcements made the market reacted positively to the tone revealed in the company's earnings which is supported by the characteristics of the company. The same thing was also explained by Fanani & Merbaka (2020) and Luo & Zhou (2017) which stated that the tone of earnings announcements affected the market, causing the market to react.

The signal theory states that if a company reports increased earnings information, then the information is categorized as a good signal (good news) for investors so that it will increase the company's stock price. On the other hand, if the company reports declining earnings information, then the information is categorized as a bad signal (bad news) for investors so that it will reduce the company's stock price (Arifin, 2017).

However, in reality, this does not happen to several companies in Indonesia, especially companies listed on the Indonesia Sharia Stock Index (ISSI). It was known that in 2014, PT Adhi Karya Tbk. (ADHI) earned a profit of IDR 332 billion and increased in the following year, namely in 2015 of IDR 465 billion. However, ADHI's share price did not reflect earnings information where the share price had decreased from IDR 2919 to 2745.

The following years also showed the same thing wherein 2016 published earnings of IDR 315 billion, in 2017 of IDR 517 billion, in 2018 of IDR 645 billion, and in 2019 of IDR 665 billion was not matched by the share price which decreased from 2016-2019, namely IDR 2210, IDR 1820, IDR 1585, IDR 630 (www.idx.co.id).

PT Aneka Tambang Tbk. (ANJT) also experienced the same thing, namely, in 2014 it earned a profit of IDR 228 billion and in 2015 suffered a loss of IDR-120 billion. However, ANJT's share price had doubled from IDR 995 to IDR 1825. It was different with PT Argha Karya Prima Industry Tbk. (AKPI) which experienced an increase in stock prices when the company's profits decreased. In 2014 the company reported earnings of IDR 35 billion and in 2015 of IDR 27 billion, but the share price has increased from IDR 600 to IDR 890 (www.idx.co.id).
The phenomenon above showed that there was still an inconsistency between the company’s stock price and net income information when it was announced. This means that there has been a discrepancy with the signal theory, namely in fact the company’s net profit that has increased is not always followed by an increase in stock prices, and vice versa, a company’s net profit that has decreased is not always followed by a decrease in stock prices.

This study also examined how managerial ability affects the tone of earnings announcements on market reactions. This study examined whether managerial ability moderates the tone of earnings announcements on market reactions. Disclosure of good financial statements showed that the company had the good managerial ability. Demerjian, Lev, Lewis, & McVay (2013) argued that managerial ability is the ability possessed by managers in managing the resources owned by the company to produce valuable output.

Demerjian, Lev, & McVay (2012) conducted a study whose results showed that companies with better managerial abilities had more positive announcement tones and produced stronger market reactions. Overall, this study showed that managerial ability is one of the important determinants of earnings announcement tone because it tends to create better company operational performance. In line with the research conducted by Demerjian et al. (2012), Luo & Zhou (2017), showed that a more capable management team provided a positive earnings announcement tone. Differences in results occurred in research (Fanani & Merbaka, 2020), which showed that management ability did not affect the tone of earnings announcements on market reactions.

In addition, another variable that affected the tone of earnings announcements on market reactions is corporate social responsibility (CSR). Lu, Cahan, & Ma (2019) stated that CSR affected the tone of earnings announcements. The research showed that more socially responsible companies showed a more optimistic tone in earnings announcements. Previous research (Arslan-Ayaydin & Thewissen (2016); Kim, Park, & Wier, (2012); and Rogers, Busrik, & Zechman (2011) also showed the same thing, where CSR and the tone of earnings announcements had a large impact on investors. Cheng & Christiawan (2011) stated that CSR affected the market reaction. In contrast to the results of Restuti & Nathaniel (2012) which stated that CSR did not affect earnings...
announcements. According to Lorraine, Collison & Power (2004) CSR did not affect the market reaction, investors did not consider CSR in making decisions.

This research was motivated by a limited study in Indonesia related to the relationship between stock prices and accounting reports, especially regarding the positive and negative tones found in Loughran & McDonald (2015) research that need to be re-examined, especially the capital market in Indonesia. This study replicated the research of Luo & Zhou (2017) where this study examined the tone of earnings announcements on market reactions with managerial ability as a moderating variable. This study added the CSR variable as a moderator by referring to the research of Lu et al. (2019) which is something new.

Research related to stock prices with the readability of accounting reports, especially those that discussed the positive tone and negative tone found by (Loughran & McDonald, 2015) has not been widely carried out. This research needs to be developed and further research is carried out so that in this test the researcher used sharia companies listed on the Indonesia Sharia Stock Index (ISSI) to be used as research samples with the 2015-2019 research period, this has never been carried out by researchers previously. The novelty in this research was the addition of a new variable, namely corporate social responsibility (CSR) as a moderating variable.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Signal Theory

According to Spence (1973), the signal theory involves two parties, namely the one who gives the signal, namely management, and the one who is given the signal, namely an outside party such as an investor. Information provided by management is a form of signal to investors or interested parties (Twedt, 2012), one of which is information about earnings announcements in the company’s financial statements. Information provided by management is a signal that becomes a clue for investors about the company’s prospects (Brigham & Houston, 2001). These signals can influence investors in making decisions. Suwardjono (2005) stated that investors do not immediately receive the information but conduct an analysis first, whether the information received is in the form of a good signal or a bad signal. Investors will invest when the signal that they receive is a good signal, thus making the market react. Investors’
actions can be seen in the movement of stock prices and trading volume around the time the information is released (Fanani & Merbaka, 2020)

**Abnormal Return**

Abnormal return is the excess of the actual return over the expected return. The market reaction can be measured using abnormal returns (Hartono, 2015). The condition of obtaining abnormal returns at the event date, but abnormal return conditions can occur before or after the event date due to several things: (1) news release about an important announcement published on the stock market before the event date; (2) information leakage occurs; (3) information that arrives late to the market on the day of the announcement, usually after the market closes; and (4) information takes time to reflect on prices (Fanani & Merbaka, 2020).

**Tone of Earnings Announcement**

Ball & Brown (1968) explained that earnings announcements bring information content to the capital market. Previous research has shown that the tone of earnings announcements did not only signals managers’ expectations about economic performance, but the market reacted positively to positive tones near the earnings announcement date (Davis *et al.*, 2012; Henry, 2008). The market reacted positively to the tone expressed in earnings announcements (Davis *et al.*, 2012; Demers & Vega, 2014).

Loughran & McDonald (2015) developed a glossary that can be used to measure the tone of financial disclosure in capital market research. The glossary can be used as a benchmark to classify the list of positive and negative words that are indicated to affect the market reaction. The language of corporate communication that is learned through the spread of the proportions of positive and negative words is called tone (Luo & Zhou, 2017).

**Managerial Ability**

Managerial ability is the ability possessed by a manager in running his/her company effectively and efficiently (Fanani & Merbaka, 2020), where managerial ability is management ability in managing resources, which starts from input to output so that it has a high selling value (Demerjian *et al.*, 2012).

Managers who have better abilities will be better able to understand the technology and industry trends, predict product demand, invest in high-value projects,
be able to manage their employees, as well as successfully identify and take advantage of investment opportunities (Luo & Zhou, 2017). A management team with a high level of efficiency can help the company achieve better operational performance, provide better company information and create better financial statements (Demerjian et al., 2012). Companies that have good financial statement disclosures showed that the company has good managerial abilities (Fanani & Merbaka, 2020).

Corporate Social Responsibility

Corporate social responsibility (CSR) according to the World Business Council on Sustainable Development (WBCSD) is a form of corporate commitment to implement ethical behavior, contribute to the country’s sustainable economic development, and improve the quality of life of employees and the wider community.

When a company implements social responsibility in its company, it shows that the company is not only responsible to shareholders, but is also responsible to the wider community and the environment around the company. This social concern can increase the public’s image and trust in the company (Effendi, 2016).

Disclosure of CSR information in this study was based on the GRI (Global Reporting Initiative) which consisted of 91 disclosure items covering 6 aspects, namely economy, environment, human rights, labor practices and work environment, product responsibility, and society which will be measured by Corporate Social Responsibility Disclosure Index (CSRI).

The Effect of Earnings Announcement Tone on Market Reaction

The tone of earnings announcements contains information for market players so that it can affect market prices (Tama-Sweet, 2014). According to Luo & Zhou (2017), in the tone of positive earnings announcements, there was a stronger positive response which showed that investors used the information that was contained in the tone of earnings announcements effectively. This showed that the signal provided by the company in the form of financial information was able to influence the market.

Based on research conducted by Davis et al. (2015), the market showed a positive reaction when companies announced their earnings. The results of Demers and Vega’s (2014) research conducted in the previous year also
found that when companies reported company earnings supported by good company characteristics, it produced a positive market reaction. In the latest research conducted by Fanani & Merbaka (2020), the results showed that the tone of earnings announcements had a positive effect on market reactions. So the hypothesis proposed by the researcher is as follows:

H1: The tone of earnings announcements has a positive effect on market reaction.

The Effect of Earnings Announcement Tone on Market Reaction with Managerial Ability as Moderating Variable

Managerial ability is the ability possessed by managers to maximize the company’s revenue and profitability (Demerjian et al., 2012). Managers who have capabilities in their fields by managing their resources will produce satisfying work. Managerial ability represents the efficiency and effectiveness of the company (Fanani & Merbaka, 2020).

An efficient management team helps the company achieve its goals with better performance, thereby providing better company information (Fanani & Merbaka, 2020). Research conducted by Davis et al. (2015), Luo & Zhou (2017), and Arslan-Ayaydin et al. (2016) showed that managerial ability affected the appearance of earnings announcement tone on market reaction, and the company’s ability was supported by company characteristics. The same thing was also shown from the research of Davis & Tama-Sweet (2012) and Henry (2008) which stated that the tone of earnings announcements was not only indicated managers’ expectations about economic performance, but also market reactions.

Based on this explanation, managerial ability moderated or strengthened the tone of earnings announcements on market reactions, so the hypothesis proposed by the researcher is as follows:

H2: Managerial Ability Moderates Tone of Earnings Announcement on Market Reaction

The Effect of Earnings Announcement Tone on Market Reaction with CSR as Moderating Variable

Lu et al. (2019) conducted a test whose results showed that CSR affected the tone of earnings announcements. The research showed that more socially responsible companies showed a more optimistic tone in earnings announcements. Previous research (Kim et al., 2012; dan Rogers et al., 2011) also showed
the same thing, in which CSR and the tone of earnings announcements had a large impact on investors. Based on this explanation, which stated that CSR moderated or strengthened the tone of earnings announcements on market reactions, the hypothesis proposed by the researcher is as follows:

H₃: CSR Moderates Tone of Earnings Announcement on Market Reaction.

METHOD

Data Source

This study used a quantitative approach. This study aims to examine the effect of the independent variable, namely the tone of earnings announcements on the dependent variable of market reaction with moderating variables of managerial ability and CSR. Sources of research data were in the form of secondary data namely by using the annual financial statements. Data was obtained from the Indonesia Stock Exchange (idx.co.id) and Yahoo Finance.

Population and Sample

The population in this study was all companies that were included in the list of the Indonesia Sharia Stock Index (ISSI) from 2014 to 2019. Sampling was carried out by the purposive sampling technique. The results of sampling obtained 154 companies with a total of 954 research objects. The determination of the sample was based on certain criteria. The criteria for determining the research sample were companies including the list of the Indonesia Sharia Stock Index from 2014 to 2019; the company published annual financial statements from 2014 to 2019 in a row, and; the company had complete data used in the research.

Operational Definition of Variable

Market reaction was proxied by using abnormal return (AR). Abnormal return is the difference between actual return (actual profit rate) and expected return (expected profit rate) (Hartono, 2015). Abnormal return measurement was carried out by calculating the event window, which was for 7 days, namely three days before the publication date of the financial statements. The 7 days of the AR observation period was then accumulated into the cumulative abnormal return (CAR).

\[
CAR = \sum_{t=-3}^{3} AR_{t}\]

The earnings announcement tone variable is defined as the language of communication in conveying earnings by using positive
and negative words (Luo & Zhou, 2017). This study used a glossary published by Loughran & McDonald (2015). The list of positive and negative words that often appear according to Loughran & McDonald (2015) research was in the form of greater, good, best, beneficial successful which is included in the positive word list and the negative word list includes loss, losses, adverse, failure, bankruptcy, fraud, negative, weakness, complaint, fail, and deficit. Measurement of earnings announcement tone was carried out using the following weighting scheme (Loughran & McDonald, 2011):

\[
TONE = \left( \frac{\text{positive words count} - \text{negative words count}}{\text{total words count}} \right)
\]

The first moderating variable is the managerial ability. According to Demerjian et al. (2012), managerial ability is defined as the level of management efficiency in processing resources to get maximum results. Managerial ability is measured through two stages. The first stage is looking for company efficiency values including net PPE, net research and development, goodwill, intangible assets, cost of goods sold, and SG&A (selling, general, and administrative expense) input and sales as output to produce a residual value. Net PPE, net research and development, goodwill, intangible assets are measured at the beginning of the year (t-1) and cost of goods sold, and SG&A is measured at the end of the year (t). The efficiency of this first stage is processed using Eviews. The results of the processing obtained residual values. The efficiency value is calculated from 1- |Residual|. The formula for calculating the company’s efficiency is as follows:

\[
\text{Sales}_{it} = \alpha + \beta_1 \text{PPE}_{it} + \beta_2 \text{RnD}_{it} + \beta_3 \text{Goodwill}_{it} + \beta_4 \text{IA}_{it} + \beta_5 \text{COGS}_{it} + \beta_6 \text{SG&A}_{it} + e_{it}
\]

Where, Sales = Revenue; PPE = Net PP&E; RnD = Net research and development; Goodwill = Goodwill; IA = Intangible assets; COGS = Cost of good sold; SG&A = Selling, general, and administrative expense; \( \alpha \) = Constant; \( \beta \) = Regression coefficient; \( i \) = Company; \( t \) = Year; and \( e \) = Error

The second stage is the efficiency value in the first stage is regressed by total assets, market share, free cash flow, and firm age. The results of the processing are in the form of residual values. The residual value is the difference between the observed value and the observation value. The higher the residual value, the higher the managerial ability because of the influence of total assets, market share, free cash flow, and firm age.
Total assets are measured by the number of assets owned by the company. Market share is measured by the number of shares outstanding multiplied by the share price. Free cash flow is measured by a dummy variable, which is 0 when free cash flow is negative and 1 when free cash flow is positive. Firm age is measured by the company’s Initial Public Offering (IPO). After determining the proxy, the efficiency value in the previous stage is regressed by total assets, market share, free cash flow, and firm age using the multiple linear regression method using the SPSS 25 program. The following is the formula for calculating managerial ability in the second stage.

\[ FE_{it} = \alpha + \beta_1 T A_{it} + \beta_2 M S_{it} + \beta_3 F C F_{it} + \beta_4 A G E_{it} + e_{it} \]

Where, \( FE \) = Firm efficiency; \( TA \) = Total assets; \( MS \) = Market share; \( FCF \) = Free cash flow; \( AGE \) = Firm age; \( \alpha \) = Constant; \( B \) = Regression coefficient; \( i \) = Company; \( t \) = Year; and \( e \) = Error.

The variable disclosure of corporate social responsibility according to the World Business Council on Sustainable Development (WBCSD) is a form of the company commitment to implement ethical behavior, contribute to the country’s sustainable economic development, and improve the quality of life of employees and the wider community. Disclosure of CSR information in this study was based on the GRI (Global Reporting Initiative) which consisted of 91 disclosure items covering 6 aspects, namely the economy, the environment, human rights, labor practices and the work environment, product responsibility, and society. CSR measurement was carried out as research by Cheng & Christiawan (2011), namely by scoring method on content analysis. The scoring was done by giving a score (value) of 1 when the company reports at least one item disclosure in the annual financial statements. If the item is not disclosed, it will be given a score (value) of 0. Then the scores are added up and divided by the total items that must be disclosed. Disclosure of Corporate Social Responsibility information can be calculated as follows:

\[ CSR = \frac{\sum N_{ji}}{n} \]
can cause the market to react. The formula for company size is as follows:

\[ \text{Size} = \ln \text{Total Assets} \]

ROA is a ratio used to calculate net income received from the use of assets. The higher the ratio, the better the productivity of assets in obtaining net earnings. This can be an attraction for investors to the company because the return on assets is getting bigger. This will also have an impact on the company’s stock price in the capital market which is increasing (Fanani & Merbaka, 2020).

\[ \text{ROA} = \frac{\text{Net Earnings}}{\text{Total Assets}} \times 100\% \]

Data Analysis Techniques

The data analysis technique used was multiple linear regression analysis and moderated regression analysis. The statistical tool used was SPSS software version 25. The research model is as follows:

**Model 1**

\[ \text{CAR}_{it} = \alpha + \beta_1 \text{TONE} + \beta_2 \text{ROA} + \beta_3 \text{SIZE} + e \]

**Model 2**

\[ \text{CAR} = \alpha + \beta_1 \text{TONE} + \beta_2 \text{KM} + \beta_3 \text{TONE} \times \text{KM} + \beta_4 \text{TONE} \times \text{CSR} + \beta_5 \text{ROA} + \beta_6 \text{SIZE} + e \]

RESULTS AND DISCUSSION

Results

Descriptive analysis was used to describe the variables used. The results of the descriptive statistical analysis in Table 1 obtained information that the number of valid data in this study was 924 samples and no data was lost.

Before the multiple regression analysis and moderation regression were tested, the classical assumption test was carried out consisting of normality test, multicollinearity test, heteroscedasticity test and autocorrelation test, the results of which showed that the data used was free from the classical assumption test. Therefore, the data can be used in this study and multiple regression analysis and moderating regression were performed.

Based on Table 2, it can be seen that model 1 in this study is as follows:

\[ \text{CAR} = -0.036 + 0.0001 \text{TONE} + 0.002 \text{SIZE} - 0.027 \text{ROA} \]

Table 2 also showed the regression coefficient value of the positive earnings announcement tone of 0.0001. This showed that
Table 1. Descriptive Statistical Analysis

<table>
<thead>
<tr>
<th></th>
<th>CAR</th>
<th>TONE</th>
<th>KM</th>
<th>TONE*KM</th>
<th>CSR</th>
<th>TONE*CSR</th>
<th>SIZE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>924</td>
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<td>924</td>
<td>924</td>
<td>924</td>
<td>924</td>
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<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>-0.002</td>
<td>-17.987</td>
<td>0.006</td>
<td>0.068</td>
<td>0.373</td>
<td>1.373</td>
<td>14.921</td>
<td>0.053</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.041</td>
<td>41.796</td>
<td>0.057</td>
<td>1.592</td>
<td>0.182</td>
<td>7.109</td>
<td>1.638</td>
<td>0.083</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.1</td>
<td>-92.59</td>
<td>-0.77</td>
<td>-8.825</td>
<td>0.09</td>
<td>-31.493</td>
<td>9.562</td>
<td>-0.4</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.095</td>
<td>100</td>
<td>0.232</td>
<td>8.969</td>
<td>0.93</td>
<td>33.192</td>
<td>19.68</td>
<td>0.621</td>
</tr>
</tbody>
</table>

Table 2. Multiple Linear Regression Analysis (Model 1)

Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-0.036</td>
<td>0.012</td>
<td>-2.945</td>
<td>0</td>
</tr>
<tr>
<td>TONE</td>
<td>0.0001</td>
<td>0.000</td>
<td>0.093</td>
<td>2.841</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.002</td>
<td>0.001</td>
<td>0.100</td>
<td>3.022</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.027</td>
<td>0.016</td>
<td>-0.056</td>
<td>1.683</td>
</tr>
</tbody>
</table>

a. Dependent Variable: CAR

Source: Processed data (2021)

Table 3. Moderation Regression Analysis (Model 2)

Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-0.032</td>
<td>0.013</td>
<td>-2.507</td>
<td>0.012</td>
</tr>
<tr>
<td>TONE</td>
<td>0.0001</td>
<td>0.000</td>
<td>0.091</td>
<td>2.676</td>
</tr>
<tr>
<td>KM</td>
<td>-0.010</td>
<td>0.023</td>
<td>-0.014</td>
<td>-0.411</td>
</tr>
<tr>
<td>TONE*KM</td>
<td>0.002</td>
<td>0.001</td>
<td>0.077</td>
<td>2.371</td>
</tr>
<tr>
<td>CSR</td>
<td>0.013</td>
<td>0.008</td>
<td>0.059</td>
<td>1.572</td>
</tr>
<tr>
<td>TONE*CSR</td>
<td>0.000</td>
<td>0.000</td>
<td>0.026</td>
<td>0.767</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.002</td>
<td>0.001</td>
<td>0.073</td>
<td>2.000</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.027</td>
<td>0.016</td>
<td>-0.056</td>
<td>1.683</td>
</tr>
</tbody>
</table>

a. Dependent Variable: CAR

Source: Processed data (2021)

for every 1% addition to the earnings announcement tone, it will be followed by an increase in the market reaction of 0.0001 with the other variables
being constant. The results of the regression test showed that the earnings announcement tone variable had a positive effect on the market reaction, which was indicated by a significance value of 0.005 which was smaller than 0.05, so $H_1$ was accepted. The t-count result was 2.841, a positive result indicated a positive direction. It means that the higher the tone of the earnings announcement, the market will react positively.

The control variable size also showed the same thing, which had a positive effect on market reaction. This was indicated by a significance value of 0.003 which was smaller than 0.05 with a t-count value of 3.022. The bigger the company, the more the market will react. The size regression coefficient was 0.002, meaning that every 1% increase in size (company size) will be followed by an increase in the market reaction of 0.002 with the provision of other variables that were constant. Another control variable, ROA, showed a significance value of 0.093 which was greater than 0.05 and the t count was -1.683. The regression coefficient of ROA was -0.027, meaning that every 1% addition of ROA will be followed by a decrease in the market reaction of 0.027 with the provisions of other variables constant.

Next, based on the results of the moderation regression calculation in Table 3, the following moderation regression equation is obtained:

$$\text{CAR} = -0.032 + 0.0001 \text{TONE} - 0.010 \text{KM} + 0.002 \text{TONE} \times \text{KM} + 0.013 \text{CSR} + 0.000 \text{TONE} \times \text{CSR} + 0.002 \text{SIZE} - 0.027 \text{ROA}$$

Table 3 shows the result of the moderation regression test. The results of this moderation regression test also showed that the earnings announcement tone (TONE) had a positive effect on market reaction (CAR), which was indicated by a significance value of 0.008 which was smaller than 0.05. The calculated t value for the earnings announcement tone variable was 2.676 with a positive direction.

The main focus on testing model 2 of this research was on the direct and indirect relationship of managerial ability and corporate social responsibility to market reactions. Table 3 showed a significant value for the managerial ability (KM) variable of 0.0681 which was greater than 0.05. This means that managerial ability did not affect market reaction (CAR). However, the significance value of managerial ability integrated with earnings announcement tone (TONE*KM) had a significance value of 0.018 and less than 0.05, which means that the
The effect of managerial ability integrated with earnings announcement tone on the market reaction was significant. This showed that the second hypothesis was accepted, where managerial ability moderated the relationship between earnings announcement tone and market reaction.

The next variable is CSR, Table 3 showed the CSR significance value of 0.116 which was greater than 0.05. It means that CSR did not affect the market reaction (CAR). The significance value of CSR was integrated with the earnings announcement tone (TONE*CSR) of 0.443 which was also greater than 0.05. This means that CSR did not moderate the relationship between earnings announcement tone (TONE) and market reaction (CAR).

The control variable size showed a significance value of 0.05 with a t-count value of 2,000 which means it had a positive effect on market reaction and for the ROA variable, it showed a significance value of 0.093 which means it did not affect market reaction.

Discussion

The Effect of Earnings Announcement Tone on Market Reaction

The results showed that the earnings announcement tone had a positive effect on market reaction, the higher the earnings announcement tone, the more the market will react. This showed that the earnings tone published by the company contains information that can be used as a guide for decision-making.

According to Fanani & Merbaka (2020) a good market reaction showed that the signal provided by the company contained quality information and attracted investors to invest. The results of this study were consistent with research by Tama-Sweet, (2014) which showed that the market reacted to a change in the tone of earnings announcements, this occurred because earnings announcements brought information content to the capital market. This study also supported the research of Davis et al. (2015); Luo & Zhou (2017); and Twedt (2012) who tested the earnings announcement tone, the results of which showed the earnings announcement tone caused the market to react positively.

The Effect of Earnings Announcement Tone on Market Reaction with Managerial Ability as Moderating Variable

The test results showed that managerial ability moderated (strengthened) the relationship between earnings announcement tone
and market reaction. A qualified management team helps the company to achieve its goals better so that the information provided is also better.

This study was consistent with the research of Davis et al. (2015); and Luo & Zhou (2017) who showed that managerial ability affected the appearance of earnings announcement tone on market reaction. This study also supported the research of Davis & Tama-Sweet (2012); and Henry (2008) which stated that the ability of managers was not only indicated managers’ expectations about economic performance but also market reactions.

The Effect of Earnings Announcement Tone on Market Reaction with CSR as Moderating Variable

The results showed that CSR did not moderate the relationship between earnings announcement tone and market reaction. CSR has not been able to interpret earnings properly and investors still doubt the disclosure of CSR in assessing earnings. Investors did not consider CSR in making investment decisions because they consider the information contained in CSR to be less relevant for making economic decisions. This study supported the results of research (Restuti & Nathaniel, 2012) which stated that CSR did not affect earnings announcements. According to them, investors have not paid attention to social information.

CONCLUSION, IMPLICATION AND LIMITATION

The results of this study conclude that the tone of earnings announcements had a significant positive effect on market reaction. This showed that the higher the tone of the earnings announcement, the more the market will react. This study also showed that the managerial ability variable moderated (strengthened) the relationship between earnings announcement tone and market reaction. The higher the value of managerial ability, the stronger the relationship between the tone of earnings announcements and market reaction. Corporate social responsibility did not moderate the tone of earnings announcements on market reactions. This showed that the higher the level of corporate social responsibility, it still does not strengthen the tone of the earnings announcement on the market reaction. The control variable, namely the size of the company affected market reaction, and ROA did not affect market reaction.

The results of this study contributed to provide additional empirical evidence about the effect of
earnings announcement tone on market reactions with the managerial ability and CSR as moderating variables because they have not been widely used. In addition, the results of this study can also be a reference for company management that a more capable management team will be better at managing existing resources so that it affects the information that will be provided to investors. On the other hand, market participants should be more careful about the tone of earnings announcements issued by more capable management teams. For corporate management, these findings suggest that a more capable management team will use a more positive tone.

The results of this study indicated a low coefficient of determination, namely 2.3% using market reaction variables, earnings announcement tone, managerial ability, CSR, size, and ROA. Different results may be obtained if the researcher adds other related variables. The researcher only examined several lists of positive and negative tone words referring to the research of Loughran & McDonald (2015), for further researchers to be able to compare the meaning of positive and negative tones in other studies so that they can interpret the tone words more broadly.

REFERENCES


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