Conference Paper

CSR & Earnings Management: An Assessment of Firm Ethics

Ain Hajawiyah\textsuperscript{1}, Indriati Siti Pratiwi\textsuperscript{2}, Annisa Ramadhini\textsuperscript{2}, Elvia Shauki\textsuperscript{2}, and Vera Diyanty\textsuperscript{2}

\textsuperscript{1}Department of Accounting, Faculty of Economics, Universitas Negeri Semarang
\textsuperscript{2}Department of Accounting, Faculty of Economics and Business, Universitas Indonesia

Abstract

\textbf{Purpose} - This study aims to examine the effect of CSR disclosure on earnings management practices stated in accrual earnings management, real earnings management, and in aggregate practice (accrual and real).

\textbf{Design/methodology/approach} - Assisted with NVivo 12 Pro software, this quantitative study measures CSR disclosures of 186 annual reports made by 62 manufacturing firms listed on the Indonesia Stock Exchange (IDX) in the period between 2013 and 2015. Period coverage of 2013-2015 is chosen to keep consistency of applied regulation about CSR disclosure in Indonesia. The data are analyzed using multiple linear regression.

\textbf{Findings} - This study finds that firms with high CSR disclosures would have low levels of accrual and aggregate earnings management. There is no significant effect of CSR disclosure to real earnings management practice.

\textbf{Research limitations/implications} - The results of this study may provide additional literature to examine the effect of CSR disclosure on the practice of comprehensive earnings management (accrual and real). Data to measure real earnings management practices is not entirely available. There is a high chance of subjectivity in measuring the level of CSR disclosure.

\textbf{Practical implications} - For company, it can provide information regarding the importance of CSR disclosure. For regulators, it can be a consideration to make strict rules related to CSR disclosure.

\textbf{Originality/value} - This study provide a comprehensive picture by examining the effect of CSR disclosure on all types of earnings management by the firm.

\textbf{Keywords:} CSR disclosure, real earnings management, accrual earnings management

1. Introduction

A survey conducted by KPMG in 2015 showed that the trend of CSR Reporting is increasing globally year by year, especially in the Asia Pacific region (KPMG, 2015). In today’s business development, CSR has grown into a new ‘norm’ driven by regulation of policy makers (KPMG, 2015). CSR becomes an important issues for business organizations in realizing the commitment to establishing relationships with internal and external stakeholders of the firm, such as local communities and the environment. The
firm is considered to need to 'guarantee' the sustainability of its business by conducting activities by social values and norms embodied in CSR activities.

The big issue in financial reporting is the asymmetric information in which managers have more information about the condition of the firm than the owners or other parties. When the principal has no control over the firm and delegates its management authority to the manager, an agency problem arises in which the manager should act in the best interest of shareholders, instead of acting opportunistically for its own sake. One of the causes of this opportunistic action is the opportunity to conduct earnings management for the benefit of the managers themselves (Richardson, 1998).

Healy and Wahlen (1999) noted two forms of earnings management, includes accrual earnings management and real earnings management. Accrual earnings management is done by arranging the choice of firm's accounting methods and discretion to get the expected earnings (Dechow and Skinner, 2000) while real earnings management is done by manipulating the firm's normal activities (Roychowdhury, 2006). However, real earnings management practices have greater costs than accrual earnings management practices as they directly affect firm cash flows such as large discounts and decreases in discretionary expenses for the current year (Roychowdhury, 2006; Cohen et al., 2008; Cohen and Zarowin, 2010).

In line with ethical theory, through the implementation of CSR activities, the firm is considered to have done an action that reflects its business ethics (Garriga & Mele, 2004). The high level of corporate awareness of the surrounding environmental and social issues indicates that the firm is increasingly ethical, so the tendency of management to take opportunistic actions such as earnings management practices decreases (Hong & Andersen, 2011; Litt et al., 2014) because such practices are inappropriate with ethical values. Kim et al., (2012) shows that firms oriented to the implementation of CSR uphold the ethical value; thus it is less likely to conduct opportunistic earnings management activities.

However, based on our literature review, the majority of prior research on the relationship between CSR and earnings management focuses only on real earnings management (Prior et al., 2008; Scholtens and Kang, 2003). Meanwhile, research that discusses the influence of CSR on both types of earnings management is still rare. To the best of our knowledge, there is little research that tests both accrual earnings management and real earnings management in one study. Separate testing of the two forms of earnings management is not considered holistically to capture all types of earnings management practices, given the potential trade-off between a real earnings
management and accrual earnings management strategy (Cohen et al., 2008; Zang, 2012).

Kim et al. (2012) tested the effects of their respective CSRs on accrual earnings management and real earnings management. However, the study does not test the aggregate earnings management (accrual and real). Therefore, this study examines the effect of CSR on 1) accrual earnings management, 2) real earnings management, and 3) the aggregate of earnings management (accrual and real) performed by the firm. The existence of study with these three models is expected to fill the previous research gap and able to provide a more comprehensive picture of the influence of CSR on various forms of earnings management.

The effect of CSR on total earnings management, this study refers to a previous research conducted by Bozzolan et al. (2015). The total value of earnings management performed by the firm either in real or accrual is calculated by looking at the decile rank of each type of earnings management. The decile rank describes the rank of the real and accrual earnings management of each firm from all the sample research. The existence of the aggregate model is expected to capture all forms of earnings management conducted by the firm, regardless of the type of earnings management (accrual or real). This decile rank is used to accommodate the effect of earnings management to both accrual and real earnings management aggregately.

This study uses NVivo 12 Pro to measure the percentage rate of CSR disclosure in 186 annual reports published by 62 manufacturing firms listed on the Indonesia Stock Exchange during 2013-2015. This period coverage is chosen to minimize the effect of different regulations governing social and environmental disclosure in Indonesia. Financial Service Authority published regulation POJK/Kep-431/BL/2012 which require firms listed in Indonesia Stock Exchange (IDX) to disclose its social and environmental activities in their annual report. Four years later, Financial Service Authority published regulation 29/POJK/04/2016 which replace the previous regulation.

The results show that there is a negative effect of CSR disclosure on accrual earnings management practices and the aggregate earnings management (accrual and real). However, there is no significant effect of CSR on real earnings management on the context of manufacturing firms in Indonesia.

This paper is structured as follows. After the introductory section is presented in the first section, a review of the literature and the development of the research hypothesis in the second section will be presented. The research methodology used will be discussed in the third section, followed by the results and analysis in the fourth section. Finally,
conclusions and limitation of this study and suggestions for further research will be presented in the fifth section.

2. Literature Review

2.1. Assessment of Firm Ethics - Ethical Theory

This theory states that the ethical actions of the company to the community and the surrounding environment to support the business process. An ethical company is a company that has the responsibility and concern for the community and the surrounding environment for the impacts resulting from its operational activities. According to Fauzi (2009), a company is like two sides of different coins which on the one hand provide benefits with the resulting product, but on the other hand the operational activities undertaken by the company is negatively influencing the society and the surrounding environment. The form of responsibility is shown by companies through CSR activities implemented by the company. This act will improve the company’s reputation in the eyes of stakeholders (Garriga & Mele, 2004).

In relation to earnings management practices, stakeholders view this practice as an opportunistic action by management to its interests and potentially detrimental to other parties such as investors or financial users. This is because earnings management practices make reported earnings information does not reflect actual company conditions so that it can mislead the decision-making process. The higher the company’s commitment to social responsibility, the higher the company’s ethical judgment, thus management’s tendency in taking opportunistic actions such as earnings management practices decreases (Hong & Andersen, 2011; Litt et al., 2014). Assessment of CSR activities undertaken by the company can be seen from the CSR disclosure activities that have been made. Therefore, this study suggests that the higher the CSR disclosure of firms the less likely it is to engage in earnings management practices.

2.2. Prior Studies & Hypothesis Developments

Prior studies that have examined the relationship between CSR towards earnings management practice has been done, however there are still limited studies that examine the effect of CSR disclosure on both types of earnings management comprehensively. In general, prior studies such as Orlitzky et al. (2003) and Kim et al. (2012) provide empirical evidence that CSR-oriented companies have the lower possibility to practice
earnings management either through discretionary accruals or real company operating manipulations. Coupled with the results of research by Litt et al. (2014) which proves that companies have concern for the environment, not performing earnings management worse than other companies that the level of awareness of the environment is still low.

According to Bozzolan et al., (2015), even if CSR-oriented companies are involved in earnings management practices, they will be more concerned with the impacts of earnings management practices. Also, Litt et al. (2014) prove that the impact of earnings management on CSR-oriented companies is smaller than non-CSR oriented companies. The results of this study indicate that CSR-oriented companies have ethical considerations in decision making that can affect the quality of the financial report. Although accrual earnings management practices do not affect the company's cash flow, it will be more easily detected by the auditor so that CSR-oriented companies will not take the risks that cause damage to reputation built through CSR activities. Therefore, the first hypothesis developed in this study is as follows:

H1: The level of CSR disclosure negatively affects the practice accrual earnings management

Besides, even though real earnings management practices are not easily detected by the auditor, the impact of real earnings management practices is greater because it affects the company's cash flow directly (Cohen & Zarowin, 2010). Thus, the company that makes the CSR as part of the corporate culture will not conduct earnings management that will reduce the quality of its financial statements (Calegari et al., 2010) although the risk for detection is smaller. Therefore, the second hypothesis to be tested in this study is as follows:

H2: The level of CSR disclosure negatively affects the practice of real earnings management

The accounting literature notes that the company will alternately choose real earnings management or accrual earnings management with consideration of the costs incurred to carry out this earnings management strategy (Cohen et al., 2008; Zang, 2012). Both real earnings management and accrual earnings management will equally affect the quality of reports produced by management, i.e., not reflecting the real condition of the company. Besides, the impact of earnings management practices may also affect the performance of the company in the future due to the manipulation of earnings in the current reporting period.

In relation to the reputation and legitimacy that the company has built with its stakeholders, one of which is through CSR activities, the company generally minimizes both real and accrual earnings management practices (Choi & Pae, 2011) in consideration
of the risks detected that would damage the reputation and the legitimacy of the company that has been built. With the destruction of the reputation and legitimacy of the company, there will be difficulties and threats to the company’s sustainability. Therefore, the third hypothesis to be tested is as follows:

**H3: The level of CSR disclosure negatively affects the practice of aggregate earnings management**

### 3. Methodology

This study uses a quantitative approach in examining 186 samples of manufacturing firms listed on the Indonesian Stock Exchange (IDX) in 2013-2015. Financial Service Authority regulation POJK/Kep-431/BL/2012 requires firms listed in Indonesia Stock Exchange (IDX) to disclose its social and environmental activities in their annual report. This regulation is replaced by 29/POJK/04/2016 in 2016. In order to keep the consistency of regulation applied, we only pick samples for the year 2013-2015.

Indonesia is selected as sample because it offers unique insight about the effect of CSR disclosure to earnings management in developing countries. Previous studies are mostly conducted in developed countries. The result of this study will enrich previous result regarding CSR and earnings management research in the world.

Samples are selected using a purposive sampling method with criteria in table 1. This study uses secondary data of financial statements and annual reports from the firm’s website, IDX’s website, and financial data from Indonesia Capital Market Institute (ICaMEL) and Datastream. Data were analyzed using multiple linear regression using Stata version 12 software, including classical assumption test, significance test, R-square test, and hypothesis test.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>No of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing firms in 3 years (2013-2015)</td>
<td>421</td>
</tr>
<tr>
<td>Firms with non-December 31 year end date</td>
<td>(4)</td>
</tr>
<tr>
<td>Firms with negative equity</td>
<td>(22)</td>
</tr>
<tr>
<td>Unbalanced panel data elimination in 2013-2015</td>
<td>(137)</td>
</tr>
<tr>
<td>Financial data and CSR score are unavailable</td>
<td>(72)</td>
</tr>
<tr>
<td>Final samples</td>
<td>186</td>
</tr>
</tbody>
</table>
Research model to examine the 1st hypothesis:

\[ AEM_{it} = \alpha_0 + \alpha_1 CSRD_{it} + \alpha_2 SIZE_{it} + \alpha_3 LEV_{it} + \alpha_4 ADJROA_{it} + \alpha_5 GROWTH_{it} + \alpha_6 MTB_{it} + \alpha_7 AQ_{it} + \varepsilon_{it} \]

(1)

2nd hypothesis:

\[ REM_{it} = \alpha_0 + \alpha_1 CSRD_{it} + \alpha_2 SIZE_{it} + \alpha_3 LEV_{it} + \alpha_4 ADJROA_{it} + \alpha_5 GROWTH_{it} + \alpha_6 MTB_{it} + \alpha_7 AQ_{it} + \varepsilon_{it} \]

(2)

3rd hypothesis:

\[ EM_ALL_{it} = \alpha_0 + \alpha_1 CSRD_{it} + \alpha_2 SIZE_{it} + \alpha_3 LEV_{it} + \alpha_4 ADJROA_{it} + \alpha_5 GROWTH_{it} + \alpha_6 MTB_{it} + \alpha_7 AQ_{it} + \varepsilon_{it} \]

(3)

Dependent variables in this research are accrual, real, and aggregate earnings management (combination of accrual and real). Accrual earnings management is calculated by subtracting normal discretionary accrual from total discretionary accrual as below.

\[ AEM_{it} = \frac{TA_{it}}{A_{it-1}} - \frac{NA_{it}}{A_{it-1}} \]

(4)

Using the combined model of Kothari et al. (2005) and Kazsnik (1999) model as performed by Diyanty (2012), the nondiscretionary accruals can be estimated below:

\[ \frac{TA_{it}}{A_{it-1}} = \alpha_0 + \alpha_1 \frac{1}{A_{it-1}} + \alpha_2 \frac{\Delta S_{it} - \Delta AR_{it}}{A_{it-1}} + \alpha_3 \frac{PPE_{it}}{A_{it-1}} + \alpha_4 \frac{\Delta CFO_{it}}{A_{it-1}} + \alpha_5 ROA_{it} + \varepsilon_{it} \]

(5)

This model is chosen due to the highest R-square in predicting nondiscretionary accrual. Total accrual is the difference between net income and cash flows from operating activities. Discretionary accrual is the difference between total accruals and nondiscretionary accruals. Nondiscretionary accruals are the fitted values of equation 5 above. This study uses the absolute value of accrual earnings management.

Real earnings management is calculated using Roychowdhury (2006) model, by adding the abnormal value of cash flows, production costs, and discretionary expenses. The abnormal operating cash flow represents the difference between the actual operating cash flows, and the normal operating cash flow is estimated by the equation model below:

\[ \frac{CFO_{it}}{A_{it-1}} = \alpha_0 + \alpha_1 \left( \frac{1}{A_{it-1}} \right) + \alpha_2 \left( \frac{S_{it}}{A_{it-1}} \right) + \alpha_3 \left( \frac{\Delta S_{it}}{A_{it-1}} \right) + \varepsilon_{it} \]

(6)
Abnormal production cost is the difference between actual and normal production costs is estimated using the equation below:

\[ \text{PROD}_{it} = \text{COGS}_{it} + \Delta \text{INV}_{it} \]  

(7)

\[ \frac{\text{COGS}_{it}}{A_{it-1}} = a_0 + a_1 \left( \frac{1}{A_{it-1}} \right) + a_2 \left( \frac{S_{it}}{A_{it-1}} \right) + \varepsilon_{it} \]  

(8)

\[ \frac{\Delta \text{INV}_{it}}{A_{it-1}} = a_0 + a_1 \left( \frac{1}{A_{it-1}} \right) + a_2 \left( \frac{S_{it}}{A_{it-1}} \right) + a_3 \left( \frac{\Delta S_{it}}{A_{it-1}} \right) + \varepsilon_{it} \]  

(9)

Real earnings management through discretionary expenses is done by reducing the sales, general & administrative expenses (SG&A); advertising costs (ADV), and research & development expenses (R&D). The abnormal discretionary cost is the actual and normal discretionary cost difference is estimated with the equation below:

\[ \text{DEXP}_{it} = \text{SG&A}_{it} + \text{ADV}_{it} + \text{R&D}_{it} \]  

(10)

\[ \frac{\text{SG&A}_{it}}{A_{it-1}} = a_0 + a_1 \left( \frac{1}{A_{it-1}} \right) + a_2 \left( \frac{S_{it}}{A_{it-1}} \right) + \varepsilon_{it} \]  

(11)

\[ \frac{\text{ADV}_{it}}{A_{it-1}} = a_0 + a_1 \left( \frac{1}{A_{it-1}} \right) + a_2 \left( \frac{S_{it}}{A_{it-1}} \right) + \varepsilon_{it} \]  

(12)

\[ \frac{\text{R&D}_{it}}{A_{it-1}} = a_0 + a_1 \left( \frac{1}{A_{it-1}} \right) + a_2 \left( \frac{S_{it}}{A_{it-1}} \right) + \varepsilon_{it} \]  

(13)

Due to data limitations in Indonesia related to R&D and ADV cost, this study estimates discretionary costs based on SG&A only. All three models are combined to estimate total real earnings management, by first multiplying AbnormalCFO and AbnormalDEXP by (-1). This study uses the absolute value of real earnings management.

Aggregate earnings management combine real and accrual earnings management using decil rank (Bozzolan et al., 2015). The first step is to sort the absolute value of accrual (AEM) and real earnings management (REM) into a decile portfolio ranging from 0,000-1,000. Ranking 1,000 shows the highest level of earnings management. The aggregate earnings management value range is 0,000-2,000. The aggregate value of 2,000 means the firms ranked in the highest position in conducting both accrual and real earnings management.

The independent variable is CSR disclosure which indicates the coverage ratio of social and environmental disclosure keywords in the annual report obtained using content analysis by using Nvivo software. Keywords used is refer to Verbeteen (2016).
under GRI G4 standard with 32 keywords. Coverage ratio shows the percentage of words in annual report which discuss about CSR disclosure.

Control variables consist of 6 variables. Larger firms/SIZE (Bozzolan et al., 2015), high levels of debt/LEV (Defond and Jiambalvo, 1994), high levels of industry-adjusted profitability/ADJ_ROA (Bozzolan et al., 2015), high growth/GROWTH firm (Skinner and Sloan, 2002; McNichols, 2000), high level of MTB as proxy of information asymmetry (Richardson, 2000), and low audit quality have more significant incentives to conduct earnings management.

4. Result and Discussion

4.1. Descriptive Statistics

The descriptive statistics of each variable is shown in Table 2 below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEM</td>
<td>186</td>
<td>0.04892</td>
<td>0.03769</td>
<td>0.00032</td>
<td>0.19803</td>
</tr>
<tr>
<td>REM</td>
<td>186</td>
<td>0.21271</td>
<td>0.21536</td>
<td>0.00160</td>
<td>1.31845</td>
</tr>
<tr>
<td>EM_ALL</td>
<td>186</td>
<td>1.00000</td>
<td>0.40675</td>
<td>0.06486</td>
<td>1.93514</td>
</tr>
<tr>
<td>CSRD</td>
<td>186</td>
<td>0.00349</td>
<td>0.00193</td>
<td>0.00000</td>
<td>0.01159</td>
</tr>
<tr>
<td>SIZE</td>
<td>186</td>
<td>28.4228</td>
<td>1.72140</td>
<td>25.2954</td>
<td>33.1341</td>
</tr>
<tr>
<td>LEV</td>
<td>186</td>
<td>0.13004</td>
<td>0.15966</td>
<td>0.00000</td>
<td>0.58413</td>
</tr>
<tr>
<td>ADJ_ROA</td>
<td>186</td>
<td>0.03108</td>
<td>0.10535</td>
<td>-0.09997</td>
<td>0.59125</td>
</tr>
<tr>
<td>GROWTH</td>
<td>186</td>
<td>2.40359</td>
<td>8.27530</td>
<td>-58.4652</td>
<td>32.5605</td>
</tr>
<tr>
<td>MTB</td>
<td>186</td>
<td>2.56260</td>
<td>2.93940</td>
<td>0.07816</td>
<td>11.8080</td>
</tr>
<tr>
<td>AQ</td>
<td>186</td>
<td>0.51613</td>
<td>0.50108</td>
<td>0.00000</td>
<td>1.00000</td>
</tr>
</tbody>
</table>

AEM = absolute value of accrual earnings management, REM = absolute value of real earnings management, EM_ALL = total value of accrual & real earnings management (in decile rank), CSRD = CSR disclosure, SIZE = natural logarithm of total asset, LEV = financial leverage, ADJ_ROA = industry-adjusted ROA, GROWTH = percentage changes in sales, MTB = market to book value ratio, AQ = audit quality using dummy variable, 1 if firms audited by Big 4 firm, 0 others

From the descriptive statistics, it is found that the mean of the absolute value of the accrual earnings (AEM) management by the sample firm is 0.0489. This number means that the average ratio of abnormal discretionary accruals indicating earnings management activity using discretionary accruals is 0.0489 of total assets. The real earnings management variable (REM), which is the sum of several abnormal firm real activities have an average value of 0.2127. This number has a meaning that the average
ratio of real corporate activity that is not normal and indicates earnings management in real terms is 0.2127 of the total assets.

EM_ALL variable that represents the total value of earnings management is presented in the form of decile rank which draws on research by Bozzolan et al. (2015). The smaller accrual or real earnings management performed by the firm, the smaller the rank obtained (close to 0). On the other hand, firms with high accrual / real earnings management will get a rank close to 1 value. Total earnings management (EM_ALL) is then obtained from the sum of AEM decile rank and REM decile rank. Therefore, the maximum value of this EM_ALL variable is 1.9351 (close to 2), which is obtained by the firm that performs earnings management with the highest value of all samples, both in the accrual earnings management group and real earnings management group.

The CSRD disclosure variable (CSRD) measured by proxy coverage rate or percentage of disclosure related keywords CSR has a mean of 0.00349. This number has the meaning that the average percentage of CSR keyword disclosure of all sample is 0.349% of all words in its annual report.

SIZE variable which is the natural logarithm of total assets of firm has mean equal to 28.44, with a real value equal to Rp 2,207,407,795,921. Financial leverage (LEV) variable has an average of 0.13004 which means that on average, the firm has a long-term loan ratio of 0.13004 or 13.004% of its total assets. The variable ADJ_ROA has an average of 0.03108 which means that the average ratio of net profit owned by the firm that has been adjusted to the industry median of each firm is 0.03108 or 3.108% of total assets. The sales change a variable (GROWTH) has an average of 2.40359 which means that on average, the firm has a sales growth rate of 2.40359 times from the previous year. The market to book value (MTB) has a mean of 2.5626 which means that on average, the firm has a market value/stock ratio of 2.5626 times of its equity book value. And the last, average obtained from the AQ variable in Table 2 above is 0.51613, indicating that the majority of firms are audited by Big 4.

From the correlation testing, there is a negative correlation between CSR disclosure level with accrual earnings management (AEM) and total earnings management (EM_ALL). This is in line with the hypothesis, which expects that high CSR disclosure indicates increasingly ethical management as well, so it has a low tendency to perform earnings management. However, there is a positive correlation between real earnings management and CSR disclosure level. The correlation analysis is expected to provide an initial description of the relationship between research variables. In the next section, the results and analysis of regression will be presented.
4.2. Model 1: The Effect of CSR Disclosure towards Accrual Earnings Management

Table 3 shows the regression results of the 1st model that tested the 1st hypothesis (H1). The p-value of F-statistic model 1 is 0.0008 (smaller than alpha 5%); thus model 1 is significant and R-squared model 1 is 0.1287.

**TABLE 3: Regression Result 1st Model**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Predicted sign</th>
<th>Coefficient</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSRD</td>
<td>- (H1)</td>
<td>-2.18659</td>
<td>0.077*</td>
</tr>
<tr>
<td>SIZE</td>
<td>+</td>
<td>-0.00482</td>
<td>0.011**</td>
</tr>
<tr>
<td>LEV</td>
<td>+</td>
<td>0.02211</td>
<td>0.140</td>
</tr>
<tr>
<td>ADJ_ROA</td>
<td>+</td>
<td>0.08736</td>
<td>0.011**</td>
</tr>
<tr>
<td>GROWTH</td>
<td>+</td>
<td>-0.00007</td>
<td>0.415</td>
</tr>
<tr>
<td>MTB</td>
<td>+</td>
<td>0.00104</td>
<td>0.231</td>
</tr>
<tr>
<td>AQ</td>
<td>-</td>
<td>0.01352</td>
<td>0.036**</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>186</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td></td>
<td>12.87%</td>
<td></td>
</tr>
<tr>
<td>Prob (F-statistic)</td>
<td></td>
<td>0.0017</td>
<td></td>
</tr>
</tbody>
</table>

***, **, * indicates significance at the 1, 5 and 10% levels, respectively.

AEM = absolute value of accrual earnings management, CSRD = CSR disclosure, SIZE = natural logarithm of total asset, LEV = financial leverage, ADJ_ROA = industry adjusted ROA, GROWTH = percentage changes in sales, MTB = market to book value ratio, AQ = audit quality using dummy variable, 1 if firms audited by Big 4 firm, 0 others

Regression results show negative effects of CSR disclosure on the accrual earnings management. This indicates that CSR disclosure can reduce accrual earnings management behavior (hypothesis 1 accepted). This result is in line with Bozzolan et al. (2015); Admiral & Yang (2009); Hong & Anderson (2011); and Choi & Pae (2011). According to ethical theory, firms that conduct CSR are considered to have high ethical value. Thus management will reduce the behavior of earnings management.

For control variables, firm size negatively affects the accrual earnings management where it is not by predictions. This may be due to a greater oversight from various parties (creditors, auditors, regulators, etc.) causes greater risk of earnings management detection, thus lowering the incentives to perform earnings management (Zhao et al., 2012). Then, ADJ_ROA positively affects the accrual earnings management. This is consistent with the assumption that the high difference in the profitability of firms with industry median motivates firms to do earnings management (Bozzolan et al., 2015) to
achieve expected and superior profits compared to competitors. AQ positively affects the accrual earnings management, which is not by the prediction. Being audited by the Big 4 firms is not necessarily reducing earnings management behavior. Further studies are needed to explain these indications. Leverage, growth, and market to book value do not significantly affect the level of accruals earnings management, not following prediction.

4.3. Model 2: The Effect of CSR Disclosure towards Real Earnings Management

Result of regression testing the 2nd hypothesis can be seen in table 4. In general, the model developed in testing 2nd hypothesis classified as good, proven by a significant F-static prob value at the level of significance of 1% and $R^2$ of 11.33%.

| Model 2: $REM = \alpha_0 + \alpha_1 CSRD + \alpha_2 \text{SIZE} + \alpha_3 \text{LEV} + \alpha_4 \text{ADJ}_{ROA} + \alpha_5 \text{GROWTH} + \alpha_6 \text{MTB} + \alpha_7 \text{AQ} + \epsilon$ |
|-----------------|-----------------|-----------------|-----------------|
| Variables      | Predicted sign | Coefficient     | Prob.           |
| CSRD           | -(H2)           | -4.26573        | 0.511           |
| SIZE           | +               | -0.03673        | 0.026**         |
| LEV            | +               | 0.214759        | 0.077**         |
| ADJ_{ROA}      | +               | 0.262909        | 0.127*          |
| GROWTH         | +               | 0.001275        | 0.308           |
| MTB            | +               | 0.018427        | 0.028**         |
| AQ             | -               | 0.041908        | 0.490           |
| N              |                 | 186             |                 |
| Adj. R²        |                 | 11.33%          |                 |
| Prob. F-Statistic |                 | 0.0105***         |                 |

***, **, * indicates significance at the 1, 5 and 10% levels, respectively.

REM = absolute value of real earnings management, CSRD = CSR disclosure, SIZE = natural logarithm of total asset, LEV = financial leverage, ADJ_{ROA} = industry adjusted ROA, GROWTH = percentage changes in sales, MTB = market to book value ratio, AQ = audit quality using dummy variable, 1 if firms audited by Big 4 firm, 0 others.

Based on the results of the 2nd hypothesis (H2) testing in table 4 above, it is proven that the improvement of corporate CSR does not affect on the practice of real earnings management. The results of this study are also inconsistent with Bozzolan et al. (2015) concludes that CSR-oriented companies tend to engage in accrual earnings management practices compared to real earnings management practices. If accrual earnings management practices are conducted through the selection of policies and accounting estimates and does not affect the company’s cash flows, it is different with real earnings
management by making the company away from its usual activities (Roychowdurry, 2006) thus having a direct impact on the company's cash flow and future prospects (Bozzolan et al., 2015) and have a greater impact than the accrual earnings management (Cohen & Zahrowin, 2010). Therefore, the level of CSR disclosure should be more negative to real earnings management practices than accrual earnings management.

The reason for the rejection of the second hypothesis in this study is probably due to the nature of real earnings management which is more difficult to detect because the implementation is done through the operational activities of the company, so it is difficult to distinguish which activities are carried out for optimization and which activities are carried out for opportunistic management acts (Zang, 2012). Another case with accrual earnings management practices that are done through the selection of policies and accounting estimates, so it is easier to detect and test related to the influence of CSR disclosure rate. Also, another possibility that led to the rejection of this second hypothesis is the measurement of incomplete real-time earnings management practices following the model developed by Roychowdurry (2006) since the data for the advertising and research & development expense on manufacturing firms in Indonesia are not available for public. Therefore, it is expected that further research can conduct similar research with more complete data, so it can be known whether the results will be consistent or not.

For control variables, firm size (SIZE) has been shown to have a positive effect on real earnings management practices. The results of this test are contrary to the alleged researcher, but these results are consistent with the research conducted by Zhao et al. (2012), larger the size of the company led to the supervision of various parties become increasingly tight and intensive thus limiting the practice of earnings management. As for the leverage test results, consistent with the allegations and described by Roychowdurry (2006) where it is mentioned that leverage is a reflection of the default risk of debt contracts with creditors so as to prevent this from happening, the company will conduct real earnings management to ensure that earnings reported in the financial statements that no one violates the debt contract (Devon & Jiambalvo, 1994). Another control variable, ADJ_ROA, proved to have a positive effect on real earnings management practices and is consistent with the statements expressed by Dechow et al. (1995) and Markarian et al. (2008). This is consistent with the assumption that the difference in the profitability of firms with high industrial median motivates firms to conduct earnings management (Bozzolan et al., 2015) to achieve expected and superior profits compared to competitors. Finally, the results show that MBV which is a proxy of information asymmetry has a positive effect on real earnings management practices. According
to Richardson (2000), when the level of information asymmetry is high, management incentives to conduct of earnings management becomes more significant.

Another control variables, that are not proven to significantly affect the practice of real earning management is the growth rate (GROWTH) and audit quality (AQ). The company's growth rate does not affect the real earnings management practices, while for the quality of the audit, although the results are not by expectations, the results of this study confirm that the practice of real earnings management is challenging to detect by the auditor. This result is consistent with Siregar & Utama (2006) which found evidence that audit quality does not affect earnings management practices.

4.4. Model 3: The Effect of CSR Disclosure towards Aggregate Earnings Management

Result of regression testing the 3rd hypothesis can be seen in table 5. In general, the model developed in testing 3rd hypothesis classified as good, proven by a significant F-static prob value at the level of significance of 1% and $R^2$ of 18.27%.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Prediction</th>
<th>Coefficient</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>- (H3)</td>
<td>-25.4810</td>
<td>0.054*</td>
</tr>
<tr>
<td>SIZE</td>
<td>+</td>
<td>-0.07191</td>
<td>0.004***</td>
</tr>
<tr>
<td>LEV</td>
<td>+</td>
<td>0.48498</td>
<td>0.037**</td>
</tr>
<tr>
<td>ADJ_ROA</td>
<td>+</td>
<td>0.74239</td>
<td>0.065*</td>
</tr>
<tr>
<td>GROWTH</td>
<td>+</td>
<td>0.00096</td>
<td>0.774</td>
</tr>
<tr>
<td>MTB</td>
<td>+</td>
<td>0.03460</td>
<td>0.029**</td>
</tr>
<tr>
<td>AQ</td>
<td>-</td>
<td>0.13777</td>
<td>0.061*</td>
</tr>
</tbody>
</table>

| N            | 186        |
| R-squared    | 18.27%     |
| Prob (F-statistic) | 0.0001 |

***, **, * indicates significance at the 1, 5 and 10% levels, respectively

In Table 5 above, the regression results of Model 3 related to the effect of CSR disclosure to total earnings management. In general, the regression results indicate a negative influence of CSRD disclosure to total earnings management (EM_ALL),
regardless of the type of earnings management (accrual or real) as was done in the previous test. These results support hypothesis 3 that suggests a negative effect of CSR disclosure levels on total earnings management. This indicates that the higher CSR disclosure made by the firm, the smaller the tendency to make total earnings management. This result is in line with the results of Bozzolan et al. (2015) and following ethical theory, which assumes that firms with high CSR will have high ethics as well, so as not to tend to engage in unethical behavior such as earnings management.

Firm size (SIZE) is found to affect earnings management but in a different direction with initial expectations. The results show that firm size negatively affects accrual earnings management. This indicates that small firms have the motivation to make high earnings management because they want to get the appreciation and positive image of investors. The earnings management is done by the firm to achieve expected profit, so it is expected to attract investors to invest. Such contradictory results can also occur given that the larger size of the firm will get closer scrutiny as well from various parties such as auditors, creditors, and regulators, thus management incentives to practice earnings management are reduced (Zhao et al., 2012).

There is also a significant influence between the levels of financial leverage (LEV) with total earnings management. The results are by the previous assumption that the existence of a high level of financial leverage will improve the management intention to make accrual earnings management due to the increasing pressure of debtholder.

Besides, there is also a significant positive effect of the level of profitability differences of the firm with its industry median (ADJ_ROA) to total earnings management. This is following the hypothesis that the high difference of the profitability of the firm with its industry median will motivate the firm to make earnings management (Bozzolan et al., 2015) to achieve the expected profit and superior to the competitor.

In line with the regression results in Models 1 and 2, there was no significant effect on firm growth (GROWTH) on total earnings management. As for the audit quality control variable (AQ), the result is that the audit quality has a positive effect on the accrual earnings management, which indicates the tendency of earnings management by firms audited by Big 4 accounting firms. The result of this research can indicate that, even if the audit process is done by Big 4, it cannot lower the tendency of the firm’s management to make earnings management. Further studies are needed to explain the phenomena and indications.

Overall, the results of this study are consistent with the theories presented in chapter 2 of this study. Based on ethical theory, companies that disclose more CSR indicate that
the company is more ethical and responsible to the community and the surrounding environment.

5. Conclusion

This study aims to examine the effect of CSR disclosure level on earnings management practices, both real and accrual. With 186 samples firm-year, for period 2013-2015, this study documents the evidence that the level of CSR disclosure is negatively affect the accrual earnings management practices and aggregate earnings management. However, we find no evidence of the effect of CSR disclosure towards real earnings management practices as it is difficult to detect and the measurement do not use the complete data.

The level of CSR disclosure negatively affects accrual and aggregate earnings management. This finding supports ethical theory. Ethical theory states that firms conducting CSR are considered to have high ethical value so management will reduce their earnings management behavior.

This study is not free from the limitations, such as limitation of the sample used; data to measure real earnings management practices is not entirely available, and method of measuring the level of CSR disclosure is less reliable. Future research is expected to improve this limitation such as using a broader sample company data thus the results can be more generalized; use of comprehensive and complete data to measure real earnings management practices so that the results are more relevant; and use other methods of measuring corporate CSR disclosure level, both scoring or checklist method on components disclosed in accordance with the GRI framework. Besides, further research can also examine the effect of CSR disclosure on the trade-off between real and accrual earnings management to confirm the results of previous studies conducted by Bozzolan et al. (2015).

Finally, the results of this study have several implications, such as: for academics, the results of this study may provide additional literature reference to examine the effect of CSR disclosure on the practice of comprehensive earnings management because this study not only examines the effect of CSR disclosure on accrual earnings management practices but also real earnings management practices; For the company, it can provide information to the company regarding the importance of disclosure of CSR activities that have been done to assess the company’s ethics as well as a consideration in making investment decisions; for regulators, it can be a consideration to make strict rules related the mandatory if implementation and disclosure of CSR in order to enhance
a sense of management responsibility so that opportunistic behavior, such as earnings management practices, can be minimized.

References


