Corporate social responsibility, earnings management, and firm performance: Are the companies really ethical?

A.K. Widagdo¹, Sri Murni¹, Siti Nurlaela², Rahmawati¹*

¹Accounting Department, Sebelas Maret University, Jl Ir Sutami 36 A, Solo, 57771, Indonesia
²Accounting Department, Batik Islamic University, Jl. Agus Salim 10, Solo, 57147, Indonesia
*Corresponding author: rahma2005@yahoo.com

Abstract. Climate change challenges present organizations (e.g., companies, corporations, nongovernmental organizations (NGOs)), communities, and citizens with the need to redefine current views on corporate social responsibility (CSR) from a voluntary luxury as being a necessity. CSR can be an effective tool for mitigating climate change. Firms have to redress climate change through environment-friendly manufacturing techniques, adopting a green, transparent policy and environmental disclosure. Based on the extant literature, CSR activities can create a positive image for the company and increase company value. However, some scholars also argue that CSR activity may also be used to hide the opportunistic behaviour of management, namely earnings management. Therefore, the purpose of this study is to examine the relationship between CSR and a firm's performance and the moderating role of earnings management on the relationship between CSR and firm performance. The sample of this research is the mining sector because this sector is included in a high-profile company, which is vulnerable to environmental damage issues. The period of observation is 2015-2019. The method of analysis uses the panel data method. The results indicate that CSR has a positive and significant relationship with a firm's values. In addition, earnings management does not moderate the relationship between CSR and a firm's value. It indicates that earnings management is not a moderating variable but a predictor variable/independent variable. The finding implies that the firms do not make social responsibility activities a symbolic activity used as a means by management to cover earnings management activities.

1. Introduction

Climate change is arguably the most significant issue confronting the international world today. If allowed uncontrolled, it can have catastrophic repercussions for humankind in severe social effects, substantial economic losses, and global environmental damage on an unprecedented scale. According to Dunne [1], Indonesia was one of the highest emitter countries of greenhouse gases on the planet. It has the sixteenth-largest economy in the world and the largest in Southeast Asia. In addition, over the past decade, the country has overtaken Australia to reclaim its position as the world's leading thermal coal exporter. Therefore, industry growth in the country, including the extensive mining and fossil-fuel sector, significantly contributes to global climate change. The mining and fossil-fuel sector should address climate change to tackle the problem of broader social responsibility, which encompasses human and labour rights, interaction with stakeholders, environmental performance, and social effect [2, 3].

The complexity of managing the tremendous socioeconomic of climate change has compelled every corporation to adopt Corporate Social Responsibility (CSR). CSR acts as a reaction to local and
international regulatory frameworks for mitigating potential risks and being proactive about climate change. Some organizations even use it to achieve progressive social impact outside the company's straight control by participating to the Sustainable Development Goals (SDGs) [4]. CSR activities related to adaptation, mitigation and managing climate change are reported in the company annual report or sustainability reporting [5].

Some scholars view that CSR has a positive impact on corporate value as it ensures sustainable business [6]. It also maintains the company’s ability to engage socially [7], support the prestige of the firm and its award-winning status [8], gain competitive advantages [9], and retain and recruit competent staff via their company culture [10]. In addition, CSR activities have been documented to have a favourable impact on a firm's profits. Saleh et al. [11] reveal that CSR implementation positively influences the company financial performance. Kopel and Brand [12] suggest that non-CSR firms experience a lower market share and profit than CSR firms. The study also finds that the profitability of CSR companies will first improve and subsequently decline with CSR.

Other scholars view that business executives frequently utilize CSR activities as a means of entrenchment to control corporate profitability. Managers manage income by utilizing CSR initiatives to maintain connections with shareholders and stakeholders and to garner their support [13, 14]. Asymmetry in information between agent (the management) and the principal (the owner) may result in earnings management, in which the manager provides the owner with a signal of the company's performance while failing to transmit information that is consistent with the company's actual condition [15]. In these scenarios, CSR can be utilized to conceal the earnings management action that has resulted in a decrease in the firm's performance. In other words, because earnings management tactics harm the collective interests of stakeholders, this present study conjectures that by adopting CSR policies, managers who influence earnings can address stakeholder involvement and oversight. Hence, CSR may be used to cover the earnings management activity, resulting in a decrease in the firm's performance. This study aims to explore whether CSR affects company performance and test whether earnings management moderates the relationship between CSR and company financial performance.

2. Previous studies and hypotheses development

2.1. The impact of CSR on financial performance

CSR enables organizations to address the requirements of all stakeholders. Internal stakeholders will be more committed to the firm's success, while external stakeholders will offer the organization a favourable review. Additionally, customers will purchase additional items or services, which will increase the company's financial success [16]. It is consistent with the notion of stakeholder theory, which states that a business has to be accountable to diverse groups in community that exert influence over it, as its actions and conduct will influence society's welfare. Positive ties between society and business generate support from the community, which is critical for the business's existence. This support manifests itself in loyal consumers and workers who work efficiently for the company's benefit to enhance financial success. Previous researches demonstrating that CSR has a beneficial influence on financial performance [11], [17–19]. Based on these explanations, this study posits the following hypothesis.

H1: CSR positively affects the firm’s financial performance.

2.2. The impact of earnings management on financial performance

Earnings management is intrinsically linked to profit generation. This is because profit produced by a business is frequently utilized as a benchmark by readers of financial statements when determining an entity's performance level. As a result, management has incentives to manage earnings. As a result, management cannot ensure that the information supplied to the owner accurately reflects the company's actual financial position. Earnings management activities may impair the quality of information given in financial statements about profits. The financial statements' low-quality information will have a detrimental effect on the organization's financial performance. According to Akram et al. [20], earnings
management initiatives are unfavourable for financial performance. Based on these explanations, this study proposes the following hypothesis.

H2: Earnings management negatively affects the firm’s financial performance.

2.3. The moderating effect of earnings management on the influence of CSR and the firm’s financial performance

CSR initiatives may assist businesses in gaining support from a supportive societal environment, allowing them to function in harmony. Social responsibility disclosure will increase transparency in financial reporting, motivating managers to improve their earnings management strategies. Additionally, through CSR, the firm will boost staff morale and foster positive engagement with investors [21]. Further, the behaviour of earnings management in the organization will weaken investor trust, resulting in a decline in the organization's financial performance. Prior et al. [13] discovered that earnings management had a negative moderating influence on the link between CSR and the financial performance of multinational businesses. Similarly, Tandry et al. [22] found that when a firm expands its CSR operations due to earnings management, the positive correlation between CSR and firm value might be considerably decreased. Therefore, the study's third hypothesis is as follow.

H3: Earnings management weaken the positive relationship between CSR and the firm's financial performance.

3. Research method

3.1. Sample

This study examines the moderating effect of earnings management on the relationship between CSR and company in mining companies in Indonesia. Therefore, the study sample is companies in the industry listed on the Indonesian Stock Exchange (IDX) in the year 2015-2019. The observation period was only until 2019 due to limiting Covid-19 that has occurred since 2020. This research selects the sample utilizing a purposive method. Table 1 shows the sampling procedure. According to the Table 1, the final sample is 166 firm-year observations.

**Table 1.** Sampling procedure.

| No | Criteria                                      | Number |
|----|-----------------------------------------------|--------|
| 1  | Mining firms listed in IDX in period 2015-2019| 38     |
| 2  | Incomplete data                               | (3)    |
| 3  | Final sample                                  | 35     |
| 4  | Firm-year observation                         | 175    |
| 5  | Outlier data                                  | (9)    |
| 6  | Final firm-year observation                   | 166    |

3.2. Variable definition

Table 2 presents the variable measurement and definition of the researched variables. There are five variables examined in this study.

**Table 2.** The operational definition and measurement of variables.

| Definition                                | Measurement |
|-------------------------------------------|-------------|

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3.3. Method of analysis
The data is processed using the panel data method using Eviews software version 9. Panel data mixes cross-sectional and time-series data, allowing for estimating population characteristics using the number of observations. The greater the number of samples used in the study, the higher the accuracy of the research results. By applying the panel data estimation process, individual characteristics can be estimated at the same time, reflecting the dynamics over time of each of these independent variables.

The present study uses Moderated Regression Analysis (MRA) to test the moderating effect of earnings management on the relationship between CSR and company performance. The test is carried out in three stages. Therefore, this study has three models, namely:

Model 1: \[ \text{ROA} = a + \beta_1 \text{OWN} + \beta_2 \text{CSR} + \beta_3 \text{SIZE} + e \]  
Model 2: \[ \text{ROA} = a + \beta_1 \text{OWN} + \beta_2 \text{CSR} + \beta_3 \text{SIZE} + \beta_4 \text{DAC} + e \]  
Model 3: \[ \text{ROA} = a + \beta_1 \text{OWN} + \beta_2 \text{CSR} + \beta_3 \text{SIZE} + \beta_4 \text{DAC} + \beta_5 \text{CSR} \times \text{DAC} + e \]

where, ROA = Return on equity; OWN = Ownership concentration; DAC = Discretionary accrual; CSR = Corporate social responsibility disclosures; SIZE: Firm size.

Model 1 is the baseline model. It examines the influence of CSR on company financial performance. Model 2 is model 1 with the discretionary accrual variable as a proxy for earnings management in the independent variables. The third model is model 2, with an addition of the interaction between CSR and earnings management in the independent variables.

4. Result and discussion
4.1. Descriptive statistics
Table 3 exhibits the descriptive statistics of all variables. Besides the minimum, maximum, mean, and standard deviation value, the table 3 also shows the skewness and kurtosis value, reflecting the normality of the data.

As displayed in Table 3, the mining industry discloses CSR at a rate of 46.83 percent, with a minimum of 33% and a high of 67%. As a result, the degree of CSR disclosure by mining companies in Indonesia appears to be quite low. This observation corroborates with previous research [23, 24, 25].

Discretionary accrual is ranging from 0.414 to 2.262, with the average value is 0.896. The mean value of return on asset is 2.026 with ranging from -70.572 to 28.363. The standard deviation is 14.711 that indicates a long range. This may be due to the high fluctuation in the price of mining products, especially petroleum. In terms of ownership concentration, in general, mining companies in Indonesia have a high concentration level with a value range from 0.146 to 0.925. The result is also consistent with a recent prior study that suggests that share ownership in the IDX manufacturing industry is highly concentrated [26].

Table 3. Descriptive statistics.
### 4.2. Hypotheses testing and discussion

Table 4 shows the results of panel data regression of the three regression models. This study utilizes a random effect model after carefully assessing the most suitable panel data regression testing model (fix effect or random effect).

#### Table 4. Results of panel data regression.

| Variable               | Model 1 (Random Effects) | Model 2 (Random Effects) | Model 3 (Random Effects) |
|------------------------|--------------------------|--------------------------|--------------------------|
|                        | C                        | OWN                      | CSR                      | DAC                      | SIZE        |
| Mean                   | 2.026                    | 0.505                    | 46.283                   | 0.896                    | 19.774      |
| Median                 | 2.924                    | 0.495                    | 41.500                   | 0.879                    | 19.893      |
| Maximum                | 28.363                   | 0.925                    | 67.000                   | 2.262                    | 22.699      |
| Minimum                | -70.572                  | 0.146                    | 33.000                   | 0.414                    | 15.229      |
| Std. Dev.              | -1.821                   | 0.154                    | 0.6741                   | 2.675                    | -0.470      |
| Skewness               | 9.410                    | 2.068                    | 2.351                    | 17.380                   | 2.919       |
| Kurtosis               | 0.3464                   | 0.1987                   | 0.2496                   | 0.7551                   | 0.7551      |
| Adjusted R^2           | 0.030                    | 0.089                    | 0.0454                   | 0.0778                   | 0.2496      |
| F-statistic            | 2.709**                  | 5.026***                 | 4.019**                  |                          |             |
| N                      | 166                      | 166                      | 166                      | 166                      | 166         |

Notes: *** = significant at 0.01; ** = significant at 0.05

As presented in Table 4, the regression results of Model 1 indicate that CSR activities positively affect company performance. This shows that the first hypothesis in this study is supported. The result suggests that the higher the company's CSR activities, the higher the financial performance in terms of profitability. The finding is consistent with previous literature [11, 17–19]. Meanwhile, the regression results in Model 2 show that earnings management also has a positive effect on company performance. The result indicates that the higher the discretionary accruals, the higher the financial performance. Therefore, the earnings management done by the management of the company increases the profitability of the company, which in turn increases financial performance. The result shows that the practice of earnings management carried out by mining companies in Indonesia is not opportunistic because it aims to convey information on company performance during the data period. The result is inconsistent with Akram [20]. In the mining sector, the management probably tends to do earnings management for reducing information asymmetry to increase firm financial performance. In Model 3, in terms of moderating variable, the analysis results show that the interaction between earnings management and CSR does not moderate the association between CSR and company performance. The result indicates that earnings management is a predictor variable. This finding implies that mining companies in Indonesia do not use CSR activities to cover earnings management practices.

### 5. Conclusion

This article aims to investigate whether CSR disclosure impact firm performance and to test whether earnings management moderates the association between CSR and company financial performance.
CSR reporting involves assessing a company’s impact on climate change, the environment, the consequences of its activities, and its participation to sustainability. Data analysis results reveal that CSR has a positive relationship with a firm’s performance. In addition, earnings management does not moderate the relationship between CSR and the firm’s financial performance. It indicates that earnings management is not a moderating variable, but it is a predictor variable/independent variable. The finding implies that the firms do not make social responsibility activities a symbolic activity used as a means by management to cover earnings management activities.

This study has certain shortcomings which can be addressed for directing next research. First, CSR activities reported in the annual report are both the social and environmental responsibility of the company. It does not explicitly assess environmental disclosure only. Further research may examine the effect of environmental disclosure on company performance to see the consistency of this study found. Second, the measurement of CSR activities uses secondary data sources that may not reflect the actual practice. Future studies can use primary data to measure CSR practices, for example, interviews.

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Acknowledgement
The authors are grateful to the Sebelas Maret University for the PNBP research funding.