The effect of good corporate governance mechanism and corporate social responsibility on financial performance with earnings management as mediating variable

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Abstract
Purpose – The purpose of this paper is to determine the direct influence of the mechanism of good corporate governance (GCG) and corporate social responsibility (CSR) on financial performance as well as through earnings management as a mediating variable.

Design/methodology/approach – The data used in this research are secondary data involving 102 companies listed on the Indonesian Stock Exchange for the period 2014. The data used in this study were analyzed using partial least square and carried out with the help of software WarpPLS 5.0.

Findings – The results show that the mechanism of GCG and CSR has a positive effect on financial performance as well as the CSR on financial performance.

Originality/value – The results also show partial mediation of earnings management on impact of GCG mechanisms on financial performance and full mediation of earnings management on impact of CSR on financial performance.

Keywords Earnings management, Corporate social responsibility, Corporate governance, Financial performance

Paper type Research paper

Introduction
The presence of good corporate governance (GCG) is absolutely required by an organization, considering GCG requires a good governance system which can assist in building shareholder confidence and ensure that all stakeholders are treated equally. A good system will provide effective protection to shareholders to recover their investment reasonably, appropriately and efficiently, and ensure that management acts for the benefit of the company.

Research on the effect of GCG on the firm performance has been conducted extensively. However, there are still inconsistencies among existing research results. Based on research by Mashitoh and Irma (2013), using bank samples existing in Indonesia, empirical evidence was found that showed that the board of commissioners and audit quality can improve financial performance, while research by Hermiyetti and Manik (2013) with a sample of 440 companies listed on the Indonesian Stock Exchange (IDX) during the period 2006–2010, except for financial companies, found empirical evidence that GCG mechanism has no effect on financial performance.

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A company not only operates for the benefit of shareholders, but also for the interests of the stakeholders in business practices through the implementation of corporate social responsibility (CSR). CSR activity is based on the theory of legitimacy which confirms that the company continues to work to ensure that the company has operated in accordance with the rules and norms prevailing in the society or environment in which the company is located, in which the company seeks to ensure that its operational activities are accepted as “legitimate” (Deegan, 2002).

The implementation of CSR can improve the company’s performance as its reputation and competitiveness increase. Research on the effect of CSR on a company’s financial performance has been conducted extensively. However, there are still inconsistencies among the existing research results. Based on research by Saleh et al. (2011), with sample companies listed on Bursa Malaysia in the period of 1999–2005, there is provided empirical evidence that the implementation of CSR has a significant positive effect on financial performance, while research by Mwangi and Jerotich (2013), with samples of manufacturing companies and construction listed on the Nairobi Stock Exchange in 2007–2011, found empirical evidence that CSR has no effect on the financial performance of the company.

The inconsistency of previous research results prompted the researcher to use another variable that could mediate the relationship between GCG and CSR with the company’s financial performance. The authors are interested in re-examining the effect of GCG and CSR on financial performance by incorporating earnings management as a mediation variable.

Earnings management can occur as a result of information asymmetry between the management (agent) and the owner (principal) in which the manager gives a signal of the condition of the company to the owner but does not convey the information according to the actual condition. Under these circumstances, a control mechanism that aligns the different interests between both parties is needed. One of the mechanisms that can be used is the GCG mechanism. Uwuigbe et al. (2014) found that the size of the board of commissioners and independent commissioners may decrease earnings management actions by managers, while the duality of the CEO has a significant positive effect on earnings management.

CSR activity is often used by company managers as an entrenchment strategy in managing corporate profits. Managers manipulate income by using CSR activities as a strategy to maintain relationships and gain support from shareholders and stakeholders (Prior et al., 2008).

Based on the description that has been disclosed, the authors are interested to examine the effect of GCG and CSR on financial performance by incorporating earnings management as a mediation variable. This research develops Setiawan’s (2015) research. This paper will be followed by an overview of literature review, research methods, results and discussion and conclusions.

**Literature review**

*Agency theory*

Jensen and Meckling (1976) describe the agency relationship as a relationship between the company owner (principal) and the agent, with the delegation of the decision-making authority to the agent. In an agency relationship, there may be a conflict of interest between the principal and the agent. Shareholders demand increased corporate profitability and dividends, while the manager is an agent motivated to maximize the fulfillment of economic and psychological needs. On the basis of agency and principal relationships, management is encouraged to perform earnings management in presenting financial statements. For that, one of the ways that can be used to monitor contract issues between management and investors and limit the opportunistic behavior of management is through the implementation of GCG.
Stakeholder theory
Freeman (1984) concluded that the real purpose of a company is to meet the needs of stakeholders, i.e., those affected by the decisions taken by the company. Gray et al. (1995) said that the survival of a company depends on the support of its stakeholders, and that support should be sought so that the company should seek that support. The stronger the stakeholders, the more the companies are trying to adapt. Stakeholder theory is important in this research because the theory is related to the parties that are interested in the company; those who will be affected and influenced by the activities of the company, such as accountability of management to stakeholders in the form of CSR activities and corporate financial performance.

Legitimacy theory
The theory of legitimacy is seen as a perspective orientation system, where companies can affect and be affected by the communities in places where the company performs its activities. Therefore, the theory of legitimacy is used as the basis of the company in disclosing CSR activities. Deegan (2002) explains that legitimacy can be obtained when there is conformity between the existence of an enterprise that is not interfering or appropriate (congruent) with the existence of the value systems in society and environment. In addition, the disclosure of a CSR report is expected to provide benefits for the company, which is to gain legitimacy from the community and increase corporate profits in the future.

Financial performance
According to IAI (2007), financial performance is the company’s ability to manage and control its resources. Financial performance can be measured by analyzing financial statements using financial ratios. According to Harahap (2008, p. 303), financial ratios are divided into four types of ratios, namely, liquidity ratios, profitability ratios, solvency ratios and activity ratios. The measurement results of performance achievement serve as the basis for management or manager of the company to improve performance in the next period and be used as the basis of reward and punishment.

Firm value
According to the opinion of Husnan (2006, p. 5), for companies that have not gone public, the company value is the number of costs willing to be paid by prospective buyers if the company is sold, while for companies that have gone public, company value can be seen from the value of its existing stock in the capital market. One of the alternatives used in measuring firm value is by using Tobin’s Q.

Good corporate governance (GCG)
The Cadbury Committee (in Siswantaya, 2007) defines GCG as a set of rules governing relationships between shareholders, corporate managers, creditors, governments, employees and other internal and external interest holders relating to their rights and obligations. Corporate governance arises from the interests of the company to ensure the principal/investors that the funds invested are used appropriately and efficiently. Uwuigbe et al. (2014) argue that the existence of GCG can prevent or reduce earnings management because such supervision becomes incentive for management as an agent to act as best as possible in the interest of the principal, i.e. stakeholders, and suppress deviant behavior so as to account for their duties properly.

Corporate social responsibility (CSR)
According to ISO 26000, CSR is the responsibility of an organization for the impacts of its decisions and activities to the society and environment, embodied in the form of transparent
and ethical behavior, in line with sustainable development and community welfare, taking into account stakeholder expectations, in line with established law and norms of international behavior, and integrated with the organization as a whole.

Profits manipulation as unethical actions is rare in companies committed to CSR because companies that engage in CSR activities maintain long-term quality relationships with investors so that companies will seek not to practice earnings management in order to maintain long-term relationships with investors (Gras-Gil, 2016). Emphasis on transparency will encourage management to present a report that describes the actual condition of the company.

**Earnings management**

Earnings management, according to Fischer and Rosenzweig (1995), is the actions of managers who increase or decrease reported profits from their unit of responsibility that has no relationship with the increase or decrease in the long-term corporate profitability. According to Scott (2003, pp. 377-383), there are several motivations to do earnings management: bonuses; contractual motivation; political motivation; tax motivation; CEO turnover; initial public offering/IPO; and inform investors. In order to measure earnings management, there are several models that can be used, such as Healy model, industrial model, de Angelo model, Jones model and modified Jones model (Dechow et al., 1995).

**Hypothesis development**

*The effect of GCG mechanism on financial performance.* Research by Wu et al. (2009) finds empirical evidence that an independent commissioner with high professionalism will produce more objective decisions and realize effectiveness in supervising managers. Thus, the decisions taken are not for the sake of certain parties, and managers act only for the benefit of the company and other stakeholders in order to improve financial performance. According to Ahmed and Hamdan (2015), a key element in the effectiveness of the board of commissioners is to have an independent commissioner. Therefore, with a greater number of independent commissioners, the decision-making process will be more objective so that will improve financial performance.

Research conducted by Abdullah and Page (2009), Coskun and Sayilir (2012) and Peters and Bagshaw (2014) found empirical evidence that GCG mechanisms have no significant effect on financial performance. According to Coskun and Sayilir (2012), this weak relationship could be due to the biased accounting numbers that become the measurement for the company’s performance. Companies with better corporate governance tend to report earnings more conservatively rather than using discretionary accounting procedures. So corporate accounting procedures that do not refer to international auditing and accounting standards are unable to assist the users of financial statements in observing a healthier comparison of financial performance and resulting in more effective evaluation. Based on the description, the proposed hypothesis is:

*H1.* GCG mechanism influences the company’s financial performance.

*The effect of CSR on financial performance.* CSR is able to meet the needs of every stakeholder. Internal stakeholders will be more dedicated to contribute to the company and external stakeholders will give a good assessment of the company. In addition, consumers will buy more products or services so that the company’s financial performance will improve (Chen and Wang, 2011). This is in accordance with the concept of stakeholder theory, which assumes that the company must be responsible to various groups in society that have influence on the company because the decisions and behavior made will affect the welfare of the society. Good relationships between society and a company will create
support from the society that affects the company’s survival. Such support is reflected in customers who are loyal to the company, and employees who work optimally for the benefit of the company so as to improve financial performance.

Research that proves that CSR has a positive effect on financial performance, includes research conducted by Saleh et al. (2011), Rajput et al. (2012), Palmer (2012), Ghelli (2013) and Ahamed et al. (2014). The research conducted by Aras and Crowther (2009), Fan (2013) and Mwangi and Jerotich (2013) found empirical evidence that CSR has no effect on financial performance. Based on the description, the proposed hypothesis is:

H2. CSR affects the company’s financial performance.

The effect of GCG mechanism on earnings management. Research conducted by Lee et al. (2012), Uwuigbe et al. (2014) and Kamran and Shah (2014) stated that the GCG mechanism has a negative and significant impact on earnings management. The effectiveness of supervisory functions by the board of commissioners requires high independence. As per agency theory, managers view independent commissioners as being more alert to agency problems as independent commissioners are fully dedicated to overseeing management’s performance and behavior as it also supports the need for independent commissioners to strengthen their reputations as expert decision makers. This supervision can certainly prevent or reduce earnings management because such supervision becomes an incentive for management as an agent to act as best as possible in the interest of the principal, i.e. stakeholders, and suppress deviant behavior so as to account for their duties properly.

Contrary to the studies above, research studies by Hermiyetti and Manik and Al-Thuneibat et al. (2016) find empirical evidence that GCG mechanisms have a non-significant effect on earnings management. Hermiyetti and Manik said that the insignificant effect is the result of the existence of the GCG mechanism which only serves as a form of corporate compliance with government law and regulation, so that the application of the GCG mechanism becomes ineffective and not optimal in supervising management actions. Based on the description, the proposed hypothesis is:

H3. GCG mechanism influences earnings management.

The effect of CSR on earnings management. Companies that engage in CSR activities maintain long-term relationships with investors so that the company will endeavor not to practice earnings management in order to maintain long-term relationships with investors (Chih et al., 2008). Carroll’s (1979) research states that CSR is an ethical corporate responsibility and CSR practice is highly expected by stakeholders. Companies that engage in CSR activities tend to be ethical and have good standards of conduct with stakeholders. Carroll’s (1979) research also states that if a company practices CSR in the context of moral obligation, then the company will tend to limit the existence of earnings management.

Managers who manipulate earnings in the interest of their personal interest will lower the level of stakeholder trust because the company is considered to be jeopardizing the interests of its stakeholders. Companies committed to CSR will seek to prevent any earnings management action by managers because earnings management is regarded as irresponsible in the company’s obligation to provide real financial information (Gras-Gil, 2016). Based on the description, the proposed hypothesis is:

H4. CSR affects earnings management.

The effect of earnings management on financial performance. Earnings management is closely related to the rate of profit earned. This is because the profit earned by an entity is often used as a benchmark for the users of financial statements in assessing the success rate of an entity. Therefore, incentives arise for management to make earnings management. As consequences, the information provided to the owner by management cannot be guaranteed
that it reflects the actual financial condition of the company. Earnings management actions can degrade the quality of information related to profits presented in the financial statements. The low quality of information contained in the financial statements will adversely affect the company’s financial performance. Research by Akram et al. (2015) concludes that earnings management actions can reduce financial performance. Based on the description, the proposed hypothesis is:


The effect of GCG mechanism on financial performance through earnings management. The financial performance of a company is determined by the extent of its seriousness to apply corporate governance. Theoretically, GCG practice can improve the company’s financial performance, reduce the risk that may be done by the board with decisions that favor their own and generally corporate governance can increase investor confidence to invest its capital that will impact on its performance. The existence of a large independent commissioner and the company’s decision to choose an external auditor with a good reputation can provide great supervision to management in order not to commit fraud in the financial statements. The existence of institutional ownership may also add to the role of supervisor as institutional investors seek to protect the rights of shareholders.

Large monitoring of independent commissioners and the ability of good external auditors in the financial field can minimize possible fraudulent actions by companies such as earnings management. As a result of declining earnings management undertaken by management, efforts to increase profits made by management are undertaken by increasing the company’s operational activities. Increased corporate operational activity is something that management will do for their personal gain in order to gain greater incentives from profits generated by the company. Increased corporate operational activity will encourage companies to improve their company’s performance. The study by Ching et al. (2015) and Setiawan (2015) found empirical evidence that corporate governance affecting financial performance is mediated by earnings management. Based on the description, the proposed hypothesis is:

H6. GCG mechanism affects financial performance through earnings management.

The effect of CSR on financial performance through earnings management. Disclosure of CSR activities can help companies gain support from a conducive society environment in order for the company to operate calmly. The disclosure of social responsibility will make financial reporting transparent, encouraging managers to reduce earnings management practices. In addition, through CSR the company will improve employees’ morale and maintain good relations with investors (Waddock and Graves, 1997). The low practice of earnings management within the company will create investor confidence so as to improve the company’s financial performance. Based on the description, the proposed hypothesis is:

H7. CSR affects financial performance through earnings management.

Theoretical thinking framework
Performance is an illustration of the activity implementation achievement in realizing the objectives of the firm; one of the important goals of the establishment of a company is to maximize shareholder wealth through increasing the value of the company (Brigham and Houston, 2001). The effort to realize optimal company performance requires a GCG mechanism. The Company assures that the implementation of GCG is another form of business ethics and work ethics enforcement that has become the company’s commitment. The role and demands of foreign investors and creditors on the application of GCG principles is one of the factors in making investment decisions in a company. Policies on
CSR activities are intended for the company to gain legitimacy from the community. CSR is a claim of stakeholders that the company not only operates for the benefit of shareholders, but also for the benefit of stakeholders in business practices.

The inconsistency of previous research results encourages researchers to use a different variable that can mediate the relationship between GCG and CSR with the company’s financial performance. The variable used as the mediation variable in this study is earnings management. Users of financial statements often make profit an indicator of the entity’s success. That is why each entity wants to report a higher level of profit. The information provided to the owner by management cannot be guaranteed that it reflects the actual financial condition of the company. This is caused by the desire of management to be able to meet their own interests. The management of the company is very concerned about the financial statements that have been analyzed, because the results can be used as a tool in making further decisions for the future.

Based on the correlation between GCG and the CSR mechanism with financial performance through earnings management described above, the theoretical framework of GCG and CSR mechanism correlation with financial performance through profit management is in Figure 1.

**Research methods**

This type of research is quantitative with the method of associative research. Associative research aims to determine the correlational relationship as well as causal relationships between variable (Sulistyanto and Susilawati, 2000).

**Variable identification**

The variable identification is shown in Table I.

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<tr>
<th>Hypotheses</th>
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<th>Dependent variables</th>
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<td>GCG mechanism</td>
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<td>Financial performance</td>
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<td>H2</td>
<td>CSR</td>
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<td>Financial performance</td>
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<td>H3</td>
<td>GCG mechanism</td>
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<td>H5</td>
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<td>H6</td>
<td>GCG mechanism</td>
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<td>H7</td>
<td>CSR</td>
<td>Earnings management</td>
<td>Financial performance</td>
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**Figure 1.** Conceptual framework
Operational definition and variable measurement

Financial performance. Financial performance is defined as the company’s ability to manage and control its resources (IAI, 2007). There are three financial performance proxies used for this research:

1. Return on asset (ROA):
   The ROA variable represents the profitability ratios a firm has. ROA is formulated as follows:
   \[ \text{ROA} = \frac{\text{Net income}}{\text{Total assets}} \]

2. Earning per shares (EPS):
   Darmadji and Fakhruddin (2012, p. 154) define EPS as a ratio showing the amount of profit contained in each share. EPS in this research is formulated as follows:
   \[ \text{EPS} = \frac{\text{Net income}}{\text{Number of shares outstanding}} \]

3. Tobin’s Q:
   Tobin’s Q variable in this research measured with Q ratio has been modified by Chung and Pruitt (1994). Simply, Tobin’s Q with Chung and Pruitt’s (1994) version can be formulated mathematically as follows:
   \[ \frac{C-PQ}{BV(TA)} = \frac{\text{MV(CS)} + \text{BV(PS)} + \text{BV(INV)} + \text{BV(CL)} - \text{BV(CA)}}{C0} \]
   where C–PQ is Tobin’s Q ratio with Chung and Pruitt (1994) model; MV(CS) the common share value (closing price at the end of the year × number of shares outstanding); BV(PS) the book value of preferred stock; BV(LTD) the book value of long-term debt; BV(INV) the book value of inventory; BV(CL) the book value of current liability; BV(CA) the book value of current asset; and BV(TA) is the book value of total asset.

Good corporate governance mechanism. The GCG mechanism variable consists of three proxies, namely independent board of commissioners, institutional ownership and audit quality:

1. Number of independent board of commissioners:
   The independent board of commissioners variables reveal the number of commissioners who come from outside of the company compared with the total existing commissioners. The independent board of commissioner used in this research is formulated as follows:
   \[ \text{KIND} = \frac{\text{Number of independent board of commissioners}}{\text{Total board of commissioners}} \]
   where KIND is the independent board of commissioners proportion.

2. Institutional ownership:
   Institutional ownership in this research is measured using the total proportion of shares ownership ≤ 20 percent or usually known as non-controlling shares ownership (Kieso et al., 2011).

3. Audit quality:
   Audit quality variable is measured using dummy variables, i.e. clients audited by Big 4 Public Accounting Firms will be assigned a value of 1, while clients audited by non-Big 4 Public Accounting Firms will be given a value of 0. Big 4 Public
Accounting Firms are considered to have higher expertise and reputation compared to non-Big 4 Public Accounting Firms.

**Corporate social responsibility.** The CSR variable in this study is defined as all company activities that are not based on the legal coercion of a country in which the company operates and are not aimed for taking profit but for social purposes only (McWilliams and Siegel, 2001). The measurement of CSR in this study will use index 91 Global Reporting Initiative (Ekawati, 2012). The checklist method is done to see disclosure of CSR done by the company. Companies that disclose items of social responsibility will be assigned a value of 1, while those not expressing are assigned a value of 0. Here is the formula used in this study:

\[
\text{CSR} = \frac{\text{Total value of "1"}}{\text{Number of item GRI - G4 2013}}
\]

**Earnings management.** Dechow et al. (1995) modified from the original model of the Jones model to reduce the alleged tendency to measure discretionary accruals error when discretionary measures were measured through income; this model was called The modified Jones model (1995). The steps in measuring earnings management with modified Jones model are:

1. Determine the total accrual value, which is the difference between net income and operating cash flow:

\[
\text{TA}_{it} = \text{NI}_{it} - \text{CFO}_{it}.
\]

2. Determining the parameters value of 1, 2 and 3 with Jones model (1991):

\[
\text{TA}_{it} = 1 + 2 \Delta \text{REV}_{it} + 3 \text{PPE}_{it} + \epsilon_t.
\]

To scale the data, all of the above variables are divided by the previous year’s assets, so the formula becomes:

\[
\frac{\text{TA}_{it}}{A_{it-1}} = 1 \left( \frac{1}{A_{it-1}} \right) + 2 \left( \frac{\Delta \text{REV}_{it}}{A_{it-1}} \right) + 3 \left( \frac{\text{PPE}_{it}}{A_{it-1}} \right) + \epsilon_t.
\]

Parameter value of 1, 2 and 3 is estimated with ordinary least square regression.

3. Using parameter value of 1, 2 and 3, value of nondiscretionary accrual can be calculated with the following formula:

\[
\text{NDA}_{it} = 1 \left( \frac{1}{A_{it-1}} \right) + 2 \left( \frac{\Delta \text{REV}_{it}}{A_{it-1}} - \Delta \text{REC}_{it} / A_{it-1} \right) + 3 \left( \frac{\text{PPE}_{it}}{A_{it-1}} \right) + \epsilon_t.
\]

4. Total accruals are the sums of discretionary accrual and nondiscretionary accruals. The value of discretionary accrual, which is an accrual earning management indicator, is calculated by subtracting the total accrual with nondiscretionary accrual:

\[
\text{DA}_{it} = \text{TA}_{it} - \text{NDA}_{it},
\]

where \(\text{TA}_{it}\) is the total accrual company \(i\) in \(t\) period; \(\text{NI}_{it}\) the net income company \(i\) in \(t\) period; \(\text{CFO}_{it}\) the operational cash flow company \(i\) in \(t\) period; \(\text{NDA}_{it}\) the nondiscretionary accrual company \(i\) in \(t\) period; \(\text{DA}_{it}\) the discretionary accrual company \(i\) in \(t\) period; \(A_{it-1}\) the total assets company \(i\) in \(t-1\) period; \(\Delta \text{REV}_{it}\) the changes in net sales company \(i\) in \(t\) period; \(\Delta \text{REC}_{it}\) the changes in receivables company \(i\) in \(t\) period; \(\text{PPE}_{it}\) the property, plant and equipment company \(i\) in \(t\) period; 1, 2, 3 are parameters obtained from regression equation; and \(\epsilon_t\) is the error term if company \(i\) in \(t\) period.
Types and sources of data. Data collection techniques to be conducted in this study is a documentation study, done by collecting secondary data from financial reports and annual reports of manufacturing companies that have been published. Audited financial statements and annual report of the company can be obtained by accessing the website of Indonesia Stock Exchange (www.idx.co.id) or each company’s website.

Research population and sample. The population in this study are all manufacturing companies listed on the Stock Exchange in 2014; an amount of 146 companies. The condition of the manufacturing sector that has the most number of issuers and has the most varied sectors can describe the condition of public companies in Indonesia. Sampling in this research is done by using purposive sampling method, which is sample technique method with certain considerations.

Analysis model and hypothesis testing. The model used in this research is the partial least square (PLS) model and uses two modeling models, namely, the outer model to evaluate the measurement model using reflective indicator and inner model to evaluate structural capital (Ghozali and Latan, 2014, pp. 91-96).

In the outer model measurements there are three types of test performed, namely, first, convergent validity: outer model has fulfilled the convergence validity requirement for reflective construct when loading factor $> 0.70$ and significant $p$-value $< 0.05$. The indicator with loading factor $< 0.40$ will be removed from the model while the loading factor between $0.40$ and $0.70$ will be analyzed for the impact of the removal of the indicator against the average variance expected (AVE) and composite reliability, where AVE limit value is $0.50$ and composite reliability is $0.70$ (Sholihin and Ratmono, 2013, p. 66). Second, discriminant validity: to perform a discriminant validity test, i.e. comparing the loading values of a construct with another construct loading value. The targeted construct loading value must be greater than the loading value of the other construct; and comparing the AVE square root of a construct with correlation between constructs (Ghozali and Latan, 2014, p. 95). The AVE root square value must be greater the other constructs. Third, composite reliability: a construct has reliable data when it meets the reliability criteria of composite reliability $> 0.70$. Value of composite reliability of 0.6–0.7 is still acceptable for exploratory research.

After measuring the outer model, the inner model measurement is done to test the relationship between variables using $R^2$. The values $0.70$, $0.45$ and $0.25$ of $R^2$ indicate that the model is strong, moderate and weak, respectively (Ghozali and Latan, 2014, p. 106). As for the relationship between variables in a system built on the research, it is calculated using the value of predictive-relevance ($Q^2$) (Yamin and Kurniawan, 2011, p. 124). Value of predictive-relevance ($Q^2$) is a value that is derived from the $R^2$ value of each variable. $Q^2$ is always positive while $Q^2$ can be negative but for models with predictive validity, $Q^2$ must have value greater than zero.

In addition, fit model testing is also done to find a model that fits with the original data so it can determine the quality of the model. This study uses the four fit measurement model including average path coefficient (APC), average $R^2$ (ARS), average adjusted $R^2$ (AARS) and average block variance inflation factor (AVIF). APC, ARS and AARS are used to measure the average lane coefficient value, $R^2$ and adjusted $R^2$ generated in the model. The three fit model measurements are measured on $p$-value $\leq 0.05$, while AVIF is used to test the problem of collinearity in the PLS model and the recommended value is $\leq 3.3$ (Ghozali and Latan, 2014, pp. 101-102).

The hypothesis test design is made based on research purposes, i.e. the hypothesis test to assess the effect of independent variables separately. The level of confidence used is 95%, so the level of precision or inaccuracy limit of ($\alpha)= 5\% = 0.05$. So:

- If the $p$-value is greater than $\alpha$ (0.05), then $H_0$ is accepted and $H_a$ is rejected.
- If the $p$-value is smaller or equal to $\alpha$, then $H_0$ is rejected and $H_a$ is accepted.
There are two types of tests: first, direct effect test, which compares the \( p \)-value (the result of model evaluation measurement) with significance level used or \( R^2 \). When \( p \)-value generated from the PLS process is greater than the level of significance used, then there is significant effect and vice versa. Second, indirect effect test that is done by simultaneously estimating the indirect effect with the triangle PLS SEM model. Concluding remarks about mediation are as follows (Sholihin and Ratmono, 2013, p. 57): if the path coefficient from the independent variable to the dependent variable after the mediation variable is inserted remains significant, and unchanged, the mediation hypothesis is not supported; if the value of path coefficient from the independent variable to the dependent variable after the mediation variable is included falls but remains significant, then the form of mediation is partial mediation, and if the value of path coefficient of the independent variable to the dependent variable after the mediation variable is included goes down and becomes insignificant, then the mediation is full mediation.

Results and discussions

An overview of the research subject and object

Research subjects used are all manufacturing companies that have published their financial statements for 2014 period at the IDX. Companies sampled in this study have met the requirements specified previously (Table II).

Analysis model and hypothesis testing

Estimated measurement of outer model. Here is the measurement of outer model based on three criteria, i.e. convergent validity, discriminant validity and composite reliability:

(1) Convergent validity: from the results of combined loadings and cross-loadings factors between the proxies and constructs obtained, proxies that meet the convergent validity are ROA, TOBS, KIND, KA, LING, SOS and DA. Proxies requiring further analysis are EPS and EKO while the eliminated proxies are KI and PROD (see Table AI). EPS and EKO proxies were further analyzed using AVE and composite reliability. From the processing results it was found that EPS proxies were maintained while EKO proxies were removed (see Tables AII and AIII). After eliminating the three proxies (KI, EKO and PROD) obtained results of eight proxies loading factors (ROA, EPS, TOBS, KIND, KA, LING, SOS and DA) have met the convergent validity (see Table AIV).

(2) Discriminant validity: the assessment of discriminant validity is performed by:

- measuring the cross-loading of each construct; from the comparative results of cross-loading of each constructs, the entire proxy has met the criteria discriminant validity where the relationship of the constructs and its proxy is larger than the proxy with other constructs (see Table AV); and

<table>
<thead>
<tr>
<th>No.</th>
<th>Sampled companies information</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturing company listed in IDX in 2014</td>
<td>146</td>
</tr>
<tr>
<td>2</td>
<td>Manufacturing company did not provide annual report in 2014</td>
<td>(9)</td>
</tr>
<tr>
<td>3</td>
<td>Manufacturing company experience loss</td>
<td>(32)</td>
</tr>
<tr>
<td>4</td>
<td>Manufacturing company does not provide complete data in IDX related to the variable of this research</td>
<td>(3)</td>
</tr>
<tr>
<td>5</td>
<td>Manufacturing company selected as sample of this research</td>
<td>102</td>
</tr>
</tbody>
</table>

Source: Processed data (2016)
• comparing AVE square roots between latent variables; from the calculation result obtained that all variables have met the criteria of discriminant validity because AVE square root value must be greater than other constructs (see Table AVI).

(3) Composite reliability: from the results of composite reliability test obtained, each construct has reached the expected limit of 0.60–0.70 which is 0.821 (FP); 0.617 (GCC); 0.762 (CSR); 1,000 (EM), then the entire construct has met the criteria of composite reliability.

Estimated measurement of inner model. The values of \( R^2 \) and \( Q^2 \) for each endogenous variable are presented in Table III.

For \( H6 \), variables of earnings management and financial performance each have a value of \( R^2 \) of 0.027 and 0.221. This means that the earnings management variable can be explained 2.7 percent by the GCG mechanism variable while the financial performance variable can be explained 22.1 percent by the GCG mechanism and earnings management. For \( H7 \), variables of earnings management and financial performance each have a value of \( R^2 \) of 0.262 and 0.069. This means that the earnings management variable can be explained at 26.2 percent by the CSR variable while the financial performance variable can be explained at 6.9 percent by CSR variable and earnings management. Based on the results of predictive validity \( (Q^2) \) calculation, the obtained value of \( Q^2 \) financial performance in \( H6 \) is 0.259 and \( H7 \) is 0.067 that is greater than zero so that they meet the criteria of a good predictive validity.

Test that must be done next is the fit model test to determine the feasibility of a model. Table IV shows the fit test results of \( H6 \) and \( H7 \).

Based on the results of data processing in Table IV, \( H6 \) has a good fit model. APC and ARS have \( p \)-value < 0.05 while \( p \)-value of AARS > 0.05, i.e. equal to 0.062, while the value of APC, ARS and AARS in \( H7 \) is below 0.05. This shows that \( H7 \) has met the criteria of goodness of fit model. AVIF value either in \( H6 \) or \( H7 \) that is less than 3.3 indicates that there is no problem of collinearity between proxies and between independent variables in the model.

Discussion

Table V shows the result of hypothesis testing using PLS analysis.

The effect on GCG mechanism on financial performance

The effect of GCG mechanisms on the financial performance shows positive and significant effect. The results of this study indicate that the presence of many commissioners in the company can provide a strong supervision of management in an effort to improve company performance. The role of the board of commissioners in a company is greater in performing the monitoring function of the board of directors policies implementation. The role of an
An independent commissioner can minimize agency issues arising between the board of directors and the shareholders. An independent board of commissioners can perform its functions to oversee the performance of the board of directors so that the performance generated is in accordance with the interests of shareholders.

In addition, the reputation of a public accountant as an independent external auditor can assist the management performance by providing an appropriate opinion on the company’s condition. Opinion issued by a reputable public accountant can be a guideline for the company to improve the company’s performance as well as to maintain the company’s survival.

The results of this study are in line with research conducted by Mashitoh and Irma (2013), Ahmed and Hamdan (2015) and Manafi et al. (2015) which states that the GCG mechanism has a positive and significant impact on financial performance. The results of this study are not in line with the research of Abdullah and Page (2009), Akhalumeh et al., Coskun and Sayilir (2012), Makki et al. (2013) and Peters and Bagshaw (2014) stating that GCG mechanisms have no significant effect on financial performance.

### The effect of GCG mechanism and CSR

#### Source: Data processed result using WarpPLS software (2016)

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>$\beta$-value</th>
<th>$p$-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>GCG mechanism</td>
<td>Financial performance</td>
<td>0.44</td>
<td>&lt; 0.01</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2</td>
<td>CSR</td>
<td>Financial performance</td>
<td>0.18</td>
<td>0.03</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3</td>
<td>GCG mechanism</td>
<td>Earnings management</td>
<td>−0.17</td>
<td>0.04</td>
<td>Accepted</td>
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<tr>
<td>H4</td>
<td>CSR</td>
<td>Earnings management</td>
<td>0.51</td>
<td>&lt; 0.01</td>
<td>Accepted</td>
</tr>
<tr>
<td>H5</td>
<td>Earnings management</td>
<td>Financial performance</td>
<td>−0.21</td>
<td>0.01</td>
<td>Accepted</td>
</tr>
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</table>

#### Table V. Summary of hypothesis testing

<table>
<thead>
<tr>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Changes $\beta$-value and $p$-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCG→FP</td>
<td></td>
<td></td>
<td>$H_6$: partial mediation</td>
</tr>
<tr>
<td>$\beta$</td>
<td>$p$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.44</td>
<td>&lt; 0.01</td>
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<tr>
<td>GCG→EM</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>$\beta$</td>
<td>$p$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>−0.17</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EM→FP</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>$\beta$</td>
<td>$p$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>−0.18</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GCG→FP</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>$\beta$</td>
<td>$p$</td>
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<td>0.42</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CSR→FP</td>
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<td></td>
<td>$H_7$: full mediation</td>
</tr>
<tr>
<td>$\beta$</td>
<td>$p$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.18</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR→EM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\beta$</td>
<td>$p$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.51</td>
<td>&lt; 0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EM→FP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\beta$</td>
<td>$p$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>−0.19</td>
<td>0.02</td>
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</tr>
<tr>
<td>CSR→FP</td>
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</tr>
<tr>
<td>$\beta$</td>
<td>$p$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.16</td>
<td>0.05</td>
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</tr>
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</table>

**The effect of CSR on financial performance**

The results showed that the CSR variable has a positive effect on financial performance as evidenced by the $\beta$-value of 0.18. This shows that the improvement of CSR conducted by the company through the improvement of environmental performance can improve company performance. In addition, environmental improvement efforts will get a positive appreciation from investors and impact the image enhancement for the company. Positive appreciation as well as the improvement of corporate image will provide company benefits in an effort to improve company performance.
The results of this study support the research conducted by Saleh et al. (2011), Rajput et al. (2012), Palmer (2012); Ghelli (2013) and Ahamed et al. (2014) which states that CSR has a positive and significant effect on financial performance. This is in accordance with the concept of stakeholder theory which assumes that the company must be responsible to various groups in society that have influence on the company because the decisions and behavior will affect the welfare of society.

Good relationships between societies and companies will create support from society that affect the company’s viability. Such support is reflected in customers who are loyal to the company and employees who work optimally for the benefit of the company so as to improve financial performance. The results of this study are inconsistent with the study of Aras and Crowther (2009), Fan (2013) and Mwangi and Jerotich (2013) stating that CSR has no effect on financial performance.

The effect of GCG mechanism on earnings management
The result of the research shows that the GCG mechanism has a significant negative effect on the earnings management. This suggests that a large number of independent board of commissioners will provide more supervision for management to manage the company better. As per agency theory, management considers independent commissioners more alert to agency problems as independent commissioners are fully dedicated to overseeing management’s performance and behavior. This supervision can certainly prevent or reduce the action of earnings management because such supervision becomes an incentive for management as an agent to act as best as possible in the interest of the principal (stakeholders) and suppress deviant behavior in order to account for its duty.

In addition to the independent commissioners, audit quality can reduce the earnings management action. Managers in companies that are Big 4 Public Accounting Firms tend to avoid earnings management practice because the Big 4 Public Accounting Firms that are well known to the public would be more cautious and uphold independence so it raises the manager’s concern that manipulated reporting will be detected and uncovered which can then destroy the company’s name. In addition, the reputation of public accountants as independent external auditors can minimize the earnings management case and increase the credibility of accounting information in the financial statements. High-quality auditors have the ability to detect questionable accounting practices, and when they are detected, the auditor will issue an opinion in the audit report.

The results of this study are in line with the research of Lee et al. (2012), Uwuigbe et al. (2014) and Kamran and Shah (2014) stating that the GCG mechanism has a negative and significant effect on earnings management. But the result of this research was not consistent with research by Hermiyetti and Manik and Al-Thyuneibat et al. stating that GCG mechanisms have a non-significant effect on earnings management.

The effect of CSR on earnings management
The results of this study indicate that CSR has a significant positive effect on earnings management. The result of the research shows that the improvement of CSR done by the company through the improvement of environmental performance can improve the management’s earning management action. CSR gives the impact of increasing the company’s operating expenses so as to reduce the company’s profit. Reduced profits is a bad news for companies, it can be interpreted negatively by investors. Therefore, an effort is needed to increase the company’s profit through the accounting policy by management.

This study supported the study of Gargouri et al. (2010), stating that CSR has a positive and significant impact on earnings management. This is due to the high costs that companies spend on CSR activity which results in decreased financial performance. Decline in financial performance then stimulates management to take earnings management action.
CSR is also considered to create collusion between managers and employees who aim to share the profits from the action of earnings management (Gargouri et al., 2010). The results of this study are inconsistent with the research of Chih et al. (2008) and Gras-Gil et al. which states that CSR has a negative and significant effect on earnings management. The negative relationship is because companies that engage in CSR activities maintain long-term relationships with investors so that companies will try not to practice earnings management in order to maintain long-term relationships with investors.

The effect of earnings management on financial management
The results of this study prove that earnings management has a significant negative effect on financial performance. Users of financial statements view the profit generated by an entity as a benchmark in assessing the success of that entity. The action of earnings management can decrease the quality of information related to the company’s earnings presented in the financial statements. The low quality of information contained in the financial statements will adversely affect the company’s financial performance.

The results of this study are in line with research by Akram et al. (2015) which states that earnings management has a negative and significant impact on financial performance. The practice of profit manipulation is a high-cost strategy as the increase of profits manipulation must be offset by the amount of cash flow. Therefore, in the long run, earnings management can lead to a decrease in profits due to increased expenses, for example, the cost of capital raising (Fan, 2007 in Akram et al., 2015).

The effect of GCG mechanism on financial performance through earnings management
The results of this research show that there is a negative and significant effect between GCG mechanism and earnings management, as well as that for earnings management on financial performance there is a negative and significant effect. This research also proves that earnings management can mediate some (partial mediation) effect of GCG mechanism on financial performance.

The results show that the presence of large independent commissioners and the appointment of external auditors with a good reputation can provide great supervision to management in order not to commit fraud in the financial statements. Great monitoring of independent commissioners and the ability of good external auditors in the financial field can minimize any possible fraudulent actions by companies such as earnings management actions.

As a result of declining earnings management undertaken by management, efforts by management to increase profits are done by increasing the company’s operational activities. Increased corporate operational activity is an effort management will undertake for their personal gain in order to gain greater incentives from profits generated by the company. Increased corporate operational activity will encourage companies to improve their company’s performance. The results of this research are consistent with the research of Ching et al. (2015) and Setiawan (2015) stating that earnings management is able to mediate the influence of GCG mechanisms on financial performance.

The effect of CSR on financial performance through earnings management
The results of this research show that there is a positive and significant effect between CSR on earnings management, while for earnings management on financial performance there is a negative and significant effect. The results of research also prove $H7$ that earnings management can mediate (full mediation) the effect of CSR on financial performance.

Management can perform accounting policies in the form of income maximization or income minimization. When management forecasted earnings in the first and second quarters of a period increase exceeding the expectations, it would cause concern for
investors, so there was an effort not to recognize the profit. Efforts are made by the management of CSR activities that funding is the profit held last year. This suggests that an increase in environmental and social performance activities will have an impact on the improvement of management’s earnings management.

Earnings management is done by allocating unrecognized profits to cover earnings of the previous year. Not professing earnings ultimately impacts on the decline in financial performance. Research conducted by Fitriyani et al. (2014) finds empirical evidence that accrual earnings management practices affect the firm’s performance over a period.

Conclusion
Testing and analysis results show that the GCG mechanism and CSR have a positive effect on financial performance and earnings management. GCG mechanisms and CSR have proven to be significant. Meanwhile, the test results and analysis show that earnings management negatively affects the financial performance and proved significant. But earnings management can mediate the effect of the GCG mechanism on financial performance with mediation from partial mediation. Then, the test results and analysis indicate that earnings management can mediate the effect of CSR to financial performance with full mediation.

A limitation of this study is that institutional ownership is unable to reflect the GCG mechanism; it shows that this requires another measurement tool which is capable of reflecting the GCG mechanism.

References


Further reading


### Appendix 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxy</th>
<th>Loading factor</th>
<th>( p )-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>FP</td>
<td>(0.897)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>EPS</td>
<td>FP</td>
<td>(0.652)</td>
<td>&lt; 0.001</td>
<td>Need further analysis</td>
</tr>
<tr>
<td>TOBS</td>
<td>KP</td>
<td>(0.773)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>KI</td>
<td>KP</td>
<td>−0.316 (104)</td>
<td>0.141</td>
<td>Do not meet the convergent validity</td>
</tr>
<tr>
<td>KIND</td>
<td>KP</td>
<td>0.263 (−0.747)</td>
<td>0.136</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>KA</td>
<td>KP</td>
<td>0.312 (0.735)</td>
<td>0.012</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>EKO</td>
<td>KP</td>
<td>−0.077 (0.494)</td>
<td>0.042</td>
<td>Need further analysis</td>
</tr>
<tr>
<td>LING</td>
<td>KP</td>
<td>0.123 (0.758)</td>
<td>0.083</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>SOS</td>
<td>KP</td>
<td>−0.084 (0.692)</td>
<td>−0.126</td>
<td>Memenuhi validitas konvergen</td>
</tr>
<tr>
<td>PROD</td>
<td>KP</td>
<td>0.131 (0.021)</td>
<td>0.163</td>
<td>Do not meet the convergent validity</td>
</tr>
<tr>
<td>DA</td>
<td>KP</td>
<td>−0.000 (1.000)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
</tbody>
</table>

### Table AII.
Results of AVE and composite reliability before and after elimination of EPS

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<tr>
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<th>AVE</th>
<th>Composite reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before eliminating any proxy</td>
<td>0.609</td>
<td>0.821</td>
</tr>
<tr>
<td>After eliminating EPS</td>
<td>0.791</td>
<td>0.884</td>
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</tbody>
</table>

### Appendix 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxy</th>
<th>Loading factor</th>
<th>( p )-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>FP</td>
<td>(0.897)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>EPS</td>
<td>FP</td>
<td>(0.652)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>TOBS</td>
<td>KP</td>
<td>(0.773)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>KI</td>
<td>KP</td>
<td>−0.316 (104)</td>
<td>0.141</td>
<td>Do not meet the convergent validity</td>
</tr>
<tr>
<td>KIND</td>
<td>KP</td>
<td>0.263 (−0.747)</td>
<td>0.136</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>KA</td>
<td>KP</td>
<td>0.312 (0.735)</td>
<td>0.012</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>EKO</td>
<td>KP</td>
<td>−0.077 (0.494)</td>
<td>0.042</td>
<td>Need further analysis</td>
</tr>
<tr>
<td>LING</td>
<td>KP</td>
<td>0.123 (0.758)</td>
<td>0.083</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>SOS</td>
<td>KP</td>
<td>−0.084 (0.692)</td>
<td>−0.126</td>
<td>Memenuhi validitas konvergen</td>
</tr>
<tr>
<td>PROD</td>
<td>KP</td>
<td>0.131 (0.021)</td>
<td>0.163</td>
<td>Do not meet the convergent validity</td>
</tr>
<tr>
<td>DA</td>
<td>KP</td>
<td>−0.000 (1.000)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
</tbody>
</table>

### Table AIII.
Result of AVE and composite reliability before and after elimination of PROD and EKO

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Before eliminating any indicator</td>
<td>0.325</td>
<td>0.589</td>
</tr>
<tr>
<td>After eliminating PROD</td>
<td>0.433</td>
<td>0.690</td>
</tr>
<tr>
<td>After eliminating PROD, EKO</td>
<td>0.615</td>
<td>0.762</td>
</tr>
</tbody>
</table>

### Appendix 4

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxy</th>
<th>Loading factor</th>
<th>( p )-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
<td>ROA</td>
<td>(0.897)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>EPS</td>
<td>ROA</td>
<td>(0.652)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>GCG</td>
<td>KIND</td>
<td>(0.773)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>CSR</td>
<td>KA</td>
<td>(0.668)</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
<tr>
<td>EM</td>
<td>DA</td>
<td>1.000</td>
<td>&lt; 0.001</td>
<td>Meet the convergent validity</td>
</tr>
</tbody>
</table>

### Table AIV.
Loading factors for each variable after eliminating KI, EKO and PROD as proxies
Appendix 5

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Loading</th>
<th>FP</th>
<th>GCG</th>
<th>CSR</th>
<th>EM</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>(0.897)</td>
<td>&gt;</td>
<td>0.178</td>
<td>0.012</td>
<td>0.077</td>
<td>Meet the discriminant validity</td>
</tr>
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<td>EPS</td>
<td>(0.653)</td>
<td>&gt;</td>
<td>−0.370</td>
<td>0.070</td>
<td>−0.274</td>
<td>Meet the discriminant validity</td>
</tr>
<tr>
<td>TOBS</td>
<td>(0.773)</td>
<td>&gt;</td>
<td>0.106</td>
<td>−0.073</td>
<td>0.142</td>
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</tr>
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<td>KIND</td>
<td>(0.668)</td>
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<td>−0.279</td>
<td>0.039</td>
<td></td>
<td>Meet the discriminant validity</td>
</tr>
<tr>
<td>KA</td>
<td>(0.668)</td>
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<td>(0.784)</td>
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<td>−0.076</td>
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<td>SOS</td>
<td>(0.784)</td>
<td>&gt;</td>
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<td>0.076</td>
<td>−0.105</td>
<td>Meet the discriminant validity</td>
</tr>
<tr>
<td>DA</td>
<td>(1.000)</td>
<td>&gt;</td>
<td>−0.000</td>
<td>−0.000</td>
<td>−0.000</td>
<td>Meet the discriminant validity</td>
</tr>
</tbody>
</table>

Table AV. Comparison of loading factors of each proxy to latent constructs with other constructs.

Appendix 6

<table>
<thead>
<tr>
<th></th>
<th>FP</th>
<th>GCG</th>
<th>CSR</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
<td>(0.780)</td>
<td>0.325</td>
<td>0.109</td>
<td>−0.135</td>
</tr>
<tr>
<td>GCG</td>
<td>0.325</td>
<td>(0.668)</td>
<td>0.111</td>
<td>−0.065</td>
</tr>
<tr>
<td>CSR</td>
<td>0.109</td>
<td>0.111</td>
<td>(0.784)</td>
<td>0.021</td>
</tr>
<tr>
<td>EM</td>
<td>−0.135</td>
<td>−0.065</td>
<td>0.021</td>
<td>(1.000)</td>
</tr>
</tbody>
</table>

Table AVI. AVE square root of correlation between variables latent.

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