Does Corporate Governance as a Moderating Variable Influence the Relationships Between Asmmetry Information and Earning Management?

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Abstract: The purposes of this research are twofold: to examine the effect of information asymmetry on earnings management and to examine the influence of mechanism of corporate governance related to information asymmetry and earnings management. Information asymmetry is measured by relative bid-ask spread, earnings management is measured by discretionary revenues model and mechanism of corporate governance as moderating variables is measured by size of commissioner, size of audit committee and audit quality. Size of company is used as control variable in this research. The samples consists of 24 companies included in LQ-45 over 3 year (2009-2011). Results show that information asymmetry has positive effect on earnings management. Size of commissioner is able to moderate relation between information asymmetry and earnings management. While size of audit committee and audit quality have no effect on relation between information asymmetry and earnings management. In addition, the company size as control variable has positive effect on earnings management.

Key words: Corporate governance, size of commissioner, size of audit committee, audit quality, information asymmetry, earnings management

INTRODUCTION

Financial statements are a source of financial information used by various parties, both the company's management and external users. Internal users have direct access to the company and possess information on events occurring in the firm so that the level of dependence on the financial statements information is lower compared to the external users who have more uncertainty of the firm (Rahmawati and Qomariyah, 2007). Such situations may trigger what so called information asymmetry, a condition when there is an imbalance between management information acquisition as a provider of information to the shareholders and stakeholders in general as users of information (Tanor, 2009).

Previous research has found that the information asymmetry has positive effect on earnings management (Richardson, 1998; Rahmawati and Qomariyah, 2007; Muliati, 2011). Rahmawati and Qomariyah (2007) revealed that companies with high investment rate would have higher degree of asymmetry of information and this will lead to grater opportunities for earnings management practices. That is, the higher the asymmetry of information, the higher the potential of earnings

management practices in the company. However, thesee condition can be changed in accordance with the contingency theory that gives the idea that there is no universal system that can always be applicable to all organizations in every state (Merchant, 1981). Therefore, the nature of the relationships that exist between the asymmetry of information and earnings management can be different for each state.

Under the contingency approach, there is a conditional variable that can be formed through a moderating variable to examine the consistency of the effect of information asymmetry on earnings management. One of the factors that can affect the consistency of these conditions is the different mechanisms of corporate governance of an organization. Therefore, the corporate governance mechanism can be used as a moderating variable in the relationship between information asymmetry and earnings management. Corporate governance mechanisms as a moderating variable is predicted to affect the relationship between the asymmetry of information and earnings management.

Corporate governance mechanism is needed to ascertain the activities of the organization can run properly in accordance with the pre-determined goals (Syakhroza, 2005). Corporate governance mechanism is a

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rule, procedure and a clear link between the decision makers with the supervisor and directed to ensure that the governance system is running well within the company. Corporate governance mechanisms can be classified into three types, namely company-specific, country-specific and market governance mechanism.

Herawaty (2008) asserts that earnings management practices can be minimized through the mechanism and role of the monitoring conducted by the board of directors and audit quality. Nasution and Setiawan reveal that corporate governance is a concept put forward for improving the company's performance through supervision or monitoring of management performance and to ensure the accountability of management to the stakeholders in accordance with the regulatory framework. With the presence of the concept of corporate governace through the monitoring actions, management can present a qualified financial statement and consequently reduce earnings management practices given there are opportunities to do so.

This study uses discretionary revenue model as a proxy for earnings management as it is considered to be more specific and is not biased compared with commonly known discretionary accruals models (Stubben, 2010). Discretionary revenue m odel has been known to be able to detect manipulations performed using accounts of revenues and expenses.

Based on the description explored above, this study is aimed to empirically examine the effects of information asymmetry on earnings management practices and the influence corporate governance mechanisms on the relationship between information asymmetry and earnings management practices.

Hypotheses development
Information asymmetry and earnings management: Information asymmetry exists as a result of agency theory. According to agency theory there is a separation of duties and authority between management and shareholders so that information about the company's operations is more widely known by management. Because management possess more information than the shareholders, they might have the opportunity to perform earnings management in order to make the presentation of financial statements better off than it actually is.

Rahmawati and Qomariyah (2007) examine the effects of information asymmetry on earnings management practices with a sample of the public banking company listed on the Indonesian Stock Exchange from 2000-2004. They show asymmetry of information has a significant

positive effect on earnings management practice. This finding supports Dye (1988), Trueman and Titman (1988) who assert that the analytical model of the existence of information asymmetry as a conditioning aspect for earnings management. On the basis of the description mentioned above, the first hypothesis in this study is as follows:

- H_1: Information asymmetry positively affect earnings management practices

Size of board, information asymmetry and earnings management: Previous studies on the effect of board directors' size on earnings management practices do not generate consistent results. Nasution and Setiawan state that the board size has positive effect on earnings management. Larger number of boards leads to poor coordination making it less effective and efficient in monitoring the management. This causes the board difficult to perform their role to supervise and control the actions of management. However, Ujiyantho and Bambang contend that the number of board did not significantly affect earnings management. Yu documents that board size negatively affect the level of earnings management. Fewer number of board increases the degree of earnings management practices caused by the strong dominance of management.

Inconsistency of results will provide different effect when the information asymmetry is to be the factor that affects earnings management. The size of the board is used as a condition that affects the relationship between the two. Board of director is element of the company who is collectively responsible for overseeing and advising the management and to ensure that company implements good corporate governance. The board is expected to affect earnings management practices caused by information asymmetry. Based on the description above, this study proposes the following:

- H_2: Board size positively affects the relationship between earnings management and information asymmetry

Size of the audit committee, information asymmetry and earnings management: Audit committee must consist of at least three people, including the chairman of the audit committee. While the other members must come from independent external parties. The audit committee has the task of assisting the board of director to supervise the management in terms of the fair presentation of the

financial statements in accordance with generally accepted accounting principles. The company's internal control structure must be implemented correctly and the implementation of internal and external audit is conducted in accordance with the auditing standards.

Nasution and Setiawan state that the existence of an audit committee within the company is able to reduce the company's earnings management. However, Sugiartha (2008) asserts that the audit committee is not one of the elements appropriate to reduce earnings management practices. The existing research results are not consistent. The size of the audit committee will give a different effect when the information asymmetry is a factor that affects earnings management while the size of the audit committee could be a condition that affects the relationship between the two. Based on the description above, the third hypothesis in this study is:

- H_3: The size of the audit committee has positive influence on the relationship between earnings management and information asymmetry

Audit quality, information asymmetry and earnings management: Audit is a process for reducing inconsistencies of the information between managers and shareholders by using outsiders to give approval to the financial statements. Audit can also be regarded as one of the concepts of corporate governance that contributes to addressing the agency problem by involving external auditors.

Sugiartha (2008) concludes that the quality and reputation of auditors measured by public accounting firm affiliated with the big four is able to prevent or reduce earnings management practices. Sugiartha's result is supported by Meutia (2004) who states that big-five accounting firms have better quality in detecting earnings management because they have auditors who are more experienced and qualified. That is, the quality of audit will certainly give effect, if the information asymmetry also be used as a factor affecting earnings management.

Independent auditor's role in corporate governance is important. It also supports one of the principles of transparency and independence in corporate governance Given that more qualified independent auditor, the financial statements will be more qualitfied and transparent. If the quality of the audit could make a condition that affects the relationship between information asymmetry and profit management, audit quality is expected to affect the relationship between the two. Based on this argument, the following hypothesis is proposed:

- H_4: Quality audits negatively affect the relationship between earnings management and information asymmetry

MATERIALS AND METHODS

The population in this study are all companies listed on the Indonesian Stock Exchange during the period of 2009-2011. The sample was determined using purposive sampling with the following criteria the company is included in the LQ-45 Index for 3 consecutive years of 2009-2011 the company has complete annual reports during the period, the company is not in a banking or financial sector.

The dependent variable in this study is earnings management. Earnings management is measured using discretionary revenues model by Stubben (2010). Discretionary revenue is considered to reduce bias and be more specific in detecting earnings management. Formula of discretionary revenue models is as follows Eq. 1:

$$\Delta AR_{it} = \alpha + \beta_1 \Delta R_{it} + \beta_2 \Delta R_{it} \times SIZE_{it} + \beta_3 \Delta R_{it} \times AGE_{it} + \beta_4 \Delta R_{it} \times AGE\_SQ_{it} + \beta_5 \Delta R_{it} \times GRR\_P_{it} + \beta_6 \Delta R_{it} \times GRR\_N_{it} + \beta_7 \Delta R_{it} \times GRM_{it} + \beta_8 \Delta R_{it} \times GRM\_SQ_{it} + \varepsilon_{it}$$

Where:
Δ	=	Annual change
AR	=	End of fiscal year accounts receivable
R	=	Annual revenues
SIZE	=	Natural log of total assets at end of fiscal year
AGE	=	Age of firm (years)
GRR_P	=	Industry-median-adjusted revenue growth (_0 if negative)
GRR_N	=	Industry-median-adjusted revenue growth (_0 if positive)
GRM	=	Industry-median-adjusted gross margin at end of fiscal year
_SQ	=	Square of variable
ε	=	Error

According to Stubben (2010), the value of discretionary revenues is estimated through the residuals of the model. The higher the value of discretionary revenues, the higher the desire to perform earnings management.

The independent variable in this study is the asymmetry of information. Asymmetry of information is measured using relative bid-ask spread that has previously been used by Rahmawati and Qomariyah (2007). Asymmetry of information is measured aas follows Eq. 2:

$$\text{Spread} = \left(\text{ask}_{i,t} - \text{bid}_{i,t}\right) / \left(\left(\text{ask}_{i,t} + \text{bid}_{i,t}\right)/2\right) \times 100$$

Adjustment model of spread is as follows Eq. 3:

$$\text{Spread} = \alpha_0 + \alpha_1 \text{Price}_{i,t} + \alpha_2 \text{Var}_{i,t} + \alpha_3 \text{Trans}_{i,t} + \\ \alpha_4 \text{Depth}_{i,t} + \text{Asimetri}_{i,t}$$

Where:
$\text{ask}_{i,t}$ = Highest ask price of firm i date t
$\text{bid}_{i,t}$ = Lowest bid price of firm i date t
$\text{Price}_{i,t}$ = Closing price of firm i date t
$\text{Var}_{i,t}$ = Daily variance return over period of analysis of firm i date t. Daily return is the daily percentage change of stoack price
$\text{Trans}_{i,t}$ = Number of transaction of firm i date t
$\text{Depth}_{i,t}$ = Average number of stock of firm i of all quotes (number of available of ask plus number of available of bid divided by two)
$\text{Asimmetry}_{i,t}$ = Residual error generated from equation (1) of firm i date t

Moderating variables are variables that determine that its presence affects the relationship between dependent and independent variables. Moderating variables can strengthen or weaken the relationship between dependent and independent variables. Moderating variable in this study is the mechanism of corporate governance that include:

- The Size of the Board of Director (SBD), the total number of board members, both from the internal and external company
- The Size of the Audit Committee (SAC), the total number of audit committee members, both from internal and external of company
- Audit Quality (AQ) measured by a dummy variable, big 4 = 1 and the other = 0

Company size (size) is used as a control variable, measured as natural logarithm of total assets. According to Johnson and Ramanan, the size of the company negatively affect earnings management. Whilst Rahmawati and Qomariyah (2007) assert the size of the company has positive effect on earnings management. Regression model used to test the hypotheses is as follows Eq. 4:

$$\text{Discrev} = \alpha_0 + \alpha_1 \text{ZAsym} + \alpha_2 \text{ZSBD} + \alpha_3 \text{ZSAQ} + \\ \alpha_4 \text{ZAQ} + \alpha_5 \text{Mod\_SBD} + \alpha_6 \text{Mod\_SAC} + \\ \alpha_7 \text{Mod\_AQ} + \alpha_8 \text{ZSize} + \varepsilon$$

Where:
Discrev = Arnings management
sym = Asymmetry of information
SBD = Size of board of director
SAC = Size of audit committee
KA = Audit quality
Size = Size of the firm
Zasimetri = Standardized residual asymmetry of information
ZSBD = Standardized residual size of board of director
ZSAC = Standardized residual size of audit committee
ZAQ = Standardized residual Audit quality
Mod_UDK = |ZAsimetri–ZUDK|
Mod_UKA = |ZAsimetri–ZUKA|
Mod_KA = |ZAsimetri–ZKA|
Zsize = St andardized Residual size of the firm
ε = Error

The equation above is used to test the absolute difference in variables moderation test. According to Ghozali (2009), test the absolute difference multikolinearity is able to avoid problems that typically occur in the interaction tests or Multiplied Regression Analysis (MRA). When a variable is moderating then the t-test probability value should be less than the level of significance ($p<0.05$).

RESULTS AND DISCUSSION

Results of measurement of earnings management using Stubben (2010)'s Model obtain coefficient of determination R^2 of 0.235 indicates that 23.5% change in receivables can be explained by changes in income while the remaining 76.5% is explained by factors other than changes in income. The probability value obtained in simultaneous significance test (F-test) and individual parameter significance test (t-test) is equal to 0.000 ($p<0.05$) proving that a change in income as independent variables can affect the value changes in receivables. It shows the relationship between the change in accounts receivable with revenue changes. Changes in revenue is predicted changes in receivables in the future because if income at the present time is not immediately accepted by the company, the revenue is recognized as accounts receivable and accounts receivable changes will affect those in the present.

Asymmetry of information is measured using the error of the model relative bid-ask spread. Results of the classical assumption test of the model relative bid-ask spread indicate that the regression equation used to

measure the asymmetry of information has satisfy the classical assumptions. The Kolmogorov-Smirnov test has p>0.05, meaning the data used are normally distributed. The Durbin-Watson test indicates no autocorrelation (1.7054<1.909<2.2946). Multikollinearity test shows each variable has variance inflation factor of <10. Result of heterocedasticity test using Spearman test shows that the significance of each unst andardized residual value on the independent variable is <0.05.

T-test results showed that the model of relative bid-ask spread of each independent variable have different impact on the dependent variable. Price and depth can be said to be the factor that can lead to the spread. Number of share transactions and stock return variance have no effect on the spread.

Hypotheses testing: The t-test shows that asymmetry of information has positive influence on earnings management practices (p = 0.044). This means that the higher the information asymmetry, the higher the opportunities of the manager to perform earnings management practices. Information asymmetry occurs because the manager is better informed than the other parties (owners or shareholders) (Tanor, 2009). Therefore, as person in charge, manager is requested to provide information about the condition of the company such as through the disclosure of financial statements to the owner. But sometimes, information received by owners does not match the actual conditions of the company that created opportunities for managers to act opportunistically, i.e., personal gain by performing earnings management practices.

Board size positively affects the relationship between earnings management and information asymmetry (p = 0.009). This means the board size is a moderating variable that can strengthen the relationship between earnings management and information asymmetry. The larger the board size, the greater the asymmetry of information so that management has more intention to perform earnings management.

The results also imply that large board size will lead to less effective performance for overseeing the manager practices of earnings management caused by information asymmetry. The condition can be caused by the difficulty of coordination among members of the board and it inhibits the supervisory process that should be the responsibility of the board of directors (Yermack, 1996; Eisenberg *et al.*, 1998; Jensen, 1993).

The size of the audit committee does not affect the relationship between earnings management and information asymmetry (p = 0.462). The result of the interaction with absolute diffirence information asymmetry between and the audit committee postulates that the size of the audit committee is not a moderating variable. Accordingly, the size of audit committee does not significantly strengthen or weaken the relationship between earnings management and information asymmetry. This condition can occur because the authority is limited by the audit committee function as a tool so that board of directors do not have any or limited execution authority but only limited to providing recommendations to the board of directors. This has resulted in limited authority audit committee can not act beyond the limits of its authority to monitor management actions so that opportunities exploited by asymmetry of information management to perform earnings management practices are not well monitored.

Audit quality affects the relationship between the asymmetry of information and profit management at moderate levels (p = 0.079). Thus, it is premature to assert that audit quality is not a moderating variable that can strengthen or weaken the relationship between earnings management and information asymmetry.

The results imply that the audit services performed by the big four or non-big four accounting firm in Indonesia have not been able to distinguish the quality of audit in pressuring earnings management practices caused by information asymmetry. Consequently, companies audited by the big four audit does not necessarily have better quality than companies that are not audited by the big four in minimizing earnings management practices presumably influenced by the asymmetry of information in the company.

This can be caused by both the big four and non big four have been working in accordance with auditing st andards applicable in indonesia. Audit carried out by auditors can be said to be qualified if they meet the provisions or auditing st andards that include professional quality independent auditor, judgment used in the preparation of the audit and the auditor's report.

In addition, during the audit process, the management will provide representation letter to the auditor. Representation letter is a letter from management stating that management has given all the information on the financial statements together with the data required during the audit process. Auditor has only limited information on the data that has been presented by the management. Limited information held by the auditor is still causing asymmetry of information between auditors and management. Thus, earnings management practices regarded as an opportunity of asymmetry of information still can not be monitored well.

The size of the company has positive effect on earnings management practices (p = 0.010). It can also be interpreted that the larger the company, the greater the level of earnings management. This condition can be caused by the fact that larger company has more complex business activities. It can support the managers to manage earnings because the control of large company is more complex and more difficult. The results support Rahmawati and Qomariyah (2007) who suggest that size of the company as control variable has significant positive effect on earnings management.

CONCLUSION

This study aimed to empirically examine the influence of information asymmetry and earnings management and the influence of corporate governance mechanism on the relationship between earnings management and information asymmetry. The study finds that information asymmetry has positive effect on earnings management practices. Board size has positive effect on the relationship between earnings management and information asymmetry. This means that the size of the board of director is a variable moderation because it can affect the relationship between information asymmetry and earnings management practices.

The size of the audit committee has no effect on the relationship between information asymmetry and earnings managementm meaning that the size of the audit committee is not a moderating variable. Audit quality does not affect the relationship between earnings management and information asymmetry. This indicates that audit quality is not a moderating variable. High quality audits have not been able to influence the relationship between earnings management and information asymmetry. Size of the company has positive and significant effect on earnings management.

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