Board-Auditor Interaction and Earnings Management: The Model of Company with Concentrated Ownership

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ABSTRACT
We examined the effect of the interaction between two mechanisms of governance; monitoring the Board of Commissioners and Auditor examination to earnings management practices. Based on the completeness of the data, we selected 122 manufacturing companies listed in Indonesia Stock Exchange in the period of 2011-2014. Moderating regression analysis is used to examine the impact of ownership concentration on the model of earnings management monitoring. The examination is conducted on sub-samples based on the level of ownership concentrations. This study finds four characteristics of the Board of Commissioners that influence earnings management. Three of them (independence, expertise, and size) had negative effects; the other one (meeting) have positive effect on earnings quality. The Board of Commissioners interacts with auditor’s quality in monitoring earnings management, except for meeting. Monitoring the effectiveness of weakening began to limit ownership of < 20%. Increasingly leading to higher concentration levels of < 90%, The Board of Commissioners influence on earnings management is insignificant.

Keywords: Board of Commissioners, auditor’s quality, ownership concentration, earnings management.

1. INTRODUCTION
We examined the the effect of the interaction between two mechanisms of governance; monitoring The Board of Commissioners and Auditor examination on the practice of earnings management. Earnings is an important element in the agency contract: planning is a bonus, debt covenants, and political cost (Scott, 2012: 307-308). The facts show that the presentation of earnings often does not describe actual profit conditions. Related earnings report, several financial scandals demonstrated company engineering financial statements. Cases in Indonesia experienced by PT. Kimia Farma (Parsaoran, 2009); PT Kereta Api Indonesia (Banjarnahor, 2014); PT Katarina Utama (Bagus, 2010); PT Inovisi Infracom (Idris, 2015), while the case in Japan experienced by Toshiba
Earnings management practices are performed when there is asymmetry of information. The asymmetry of information could be triggered due to capital market conditions. Indonesian capital market has a semi-strong structure (Gumanti and Utami, 2002; Tjandra, 2006; Khajar 2008; Mar'ati, 2012). Semi-strong form market efficiency had a characteristic price reflects all relevant public information. Public information such as financial statements (profit) can be used to gain the abnormal return. The magnitude of abnormal returns is related with information asymmetry in the market (Ardiansyah and Qoyum, 2012). The parties who have access to comprehensive and quality information will receive abnormal return higher than the other party. Information held by investors, especially financial statements (profit) sometimes of poor quality, in other words it contains elements of earnings management (Gumanti, 2001; Sholihin and Na'im, 2004; Adiasih and Indra 2011, Dwiatnyana and Teak, 2014).

The asymmetry of information arising from moral hazard may encourage management opportunistic behavior which result in poor earnings management. Inappropriate earnings management is performed through hiding the actual operating performance by creating false bookkeeping or multiplying profit beyond the limits of reasonableness (Parfet, 2000). The negative impact of opportunistic earnings management is the low earning quality reported in the annual statement (Velury and Jenkins, 2006), reduce the relevance of accounting information (Habib, 2004), the decline in future earnings (Chan, Chan, Jegadeesh, and Lakonishok, 2004), and the decline in shares liquidity (Fathi, Seyyed, and Zahra, 2011).

The Board of Commissioners can perform the monitoring of financial statements to prevent the practice of opportunistic earnings management. Investors are reviewing whether capital has been invested properly, by monitoring where the regulatory process is supervised by the Board of Commissioners (Jaya, Septiarini, and Arafat, 2016). The Audit Committee, as a committee that assists the Board of Commissioners, can conduct a review on the financial information presented by the company. The review from the Audit Committee is reported to the Board of Commissioners for follow-up so that the company will presents high quality financial statements. The financial statements were presented companies need to assurance (assurance) that the financial statements presented in accordance with applicable accounting standards. According to regulations in the capital market, the guarantee is provided by external auditors who have professional competence in financial statements examination field. Two monitoring mechanisms interact with each other, the supervision by the Board of Commissioners and an examination by an external auditor. Internal mechanism is conducted by an Audit Committee that assists the Board of Commissioners, while the external mechanism runs by an external auditor (Babatunde and Olaniran, 2009).

The function of earnings management monitoring is determined by the characteristics of The Board of Commissioners. Osma (2008) finds that independent Board of Commissioners can prevents the manipulation of R & D spending. Alzoubi (2012) finds the effectiveness of monitoring conducted by the Board of Commissioners could reduce earnings management and improve the quality of financial reporting. Lo, Wong, and Firth (2010) find that companies with a higher proportion of independent commissioners, or have an audit committee with financial expertise could reduce the manipulation in transfer pricing.
The role of the Board of Commissioners monitoring is also depends on the control of large shareholders. Board of Commissioners will face a strong control of large shareholders, especially for companies with concentrated ownership. Large shareholders have an extensive control up to the management level and provide incentive to expropriate (La Porta, De Silanes, and Shleifer, 1999; Claessens, Djankov, and Lang, 2002; Faccio and Lang, 2002; Du and Dai, 2005; Palenzuela and Mariscal, 2007). Hassan and Abubakar (2012) assert that ownership affects earnings manipulation. The higher the number of shares owned by large shareholders, the more pressure managers feel to conform to the interests of shareholders (Sanda, Mukaila, and Garba, 2005). Concentration of ownership, beyond a certain level can lead to abuse of power, so it can be detrimental to the purpose of a company, which is maximizing the value of the company (Sanda et al., 2005).

Other findings show different results, large stock holders has an incentive to monitor management (Shleifer and Vishny, 1997). The existence of large shareholders could effectively monitor management to avoid opportunistic behavior of earnings management (Roodposhti and Chashmi, 2010). Hashim and Devi (2008) find that concentrated share ownership by institutional investors has an interest on management monitoring because it has resources and expertise. Farooq and El Jai (2012) observe that the concentration of ownership has alignment effect that reduces manager’s opportunistic behavior or entrenchment effect that increases earnings manipulation.

The above explanation shows that some financial cases related to earnings management are still occur in public companies in Indonesia. This condition is also confirmed by empirical evidence that the financial statements of public companies in Indonesia still contains an element of earnings management (Gumanti, 2001; Sholihin and Na'im, 2004; Adiasih and Indra 2011, Dwiatnyana and Teak, 2014). In accordance with good corporate governance, a monitoring mechanism has been run by the Board of Commissioners (Audit Committee) and the Auditor, but the practice of opportunistic earnings management still takes place. Do governance mechanisms performed effectively? Are there any influences of ownership? We suspect the strong influence of concentrated ownership that occurred in the majority of public companies in Indonesia to be the cause. Large shareholders had extensive control that gives incentive to expropriate, including opportunistic earnings management. This phenomenon causes the monitoring functions of the financial statements (profit and loss) to be less effective.

2. LITERATURE REVIEW AND HYPOTHESIS

The Interaction of Board Independence-Auditor Quality and Earnings Management

The study on the influence of board independence on earnings management resulted in mixed findings. The negative effect of board independence on earnings management is found by Niu (2006), Abdul-Rahman and Ali (2006), Osma and Noguer (2007), Jaggi, Leung, and Gul (2009), Lo, Wong, and Firth (2010), and Prastiti and Wahyu (2013). The research that finds the positive effect of board independence on earnings management are conducted by Saleh, Takiah, and Grace (2007) and Hashim and Devi (2008). While Siregar and Main (2008) find no evidence of the relationship between independent commissioners and earnings management, this result contradict the findings from previous studies.

Based on the arguments above, it can be concluded that the majority of previous studies show that the board independence has a negative effect on earnings management, this relationship get stronger when two mechanisms are interacted, the board
independence and auditor quality. In a business environment with concentrated ownership, the negative influence of the board independence became weaker when the concentration of ownership is getting stronger, as the control shareholders also getting stronger (Jaggi and Tsui, 2007; Shleifer and Vishny, 1997). This hypothesis can be formulated as follows:

\[ H_{1a} : \text{The interaction between board independence and auditor quality negatively affect earnings management.} \]

\[ H_{1b} : \text{The negative effect of Board independence-Auditor quality on earnings management is weaker when the concentration of ownership is higher.} \]

The Interaction of Board Expertise-Auditor Quality and Earnings Management

The Board of Commissioners can play an effective role in improving the monitoring of earnings report by providing access to the necessary resources such as finance, governance, and specific expertise (Bedard, Chtourou, and Courteau, 2004; JCGC, 2009). Barton, Coombes, and Wong (2004: 61) state that to perform tasks effectively the Board of Commissioners must have certain capabilities and expertise, especially in finance. Study on the effect of board expertise on earnings management resulted in mixed findings. Research that shows negative effect of board expertise on earnings management are conducted by Xie, Davidson, and DaDalt (2003); Alzoubi and Selamat (2012); and Trainor and Finnegan (2013). The study that shows a positive effect on earnings management is conducted by Ahmed (2013). While Prastiti and Wahyu (2013), find that financial expertise of the Board of Commissioners has no effect on earnings management.

Based on the arguments above, it can be concluded that the majority of previous studies show negative effect of the Board expertise on earnings management, this relationship is stronger when the two mechanisms are interacted, the board expertise and auditor quality. In a business environment with concentrated ownership, the negative influence of the board expertise become weaker when the concentration of ownership is stronger, as the control shareholders also getting stronger (Jaggi and Tsui, 2007; Shleifer and Vishny, 1997). This hypothesis can be formulated as follows:

\[ H_{2a} : \text{The interaction of board expertise and auditor quality negatively affects earnings management.} \]

\[ H_{2b} : \text{The negative effect of Board expertise-Auditor quality on earnings management is weaker while the higher concentration of ownership.} \]

The Interaction of Board Size-Auditor Quality and Earnings Management

According to Monks and Minow (2011) the larger the size of the board will able to monitor the management with more time and effort, while the small size of the Board is only able to do a little of time and effort. The researches on the influence of the board size on earnings management generate diverse result. Researches that show the negative effect of board size on earnings management are conducted by Xie et al. (2003); Nihandi, Baghbani, and Bolouri (2011). Yu (2008) finds that a large board size is capable of detecting earnings management. Board size is a good indicator for the monitoring and advisory / management behavior (Anderson, Mansi, and Reeb, 2004; Coles, Daniel, and Naveen, 2008).
Researches that show the positive effect of board size on earnings management are conducted by Abdulrahman and Ali (2006) and Kao and Chen (2004). Abbott et al. (2004) find a positive relationship between the board size and the possibility of restatement. Topak (2011) concludes that there is a difficulty in performing communication, decision making, and coordination among board members in the board with a large size. While Tang and Xu (2007) find no significant relationship between the board size and earnings management. Nugroho and Umanto (2012) find that board size does not affect earnings management practices.

Based on the arguments above, it can be concluded that the majority of previous studies show that the Board size has a negative effect on earnings management, this relationship is stronger when the two mechanisms are interacting, the board size and auditor quality. In a business environment with concentrated ownership, the negative influence of the board size become weaker when the concentration of ownership is getting stronger, as the control shareholders also getting stronger (Jaggi and Tsui, 2007; Shleifer and Vishny, 1997). This hypothesis can be formulated as follows:

$H_{3a}$: The interaction between board size and auditor quality negatively affects earnings management.

$H_{3b}$: The negative effect of interaction between the board size and auditor quality on earnings management is weaker while the concentration of ownership is higher.

The Interaction of Board Meeting-Auditor Quality and Earnings Management

The results of previous studies show the positive influence of the board meeting on earnings management found by Gulzar and Wang (2011) and Metawee (2013), there is a positive relationship between board meetings and profit management. According to Lorca, Sanchez-Ballesta, and Garcia-Meca (2011), the board is not necessarily beneficial, because routine tasks commissioner and CEO take a lot of time, because it is necessary to define a common agenda in determining the board meeting.

Based on the arguments above, it can be concluded that the majority of previous studies show that the board meeting has negative effect on earnings management, this relationship is stronger when two mechanisms are interacted, the board meeting and auditor quality. In a business environment with concentrated ownership, the negative influence of the board meeting become weaker when the concentration of ownership is stronger, as the control shareholders also getting stronger (Jaggi and Tsui, 2007; Shleifer and Vishny, 1997). This hypothesis can be formulated as follows:

$H_{4a}$: The interaction between board meeting and auditor quality negatively affects earnings management.

$H_{4b}$: The negative effect of interaction between board meeting and auditor quality on earnings management is weaker when the concentration of ownership is higher.

Overall development of the hypothesis can be presented in Figure 1.
Figure 1 Conceptual Framework of Research: Board-Auditor Interaction and Earnings Management

3. RESEARCH METHOD

The population of this research is manufacturing company listed in Indonesia Stock Exchange during 2011-2014 period, summed to 138 companies. Based on the data completeness, we selected 122 companies, thus the total observation is 488 (122 x 4 years). Due to the indication of outliers, we perform further selection and obtained 388 observations. We choose concentrated ownership as a research context. Ownership concentration is used as the basis to analyze the effect of monitoring effectivity. In this study we define ownership concentration as the major shareholder who own at least 20% (cut off) of the common shares (Faccio, and Lang, 2002). The samples, in further testing, are split into five groups based on their level of concentration, the ownership concentration of < 10%, the ownership concentration of < 20%, the ownership concentration of < 50%, the ownership concentration of < 80%, the ownership concentration of < 90%

The data is analyzed using Moderating Regression Analysis (MRA). This method is selected because there is a moderating variable in the formula, the quality of the auditor. MRA is a specific application of multiple linear regression in the regression equation which contains elements of interaction or multiplication of two or more independent variables (Ghozali, 2011: 229). The model of analysis is:

$$EM = \alpha + \beta_1 BoardIndep + \beta_2 BoardExpert + \beta_3 BoardSize + \beta_4 BoardMeet + \beta_5 Growth + \beta_6 Leverage + \beta_7 Concentration1 + \beta_8 Concentration2 + \beta_9 Concentration3 + \beta_{10} Concentration4 + \varepsilon$$

(1)

$$EM = \alpha + \beta_1 BoardIndep + \beta_2 BoardExpert + \beta_3 BoardSize + \beta_4 BoardMeet + \varepsilon$$

(2)
\[ \beta_5 \text{AudQual} + \beta_6 \text{Growth} + \beta_7 \text{Leverage} + \beta_8 \text{Concentration}_1 + \beta_9 \text{Concentration}_2 + \beta_{10} \text{Concentration}_3 + \beta_{11} \text{Concentration}_4 + \epsilon \]

\[ \text{EM} = \alpha + \beta_1 \text{BoardIndep} + \beta_2 \text{BoardExpert} + \beta_3 \text{BoardSize} + \beta_4 \text{BoardMeet} + (3) \]

\[ \beta_5 \text{AudQual} + \beta_6 \text{BoardIndep*AudQual} + \beta_7 \text{BoardExpert*AudQual} + \beta_8 \text{BoardSize*AudQual} + \beta_9 \text{BoardMeet*AudQual} + \beta_{10} \text{Growth} + \beta_{11} \text{Leverage} + \beta_{12} \text{Concentration}_1 + \beta_{13} \text{Concentration}_2 + \beta_{14} \text{Concentration}_3 + \beta_{15} \text{Concentration}_4 + \epsilon \]

The research variables are grouped into independent variable, dependent variable, moderating variables, and control variables. Each of these variables and measurements are presented in Table 1.

### Table 1 Definition and Measurement of Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition and Measurement</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Independence</td>
<td>Proportion (percentage) of the independent members of the board to the total number of board members (Siregar and Utama, 2008; Osma, 2008; Lo, Wong, and Firth, 2010; Alzoubi, 2012).</td>
<td></td>
</tr>
<tr>
<td>Board Expertise</td>
<td>Proportion (percentage) of board members with accounting and finance education background to the total numbers of board members (Alzoubi, 2012; Trainor and Finnegan, 2013; Prastiti and Wahyu, 2013; Chychyla, Leone, and Minutti-Meza, 2015).</td>
<td></td>
</tr>
<tr>
<td>Board Size</td>
<td>The total number of board members of (Yu, 2008; Nihandi, Baghbani, and Bolouri; 2011; Monks and Minow, 2011; Alzoubi, 2012; Nugroho and Umanto, 2012)</td>
<td></td>
</tr>
<tr>
<td>Board Meeting</td>
<td>The frequency of board meetings in the first year (Xie, et al., 2003; Sarkar, Sarkar, and Sen, 2008; Gulzar and Wang, 2011; Alzoubi, 2012; Metawee, 2013).</td>
<td></td>
</tr>
<tr>
<td>Discretionary Accruals</td>
<td>( \text{TAccr}<em>{i,t} = \alpha_0 + \alpha_1 (1/\text{Assets}</em>{i,t-1}) + \alpha_2 \Delta \text{Rev}<em>{i,t} + \alpha_3 \text{PPE}</em>{i,t} + \alpha_4 \text{ROA}<em>{i,t} + \epsilon</em>{i,t} ) (Kothari, Leone, and Wasley, 2005), The residual of the regression model is the discretionary accruals. This study uses the absolute value of discretionary accruals (DisAccr) as a proxy for the Earnings Management. The high discretionary accruals means the earnings management is high, and otherwise.</td>
<td></td>
</tr>
<tr>
<td>Auditor Quality</td>
<td>Measured using the industry specialization, the ratio of market share an ratio of total assets of audited companies as a proxy (Gul, Fung, and Jaggi, 2009).</td>
<td></td>
</tr>
<tr>
<td>Growth</td>
<td>The percentage growth in total assets (Bedard et al., 2004).</td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>Measured using financial leverage, the ratio of total debt on total assets as a proxy (Hamdan, Adel, and Sameh, 2013).</td>
<td></td>
</tr>
<tr>
<td>Ownership Concentration</td>
<td>Total common stock ownership of at least 20% (cutoff) (Faccio, and Lang, 2002). The role of this variable is as a dummy variable and as a fraction sample.</td>
<td></td>
</tr>
</tbody>
</table>

### 4. RESEARCH FINDINGS

#### Data and Analysis

The analysis aims to find the effect of the main variables: board independence, board expertise, board size, board meeting on earnings management, and determine the effect of interaction between auditor quality and the board on earnings management.
Analysis also aims to determine the changes in the influence of the main variables (with the mechanism of interaction) at various levels of ownership concentration. The test aims to determine the significant value of each variable: Board of Commissioner independence, Board of Commissioner expertise, Board of Commissioner size, Board of Commissioner meeting on earnings management, with interaction or without interaction with auditor quality. The testing also aims to find the significant value of each variable at different levels of ownership concentration. The significance value is used to test the hypothesis, whether the hypothesis formulated/expressed is supported (significant) by the result or not. The results of the analysis are presented in Table 2 and Table 3.

### Table 2 The Results of Interaction Model Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hip.</th>
<th>Exp.</th>
<th>Sign</th>
<th>Main Model</th>
<th>Model with Interaction</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No Interaction</td>
<td>Interaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sample of 388</td>
<td>Sample of 388</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Beta</td>
<td>Sig.</td>
<td>Beta</td>
</tr>
<tr>
<td>Board Independency$^b$</td>
<td>$H_1$</td>
<td>(-)</td>
<td></td>
<td>-.036</td>
<td>.474</td>
<td>-.104</td>
</tr>
<tr>
<td>Board Expertise$^b$</td>
<td>$H_2$</td>
<td>(-)</td>
<td></td>
<td>-.104</td>
<td>.037**</td>
<td>-.197</td>
</tr>
<tr>
<td>Board Size$^b$</td>
<td>$H_3$</td>
<td>(-)</td>
<td></td>
<td>-.006</td>
<td>.908</td>
<td>-.186</td>
</tr>
<tr>
<td>Board Meeting$^b$</td>
<td>$H_4$</td>
<td>(+)</td>
<td></td>
<td>.124</td>
<td>.013**</td>
<td>.153</td>
</tr>
<tr>
<td>Auditor Quality$^b$</td>
<td></td>
<td>(-)</td>
<td></td>
<td>-.030</td>
<td>.591</td>
<td>-.123</td>
</tr>
<tr>
<td>Board Indep*Auditor Quality$^d$</td>
<td></td>
<td></td>
<td></td>
<td>.337</td>
<td>.092*</td>
<td></td>
</tr>
<tr>
<td>Board Expert*Auditor Quality$^d$</td>
<td></td>
<td></td>
<td></td>
<td>.422</td>
<td>.008***</td>
<td></td>
</tr>
<tr>
<td>Board Size*Auditor Quality$^d$</td>
<td></td>
<td></td>
<td></td>
<td>.668</td>
<td>.000***</td>
<td></td>
</tr>
<tr>
<td>Board Meeting*Auditor Quality$^d$</td>
<td></td>
<td></td>
<td></td>
<td>-.040</td>
<td>.807</td>
<td></td>
</tr>
<tr>
<td>Growth$^c$</td>
<td></td>
<td>(+)</td>
<td></td>
<td>.008</td>
<td>.875</td>
<td>.003</td>
</tr>
<tr>
<td>Leverage$^c$</td>
<td></td>
<td>(+)</td>
<td></td>
<td>.206</td>
<td>.000***</td>
<td>.214</td>
</tr>
<tr>
<td>Ownership Concentration 1$^f$</td>
<td></td>
<td>(+)</td>
<td></td>
<td>-.125</td>
<td>.014**</td>
<td>-.090</td>
</tr>
<tr>
<td>Ownership Concentration 2$^f$</td>
<td></td>
<td>(+)</td>
<td></td>
<td>-.056</td>
<td>.303</td>
<td>-.035</td>
</tr>
<tr>
<td>Ownership Concentration 3$^f$</td>
<td></td>
<td>(+)</td>
<td></td>
<td>-.121</td>
<td>.025**</td>
<td>-.117</td>
</tr>
<tr>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td>.316</td>
<td></td>
<td>.378</td>
</tr>
<tr>
<td>R Square</td>
<td></td>
<td></td>
<td></td>
<td>.100</td>
<td></td>
<td>.143</td>
</tr>
<tr>
<td>Adj. R Square</td>
<td></td>
<td></td>
<td></td>
<td>.076</td>
<td></td>
<td>.111</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td>4.190</td>
<td></td>
<td>4.441</td>
</tr>
<tr>
<td>Sig</td>
<td></td>
<td></td>
<td></td>
<td>.000***</td>
<td></td>
<td>.000***</td>
</tr>
</tbody>
</table>

EM $= \alpha + \beta_1 \text{BoardIndep} + \beta_2 \text{BoardExpert} + \beta_3 \text{BoardSize} + \beta_4 \text{BoardMeet} + \beta_5 \text{AudQual} + \beta_6 \text{BoardIndep*AudQual} + \beta_7 \text{BoardExpert*AudQual} + \beta_8 \text{BoardSize*AudQual} + \beta_9 \text{BoardMeet*AudQual} + \beta_{10} \text{Growth} + \beta_{11} \text{Leverage} + \beta_{12} \text{Concentration1} + \beta_{13} \text{Concentration2} + \beta_{14} \text{Concentration3} + \beta_{15} \text{Concentration4} + \epsilon$

### Notes
- $^a$ Dependent: Earnings Management
- $^b$ Independent (Predictors): Board Independence, Board Expertise, Board Size, Board Meeting
- $^c$ Moderator/Interaction: Auditor Quality
- $^d$ Interaction (Indep dan Moderator): BoardIndep*AudQual, BoardExpert*AudQual, BoardSize*AudQual, BoardMeet*AudQual
- $^e$ Control (Predictors): Growth, Leverage
- $^f$ Dummy of Ownership Concentration: Ownership Concentration 1 = 0 - 20% is 1, others 0; Ownership Concentration 2 = 20 - 50% is 1, others 0; Ownership Concentration 3 = 50 - 80% is 1, others 0; Ownership Concentration 4 = 80 – 100% is 1, others 0.
### Table 2 The Analysis of Interaction Model at Various Levels of Concentration Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Exp. Sign</th>
<th>Total Sample</th>
<th>Sample &lt; 10%</th>
<th>Sample &lt; 20%</th>
<th>Sample &lt; 50%</th>
<th>Sample &lt; 80%</th>
<th>Sample &lt; 90%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Σ Sample of 388</td>
<td>Σ Sample of 388</td>
<td>Σ Sample of 365</td>
<td>Σ Sample of 274</td>
<td>Σ Sample of 87</td>
<td>Σ Sample of 33</td>
</tr>
<tr>
<td>Board Independency</td>
<td>(-)</td>
<td>-104</td>
<td>-104</td>
<td>.072*</td>
<td>-115</td>
<td>-.112</td>
<td>-1.52</td>
</tr>
<tr>
<td>Board Expertise</td>
<td>(-)</td>
<td>-197</td>
<td>-184</td>
<td>.001***</td>
<td>-162</td>
<td>.023**</td>
<td>-1.194</td>
</tr>
<tr>
<td>Boar Size</td>
<td>(-)</td>
<td>-186</td>
<td>-218</td>
<td>.011**</td>
<td>-1.22</td>
<td>-.094</td>
<td>.972</td>
</tr>
<tr>
<td>Board Meeting</td>
<td>(+)</td>
<td>153</td>
<td>.015**</td>
<td>143</td>
<td>.027**</td>
<td>.091*</td>
<td>-1.194</td>
</tr>
<tr>
<td>Auditor Quality</td>
<td>(-)</td>
<td>-1.233</td>
<td>-1.194</td>
<td>.001***</td>
<td>-1.194</td>
<td>-.094</td>
<td>.972</td>
</tr>
<tr>
<td>Board Indep*Auditor Quality</td>
<td>d</td>
<td>.337</td>
<td>.352</td>
<td>.090*</td>
<td>.434</td>
<td>.087*</td>
<td>.823</td>
</tr>
<tr>
<td>Board Expert*Auditor Quality</td>
<td>d</td>
<td>.372</td>
<td>.374</td>
<td>.023**</td>
<td>.407</td>
<td>.026*</td>
<td>.823</td>
</tr>
<tr>
<td>Board Size*Auditor Quality</td>
<td>d</td>
<td>.668</td>
<td>.663</td>
<td>.000***</td>
<td>.690</td>
<td>.002***</td>
<td>.563</td>
</tr>
<tr>
<td>Board Meeting*Auditor Quality</td>
<td>d</td>
<td>-0.40</td>
<td>-.021</td>
<td>.901</td>
<td>.182</td>
<td>.382</td>
<td>.253</td>
</tr>
<tr>
<td>Growth</td>
<td>(+)</td>
<td>.003</td>
<td>.027</td>
<td>.092</td>
<td>.053</td>
<td>.333</td>
<td>-1.64</td>
</tr>
<tr>
<td>Leverage</td>
<td>(+)</td>
<td>.214</td>
<td>.245</td>
<td>.000***</td>
<td>.279</td>
<td>.000***</td>
<td>-1.028</td>
</tr>
</tbody>
</table>

R | .316 | .316 | .348 | .392 | .456 | .679 |
R Square | .100 | .100 | .121 | .154 | .208 | .461 |
Adj. R Square | .076 | .076 | .093 | .118 | .092 | .178 |
F | 4.190 | 4.190 | 4.411 | 4.321 | 1.793 | 1.631 |
Sig. | .000*** | .000*** | .000** | .000** | .070* | .161 |

***level of significant 0.01; ** level of significant 0.05; * level of significant 0.10

a. Dependent: Earnings Management
b. Independent (Predictors): Board Indepency, Board Expertise, Board Size, Board Meeting
c. Moderator/Interaction: Auditor Quality
d. Interaction (Indep dan Moderator): BoardIndep*AudQual, BoardExpert*AudQual, BoardSize*AudQual, BoardMeet*AudQual
e. Control (Predictors): Growth, Leverage
f. Split Sample: Ownership Concentration 1 (cutoff 10%), Ownership Concentration 2 (cutoff 20%), Ownership Concentration 3 (cutoff 50%), Ownership Concentration 4 (cutoff 80%), Ownership Concentration 4 (cutoff 90%)
Table 3 Summary of Hypotheses Testing and Analysis

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Statement</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>(H_{1a})</td>
<td>The interaction between board independence-auditor quality negatively affects earnings management.</td>
<td>do not supported (No evidence) at the level of 5% (no interaction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a. Main: beta (β) = -.104; sig. = .072*;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Interaction: beta (β) = .337; sig. = .092* (Table 1)</td>
</tr>
<tr>
<td>(H_{1b})</td>
<td>The negative effect of interaction between board independence-auditor quality on earnings management is weaker when the concentration of ownership is higher.</td>
<td>supported (evidence found) the higher the concentration levels (&lt;20%), the weaker the effect:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Concentration 1 (cut off 10%):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beta (β) = -.197; sig. = .001***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Concentration 2 (cut off 20%):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beta (β) = -.094; sig. = .012**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Concentration 3 (cut off 50%):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beta (β) = -.115; sig. = .118 (not significant)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Concentration 4 (cut off 80%):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beta (β) = -.187; sig. = .137 (not significant)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Concentration 5 (cut off 90%):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beta (β) = -.152; sig. = .614 (not significant) (Tabel 2)</td>
</tr>
<tr>
<td>(H_{2a})</td>
<td>The interaction between board expertise-auditor quality negatively affects earnings management.</td>
<td>supported (evidence found):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a. Main: beta (β) = -.197; sig. = .001***,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Interaction: beta (β) = .422; sig. = .008*** (Tabel 1)</td>
</tr>
<tr>
<td>(H_{2b})</td>
<td>The negative effect of interaction between board expertise-auditor quality on earnings management is weaker when the concentration of ownership is higher.</td>
<td>support (evidence found) the higher the concentration levels (&lt;50%), the weaker the effect:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Concentration 1 (cut off 10%):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beta (β) = -.197; sig. = .001***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Concentration 2 (cut off 20%):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beta (β) = -.184; sig. = .003***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Concentration 3 (cut off 50%):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beta (β) = -.162; sig. = .023**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Concentration 4 (cut off 80%):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beta (β) = -.180; sig. = .208 (not significant)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Concentration 5 (cut off 90%):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beta (β) = .078; sig. = .763 (not significant) (Tabel 2)</td>
</tr>
</tbody>
</table>
### Continued Table 3

<table>
<thead>
<tr>
<th>Hyp</th>
<th>Statement</th>
<th>Test Results</th>
</tr>
</thead>
</table>
| $H_{3a}$ | The interaction between board size-auditor quality negatively affects earnings management. | **supported (evidence found):**  
Main: $\beta = -.186$; sig. = .011**  
Interaction: $\beta = .668$; sig. = .000***  
(Table 1) |
| $H_{3b}$ | The negative effect of interaction between board size-auditor quality on earnings management is weaker when the concentration of ownership is higher. | **supported (evidence found) the higher the concentration levels (<20%), the weaker the effect:**  
1. Concentration 1 (cut off 10%):  
   $\beta = -.186$; sig. = .011**  
2. Concentration 2 (cut off 20%):  
   $\beta = -.218$; sig. = .003***  
3. Concentration 3 (cut off 50%):  
   $\beta = -.122$; sig. = .198 (not significant)  
4. Concentration 4 (cut off 80%):  
   $\beta = .094$; sig. = .572 (not significant)  
5. Concentration 5 (cut off 90%):  
   $\beta = -.089$; sig. = .839 (not significant)  
(Table 4.15) |
| $H_{4a}$ | The interaction between board meeting-auditor quality negatively affects earnings management. | **Rejected (No evidence) at the level of 5% (no interaction)**  
Main: $\beta = .153$; sig. = .015**  
Interaction: $\beta = -.040$; sig. = .807  
(Table 1) |
| $H_{4b}$ | The negative effect of interaction between board meeting-auditor quality on earnings management is weaker when the concentration of ownership is higher. | **supported (evidence found) higher concentration levels (<20%), the effect of the weaker:**  
1. Concentration 1 (cut off 10%):  
   $\beta = .153$; sig. = .015**  
2. Concentration 2 (cut off 20%):  
   $\beta = .143$; sig. = .027**  
3. Concentration 3 (cut off 50%):  
   $\beta = .126$; sig. = .091 (not significant)  
4. Concentration 4 (cut off 80%):  
   $\beta = .118$; sig. = .449 (not significant)  
5. Concentration 5 (cut off 90%):  
   $\beta = -.014$; sig. = .972 (not significant)  
(Table 2) |

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**DISCUSSION**

The Effect of Board of Commissioners on Earnings Management and the Interaction with Quality Auditor
The effectiveness of monitoring depends on various characteristics possessed by the board. The results of previous studies concluded that the effectiveness of the board in monitoring financial reporting (profit) is multidimensional and is influenced by a variety of characteristics, which include independence (Osma, 2008), financial expertise (Bedard, Chtourou, and Courteau, 2004), size (Klein, 2002); the number of meetings (Xie, et al., 2003; Adams, Hermalin, and Weisbach, 2008).

The analysis showed that the board characteristics affects earnings management, the effect is stronger when the variable interacts with auditor quality. Board of commissioner characteristics that negatively affect earnings management is a skill and size, while meeting has a positive effect. The Board independence has no effect on earnings management (but significant at the 10% level).

**The Effect of Board Independence on Earnings Management and the Interaction with Auditor Quality**

The analysis showed that the board independence has no effect on earnings management. The results of this study contradict the research conducted by Fama and Jensen (1983); Sharma (2004); Abdul-Rahman and Ali (2006); Osma and Noguer (2007); Osma (2008); Jaggi et al. (2009); Lo, Wong, and Firth (2010); and Prastiti and Wahyu (2013) who concluded that board independence negatively affects earnings management. While the finding from Siregar and Utama (2008) supports the results of this study, there is no evidence of an association independent commissioner with earnings management. While research conducted by Hashim and Devi (2008) finds evidence but with opposite sign, that there is a positive relationship of independent directors on earnings management. This result on board independence effect still provides mixed finding presumably because the independence of the board is difficult to observe directly. Researchers generally only able to observe this variable from the indicators that appeared on the surface, for example, the absence of working relationship between the commissioners and the company, in addition to his position as commissioner. Researchers do not have access to observe the actual relationship between the commissioners with the company owners, especially for a company that has an extensive network with another company (holding company). The research conducted by Siregar and Utama (2008), has similar characteristics with this study, so the results confirm each other.

Operationally, the task of monitoring (supervision) the implementation of financial statements is handed over to the Audit Committee, although one of the committee is appointed as the head of the Audit Committee. Audit Committee has a closer position to the monitoring of financial statement, thus they has direct relationship with the implementation of financial statement. The Board of Commissioners received a report on the review of financial statements (profit) from the Audit Committee. The follow-up of the report from the Audit Committee is highly dependent on the decision of the Board of Commissioners, the possibility is whether there will be a follow-up or not, or even delay in follow-up. Thus, Audit Committee has direct effect on the monitorin of earning management, in which the head of the Audit Committee also appointed as independent commissioner.

**The Effect of Board Expertise on Earnings Management and the Interaction with Auditor Quality**

The results of this study prove that the financial and accounting expertise of Board of Commissioner members has negative effect on earnings management, both before or after the interaction auditor quality. These results are in line with the opinion of Chtourou, Bedard, and Courteau (2001); Bedard et al. (2004); and JCGC (2009). The results also
support findings of several previous studies. Findings from Xie et al. (2003) show that earnings management rarely occurs in companies that are monitored by the Board of Commissioners who have financial education backgrounds. Alzoubi and Selamat (2012) find that Board of Commissioners with education background in finance has a negative effect on earnings management. Trainor and Finnegan (2013) find that a company with Board of Commissioners members who has an academic background (accounting and finance) has lower discretionary accruals.

This study also proved that the quality of auditors strengthen the influence of financial expertise of board members on earnings management. The interaction between financial and / or accounting expertise of board members with auditor quality is proven further strengthen the effectiveness of monitoring. The larger the number of board members who have financial and / or accounting expertise, the easier for them to interact with the auditors. Board members who have education background similar to the auditors will facilitate the communication concerning the financial reporting process (profit). These interactions can be a review of financial reporting activities (profit) together with the Audit Committee and auditors. This kind of interaction is proven to improve the effectiveness of earnings management monitoring.

The Effect of Board Size on Earnings Management and the Interaction with Auditor Quality

The results of this study prove that the size of the board negatively affects earnings management. This effect of the size of the Board to earnings management is significant both before and after interacting with auditor quality. The results of this study are consistent with the findings from Anderson et al. (2004); Persons (2006); Coles et al. (2008); and Monks and Minow (2011) that the size of the board determine the effectiveness of earnings management monitoring. Findings from Klein (2002) also supports that the effectiveness of monitoring is positively related to the size of the board because of its ability to distribute the workload. Yu (2008) finds that the small size of the board is more prone to failure in detecting the earnings management. This finding also shows implicitly that small size board tends to be easily influenced by management or dominant shareholders, while the large board size is more capable to monitor the actions of management. Xie et al. (2003) find a negative relationship between the size of the board and earnings management.

The results of this study contradict the result of research conducted by Abdulrahman and Ali (2006) and Kao and Chen (2004), they find a positive relationship between the size of the board and earnings management. Abbott et al. (2004) also find a positive relationship between the size of the board with the possibility of restatement. Topak (2011) concludes that the large size of the board is more difficult to perform communication, decision-making, and coordination between members of the board.

This research also proves that the auditor quality strengthen the influence of the size of the board on earnings management. The interaction between the size of the board with auditor quality is proven further strengthen the effectiveness of monitoring. The larger the number of board members provide more opportunity to interact with the auditors, because it allows distribution of tasks, especially to members of the board who has financial / accounting expertise. These interactions can be either a review of financial reporting (profit) together with the Audit Committee and auditors. This kind of interaction is proven to improve the effectiveness of earnings management monitoring.

The Effect of Board Meeting on Earnings Management and the Interaction with Auditor Quality

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The results of this study are generally contrary to the findings of previous researches. This research proves that the board meeting has a positive effect on earnings management. The effect of board meetings is only significant when the interaction with auditor quality is absent. This result proves that the board meeting never or involving few auditors, the auditors have more intensive interaction with the Audit Committee in reviewing the financial statements (profit). Board obtains reports on the meeting with the auditors from the Audit Committee, the board does not interact directly with the auditors, including the process of auditor selection, which is handed to the Audit Committee.

Board meeting has negative effect on earnings management. This shows that the more frequent the board holds a meeting, the higher the earnings management. We assume that this phenomenon is related with the effectiveness of the meeting. Board meetings usually discuss things that are strategic, while technical issues such as examining the financial statements are handed over to the Audit Committee. The Audit Committee provides report of their review on financial report to the Board of Commissioners. Whether the reports are presented in the forum of board meeting or in other forums, the researchers did not have the access for the data. Therefore the researchers explanation concerns the Board meeting because a positive effect on earnings management is not supported.

Some researchers support the results of this study. The research conducted by Gulzar and Wang (2011) find a positive relationship between board meetings and earnings management. Metawee (2013) also find a positive relationship between the board meeting and earnings management. Board meeting is not necessarily beneficial, because commissioner and CEO routine tasks take a lot of time, and it is necessary to define a common agenda in the board meeting (Lorca, Sanchez-Ballesta, and Garcia-Meca, 2011).

This study contradicts the research conducted by Lipton and Lorsch (1992), that the Board of Commissioners meet frequently are more likely to solve the company's problems effectively. According Vafeas (1999), the more frequent the board meetings, the more effective the monitoring function. They find evidence that the company that has less frequent board meeting experiences the decline in the monitoring of earning management. Xie et al. (2003) find that when board meetings are rarely carried out, issues such as earnings management may not be a priority because it has a little time. The number of board meetings significantly and negatively related to earnings management.

The Effect of Board of Commissioners on Earnings Management and the Interaction with Auditor Quality based on the Level of Concentration of Ownership

The role of the Board of Commissioners on monitoring earnings management is influenced by the business environment in Indonesia, which has the characteristics of concentrated ownership (La Porta, De Silanes, and Shleifer 1999; Claessens, Djankov, and Lang 2002; Lukviarman, 2004). Ownership concentration is likely to have wide powers of control, even at management level. Companies with concentrated ownership can be affected by a conflict of interests between majority and minority shareholders. Large shareholders may exercise the right of control to create a private benefit, sometimes expropriate minority shareholders. Large shareholders can impose personal preferences, even preference which runs contrary to the minority shareholders (Shleifer and Vishny, 1997). Therefore, shareholders are likely to interfere in the management, and may encourage managers to engage in earnings management in order to maximize the private benefits (Jaggi and Tsui, 2007). Managers fear the negative impact of a decrease in the performance of the majority shareholder, so they have a strong motivation to engage in earnings management. The concentration of ownership has more incentive to manage earnings because the expected benefits exceed the costs of holding equity monitoring (Ramsy and Blair, 1993).
On the other hand, the concentration of ownership can reduce agency costs by improving monitoring and reducing the free-rider problem (Shleifer and Vishny, 1997). Ali, Salleh, and Hassan (2008) and Iturriaga and Hoffmann (2005) find that the concentration of ownership reduces manager discretionary behavior. Large shareholder can effectively monitor management to avoid opportunistic behavior of earnings management (Roodposhti and Chashmi, 2010). Hashim and Devi (2008) find that concentrated ownership by institutional investors attract monitoring because it has resources and expertise. Farooq and El Jai (2012) observe that the concentration of ownership has allignment effect that reduces manager opportunistic behavior or entrenchment effect that increases earnings manipulation.

At the level of ownership concentration < 20%, the effect of board independence and board size on earnings management is significantly weaker. At the level of ownership concentration < 50%, the effect of board expertise on earnings management is significantly weaker. At the level of ownership concentration < 20%, the effect of board meeting on earnings management without interacting with the quality of auditors is significantly weaker.

The results of this study prove that the higher the level of ownership concentration, further weakening the influence of board characteristics on earnings management. Researchers find that starting from the ownership concentration of < 20%, the effect of board characteristics on monitoring earnings management is significantly weaker. When the concentration of ownership is increasing and reaches near < 90%, the effect of board characteristics on earnings management become insignificant. The results of this study are supported by the findings of previous studies that the concentration of large shareholders tends to have wide powers of control, even at management level. Research conducted by Varma, Patel, and Naidu (2009) find that companies with a high concentration of ownership tend to favor managers to select accounting methods that is profitable for the company.

These results also show the weakening of board characteristics effect on earnings management, also followed by the shift in the sign of significance. Board independence and board expertise that have a negative effect on earning managements at lower concentration levels show different effect at higher concentration levels (positive effect on earning management). While the size of the Board of positive and negative changes in the level of concentration of < 80% and < 90%. Board meeting influence on earnings management turned negative at the higher concentration level, where previously (lower concentration levels) this variable has a positive effect.

The results of this study find that auditor quality consistently has a negative effect on earnings management, although the concentration of ownership becomes higher. This indicates that the auditor specialized in industry (auditor quality), is not affected by the level of ownership concentration. The results also indicate that the specialized auditor reflects qualified auditor. The results of previous studies support this conclusion. Balsam, Krishnan, and Yang (2003), find that the auditor specialization in certain industry is related with audit quality. Stein and Cadman (2005) state that auditors who specialized in the industry will provide high-quality audit. Audit quality will improved if the auditor who conducts the examination has specialized in the field of industry (Almutairi, Dunn, and Skantz, 2006). Rosnidah (2010) explains that the auditor who has experience in the examination of a client’s industry type obtains technical training and continuously develops skills through education and training, they will be more qualified auditor. Sun and Guoping (2013) argue that the industry specialist auditors may restrict earnings management not only through financial audit but also through interaction with the internal governance mechanisms.
5. CONCLUSIONS AND CONTRIBUTIONS

Conclusions

The board independence has no effect on earnings management. Financial expertise and size of the board negatively affect earnings management. The greater the proportion of board members who have financial and/or accounting expertise increase the effectivity of earnings management monitoring. The greater the number of board members the more effective the earnings management monitoring is. The board meeting has positive effect on earnings management. The more frequent the meetings conducted by the board further improve earnings management, it is thought to relate to the effectiveness of the meeting. The board interacts with the auditor quality in earnings management monitoring. This shows that a qualified auditor will strengthen monitoring function of earnings management. Monitoring function will be more effective when there is interaction with the expertise and the size of the Board of Commissioners.

The concentration level of ownership has an impact on the effectiveness of monitoring. The weakening of monitoring effectiveness begins at the concentration of ownership of < 20%. The increase of ownership concentration at nearly < 90%, causes the effect of board characteristics on earnings management become insignificant. This shows that the higher the ownership concentration weakens the monitoring role of the board on earnings management. This study also find that auditor quality has consistent negative effect on earnings management, although the level of ownership concentration get higher. This indicates that the auditor specialized in a certain industry (which describes the quality of auditors) are not affected by the level of ownership concentration.

Contributions

The application of agency theory initially assumes that that ownership is dispersed, then for the business environment with a high concentration of ownership (such as in Indonesia), the application of assumptions should change. Changes in these assumptions will have an impact on empirical testing methods in research. The ownership structure is a part of the monitoring system in the concept of governance, but ownership with a particular concentration level can weaken monitoring. The weakening of of monitoring effectiveness confirms the presence of entrenchment effects because of the high level of concentration of ownership.

While in practice, the majority ownership exceeding 50% has a strong ability to control. If the controlling interest (the right to control) is performed excessively (opportunistic) and tends to expropriate, it is not only detrimental to the minority shareholders but also detrimental to other stakeholders. It also resulted in the weakening of the role of corporate governance. Therefore, there should be regulations related to majority ownership, for example, increase the minimum threshold for the minority ownership of listed companies in the stock market.

Disclosure of non-controlling shareholders' rights has been regulated, but the disclosure of the majority shareholder is still very limited. The shareholder structure must be expressed clearly, particularly major shareholders (ultimate shareholders), currently the shareholders reported in the financial statement is the ‘surface shareholders’, the ultimate owner has never been disclosed. Disclosure of ownership structure should be reported in the form of a pyramid, so they can know who the real controller, thus the right of control and cash flow can be computed. The general public (including investors) can detect the presence or absence of expropriation practices that harm certain parties.
Limitations

Researchers do not have access to the data to observe the ownership structure of the ultimate shareholders, thus it results in the limitation in measuring ownership concentration. In addition, the researchers do not have access to data on the results of Board of Comissioner meeting, so there is a limitation in the measurement of board meeting and several other variables.

REFERENCES


implikasinya pada kepuasan pengguna jasa audit (survei pada Emiten terdaftar di Bursa Efek Indonesia).)


[86] Xie, B., Davidson III, W. N., and DaDalt, P. J., 2003. Earnings management and